
PFERD

Your personal contact

Do you have any questions regarding PFERD products and solutions? Together with our trading partners, we offer qualified support, free of charge and without obligation. Simply contact your personal PFERD representative! To find a PFERD retailer near you, visit:
www.pferd.com

TRUST BLUE

Know-how

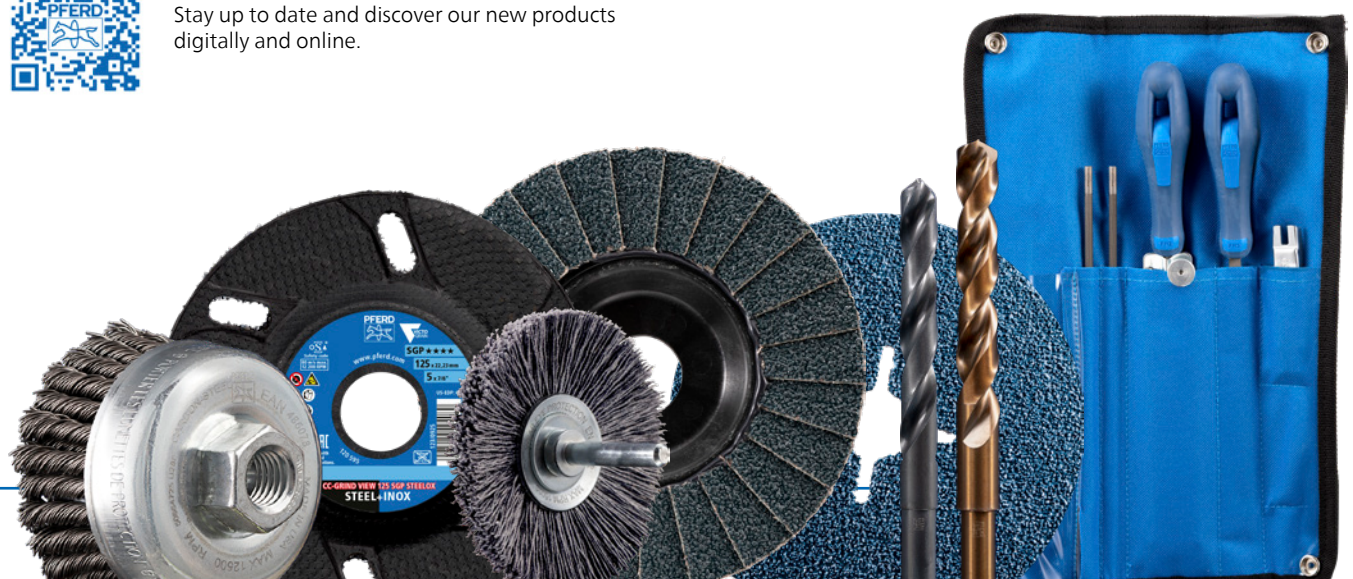
Thanks to the product finder on the homepage, the ideal product is just a few clicks away. More information about our products is available in our **PFERD**SHOP. The QR codes in the product catalogue provide further, detailed product information. Or why not take advantage of our convenient, digital Tool Manual – simply click the desired item to find out more about it.

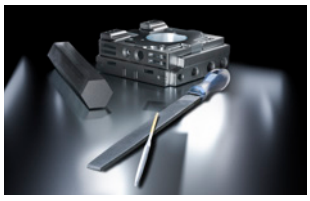
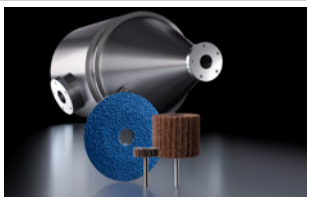
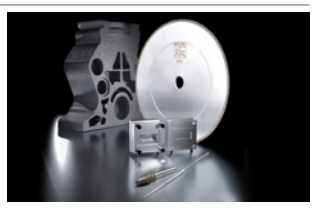


New in the PFERD product range

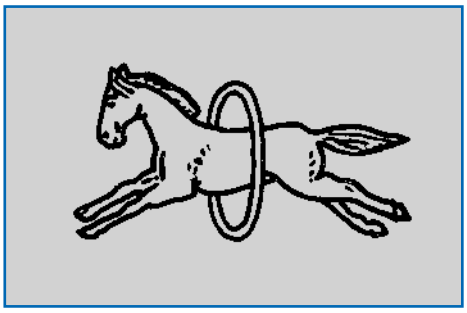
Our new products have **blue** item numbers in the Tool Manual. Alongside the new PFERD products and additions to the range, we've also identified all discontinued products for you. The item numbers concerned are in ***italics*** and identified accordingly in the corresponding product tables in catalogue sections 1-10.

Stay up to date and discover our new products digitally and online.



General information	About us Products Services	
Files	Chamfering Finishing Sharpening	
Milling, drilling and countersinking tools	Deburring Machining of contours Cutting out holes Drilling and countersinking	
Mounted points	Machining of geometries Chamfering Cleaning	
Fine grinding and polishing tools	Creation of surfaces Levelling Polishing	
Diamond and CBN tools	Filing Grinding Cutting	
Cut-off wheels, flap discs and grinding wheels	Cutting Roughing Grinding	
Cut-off wheels for stationary applications	Cutting to size Cutting of large cross sections Cutting rails	
Industrial power brushes	Deburring Cleaning of weld seams Cleaning/derusting	
Tool drives	Robot spindles Air grinders Electric grinders Drive systems DIN 10/DIN 15	
Cutting tools for stationary applications	Milling Deburring	









Quality since 1799



The **jumping HORSE**

PFERD (the German term for horse) is leading in the development, production and support, as well as in the distribution, of tool solutions for work on surfaces and material cutting. In keeping with a tradition that dates back more than 200 years, PFERD operates as an independent, internationally oriented, family-owned company geared towards the long term.

PFERD tools offer the user maximum benefit and optimum cost-effectiveness. Its unlimited commitment to premium quality, its reliability as a supplier and its responsible use of resources all make PFERD a dependable and reliable trading partner that operates with sustainability in mind.









The **optimum** tool

With over 9,500 tools for work on surfaces and material cutting, PFERD offers the ideal tool solution for every application. The correct tool is determined by the application, the material to be worked and the appropriate tool drive.

The tool navigation in the introduction of the respective catalogue sections 1 to 10 will help you select the optimum tool.

Application

The application determines the choice of drive and tool. The following factors should be taken into account:

- The desired work result, e.g. high stock removal, high surface quality.
- The operating conditions, e.g. the power supply, stationary or manual application.
- The workpiece to be worked, e.g. its dimensions, geometry and accessibility.
- The duration of use, e.g. individual or mass production.
- Requirements and ergonomic advantages in accordance with labour protection laws.

Material

The varying properties of the materials place individual requirements on the tools used to work on them. PFERD tools are especially designed for the differing material properties and thus allow the highest possible levels of costeffectiveness and the very best results.

Tool drive

The tool drive that is used has a significant influence on the cost-effectiveness of the machining process. Selecting the ideal drive, i.e. air grinder, electric grinder and flexible shaft drive, takes into account:

- Design, shape and size
- Performance
- Rotational speed
- Tool mounting
- Power supply (compressed air or electrical power supply)

Greater **economic efficiency**

Each and every day, PFERD tools solve application problems within a great number of industries. Innovations in this area regularly offer considerable added value: not just for users, but for trade as well – PFERD innovations are unique selling propositions!

PFERD product management is constantly updating and further developing the range in line with your wishes and needs. If required, PFERD can develop your own tailor-made solution, always with the aim of attaining the highest levels of cost-effectiveness for you.

Contact us to arrange an appointment with our experienced sales representatives and technical customer support team. Boost your productivity, cut your process costs and achieve maximum efficiency – with PFERD by your side.

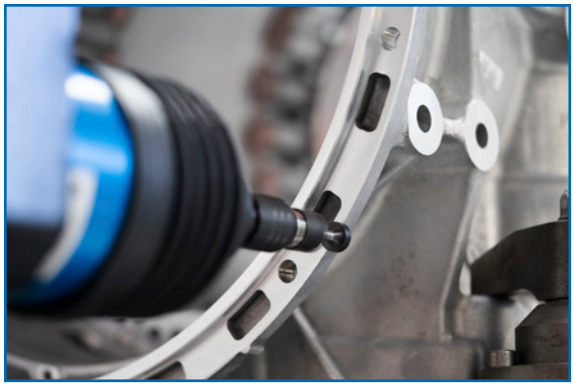
Just get in touch.
Our experts would be glad to help you find the optimum tool.













Formula for **success**

The PFERD formula is the basis for your success. Workers all over the world trust blue and choose PFERD. The combination of individual consultation and innovative high-performance tools, together with the worker's experience on site, consistently guarantee optimum work results.

Innovative, high-performance tools
+ Individual, targeted consultation
+ Correct selection of drive
+ Worker's experience

= Optimum economic result

Economic efficiency
boost

Vibration
reduction

Energy
savings

Noise
reduction

Waste
reduction

PFERDERGONOMICS



PFERDEFFICIENCY

Emissions
reduction

Time & cost
savings

Comfort
enhancement

Resources
put to optimum use

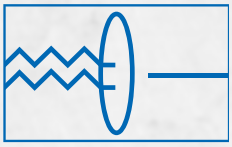
PFERDVALUE – ergonomic & efficient

Optimizing work processes through the use of high-performance premium tools and drives will boost profitability in your company. Those who operate based on a long-term economic plan also work sustainably. Results from the PFERD test laboratories as well as from the product tests by independent testing institutions prove that PFERD tools offer a measurable added value. Speak to your PFERD representative and uncover your added value with PFERD.

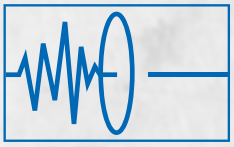
Find out more about **PFERD**VALUE –
Your added value with PFERD.

PFERDERGONOMICS

Users of hand-held tools are exposed to mechanical oscillation. The consequences of these oscillations may lead to decreased performance and adverse health effects.



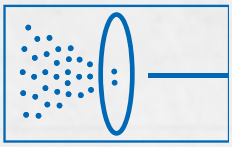
Vibration Filter



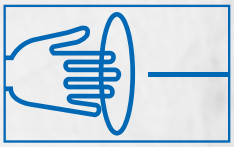
Noise Filter

Noise at the workplace can become an issue. Depending on the job and personal perceptions, noise at work may be bothersome, disruptive and may even pose a danger to health.

Not only does the pollutant content impair air quality due to the dust, the size of the particles may also create issues: The smaller they are, the greater the health hazard.



Emission Filter



Haptic Filter

Using tools successfully and economically requires the ability to work using the lowest level of force with the best possible control and maximum comfort.

PFERDEFFICIENCY

Perfectly harmonised with optimum dimensions, PFERD tools and tool drives offer considerably higher performance, save energy and boost economic efficiency.



Energy Saving



Waste Saving

Waste incurs effort and costs. PFERD tools produce less waste through improved stock removal rates and cutting performance with reduced product mass or an above-average tool life.

Time is a factor in cost-effectiveness. More aggressive tools with a higher stock removal rate plus reduced unproductive idle time, such as tool changes and rest periods, result in time savings.



Time Saving



Resource Saving

PFERD tools set themselves apart over their entire life cycle through the optimum and efficient utilisation of existing resources, thus enabling them to make a considerable contribution to savings.

Taking action together

Within the marketplace, PFERD is perfectly at home within trade circles. The close-knit trade network guarantees a fast response. Through ongoing training, you can rely on the retail market to be your ideal local adviser.

Whether on site, on your premises or over the Internet: PFERD offers powerful suppor for your sales. The **PFERD**TOOL-CENTER showcases the money makers and brings the world of PFERD tools to life.

Our services at a glance:

- Exclusive sales/customer service and active consultation.
- Efficient logistics network.
- Practical education and further training.
- Targeted advertising and sales promotion measures.
- Extensive digital data packages and electronic data.

Scan the QR code to find your nearest expert PFERD retail partner.











E-commerce – **top selling** with PFERD

PFERD offers a high-seller range specially tailored to your needs in e-commerce. To ensure PFERD products are optimally presented in the digital world, we provide comprehensive and high-quality product information, images and videos as part of the PFERD data service. The aim is to be able to trade together successfully in the future.

Electronic order processing is an efficient way of reducing your process costs and speeding up order processing. With the **PFERD**SHOP, EDI, EDI CSV and nexMart, we offer you different digital ordering methods. You will, of course, receive all-round support and we will be at your disposal for any further details you may require.

Scan the QR code for more information on the topic of e-commerce with PFERD.



Always at **your** side

Near-100 % availability and a reliable global logistics network with its own warehouses right around the globe – welcome to **PFERD**LOGISTICS. Your order will be dispatched to you within 24 hours.

PFERD in-house representatives handle your enquiries personally and are dedicated to dealing with your order efficiently. Maintaining this close dialogue is the key to mutual success.

Better **PFERD**

Quality is directly connected with benefit and customer satisfaction. That's why PFERD researches and develops innovative, high-performance products.

Our own machine and plant construction, and the continuous testing and further development of the quality and safety standards in our own laboratories all guarantee the proverbial PFERD quality. As a founder member of the "Organisation for the Safety of Abrasives (oSa)", PFERD also offers the highest possible levels of safety for the user by constantly monitoring manufacturing in all PFERD production facilities worldwide.

PFERD quality management is certified according to ISO 9001.





FWI
FACHVERBAND WERKZEUGINDUSTRIE e.V.

oSa®

VDS Verband Deutscher Schleifmittelwerke

FEPA
FEDERATION·OF·EUROPEAN
PRODUCERS·OF·ABRASIVES

ISO 9001
BUREAU VERITAS
Certification

A community of experts

In-depth knowledge of the interaction between the tool, material and tool drive forms the foundation for optimizing machining processes.

PFERD sales representatives and technical advisers along with the **PFERD**TOOL-MOBILES are employed daily around the world to find the best solution to your application problem – together with your retailer, on site and individually tailored to you.

In the **PFERD**ACADEMY, we provide highly specialized and practical knowledge from the world of grinding and cutting. The seminar blocks follow on from each other, so you can become a PFERD tool specialist step by step.

Anyone wanting to learn even more can connect with PFERD on one of the social media channels and become part of the **PFERD**COMMUNITY – creating a growing community of experts!












Marienheide, Germany


Hermeskeil, Germany


Araia, Spain


Jundiz, Spain


Milwaukee, USA


Johannisburg, South Africa


Changli, China

PFERD worldwide

Based in Germany, successful right across the globe. With a comprehensive network comprising 7 production sites, 22 dedicated subsidiaries and more than 100 trading partner representatives worldwide, PFERD has a truly global presence.

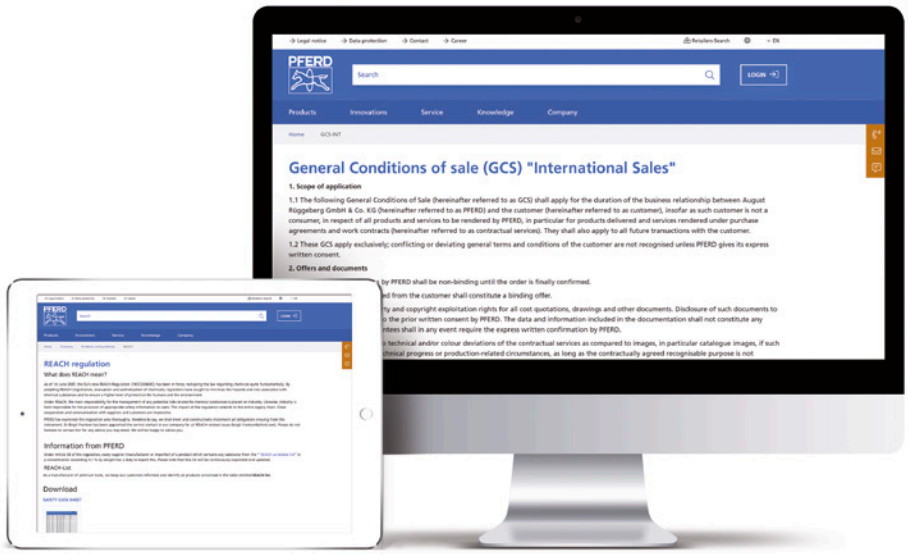
Including a location near you.

You can find all contact persons, subsidiaries, distribution companies and national and international representative offices here.

General terms and conditions of sale

Our general terms and conditions of sale apply, which you can view at **www.pferd.com/conditions.**

Scan the QR code for more information about our general terms and conditions of sale.



REACH Regulation (EC) No. 1907/2006

By adopting REACH (registration, evaluation and authorisation of chemicals), legislators have sought to minimize the hazards and risks associated with chemical substances and to ensure a higher level of protection for humans and the environment.

Information about PFERD tools in the context of the EC REACH Regulation can be found on our website **www.pferd.com/reach**.

PFERD repair service

Our highly experienced team at our Marienheide plant in Germany ensures that repairs are carried out quickly and looks after the provision of spare parts. Please send any queries to: **pferd.power.tools@pferd.com**

PFERD

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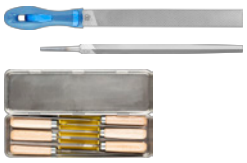


Files

Files
Table of contents

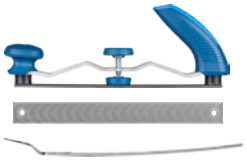
Files

- Highlights from the PFERD range 3
- The quick way to find the perfect tool 4
- The most common PFERD cuts 5



Files for the workshop

- Machinist's files, DIN series 7
- Special files 15
- Key files 18
- Key file sets 20
- Tungsten point file 20



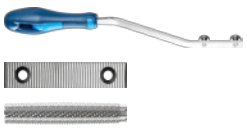
Car body files

- Adjustable holders for car body files 21
- Car body file blades 21
- Car body files tanged 22



Milled tooth files

- Paint peeler 23
- Universal chamfer file 23
- Milled tooth files, tanged 24
- Milled tooth file blades 24
- Holder for file blades 25



Tungsten carbide files

- Tungsten carbide files 26
- Holder for tungsten carbide files 26



Sharpening files

- Three square saw files 27
- Knife sharpening files 29
- Featheredge file 29
- Mill saw files 30
- Chain saw files 31
- CHAIN SHARP chain saw sharpeners 33
- Depth gauge files 36



Files and rasps for wood

- Wood files 37
- Wood rasps 37
- Hoof rasps 40
- Special rasps 40
- Needle rasps 41
- Needle rasp set 42



Precision files

- Tang files 43
- CORINOX files 48
- CORINOX needle files 50
- Needle files 52
- Needle file sets 57
- Handy files 58
- Handy file sets 59
- Riffler files, riffler rasps 60



File handles, file sleeves, file brush

- File handles 65
- Quick-mounting handles 66
- Riffler file holder 66
- Empty plastic sleeves 66
- File brush 67



Hand deburrer

- Hand deburrer 68

Car body files

PFERD car body files are not just used for automotive body work. They are ideal for any surface work on sheet metal, non-ferrous metals and plastics requiring a particularly high surface quality and scratch-free finish. Scan the QR code to find out more about PFERD's range of car body files.



Advantages:
- Versatile application.
- Ideal tooth shape.
- Convex shape prevents scratches.

CHAIN SHARP CS-X chain saw sharpener

Sharpening using chain saw files and depth gauge files requires you to have a lot of experience. Thanks to the chain saw sharpeners from PFERD, users who do not have as much experience can also achieve precise and uniform sharpening results.

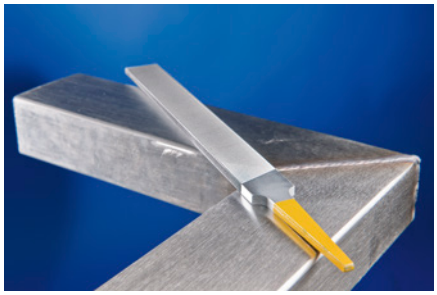


The CHAIN SHARP CS-X chain saw sharpener combines the functions of a depth gauge file and chain saw file in one. It allows the saw tooth to be sharpened whilst the depth gauge is adjusted at the same time. Scan the QR code to find out more about PFERD's range of chain saw sharpeners.

Advantages:
- Turn the device over to change from the right to the left tooth â€" no conversion work required.
- Optimized shape for precise guidance and optimal sharpening results.
- Improved shape makes it easy to replace the files.

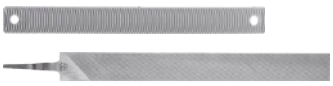
CORINOX files

CORINOX files are characterized by an exceptional surface hardness grade of 1,200 HV (Vickers scale). They are ideal for precisely filing components made of materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP). Scan the QR code to find out more about PFERD's range of CORINOX files and needle files.



Advantages:
- Extremely wear-resistant and sturdy thanks to high surface hardness.
- Low tendency to cause chip adhesion.

Files
The quick way to find the perfect tool

Use	Material	Applications	Tool
Filing 	■ Steel ■ Stainless steel (INOX) ■ Cast iron ■ Cast steel ■ Non-ferrous metals ■ Copper ■ Bronze ■ Brass ■ Zinc	■ Chamfering ■ Deburring ■ Roughing ■ Finishing ■ Surface work ■ Filing of breakthroughs	Files for the workshop  Files for aluminium  Milled tooth files  Precision files  Tungsten carbide files 
Sharpening 	■ Saw chains ■ Saw blades ■ Band saw blades ■ Knives ■ Machetes	■ Sharpening of saw chains, blades, and band saw blades	Chain saw files Three square saw files  Mill saw files  CHAIN SHARP chain saw sharpeners 
Car body work 	■ Sheet metal ■ Non-ferrous metals ■ Plastics	■ Surface work ■ Deburring ■ Removal of solder spots ■ Removal of weld spots	Car body files 
		■ Removal of thin paint layers ■ Correction of painting faults	Paint peeler 
Soft material work 	■ Wood ■ Plastics ■ Soft stone ■ Horn	■ Roughing ■ Finishing ■ Surface work ■ Deburring ■ Chamfering	Wood files  Wood rasps  Hoof plane and horse rasps  Special rasps 

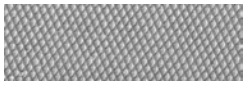
Files for the workshop



Cut 1
- Cross cut for coarse stock removal and roughing.



Cut 2
- Cross cut for universal roughing and finishing.



Cut 3
- Cross cut for precision processing and finishing.

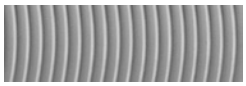
Car body files



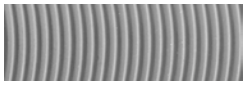
Cut 00
- Radial cut for very coarse stock removal and roughing.
- Creates score-free surfaces.



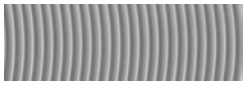
Cut 0
- Radial cut for coarse stock removal and roughing.
- Creates score-free surfaces.



Cut 1
- Radial cut for coarse stock removal and roughing.
- Creates score-free surfaces.

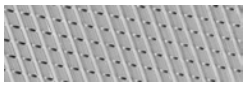


Cut 2
- Radial cut for general roughing and finishing.
- Creates score-free surfaces.

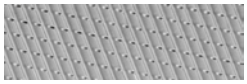


Cut 3
- Radial cut for fine stock removal and finishing.
- Creates score-free surfaces.

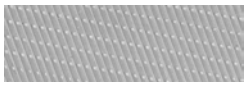
Milled tooth files



Cut 1
- Straight cut for coarse stock removal on soft metals.
- Because of its milled tooth shape with large flutes, the teeth do not clog up.

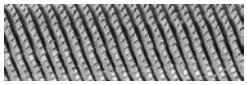


Cut 2
- Straight cut for general roughing and finishing on soft metals.
- Because of its milled tooth shape with large flutes, the teeth do not clog up.

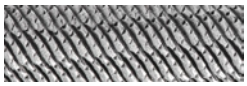


Cut 3
- Straight cut for fine stock removal on soft metals.
- Because of its milled tooth shape with large flutes, the teeth do not clog up.

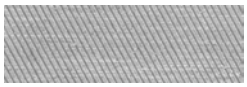
Sharpening files



Classic
- Classic spiral cut for users who prefer a softer filing action.



Premium
- Innovative spiral cut for users who prefer a softer filing action.

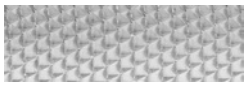


Single cut Cut 2
- Single cut.
- Universally suited to sharpening.

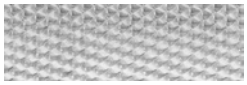
Rasps



Cut 1
- Rasp cut for very coarse stock removal.

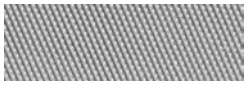


Cut 2
- Rasp cut for coarse stock removal.



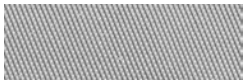
Cut 3
- Rasp cut for coarse stock removal.

Precision files

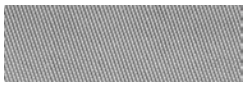


Cut 00
- Cross cut for very coarse precision work.

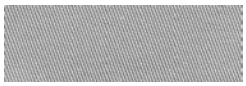
Files
The most common PFERD cuts



Cut 0
- Cross cut for coarse precision work.



Cut 1
- Cross cut for medium precision work.



Cut 2
- Cross cut for medium-fine precision work.



Cut 3
- Cross cut for fine precision work.



Cut 4
- Cross cut for very fine precision work.



Hand (1112)

Rectangular files, cut on three sides, one side uncut. Tanged design. Shape A in accordance with DIN 7261. Suitable for work on rectangular geometries.



Special features:
- Uniformly high stock removal rate.
- Long tool life.
- Suitable for use on aluminium, bronze, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/ unit EUR
Industrial packaging (without handle)										
1112	100	1	12	2.5	FH 2	-	10	11101101	1112 100 H1	-
		2	12	2.5	FH 2	-	10	11101102	1112 100 H2	-
		3	12	2.5	FH 2	-	10	11101103	1112 100 H3	-
	150	1	16	4	FH 3	-	10	11101151	1112 150 H1	-
		2	16	4	FH 3	-	10	11101152	1112 150 H2	-
		3	16	4	FH 3	-	10	11101153	1112 150 H3	-
	200	1	20	5	FH 4/1	-	10	11101201	1112 200 H1	-
		2	20	5	FH 4/1	-	10	11101202	1112 200 H2	-
		3	20	5	FH 4/1	-	10	11101203	1112 200 H3	-
	250	1	25	6	FH 4/1	-	10	11101251	1112 250 H1	-
		2	25	6	FH 4/1	-	10	11101252	1112 250 H2	-
		3	25	6	FH 4/1	-	10	11101253	1112 250 H3	-
	300	1	30	6.5	FH 5/1	-	5	11101301	1112 300 H1	-
		2	30	6.5	FH 5/1	-	5	11101302	1112 300 H2	-
		3	30	6.5	FH 5/1	-	5	11101303	1112 300 H3	-
	350	1	35	7.5	FH 5/1	-	5	11101351	1112 350 H1	-
		2	35	7.5	FH 5/1	-	5	11101352	1112 350 H2	-
POS packaging (with ergonomic file handle)										
1112	150	1	16	4	-	FH 3	1	11210156	PF 1112 150 H1	-
		2	16	4	-	FH 3	1	11210157	PF 1112 150 H2	-
		3	16	4	-	FH 3	1	11210158	PF 1112 150 H3	-
	200	1	20	5	-	FH 4/1	1	11210206	PF 1112 200 H1	-
		2	20	5	-	FH 4/1	1	11210207	PF 1112 200 H2	-
		3	20	5	-	FH 4/1	1	11210208	PF 1112 200 H3	-
	250	1	25	6	-	FH 4/1	1	11210256	PF 1112 250 H1	-
		2	25	6	-	FH 4/1	1	11210257	PF 1112 250 H2	-
		3	25	6	-	FH 4/1	1	11210258	PF 1112 250 H3	-
	300	1	30	6.5	-	FH 5/1	1	11210306	PF 1112 300 H1	-
		2	30	6.5	-	FH 5/1	1	11210307	PF 1112 300 H2	-
		3	30	6.5	-	FH 5/1	1	11210308	PF 1112 300 H3	-



Flat (1122)

Rectangular file, tapered and cut on four sides. Tanged version. Shape B according to DIN 7261. Suitable for work on rectangular geometries.



Special features:
- Uniformly high stock removal rate.
- Long tool life.
- Suitable for use on aluminium, bronze, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/ unit EUR
Industrial packaging (without handle)										
1122	100	1	12	2.5	FH 2	-	10	11103101	1122 100 H1	-
		2	12	2.5	FH 2	-	10	11103102	1122 100 H2	-
		3	12	2.5	FH 2	-	10	11103103	1122 100 H3	-
	150	1	16	4	FH 3	-	10	11103151	1122 150 H1	-
		2	16	4	FH 3	-	10	11103152	1122 150 H2	-
		3	16	4	FH 3	-	10	11103153	1122 150 H3	-
	200	1	20	5	FH 4/1	-	10	11103201	1122 200 H1	-
		2	20	5	FH 4/1	-	10	11103202	1122 200 H2	-
		3	20	5	FH 4/1	-	10	11103203	1122 200 H3	-
	250	1	25	6	FH 4/1	-	10	11103251	1122 250 H1	-
		2	25	6	FH 4/1	-	10	11103252	1122 250 H2	-
		3	25	6	FH 4/1	-	10	11103253	1122 250 H3	-
	300	1	30	6.5	FH 5/1	-	5	11103301	1122 300 H1	-
		2	30	6.5	FH 5/1	-	5	11103302	1122 300 H2	-
		3	30	6.5	FH 5/1	-	5	11103303	1122 300 H3	-
	350	1	35	7.5	FH 5/1	-	5	11103351	1122 350 H1	-
POS packaging (with ergonomic file handle)										
1122	150	1	16	4	-	FH 3	1	11216156	PF 1122 150 H1	-
		2	16	4	-	FH 3	1	11216157	PF 1122 150 H2	-
		3	16	4	-	FH 3	1	11216158	PF 1122 150 H3	-
	200	1	20	5	-	FH 4/1	1	11216206	PF 1122 200 H1	-
		2	20	5	-	FH 4/1	1	11216207	PF 1122 200 H2	-
		3	20	5	-	FH 4/1	1	11216208	PF 1122 200 H3	-
	250	1	25	6	-	FH 4/1	1	11216256	PF 1122 250 H1	-
		2	25	6	-	FH 4/1	1	11216257	PF 1122 250 H2	-
		3	25	6	-	FH 4/1	1	11216258	PF 1122 250 H3	-
	300	1	30	6.5	-	FH 5/1	1	11216306	PF 1122 300 H1	-
		2	30	6.5	-	FH 5/1	1	11216307	PF 1122 300 H2	-
		3	30	6.5	-	FH 5/1	1	11216308	PF 1122 300 H3	-



Three square (1132)

Triangular file, tapered and cut on three sides. Tanged version. Shape C according to DIN 7261. Suitable for filing angular profiles.

Special features:
- Uniformly high stock removal rate.
- Long tool life.
- Suitable for use on aluminium, bronze, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)									
1132	100	1	8	FH 2	-	10	11108101	1132 100 H1	-
		2	8	FH 2	-	10	11108102	1132 100 H2	-
		3	8	FH 2	-	10	11108103	1132 100 H3	-
	150	1	11	FH 3	-	10	11108151	1132 150 H1	-
		2	11	FH 3	-	10	11108152	1132 150 H2	-
		3	11	FH 3	-	10	11108153	1132 150 H3	-
	200	1	13	FH 4	-	10	11108201	1132 200 H1	-
		2	13	FH 4	-	10	11108202	1132 200 H2	-
		3	13	FH 4	-	10	11108203	1132 200 H3	-
	250	1	15.5	FH 5	-	10	11108251	1132 250 H1	-
		2	15.5	FH 5	-	10	11108252	1132 250 H2	-
		3	15.5	FH 5	-	10	11108253	1132 250 H3	-
	300	1	18	FH 5	-	5	11108301	1132 300 H1	-
		2	18	FH 5	-	5	11108302	1132 300 H2	-
POS packaging (with ergonomic file handle)									
1132	150	1	11	-	FH 3	1	11211156	PF 1132 150 H1	-
		2	11	-	FH 3	1	11211157	PF 1132 150 H2	-
		3	11	-	FH 3	1	11211158	PF 1132 150 H3	-
	200	1	13	-	FH 4	1	11211206	PF 1132 200 H1	-
		2	13	-	FH 4	1	11211207	PF 1132 200 H2	-
		3	13	-	FH 4	1	11211208	PF 1132 200 H3	-
	250	1	15.5	-	FH 5	1	11211256	PF 1132 250 H1	-
		2	15.5	-	FH 5	1	11211257	PF 1132 250 H2	-



Square (1142)

Square file, tapered and cut on four sides. Tanged version. Shape D according to DIN 7261. Suitable for filing angular profiles.



Special features:
- Uniformly high stock removal rate.
- Long tool life.
- Suitable for use on aluminium, bronze, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)									
1142	100	1	4	FH 2	-	10	11104101	1142 100 H1	-
		2	4	FH 2	-	10	11104102	1142 100 H2	-
		3	4	FH 2	-	10	11104103	1142 100 H3	-
	150	1	6	FH 3	-	10	11104151	1142 150 H1	-
		2	6	FH 3	-	10	11104152	1142 150 H2	-
		3	6	FH 3	-	10	11104153	1142 150 H3	-
	200	1	8	FH 4	-	10	11104201	1142 200 H1	-
		2	8	FH 4	-	10	11104202	1142 200 H2	-
		3	8	FH 4	-	10	11104203	1142 200 H3	-
	250	1	10	FH 4	-	10	11104251	1142 250 H1	-
		2	10	FH 4	-	10	11104252	1142 250 H2	-
		3	10	FH 4	-	10	11104253	1142 250 H3	-
	300	1	12	FH 5	-	5	11104301	1142 300 H1	-
		2	12	FH 5	-	5	11104302	1142 300 H2	-
POS packaging (with ergonomic file handle)									
1142	150	1	6	-	FH 3	1	11212156	PF 1142 150 H1	-
		2	6	-	FH 3	1	11212157	PF 1142 150 H2	-
	200	1	8	-	FH 4	1	11212206	PF 1142 200 H1	-
		2	8	-	FH 4	1	11212207	PF 1142 200 H2	-
	250	1	10	-	FH 4	1	11212256	PF 1142 250 H1	-
		2	10	-	FH 4	1	11212257	PF 1142 250 H2	-



Half-round (1152)

Half-round file, cut on two sides. Tanged version. Shape E according to DIN 7261. Suitable for work on radii and for filing of half-round shapes.



Special features:
- Excellent filing performance thanks to PFERD spiral cut.
- Long tool life.
- Suitable for use on aluminium, bronze, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/ unit EUR
Industrial packaging (without handle)										
1152	150	1	16	4.5	FH 3	-	10	11105151	1152 150 H1	-
		2	16	4.5	FH 3	-	10	11105152	1152 150 H2	-
		3	16	4.5	FH 3	-	10	11105153	1152 150 H3	-
	200	1	20	6	FH 4/1	-	10	11105201	1152 200 H1	-
		2	20	6	FH 4/1	-	10	11105202	1152 200 H2	-
		3	20	6	FH 4/1	-	10	11105203	1152 200 H3	-
	250	1	25	7	FH 4/1	-	10	11105251	1152 250 H1	-
		2	25	7	FH 4/1	-	10	11105252	1152 250 H2	-
		3	25	7	FH 4/1	-	10	11105253	1152 250 H3	-
	300	1	30	8.5	FH 5/1	-	5	11105301	1152 300 H1	-
		2	30	8.5	FH 5/1	-	5	11105302	1152 300 H2	-
		3	30	8.5	FH 5/1	-	5	11105303	1152 300 H3	-
	350	1	35	10	FH 5/1	-	5	11105351	1152 350 H1	-
POS packaging (with ergonomic file handle)										
1152	150	1	16	4.5	-	FH 3	1	11213156	PF 1152 150 H1	-
		2	16	4.5	-	FH 3	1	11213157	PF 1152 150 H2	-
		3	16	4.5	-	FH 3	1	11213158	PF 1152 150 H3	-
	200	1	20	6	-	FH 4/1	1	11213206	PF 1152 200 H1	-
		2	20	6	-	FH 4/1	1	11213207	PF 1152 200 H2	-
		3	20	6	-	FH 4/1	1	11213208	PF 1152 200 H3	-
	250	1	25	7	-	FH 4/1	1	11213256	PF 1152 250 H1	-
		2	25	7	-	FH 4/1	1	11213257	PF 1152 250 H2	-
		3	25	7	-	FH 4/1	1	11213258	PF 1152 250 H3	-
	300	1	30	8.5	-	FH 5/1	1	11213306	PF 1152 300 H1	-



Half-round pointed (1152 SP)

Half-round pointed file, cut on two sides. Tanged version. Shape E according to DIN 7261. Suitable for work on radii and for filing of half-round shapes.

Special features:
- Excellent filing performance thanks to PFERD spiral cut.
- Long tool life.
- Suitable for use on aluminium, bronze, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/ unit EUR
Industrial packaging (without handle)										
1152 SP	100	1	10.4	2.5	FH 2	-	10	11105101	1152 SP 100 H1	-
		2	10.4	2.5	FH 2	-	10	11105102	1152 SP 100 H2	-
		3	10.4	2.5	FH 2	-	10	11105103	1152 SP 100 H3	-

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Files for the workshop
Machinist's files, DIN series

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/ unit EUR
1152 SP	150	1	16	4.5	FH 3	-	10	11125151	1152 SP 150 H1	-
		2	16	4.5	FH 3	-	10	11125152	1152 SP 150 H2	-
		3	16	4.5	FH 3	-	10	11125153	1152 SP 150 H3	-
	200	1	20	6	FH 4/1	-	10	11125201	1152 SP 200 H1	-
		2	20	6	FH 4/1	-	10	11125202	1152 SP 200 H2	-
		3	20	6	FH 4/1	-	10	11125203	1152 SP 200 H3	-
	250	1	25	7	FH 4/1	-	10	11125251	1152 SP 250 H1	-
		2	25	7	FH 4/1	-	10	11125252	1152 SP 250 H2	-
		3	25	7	FH 4/1	-	10	11125253	1152 SP 250 H3	-
	300	1	30	8.5	FH 5/1	-	5	11125301	1152 SP 300 H1	-
		2	30	8.5	FH 5/1	-	5	11125302	1152 SP 300 H2	-
		3	30	8.5	FH 5/1	-	5	11125303	1152 SP 300 H3	-
	350	1	35	10	FH 5/1	-	5	11125351	1152 SP 350 H1	-
POS packaging (with ergonomic file handle)										
1152 SP	150	1	16	4.5	-	FH 3	1	11235156	PF 1152 SP 150 H1	-
		2	16	4.5	-	FH 3	1	11235157	PF 1152 SP 150 H2	-
		3	16	4.5	-	FH 3	1	11235158	PF 1152 SP 150 H3	-
	200	1	20	6	-	FH 4/1	1	11235206	PF 1152 SP 200 H1	-
		2	20	6	-	FH 4/1	1	11235207	PF 1152 SP 200 H2	-
		3	20	6	-	FH 4/1	1	11235208	PF 1152 SP 200 H3	-
	250	1	25	7	-	FH 4/1	1	11235256	PF 1152 SP 250 H1	-
		2	25	7	-	FH 4/1	1	11235257	PF 1152 SP 250 H2	-
		3	25	7	-	FH 4/1	1	11235258	PF 1152 SP 250 H3	-
	300	1	30	8.5	-	FH 5/1	1	11235306	PF 1152 SP 300 H1	-
		2	30	8.5	-	FH 5/1	1	11235307	PF 1152 SP 300 H2	-
		3	30	8.5	-	FH 5/1	1	11235308	PF 1152 SP 300 H3	-



Round (1162)

Round file with circumferential cut. Tanged version. Shape F according to DIN 7261. Suitable for work on radii and for filing profiles with inner radii.



Special features:
- Excellent filing performance thanks to PFERD spiral cut.
- Long tool life.
- Suitable for use on aluminium, bronze, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	ø [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)									
1162	100	1	4	FH 2	-	10	11107101	1162 100 H1	-
		2	4	FH 2	-	10	11107102	1162 100 H2	-
		3	4	FH 2	-	10	11107103	1162 100 H3	-
	150	1	6	FH 3	-	10	11107151	1162 150 H1	-
		2	6	FH 3	-	10	11107152	1162 150 H2	-
		3	6	FH 3	-	10	11107153	1162 150 H3	-
	200	1	7.5	FH 4	-	10	11107201	1162 200 H1	-
		2	7.5	FH 4	-	10	11107202	1162 200 H2	-
		3	7.5	FH 4	-	10	11107203	1162 200 H3	-
	250	1	9.5	FH 4	-	10	11107251	1162 250 H1	-

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Profile	Length [mm]	Cut	ø [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
1162	250	2	9.5	FH 4	-	10	11107252	1162 250 H2	-
		3	9.5	FH 4	-	10	11107253	1162 250 H3	-
	300	1	12	FH 5	-	5	11107301	1162 300 H1	-
		2	12	FH 5	-	5	11107302	1162 300 H2	-
		3	12	FH 5	-	5	11107303	1162 300 H3	-
	350	1	15	FH 5	-	5	11107351	1162 350 H1	-
POS packaging (with ergonomic file handle)									
1162	150	1	6	-	FH 3	1	11214156	PF 1162 150 H1	-
		2	6	-	FH 3	1	11214157	PF 1162 150 H2	-
		3	6	-	FH 3	1	11214158	PF 1162 150 H3	-
	200	1	7.5	-	FH 4	1	11214206	PF 1162 200 H1	-
		2	7.5	-	FH 4	1	11214207	PF 1162 200 H2	-
		3	7.5	-	FH 4	1	11214208	PF 1162 200 H3	-
	250	1	9.5	-	FH 4	1	11214256	PF 1162 250 H1	-
		2	9.5	-	FH 4	1	11214257	PF 1162 250 H2	-
		3	9.5	-	FH 4	1	11214258	PF 1162 250 H3	-
	300	1	12	-	FH 5	1	11214306	PF 1162 300 H1	-





Knife files (1172)

Triangular file with knife profile, cut on two sides and the narrow edge. Tanged version. Shape G according to DIN 7261. For work on very acute-angled and narrow geometries.

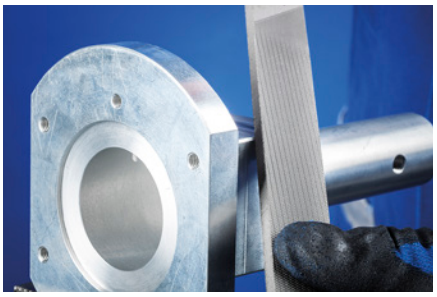
Special features:
- Uniformly high stock removal rate.
- Long tool life.
- Suitable for use on aluminium, bronze, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/ unit EUR
Industrial packaging (without handle)									
1172	150	2	16	5.2 x 1.25	FH 3	10	11109152	1172 150 H2	-
		3	16	5.2 x 1.25	FH 3	10	11109153	1172 150 H3	-
	200	1	20	6.4 x 1.5	FH 4/1	10	11109201	1172 200 H1	-
		2	20	6.4 x 1.5	FH 4/1	10	11109202	1172 200 H2	-
		3	20	6.4 x 1.5	FH 4	10	11109203	1172 200 H3	-
	250	1	25	7.9 x 1.75	FH 4/1	10	11109251	1172 250 H1	-
		2	25	7.9 x 1.75	FH 4/1	10	11109252	1172 250 H2	-



PFERD-PLUS files, hand type (1112)

Rectangular file, cut on three sides, one edge uncut. Tanged design. Shape A in accordance with DIN 7261. Excellent filing performance thanks to the special PFERD-PLUS cut. Suitable for work on rectangular geometries.



Special features:
- Easy and energy-saving working due to spade-like filing teeth.
- No clogging whilst processing soft materials thanks to a wide chip breaker.
- Can be used generally for all hobby and DIY purposes.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Incl. handle		Item no.	Designation	Price/ unit EUR
POS packaging (with ergonomic file handle)									
1112	200	PLUS-cut	20	5	FH 4/1	1	11215206	PF 1112 PLUS 200	-
	250	PLUS-cut	25	6	FH 4/1	1	11215256	PF 1112 PLUS 250	-
	300	PLUS-cut	30	6.5	FH 5/1	1	11215306	PF 1112 PLUS 300	-



Machinist's files in plastic pouch WR, machinist's files in plastic pouch with cardboard box WRU

Quality files for industry and trade in a protective and climate-resistant PVC pouch for storage in a toolbox or on a workbench. Each file comes with an ergonomic file handle.

Special features:
- Suitable for a wide range of applications.
- Available on request with matching plastic pouch to save space when stored. Available in the versions WR (plastic pouch) and WRU (plastic pouch with cardboard box).
- PFERD also provides the plastic pouches with files that are 200 and 250 mm in length in attractive packaging with a transparent window.

Length [mm]	Contents		Item no.	Designation	Price/unit EUR
WR design = Machinist's files in plastic pouch					
200	1112 200 H1, 1142 200 H1, 1152 200 H1, 1162 200 H1, 1552 200 H2	1	11800520	520 WR 200	-
	1112 200 H1, 1132 200 H1, 1142 200 H1, 1152 SP 200 H1, 1162 200 H1	1	11800531	531 WR 200	-
	1112 200 H2, 1132 200 H2, 1142 200 H2, 1152 SP 200 H2, 1162 200 H2	1	11800532	532 WR 200	-
	1112 200 H3, 1132 200 H3, 1142 200 H3, 1152 SP 200 H3, 1162 200 H3	1	11800533	533 WR 200	-
250	1112 250 H1, 1132 250 H1, 1142 250 H1, 1152 SP 250 H1, 1162 250 H1	1	11800541	541 WR 250	-
	1112 250 H2, 1132 250 H2, 1142 250 H2, 1152 SP 250 H2, 1162 250 H2	1	11800542	542 WR 250	-
	1112 250 H3, 1132 250 H3, 1142 250 H3, 1152 SP 250 H3, 1162 250 H3	1	11800543	543 WR 250	-
300	1112 300 H1, 1132 300 H1, 1142 300 H1, 1152 SP 300 H1, 1162 300 H1	1	11800551	551 WR 300	-
	1112 300 H2, 1132 300 H2, 1142 300 H2, 1152 SP 300 H2, 1162 300 H2	1	11800552	552 WR 300	-
200 / 300	1112 200 H1, 1112 300 H1, 1112 200 H2, 1112 300 H2, 1112 200 H3, 1112 300 H3	1	11800555	555 WR 200/300	-

Continued on next page

Length [mm]	Contents		Item no.	Designation	Price/unit EUR
WRU design = Machinist's files in plastic pouch with cardboard box					
200	1112 200 H1, 1142 200 H1, 1152 200 H1, 1162 200 H1, 1552 200 H2	1	11801520	520 WRU 200	-
	1112 200 H1, 1132 200 H1, 1142 200 H1, 1152 SP 200 H1, 1162 200 H1	1	11801531	531 WRU 200	-
	1112 200 H2, 1132 200 H2, 1142 200 H2, 1152 SP 200 H2, 1162 200 H2	1	11801532	532 WRU 200	-
	1112 200 H3, 1132 200 H3, 1142 200 H3, 1152 SP 200 H3, 1162 200 H3	1	11801533	533 WRU 200	-
250	1112 250 H1, 1132 250 H1, 1142 250 H1, PF 1152 SP 250 H1, PF 1162 250 H1	1	11801541	541 WRU 250	-
	1112 250 H2, 1132 250 H2, 1142 250 H2, 1152 SP 250 H2, 1162 250 H2	1	11801542	542 WRU 250	-
	1112 250 H3, 1132 250 H3, 1142 250 H3, 1152 SP 250 H3, 1162 250 H3	1	11801543	543 WRU 250	-



File set

Quality files designed to meet the needs of DIY users in a protective cardboard box. Precise versions with a high stock removal rate and a long tool life. Also suitable for sharpening. Each file comes with an ergonomic file handle.

Contents:
The set consists of a PF 1512 VZ 200 H1/1 (file rasp), a PF 1152 200 H1 (half-round file) and a PF 1212 VZ 200 H1/2 (hobby file).

Length [mm]	Contents		Item no.	Designation	Price/unit EUR
200	PF 1152 200 H1, PF 1212 VZ 200 H1/2, PF 1512 VZ 200 H1/1	1	11202300	PF-Set 300 200	-

Special files



Hobby file (1212)

Rectangular file with different cuts on three sides. Version with tang and ergonomic file handle. Cross cut 1 on front side for roughing, single cut 2 on back side and edge for sharpening.

Special features:
- For roughing and sharpening using the same tool.
- Versatile.
- Suitable for use on steel and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Incl. handle		Item no.	Designation	Price/unit EUR
POS packaging (with ergonomic file handle)									
1212	200	Cross cut 1 / single cut 2	25	4.5	FH 4/1	1	11273207	PF 1212 VZ 200 H1/2	-



File rasp (1512)

Rectangular file with different cuts on both flat sides. Version with tang and ergonomic file handle. Cross cut 1 on front side for roughing, rasp cut 1 on back side for rasping and one cut edge.

Special features:
- For roughing and sharpening using the same tool.
- Versatile.
- Suitable for use on soft non-ferrous metals, wood, plastics and steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Incl. handle		Item no.	Designation	Price/unit EUR
POS packaging (with ergonomic file handle)									
1512	200	Cross cut 1 / rasp cut 1	20	5	FH 4/1	1	11232206	PF 1512 VZ 200 H1/1	-





Universal sharpening file (1212)

Rectangular file, tanged and single cut 2 on two sides, with rounded, uncut narrow edges and ergonomic file handle. Often referred to as a lawnmower file. Suitable for sharpening cutting tools.



Special features:
- Long tool life.
- High surface quality with optimum cutting performance.
- Suitable for use on steel and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Incl. handle		Item no.	Designation	Price/ unit EUR
POS packaging (with ergonomic file handle)									
1212	200	Single cut 2	25	4.5	FH 4/1	1	11272207	PF 1212 ruk 200 H2	-





Fitter's file (611)

Rectangular file with different milled cuts, tanged and with ergonomic file handle. Straight cut with chip breaker on front side, radial cut on rear, uncut edges.

Special features:
- Extremely robust design.
- Versatile.
- Suitable for use on aluminium, soft non-ferrous metals, wood, plastics, steels up to 1,200 N/mm² and cast steel.

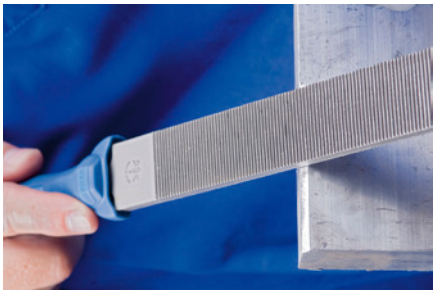
Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Incl. handle		Item no.	Designation	Price/ unit EUR
POS packaging (with ergonomic file handle)									
611	250	Radial 1/ straight 2	24	5.3	FH 4/1	1	11273256	PF 611 250 Z1/2	-





Files for aluminium, hand (1612 w)

Rectangular file, tanged and special cut on three sides, one edge uncut. Shape A according to DIN 7261. Particularly suitable for work on soft metals.



Special features:
- Special tooth geometry prevents the file from clogging.
- Good surfaces and labour-saving work.
- Suitable for use on aluminium, soft non-ferrous metals and plastics.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/ unit EUR
1612 w	250	0	25	6	FH 4/1	10	11102250	1612 w 250 H0	-
	300	0	30	6.5	FH 5/1	5	11102300	1612 w 300 H0	-





Files for aluminium, half-round (1652 w)

Half-round file, tanged with cut on two sides. Shape E according to DIN 7261. Excellent filing performance thanks to the PFERD spiral cut on the half-round side. Particularly suitable for work on soft metals.

Special features:
- Special tooth geometry prevents the file from clogging.
- Good surfaces and labour-saving work.
- Suitable for use on aluminium, soft non-ferrous metals and plastics.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/ unit EUR
1652 w	250	0	25	7	FH 4/1	10	11106250	1652 w 250 H0	-
	300	0	30	8.5	FH 5/1	5	11106300	1652 w 300 H0	-





Deburring files

Rectangular file, tanged and cross cut on three sides, one edge uncut. The cross cut is characterized by a particularly high stock removal rate. Also well suited to work on plastics, particularly thermosetting plastics.

Special features:
- Exceptionally high stock removal rate.
- Versatile.
- Suitable for use on soft non-ferrous metals and plastics.

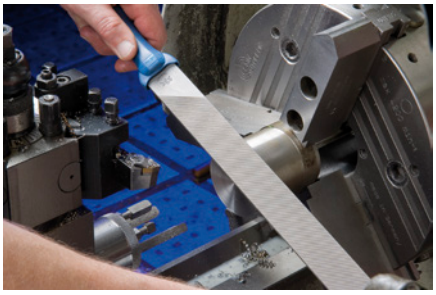
Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/ unit EUR
1312	150	Cross cut	16	2.8	FH 3	10	11110150	1312 150	-
	200	Cross cut	20	3.5	FH 4/1	10	11110200	1312 200	-





Lathe files

Rectangular file, tanged and cut on two sides, two edges uncut. Shape H according to DIN 7261. Suitable for deburring parts turned on a lathe.



Special features:
- Opposed direction of the cut on the front and back side causes the file to move away from the chuck during lathe work. This improves safety.
- Suitable for use on aluminium, hard non-ferrous metals, plastics, steel and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/ unit EUR
1612 DE	250	Single cut	25	6	FH 4/1	10	12119253	1612 DE 250 H1	-
	300	Single cut	30	6.5	FH 5/1	5	12119303	1612 DE 300 H1	-



Hand (1117)

Small files in accordance with DIN 7283 perfectly suited to light and delicate filing tasks, especially in tool and mould-making. Rectangular file that is cut on three sides and uncut on one side. Tanged design.



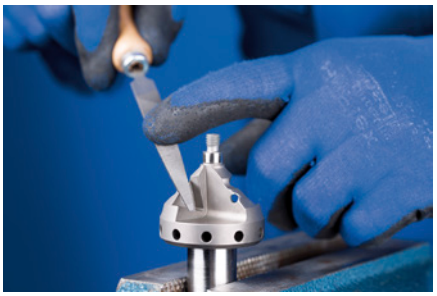
Special features:
- Versatile.
- Very handy design for the processing of delicate components.
- Suitable for use on aluminium, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/ unit EUR
Industrial packaging (without handle)										
1117	100	2	10	1.4	FH 2	-	10	11502102	1117 100 H2	-
	150	2	16	1.8	FH 2	-	10	11502152	1117 150 H2	-
POS packaging (with wooden handle)										
1117	100	2	10	1.4	-	Wooden handle	1	11251102	PF 1117 100 H2	-



Flat (1127)

Small files in accordance with DIN 7283 perfectly suited to light and delicate filing tasks, especially in tool and mould-making. Rectangular file, tapered and cut on four sides. Tanged design.



Special features:
- Versatile.
- Very handy design for the processing of delicate components.
- Suitable for use on aluminium, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
1127	100	2	10	1.4	FH 2	10	11501102	1127 100 H2	-
	150	2	16	1.8	FH 2	10	11501152	1127 150 H2	-



Three square (1137)

Small files in accordance with DIN 7283 perfectly suited to light and delicate filing tasks, especially in tool and mould-making. Triangular file, tapered and cut on three sides. Tanged design.

Special features:
- Versatile.
- Very handy design for the processing of delicate components.
- Suitable for use on aluminium, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Matching handle		Item no.	Designation	Price/unit EUR
1137	100	2	5	FH 2	10	11505102	1137 100 H2	-





Square (1147)

Small files in accordance with DIN 7283 perfectly suited to light and delicate filing tasks, especially in tool and mould-making. Square file, tapered and cut on four sides. Tanged design.

Special features:
- Versatile.
- Very handy design for the processing of delicate components.
- Suitable for use on aluminium, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)									
1147	100	2	3	FH 2	-	10	11506102	1147 100 H2	-
POS packaging (with wooden handle)									
1147	100	2	3	-	Wooden handle	1	11254102	PF 1147 100 H2	-





Half-round (1157)

Small files in accordance with DIN 7283 perfectly suited to light and delicate filing tasks, especially in tool and mould-making. Half-round file, cut on two sides. Tanged design.

Special features:
- Versatile.
- Very handy design for the processing of delicate components.
- Suitable for use on aluminium, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)										
1157	100	2	9	3	FH 2	-	10	11503102	1157 100 H2	-
POS packaging (with wooden handle)										
1157	100	2	9	3	-	Wooden handle	1	11255102	PF 1157 100 H2	-





Round (1167)

Small files in accordance with DIN 7283 perfectly suited to light and delicate filing tasks, especially in tool and mould-making. Round file with circumferential cut. Tanged design.



Special features:
- Versatile.
- Very handy design for the processing of delicate components.
- Suitable for use on aluminium, copper, brass, zinc, grey cast iron, steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	ø [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)									
1167	100	2	3	FH 2	-	10	11504102	1167 100 H2	-
POS packaging (with wooden handle)									
1167	100	2	3	-	Wooden handle	1	11256102	PF 1167 100 H2	-

Files for the workshop
Key file sets



Key file set 265 A

Contains an application-oriented selection of key files. Ideal for fine and delicate filing.

Contents:
The set contains six key files and a quick-mounting handle. The set comprises one each of the following files: hand (1117), flat (1127), three square (1137), square (1147), half-round (1157), round (1167).

Special features:
- Suitable for a wide range of delicate and light filing tasks.
- Supplied with quick-mounting handle no. 210 in a plastic pouch to protect against dirt and damage. Handle is only available in a set and not individually.

Length [mm]		Item no.	Designation	Price/unit EUR
100	1	11702100	265 A 100 H2	-



Key file set 265 B

Contains an application-oriented selection of key files. Ideal for fine and delicate filing.

Contents:
The set contains six key files. The set comprises one each of the following files: hand (1117), flat (1127), three square (1137), square (1147), half-round (1157) and round (1167).

Special features:
- Suitable for a wide range of delicate and light filing tasks.
- Supplied with mounted wooden handles in a plastic pouch to protect against dirt and damage. Key files are only available in a set and not individually.

Length [mm]		Item no.	Designation	Price/unit EUR
100	1	11706100	265 B 100 H2	-



Key file set 265 K

Contains an application-oriented selection of key files. Ideal for fine and delicate filing.

Contents:
The set contains six key files. The set comprises one each of the following files: hand (1117), flat (1127), three square (1137), square (1147), half-round (1157) and round (1167).

Special features:
- Suitable for a wide range of delicate and light filing tasks.
- Supplied with mounted wooden handles in a metal box to protect against dirt and damage. Key files are only available in a set and not individually.

Length [mm]		Item no.	Designation	Price/unit EUR
100	1	11700265	265 K 100 H2	-

Tungsten point file



Tungsten point file

Rectangular file with flat handle and cut 2 on two sides. Shape A according to DIN 7283. Very thin file, which is particularly suitable for work on contacts, narrow grooves and cut holes.

Special features:
- The punched file handle eliminates the need for an additional handle.
- Practical design.
- Suitable for use on soft non-ferrous metals, steel and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
1118 A	100	2	8	1.2	10	11509150	1118 A 100 H2	-



Adjustable holders for car body files

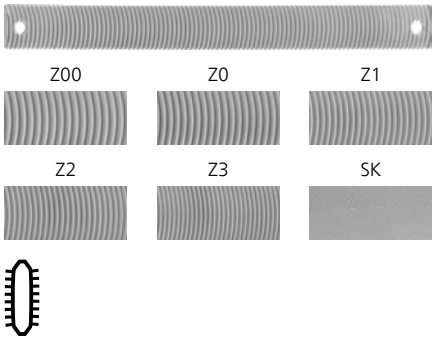
This light ergonomic holder with plastic handles without plasticizer allows individual tensioning of car body file blades to match the surface contour of the workpiece.



Special features:
- The bending radius of the file can be steplessly adjusted via the tensioning system.
- Can be used in a focused manner or over a wide area as the car body file can be used curved as well as straight.
- Enables work with low levels of fatigue thanks to vibration-damping rubber pad.

Suitable for file length [mm]		Item no.	Designation	Price/unit EUR
300	1	14000167	KFH 300	-
350	1	14203350	KFH 350	-

Car body file blades



Car body file blades

The car body file blades have razor-sharp tooth edges and, thanks to the individual clamping in the car body file holder, can be adjusted to the contour of the surface to be worked. The file blades can also be used at specific points.

Special features:
- The bending radius of the file can be steplessly adjusted via the tensioning system.
- Convex shape of the file blades (type 299 b) prevents unwanted scratches.
- Suitable for use on aluminium and steels up to 1,200 N/mm².

Profile	Length [mm]	Cut	Version	Width [mm]	Height [mm]	Teeth per inch		Item no.	Designation	Price/unit EUR
299 b	300	1	coarse	31	4.7	9	1	14101301	299 b 300 Z1	-
		2	medium	31	4.7	10	1	14101302	299 b 300 Z2	-
		3	fine	31	4.7	12	1	14101303	299 b 300 Z3	-
	350	0	very coarse	36	5.2	8	1	14101350	299 b 350 Z0	-
		00	extra-coarse	36	5.8	7	1	14101357	299 b 350 Z00	-
		1	coarse	36	4.7	9	1	14101351	299 b 350 Z1	-
		2	medium	36	4.7	10	1	14101352	299 b 350 Z2	-
		3	fine	36	4.7	12	1	14101353	299 b 350 Z3	-
299 e	350	Special cross cut (SK)	-	36	4.7	-	1	14107359	299 e 350	-

Car body files
Car body files tanged



Car body files tanged

File curved in longitudinal and transverse direction (convex), tanged. Cut on one side.



Special features:
- Convex shape of the file prevents unwanted scratches.
- Can be used in a focused manner.
- Suitable for use on aluminium and steels up to 1,200 N/mm².

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/ unit EUR
299 c	350	1	34.5	7.6	FH 5/1	5	14103351	299 c 350 H1	-
		3	34.5	7.6	FH 5/1	5	14103353	299 c 350 H3	-



Paint peeler

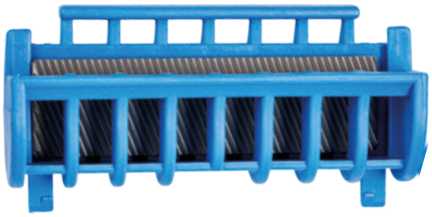
Small paint peeler with file blade that can be used on both sides, for finishing of very small painted surfaces thanks to precisely adjustable plastic holder. For levelling and correction of painting faults, and for removal of extremely thin paint layers.



Special features:
- Convex shape prevents unwanted scratches.
- Precision-cut, razor-sharp teeth provide a very high-quality, score-free surface finish.
- Surfaces can be painted or processed immediately.

Length [mm]	Cut	Width [mm]	Height [mm]	Replacement file		Item no.	Designation	Price/unit EUR
Paint peeler (including file)								
50	3	36	4.7	LAHF 50 Z3	1	14302001	LAH Z3	-
Replacement file for paint peeler								
50	3	36	4.7	-	10	14131053	LAHF 50 Z3	-

Universal chamfer file



UKF



KF 110

Universal chamfer file

Rectangular file in a special plastic holder, angled cut on two sides. Ideal for quick and easy deburring work.



Special features:
- The special holder enables easy tool control and exact, right-angled positioning of the chamfer file on the guide rail.
- Outstandingly well suited for sharpening ski edges and repairing guide rails on motor saws.
- Suitable for use on aluminium, grey cast iron and steels up to 1,200 N/mm^2.

Length [mm]	Cut	Width [mm]	Height [mm]	Replacement file		Item no.	Designation	Price/unit EUR
Universal chamfer file (including file blade)								
110	2	-	-	KF 110 Z2	1	13217110	UKF Z2	-
Spare file blade								
110	2	31	4.7	-	10	13215112	KF 110 Z2	-

Milled tooth files
Milled tooth files, tanged



Hand

Rectangular file with cuts on three sides. Tanged version. Angled cut with chip breaker on the flat sides, straight cut on the high edge. Suitable for work on rectangular geometries.

Special features:
- Very aggressive.
- No clogging thanks to the large flutes.
- Suitable for use on aluminium, grey cast iron, steels up to 1,200 N/mm², cast steel, copper and brass.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
290	250	1	25	5.5	FH 4/1	10	13101251	290 250 Z1	-
		2	25	5.5	FH 4/1	10	13101252	290 250 Z2	-
	300	1	30	6	FH 5/1	5	13101301	290 300 Z1	-
		2	30	6	FH 5/1	5	13101302	290 300 Z2	-
		3	30	6	FH 5/1	5	13101303	290 300 Z3	-
	350	1	36	7	FH 5/1	5	13101351	290 350 Z1	-
		2	36	7	FH 5/1	5	13101352	290 350 Z2	-



Half-round, hollow

Half-round file, hollow and tapered. Tanged version. With chip breaker on the half-round side, angled cut on one side. Suitable for work on radii and for filing of half-round shapes.



Special features:
- Very aggressive.
- No clogging thanks to the large flutes.
- Suitable for use on aluminium, grey cast iron, steels up to 1,200 N/mm², cast steel, copper and brass.

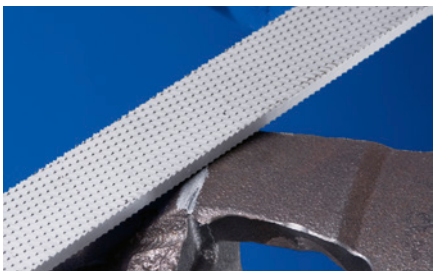
Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
295	250	1	23	7	FH 4/1	10	13103251	295 250 Z1	-
	300	1	27	9	FH 5/1	5	13103301	295 300 Z1	-

Milled tooth file blades



Hand

Rectangular file with two holes for mounting on the file holder, angled cut with chip breaker on the flat sides.



Special features:
- Very aggressive.
- No clogging thanks to the large flutes.
- Suitable for use on aluminium, grey cast iron, cast steel and steels up to 1,200 N/mm².

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Suitable holders		Item no.	Designation	Price/unit EUR
296	300	1	31	4.7	296a/300	5	13201301	296 300 Z1	-
		2	31	4.7	296a/300	5	13201302	296 300 Z2	-
	350	1	36	4.7	296a/350	5	13201351	296 350 Z1	-
		2	36	4.7	296a/350	5	13201352	296 350 Z2	-



Holder for file blades

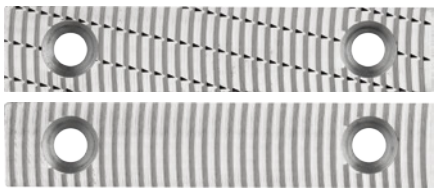
This reusable file holder gives optimum file control and optimum filing results. It can also easily be used for car body file blades. Available in two sizes for all PFERD milled file blades.

Special features:
- Quick tool changes without special tools.
- Practical design.

Suitable for file length [mm]	Matching handle		Item no.	Designation	Price/unit EUR
300	FH 5/1	1	13203300	296a/300	-
350	FH 5/1	1	13203350	296a/350	-



HMF 5010/1
HMF 13220/1



HMF 5010/2
HMF 13220/2

Tungsten carbide files flat

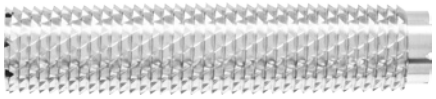
Flat tungsten carbide files for working on flat and convex surfaces. Optimum work results achieved thanks to radial and convex cut pattern. Tungsten carbide file holders (HMFH) must be ordered separately.

Special features:
- **HMF 5010/1, HMF 13220/1:** Rectangular files, convex in transverse and longitudinal direction, cut on one side for a high surface quality.
- **HMF 5010/2, HMF 13220/2:** Rectangular file, convex in transverse direction, cut on two sides, one side with chip breakers for high stock removal.
- Suitable for use on steel and steel materials with hardness > 54 HRC.

Length [mm]	Teeth per cm	Height [mm]	Width [mm]	Chip breaker	Suitable holders		Item no.	Designation	Price/ unit EUR
50	10	10	5	-	HMFH 50	1	14403041	HMF 5010/1	-
	6.5	10	5	1 side without, 1 side with	HMFH 50	1	14403042	HMF 5010/2	-
132	5	20	7	-	HMFH 132	1	14410131	HMF 13220/1	-
				1 side without, 1 side with	HMFH 132	1	14410132	HMF 13220/2	-



HMF 1050



HMF 1250

Round tungsten carbide files

Round tungsten carbide files with circumferential cut for working on concave shapes and for reworking internal radii. Please order holders for tungsten carbide files (HMFH 51 R) separately.

Special features:
- The unique tooth geometry ensures optimum results.
- For 360° use: Mounting in the HMFH 51 R file holder enables the files to be moved about their own axis in 60° increments.
- Suitable for use on steel and steel materials with hardness > 54 HRC.

Length [mm]	Teeth per cm	ø [mm]	Suitable holders		Item no.	Designation	Price/unit EUR
50	8	10	HMFH 51 R	1	14405040	HMF 1050	-
		12	HMFH 51 R	1	14406040	HMF 1250	-

Holder for tungsten carbide files



HMFH 50



HMFH 132



HMFH 51 R

Holder for tungsten carbide files

Reusable and ergonomically shaped file holder with ergonomic file handle. Please order tungsten carbide files separately.

Special features:
- Optimal file control is guaranteed.
- The best results.
- Quick tool changes.

Suitable tungsten carbide files		Item no.	Designation	Price/unit EUR
HMF 5010/2, HMF 5010/1	1	14203050	HMFH 50	-
HMF 13220/2, HMF 13220/1	1	14204132	HMFH 132	-
HMF 1050, HMF 1250	1	14203051	HMFH 51 R	-





Saw files, normal (1232)

Triangular file, tapered with tang for a wide range of applications. Cut on three sides and three edges.



Special features:
- Good stock removal rate.
- Long tool life.
- Suitable for use on steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)									
1232	125	2	10	FH 3	-	10	*11401122*	1232 125 H2	-
	150	2	12	FH 3	-	10	11401152	1232 150 H2	-
	250	2	18	FH 4	-	10	11401252	1232 250 H2	-
POS packaging (with ergonomic file handle)									
1232	125	2	10	-	FH 3	1	11274127	PF 1232 125 H2	-
	150	2	12	-	FH 3	1	11274157	PF 1232 150 H2	-





Saw files, slim (1237)

Triangular file, tapered with tang for a wide range of applications. Cut on three sides and three edges.

Special features:
- Good stock removal rate.
- Long tool life.
- Suitable for use on steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)									
1237	100	2	6	FH 2	-	10	11402102	1237 100 H2	-
	125	2	7	FH 2	-	10	11402122	1237 125 H2	-
	150	2	8.5	FH 3	-	10	11402152	1237 150 H2	-
	175	2	10	FH 4	-	10	11402182	1237 175 H2	-
	200	2	12	FH 4	-	10	11402202	1237 200 H2	-
POS packaging (with ergonomic file handle)									
1237	125	2	7	-	FH 2	1	11275127	PF 1237 125 H2	-
	150	2	8.5	-	FH 3	1	11275157	PF 1237 150 H2	-





Saw files, extra slim (1238)

Triangular file, tapered with tang for a wide range of applications. Cut on three sides and three edges.

Special features:
- Good stock removal rate.
- Long tool life.
- Suitable for use on steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)									
1238	100	2	5	FH 2	-	10	11403102	1238 100 H2	-
	150	2	7	FH 2	-	10	11403152	1238 150 H2	-
POS packaging (with ergonomic file handle)									
1238	150	2	7	-	FH 2	1	11277157	PF 1238 150 H2	-



Saw files, ultra-slim (1239)

Triangular file, tapered with tang for a wide range of applications. Cut on three sides and three edges.

Special features:
- Good stock removal rate.
- Long tool life.
- Suitable for use on steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Matching handle		Item no.	Designation	Price/unit EUR
1239	125	2	4.7	FH 2	10	11404122	1239 125 H2	-
	200	2	8	FH 3	10	11404202	1239 200 H2	-





Fine saw file

Triangular file with knife profile, tanged. Cut on two sides and the narrow edge.

Special features:
- Good stock removal rate.
- Long tool life.
- Suitable for use on steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)										
340	110	2	6.5	4.8	FH 2	-	10	*11630113*	340 110 H2	-
POS packaging (with ergonomic file handle)										
340	110	2	6.5	4.8	-	FH 2	1	11279118	PF 340 110 H2	-





Cantsaw file (1230)

Triangular file, tanged. Cut on three sides, non-equilateral triangular shape.

Special features:
- Good stock removal rate.
- Long tool life.
- Suitable for use on steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
1230	200	2	22.4	12.5	FH 4	10	11633202	1230 200 H2	-



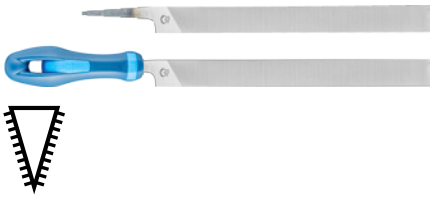


Band saw files (1231)

Triangular file, tapered with tang. Cut on three sides, round cut edges. Shape D according to DIN 7262. Suitable for sharpening saw blades.

Special features:
- Good stock removal rate.
- Long tool life.
- Suitable for use on steels up to 1,200 N/mm² and cast steel.

Profile	Length [mm]	Cut	Width [mm]	Matching handle		Item no.	Designation	Price/unit EUR
1231	150	2	14.6	FH 3	10	11621152	1231 150 H2	-
	175	2	15.5	FH 4	10	11621182	1231 175 H2	-
	200	2	17	FH 4	10	11621202	1231 200 H2	-



Knife sharpening files (1272)

Triangular file with knife profile, tanged. Cut on two sides and the narrow edge. Shape G according to DIN 7262.



Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/ unit EUR
Industrial packaging (without handle)										
1272	200	2	20	6.4 x 1.5	FH 4/1	-	10	11604203	1272 200 H2	-
	250	2	25	7.9 x 1.75	FH 4/1	-	10	11604253	1272 250 H2	-
POS packaging (with ergonomic file handle)										
1272	200	2	20	6.4 x 1.5	-	FH 4/1	1	11276208	PF 1272 200 H2	-

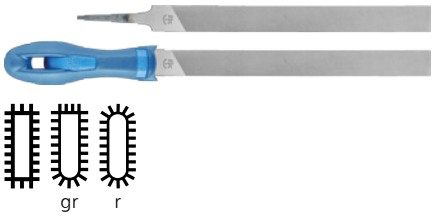
Featheredge file



Featheredge file

File with rhomboid cross section with feather edge profile, tanged. Cut on four sides.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
305	200	2	30	5	FH 5/1	10	11605203	305 200 H2	-



Mill saw files (1212)

Rectangular file, tanged. Available in three designs: With two straight edges (1212), one round and one straight edge (1212 gr), with two round edges (1212 r) and cut on four sides. Shape E in accordance with DIN 7276.



Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)										
1212	200	2	20	3.5	FH 4/1	-	10	11607203	1212 200 H2	-
	250	2	25	4.5	FH 4/1	-	10	11607253	1212 250 H2	-
	300	2	30	5	FH 5/1	-	10	11607303	1212 300 H2	-
Industrial packaging (without handle) – gr										
1212 gr	150	2	16	3	FH 3	-	10	11608153	1212 gr 150 H2	-
	200	2	20	3.5	FH 4/1	-	10	11608203	1212 gr 200 H2	-
	250	2	25	4.5	FH 4/1	-	10	11608253	1212 gr 250 H2	-
	300	2	30	5	FH 5/1	-	10	11608303	1212 gr 300 H2	-
POS packaging (with ergonomic file handle) – gr										
1212 gr	200	2	20	3.5	-	FH 4/1	1	11270208	PF 1212 gr 200 H2	-
Industrial packaging (without handle) – r										
1212 r	200	2	20	3.5	FH 4/1	-	10	11609203	1212 r 200 H2	-
	250	2	25	4.5	FH 4/1	-	10	11609253	1212 r 250 H2	-
	300	2	30	5	FH 5/1	-	10	11609303	1212 r 300 H2	-
POS packaging (with ergonomic file handle) – r										
1212 r	200	2	20	3.5	-	FH 4/1	1	11271208	PF 1212 r 200 H2	-
	250	2	25	4.5	-	FH 4/1	1	11271258	PF 1212 r 250 H2	-



Mill saw files, USA type 1212 SP (“mill file”)

Rectangular file, tapered with tang, for sharpening, deburring and surface work. Cut on four sides. Shape E in accordance with DIN 7262.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
1212 SP	150	1	16	3	FH 3	10	11904151	1212 SP 150 H1	-
		3	16	3	FH 3	10	11904153	1212 SP 150 H3	-
	200	1	20	3.5	FH 4/1	10	11904201	1212 SP 200 H1	-
		2	20	3.5	FH 4/1	10	11904202	1212 SP 200 H2	-
		3	20	3.5	FH 4/1	10	11904203	1212 SP 200 H3	-
	250	1	25	4.5	FH 4/1	10	11904251	1212 SP 250 H1	-
		2	25	4.5	FH 4/1	10	11904252	1212 SP 250 H2	-
		3	25	4.5	FH 4/1	10	11904253	1212 SP 250 H3	-
	300	1	30	5	FH 5/1	10	11904301	1212 SP 300 H1	-
		2	30	5	FH 5/1	10	11904302	1212 SP 300 H2	-
		3	30	5	FH 5/1	10	11904303	1212 SP 300 H3	-



Chain saw files, round

Round file for fast and score-free manual sharpening of saw chains. In comparison to machine sharpening, this file removes stock sparingly without thermal loads caused by friction on the metal. LP = Low Profile.



Special features:
- Precise spiral cut for extreme sharpness and exceptionally long tool life.
- **Classic Line:** Optimum combination of tool life and stock removal rate, aggressive filing for quick sharpening.
- **Premium Line:** Perfect sharpness thanks to innovative spiral cut. Fine tooth surfaces for maximum cutting performance and gentler filing.

Profile	Length [mm]	ø [mm]	ø [inch]	Performance Line	Chain pitch [inch]	Matching handle	📦	Item no.	Designation	Price/ unit EUR
412 200	200	3.5	9/64	Classic Line	1/4 LP	SH 220	6	11004153	412 200 x 3,5 Classic	-
		4	5/32	Classic Line	1/4 , 3/8 LP	FH 2	6	11016203	412 200 x 4,0 Classic	-
				Premium Line	1/4, 3/8 LP	FH 2	6	11037203	412 200 x 4,0 Premium	-
		4.5	11/64	Classic Line	.325	FH 2	6	11017203	412 200 x 4,5 Classic	-
				Premium Line	.325	FH 2	6	11038203	412 200 x 4,5 Premium	-
		4.8	3/16	Classic Line	.325	FH 2, FH 3	6	11018203	412 200 x 4,8 Classic	-
				Premium Line	.325	FH 2, FH 3	6	11039203	412 200 x 4,8 Premium	-
		5.16	13/64	Classic Line	3/8	FH 3	6	11020203	412 200 x 5,16 Classic	-
				Premium Line	3/8	FH 3	6	11040203	412 200 x 5,16 Premium	-
		5.5	7/32	Classic Line	3/8 , .404	FH 3	6	11022203	412 200 x 5,5 Classic	-
				Premium Line	3/8, .404	FH 3	6	11041203	412 200 x 5,5 Premium	-
		6.3	1/4	Classic Line	-	FH 3	6	11024203	412 200 x 6,3 Classic	-
		7	9/32	Classic Line	-	FH 3	6	11026203	412 200 x 7,0 Classic	-
		7.9	5/16	Classic Line	3/4	FH 3	6	11028203	412 200 x 7,9 Classic	-



Chain saw files in plastic pouch, pack of 3

Three round files with spiral cut in promotional plastic packaging to protect against dirt and damage. The opening on the front of the packaging makes it easier to remove and return the files. A packaging unit contains four packs, each containing three files. LP = Low Profile.

Special features:
- The chain saw files 412, file diameter 3.2 mm, are supplied with a round cylindrical tang.
- **Classic Line:** Optimum combination of tool life and stock removal rate, aggressive filing for quick sharpening.
- **Premium Line:** Perfect sharpness thanks to innovative spiral cut. Fine tooth surfaces for maximum cutting performance and gentler filing.

Profile	Length [mm]	ø [mm]	ø [inch]	Performance Line	Chain pitch [inch]	Matching handle	📦	Item no.	Designation	Price/ unit EUR
POS packaging										
412 4x3	200	3.2	1/8	Classic Line	1/4 LP	SH 220	12	18600740	412 4x3 200 x 3,2 Classic	-
		4	5/32	Classic Line	1/4 , 3/8 LP	FH 2	12	11071203	412 4x3 200 x 4,0 Classic	-
				Premium Line	1/4 , 3/8 LP	FH 2	12	18600759	412 4x3 200 X 4,0 Premium	-
		4.5	11/64	Classic Line	.325	FH 2	12	18600763	412 4x3 200 x 4,5 Classic	-
				Premium Line	.325	FH 2	12	18600764	412 4x3 200 X 4,5 Premium	-
		4.8	3/16	Classic Line	.325	FH 2, FH 3	12	11073203	412 4x3 200 x 4,8 Classic	-
				Premium Line	.325	FH 2, FH 3	12	18600760	412 4x3 200 X 4,8 Premium	-
		5.16	13/64	Classic Line	3/8	FH 3	12	18600758	412 4x3 200 x 5,16 Classic	-
				Premium Line	3/8	FH 3	12	18600761	412 4x3 200 x 5,16 Premium	-
		5.5	7/32	Classic Line	3/8 , .404	FH 3	12	11075203	412 4x3 200 x 5,5 Classic	-
				Premium Line	3/8 , .404	FH 3	12	18600762	412 4x3 200 x 5,5 Premium	-



Chain saw files in plastic pouch, pack of 2

Two round Classic Line files with spiral cut in promotional plastic packaging to protect against dirt and damage. One packaging unit contains twenty plastic packs, each containing two files. LP = Low Profile.



Special features:
- The overlapping opening on the rear ensures that no files can inadvertently slide out of the packaging.
- **Classic Line:** Optimum combination of tool life and stock removal rate, aggressive filing for quick sharpening.

Profile	Length [mm]	ø [mm]	ø [inch]	Performance Line	Chain pitch [inch]	Matching handle		Item no.	Designation	Price/ unit EUR
POS packaging										
4122 SK	200	4	5/32	Classic Line	1/4 , 3/8 LP	FH 2	40	11081203	4122 SK-4,0 200 Classic	-
		4.8	3/16	Classic Line	.325	FH 2, FH 3	40	11083203	4122 SK-4,8 200 Classic	-
		5.16	13/64	Classic Line	3/8	FH 3	40	18600757	4122 SK-5,16 200 Classic	-
		5.5	7/32	Classic Line	3/8 , .404	FH 3	40	11085203	4122 SK-5,5 200 Classic	-



Wooden handles for chain saw files

The wooden handle for chain saw files has an angular contact surface which maintains a 35° filing angle for accurate, even sharpening of all chain saw teeth.

Special features:
- Optimized filing angle ensures precise, even filing.

Suitable for chain saw file ø [mm]	Total length [mm]		Item no.	Designation	Price/unit EUR
4,8 / 5,16 / 5,5 / 6,3 / 7,0 /7,9	100	10	12611010	HKSF 100/10	-
		100	12610010	HKSF 100/100	-



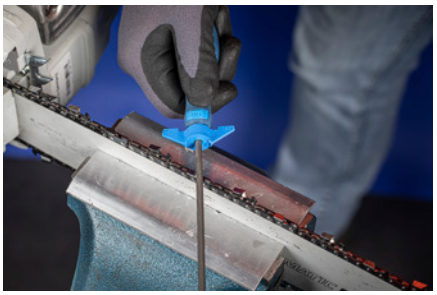
FH 1 KSF



KSSL

Ergonomic file handle, chain saw gauge

The chain saw gauge supports consistent sharpening results by providing the correct sharpening angle. It is attached to the pin of the FH 1 KSF ergonomic file handle. Please order the FH 1 KSF ergonomic file handle separately.



Special features:
- The chain saw gauge is available in two designs: angle 25°/30° and angle 30°/35°.

Suitable for chain saw file ø [mm]	Total length [mm]		Item no.	Designation	Price/unit EUR
Ergonomic file handle					
4,0 / 4,5 / 4,8 / 5,16 / 5,5	120	10	12617110	FH 1 KSF	-
Chain saw gauge					
4,0 / 4,5 / 4,8 / 5,16 / 5,5	-	10	12600020	KSSL 25/30	-
			12600010	KSSL 30/35	-



Set of ergonomic file handles, chain saw gauge

Set of one ergonomic file handle for chain saw files and two chain saw gauges. The chain saw gauge is attached to the pin of the FH 1 KSF ergonomic file handle.



Contents:
The set consists of an FH 1 KSF ergonomic file handle, a KSSL 25/30 chain saw gauge (angle 25°/30°) and a KSSL 30/35 chain saw gauge (angle 30°/35°).

Special features:
- The chain saw gauge supports consistent sharpening results by providing the correct sharpening angle.
- The set is provided in sales-boosting individual packaging.

	Item no.	Designation	Price/unit EUR
1	12600030	SET FH1 KSSL 25/30-30/35	-

CHAIN SHARP chain saw sharpeners



CS-X-3,2



CS-X-4,0 / CS-X-4,8
CS-X-5,16 / CS-X-5,5

CHAIN SHARP CS-X chain saw sharpeners

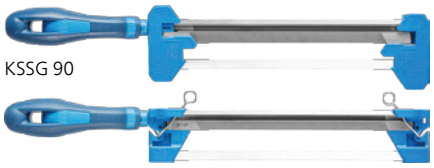
The CHAIN SHARP CS-X chain saw sharpener enables the saw teeth to be sharpened and the depth gauge to be adjusted simultaneously. The optimized shape and excellent file position ensure precise guidance and optimum sharpening results.



Contents:
The chain saw sharpener consists of a sharpener, a depth gauge file and two Classic Line chain saw files.

Special features:
- Turn the device over to change from the right to the left tooth, no conversion work required.
- Improved shape makes it easy to replace the files.
- The chain saw sharpener provides a sharpening angle of 30°.

Suitable for chain saw file ø [mm]	Suitable for chain saw file ø [inch]	Chain pitch [inch]	Depth gauge distance [inch]	Suitable depth gauge file		Item no.	Designation	Price/unit EUR
POS packaging								
3,2	1/8	1/4 LP	0.45	4132	1	18600742	CS-X-3,2	-
4,0	5/32	3/8 LP	0.65	4132	1	11098040	CS-X-4,0	-
4,8	3/16	.325	0.65	4132	1	11098048	CS-X-4,8	-
5,16	13/64	3/8	0.65	4132	1	11098051	CS-X-5,16	-
5,5	7/32	.404	0.75	4132	1	11098055	CS-X-5,5	-

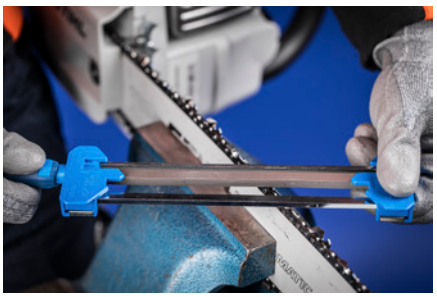


KSSG 90

KSSG 91

CHAIN SHARP KSSG chain saw sharpeners

You can convert the device for sharpening the right and left cutting teeth in a few steps.



Contents:
The chain saw sharpener consists of a sharpener, a Classic Line chain saw file, a depth gauge file and an FH 1 KSF ergonomic file handle.

Special features:
- Maximum precision for optimal sharpening results.
- For simultaneously sharpening the saw teeth and adjusting the depth gauge.
- Available in three designs that are adapted to different chain pitches.

Suitable for chain saw file ø [mm]	Suitable for chain saw file ø [inch]	Chain pitch [inch]	Depth gauge distance [inch]	Suitable depth gauge file		Item no.	Designation	Price/unit EUR
POS packaging								
4,0	5/32	3/8 LP	0.65	4131	1	11099092	KSSG 91-4,0	-
4,8	3/16	.325	0.65	4130	1	11098090	KSSG 90-4,8	-
5,5	7/32	.404	0.65	4130	1	11099090	KSSG 90-5,5	-



CHAIN SHARP CS-MT chain saw sharpeners

Compact sharpener made up of chain saw file and depth gauge file in a single ergonomic tool. The defined elevation of the chain saw file makes sharpening the saw teeth easier and prevents the connecting links of the saw chain from being damaged.



Contents:
The chain saw sharpener consists of a sharpener, a Classic Line chain saw file, a depth gauge file, an ergonomic file handle and a depth gauge.

Special features:
- Depth gauge can be individually adjusted. Gauge supplied gives depth gauge distances of 0.65 mm (.025") for harder wood or 0.75 mm (.030") for softer wood.
- Suitable for all commercially available chain saw files.
- Long tool life with PFERD files.

Suitable for chain saw file ø [mm]	Suitable for chain saw file ø [inch]	Chain pitch [inch]	Depth gauge distance [inch]	Suitable depth gauge file		Item no.	Designation	Price/unit EUR
POS packaging								
4,0	5/32	3/8 LP	0.65	1213 ruk 150	1	*11091040*	CS-MT-4,0	-
4,8	3/16	.325	0.65	1213 ruk 150	1	*11091048*	CS-MT-4,8	-
5,16	13/64	3/8	0.65	1213 ruk 150	1	*11091051*	CS-MT-5,16	-
5,5	7/32	.404	0.65	1213 ruk 150	1	*11091055*	CS-MT-5,5	-



CHAIN SHARP CS-SL chain saw sharpeners

The handy and compact sharpening gauge combines a chain saw file and a gauge in one ergonomic tool. The gauge supports consistent sharpening results by providing the correct sharpening angle. PFERD files allow a long usage period.



Contents:
The sharpening gauge comprises a Classic Line chain saw file with an ergonomic file handle and a gauge.

Special features:
- Precise and uniform sharpening result, even for semi-professional users.
- Different designs adapted to different chain pitches. Suitable for all commercially available saw chains.
- A defined chain saw file elevation makes it easier to sharpen the saw tooth and prevents damage to the connecting links of the saw chain.

Suitable for chain saw file ø [mm]	Suitable for chain saw file ø [inch]	Chain pitch [inch]	Depth gauge distance [inch]		Item no.	Designation	Price/unit EUR
POS packaging							
4,0	5/32	3/8 LP	0.65	1	11099040	CS-SL-4,0	-
4,8	3/16	.325	0.65	1	11099048	CS-SL-4,8	-
5,16	13/64	3/8	0.65	1	11099051	CS-SL-5,16	-
5,5	7/32	.404	0.65	1	11099055	CS-SL-5,5	-



CHAIN SHARP CS-SLS chain saw sharpener set

CHAIN SHARP CS-SLS Set for maintaining saw chains and guide rails. The compact and ergonomic sharpener enables saw chains to be sharpened in a targeted way. The defined elevation of the chain saw file makes sharpening the saw teeth easier and prevents the connecting links of the saw chain from being damaged.

Contents:
The chain saw sharpener set consists of a sharpener, two Classic Line chain saw files, a depth gauge file with an ergonomic file handle and a depth gauge. The set is supplied in a belt pouch which protects against damage and dirt.

Special features:
- Depth gauge can be individually adjusted. Gauge supplied gives depth gauge distances of 0.65 mm (.025") for harder wood or 0.75 mm (.030") for softer wood.
- Long tool life and precise and uniform sharpening results with PFERD files. Even for semi-professional users.
- The set enables saw chains and guide rails to be maintained.

	Item no.	Designation	Price/unit EUR
1	11099140	SET CS-SLS-4.0	-
	11099148	SET CS-SLS-4.8	-
	11099151	SET CS-SLS-5.16	-
	11099155	SET CS-SLS-5,5	-



Depth gauge files for CHAIN SHARP CS-X

Rectangular file with cut on two sides. Suitable for the CHAIN SHARP CS-X chain saw sharpener.

Special features:
- Stock removal rate is precisely tailored to the depth gauge.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Suitable for		Item no.	Designation	Price/unit EUR
4132	200	2	9	6	CS-X	10	11692202	4132 200	-
						1	11692203	4132 200 (1)	-



Depth gauge files for CHAIN SHARP KSSG

Rectangular file with cut on two sides. Available in two different cross sections. Suitable for the CHAIN SHARP KSSG chain saw sharpener.

Special features:
- Stock removal rate is precisely tailored to the depth gauge.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Suitable for		Item no.	Designation	Price/unit EUR
4130	200	2	9	6	KSSG 90-4,8, KSSG 90-5,5	10	11690202	4130 200	-
4131	200	2	7	4.5	KSSG 91-4,0	10	11691202	4131 200	-



Flat chain saw files for depth gauge

Rectangular file, tanged with two round uncut edges and cut on two sides. Shape F according to DIN 7262. Flat chain saw files are used to file the depth gauges of saw chains.



Special features:
- Stock removal rate is precisely tailored to the depth gauge.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
1213 ruk	150	2	16	3	FH 3	10	11610153	1213 ruk 150 H2	-
						1	11610154	1213 ruk 150 H2 (1)	-
	200	2	20	3.5	FH 4/1	10	11610203	1213 ruk 200 H2	-
						1	11610204	1213 ruk 200 H2 (1)	-



Chisel bit files

For repairing and sharpening saw chains with angular tooth base. For edge grinding saw chains. Available as three square or flat file.

Special features:
- The three square version is especially well-suited for sharpening 3/8" chains.
- The flat version can be used for sharpening the cutting edge and for lowering the depth gauge. Highly recommended for beginners.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
1215	175	2	12.4	3.3	FH 3, FH 3-1	1	18801226	1215 FLST 175 (1)	-
1250	175	2	-	4.6	FH 3, FH 3-1	1	18801225	1250 DKT 175 (1)	-





Half-round files for wood

Half-round file with special file cut on two sides. Shape C in accordance with DIN 7263. Tanged design. Particularly suitable for cutting wood.

Special features:
- High stock removal rate.
- Good chip removal.
- Suitable for use on wood and plastics.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/ unit EUR
1159	200	2	20	6	FH 4/1	10	11106202	1159 200 H2	-
	250	2	25	7	FH 4/1	10	11106252	1159 250 H2	-





Cabinet files for wood

Half-round file, tapered with special cut on two sides. Flatter and wider design in comparison to the half-round file. Shape F in accordance with DIN 7263. Tanged design. Particularly suitable for cutting wood.



Special features:
- High stock removal rate.
- Good chip removal.
- Suitable for use on wood and plastics.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/ unit EUR
1158	200	1	23	4.7	FH 4/1	5	*11310201*	1158 200 H1	-
	250	1	29	6	FH 4/1	5	*11310251*	1158 250 H1	-

Wood rasps





Hand wood rasps

Rectangular file with cut on three sides, flat sides with rasp cut, one edge with file cut, one edge uncut. Shape A in accordance with DIN 7263. Tanged design. Particularly suitable for coarse cutting of wood.

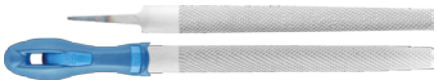


Special features:
- High stock removal rate.
- Good chip removal.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/ unit EUR
Industrial packaging (without handle)										
1512	200	2	20	6.5	FH 4/1	-	10	*11306202*	1512 200 H2	-
	250	1	25	7.5	FH 4/1	-	10	11306251	1512 250 H1	-
		2	25	7.5	FH 4/1	-	10	11306252	1512 250 H2	-

Continued on next page

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/ unit EUR
POS packaging (with ergonomic file handle)										
1512	200	2	20	6.5	-	FH 4/1	1	11231207	PF 1512 200 H2	-
	250	2	25	7.5	-	FH 4/1	1	11231257	PF 1512 250 H2	-



Half-round wood rasps

Half-round file, tapered with rasp cut on two sides. Shape C in accordance with DIN 7263. Tanged design. Particularly suitable for coarse cutting of wood.



Special features:
- High stock removal rate.
- Good chip removal.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/ unit EUR
Industrial packaging (without handle)										
1552	150	2	16	6	FH 3	-	10	*11307152*	1552 150 H2	-
	200	1	21	7.5	FH 4/1	-	10	11307201	1552 200 H1	-
		2	21	7.5	FH 4/1	-	10	11307202	1552 200 H2	-
	250	1	25	8.5	FH 4/1	-	10	11307251	1552 250 H1	-
		2	25	8.5	FH 4/1	-	10	11307252	1552 250 H2	-
		3	25	8.5	FH 4/1	-	10	*11307253*	1552 250 H3	-
	300	1	30	10	FH 5/1	-	5	11307301	1552 300 H1	-
		2	30	10	FH 5/1	-	5	11307302	1552 300 H2	-
POS packaging (with ergonomic file handle)										
1552	150	2	16	6	-	FH 3	1	11233157	PF 1552 150 H2	-
	200	1	21	7.5	-	FH 4/1	1	11233206	PF 1552 200 H1	-
		2	21	7.5	-	FH 4/1	1	11233207	PF 1552 200 H2	-
	250	2	25	8.5	-	FH 4/1	1	11233257	PF 1552 250 H2	-



Round wood rasps (1562)

Round file, tapered with circumferential rasp cut. Shape E according to DIN 7263. Tanged version. Suitable for work on radii and for filing profiles with inner radii.



Special features:
- High stock removal rate.
- Good chip removal.

Profile	Length [mm]	Cut	ø [mm]	Matching handle	Incl. handle		Item no.	Designation	Price/unit EUR
Industrial packaging (without handle)									
1562	200	2	9.5	FH 4	-	10	11308202	1562 200 H2	-
	250	2	11.5	FH 4	-	10	11308252	1562 250 H2	-
POS packaging (with ergonomic file handle)									
1562	200	2	9.5	-	FH 4	1	11234207	PF 1562 200 H2	-
	250	2	11.5	-	FH 4	1	11234257	PF 1562 250 H2	-



Cabinet rasps (1558)

Half-round file, tapered with rasp cut on two sides. Shape D according to DIN 7263. Tanged version. Wider and flatter than a half-round wood rasp. Suitable for work on surfaces, radii, half-round profiles and edges (chamfering and rounding).



Special features:
- High stock removal rate.
- Good chip removal.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/ unit EUR
1558	200	2	25	6	FH 4/1	5	*11309202*	1558 200 H2	-
	250	2	29	7	FH 4/1	5	*11309252*	1558 250 H2	-
		3	29	7	FH 4/1	5	*11309253*	1558 250 H3	-
		5	29	7	FH 4/1	5	*11309255*	1558 250 H5	-
	300	2	34	8	FH 5/1	5	*11309302*	1558 300 H2	-

Files and rasps for wood
Hoof rasps





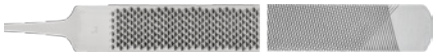
Hoof plane

Rectangular file, tanged and cut on four sides. One side fine, one side coarse. Suitable for straightening of the hoof surface, finishing the hoof wall, filing the toes and for work on the hoof nails after undercutting, conserving energy and easing back strain.



Special features:
- Long tool life.
- Very good surface quality.
- Comfortable filing for worker and animal alike.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/ unit EUR
3515	350	milled	44	6	FH 5	1	13180350	3515 350	-





Hoof rasp

Rectangular file, tanged and cut on four sides, one flat side with a rasp cut, one flat side with a cross cut, two edges with a file cut. Shape B according to DIN 7263.

Special features:
- Very robust tool.

Profile	Length [mm]	Cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/ unit EUR
3510	350	Rasp/filing cut 1	40	6	FH 5	5	11313351	3510 350 H1	-

Special rasps





Sculptor's file rasp

Half-round file rasp with two curved ends, each with different cuts (file cut and rasp cut). They are used for the processing of carved woodwork, plastics, relief ornaments, casting patterns and areas which are hard to reach.

Special features:
- Suitable for use on wood, soft stone, plastics and horn.

Profile	Length [mm]	Cut		Item no.	Designation	Price/ unit EUR
3553	200	2	5	11316202	3553 200 H2	-





Staircase maker's file rasp

File rasp with two half-round, curved ends with rasp cut on the outer radius and file cut on the inner radius. They are used for the processing of carved woodwork, plastics, relief ornaments, casting patterns and areas which are hard to reach.



Special features:
- Suitable for use on wood, soft stone, plastics and horn.

Profile	Length [mm]	Cut		Item no.	Designation	Price/ unit EUR
3554	250	2	5	11303252	3554 250 H2	-



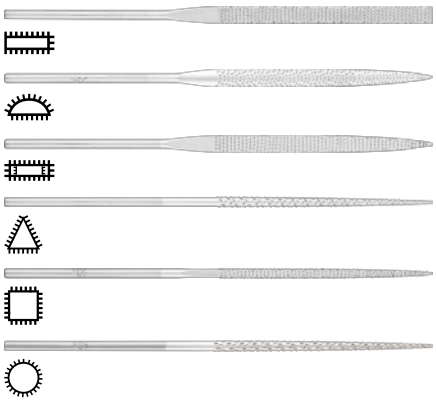
Staircase maker's rasp

Half-round, curved file body with rasp cut on the half-round side. Strongly curved, half-round profile allows you to work on various radii. Suitable for reworking handrails, embellishments, carved woodwork, plastics and casting patterns.

Special features:
- Suitable for use on wood, soft stone, plastics and horn.

Profile	Length [mm]	Cut		Item no.	Designation	Price/ unit EUR
3556	250	2	2	11302252	3556 250 H2	-

Needle rasps



Needle rasps

Needle rasps are excellent for working on hard-to-reach areas, e.g. ornaments, casting patterns, carved woodwork and sculptures.

Special features:
- Can be used with or without a file handle thanks to the forged shanks.
- Suitable for use on wood, soft stone, plastics and horn.

Profile	Length [mm]	Swiss cut	Tang ø [mm]		Item no.	Designation	Price/unit EUR
2501	140	2	3	12	12551142	2501 140 H2	-
2502	140	2	3	12	12552142	2502 140 H2	-
2506	140	2	3	12	12556142	2506 140 H2	-
2507	140	2	3	12	12557142	2507 140 H2	-
2508	140	2	3	12	12558142	2508 140 H2	-
2510	140	2	3	12	12559142	2510 140 H2	-

Files and rasps for wood
Needle rasp set



Needle rasp set

Contains an application-oriented selection of needle rasps for work in hard-to-reach areas.

Contents:
The set contains six needle rasps. The set consists of one each of flat, hand, three square, square and half-round files.

Special features:
- Can be used with or without a file handle thanks to the forged shanks.
- Supplied in a clearly structured plastic pouch to protect against dirt and damage.
- Suitable for use on wood, soft stone, plastics and horn.

Profile	Length [mm]	Swiss cut	Contents [Piece]		Item no.	Designation	Price/unit EUR
2527	140	2	6	1	12799020	2527 140 H2	-



Pottance files, hand

Small and handy hand pottance files, cut on three sides, for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.



Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
800	100	00	13	3	FH 2, FH 2-1	12	*19300101*	800 100 H00	-
		0	13	3	FH 2, FH 2-1	12	19300102	800 100 H0	-
		1	13	3	FH 2, FH 2-1	12	19300103	800 100 H1	-
		2	13	3	FH 2, FH 2-1	12	19300104	800 100 H2	-
		3	13	3	FH 2, FH 2-1	12	19300105	800 100 H3	-
		4	13	3	FH 2, FH 2-1	12	19300106	800 100 H4	-
	150	00	18	4	FH 3, FH 3-1	12	19300151	800 150 H00	-
		0	18	4	FH 3, FH 3-1	12	19300152	800 150 H0	-
		1	18	4	FH 3, FH 3-1	12	19300153	800 150 H1	-
		2	18	4	FH 3, FH 3-1	12	19300154	800 150 H2	-
		3	18	4	FH 3, FH 3-1	12	19300155	800 150 H3	-
		4	18	4	FH 3, FH 3-1	12	19300156	800 150 H4	-
	200	00	22	5	FH 4/1	12	19300201	800 200 H00	-
		0	22	5	FH 4/1	12	19300202	800 200 H0	-
		1	22	5	FH 4/1	12	19300203	800 200 H1	-
		2	22	5	FH 4/1	12	19300204	800 200 H2	-
		3	22	5	FH 4/1	12	19300205	800 200 H3	-
		4	22	5	FH 4/1	12	19300206	800 200 H4	-



Pillar files, regular

Small and handy pillar files, cut on two sides, for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.

Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
810	150	00	13	4	FH 3, FH 3-1	12	19302151	810 150 H00	-
		0	13	4	FH 3, FH 3-1	12	19302152	810 150 H0	-
		2	13	4	FH 3, FH 3-1	12	19302154	810 150 H2	-
	200	00	15	5	FH 4/1	12	19302201	810 200 H00	-
		0	15	5	FH 4/1	12	19302202	810 200 H0	-
		2	15	5	FH 4/1	12	19302204	810 200 H2	-
	250	00	18	6	FH 4/1	12	19302251	810 250 H00	-
		0	18	6	FH 4/1	12	19302252	810 250 H0	-
		2	18	6	FH 4/1	12	19302254	810 250 H2	-

Precision files
Tang files



Pillar files, slim

Small and handy slim pillar files, cut on two sides, for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.

Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
815	150	00	8	3.5	FH 2, FH 2-1	12	19303151	815 150 H00	-
		0	8	3.5	FH 2, FH 2-1	12	19303152	815 150 H0	-
		2	8	3.5	FH 2, FH 2-1	12	19303154	815 150 H2	-
	200	00	10	4.5	FH 3, FH 3-1	12	19303201	815 200 H00	-
		0	10	4.5	FH 3, FH 3-1	12	19303202	815 200 H0	-
		2	10	4.5	FH 3, FH 3-1	12	19303204	815 200 H2	-
	250	0	12	5	FH 3, FH 3-1	12	19303252	815 250 H0	-
		2	12	5	FH 3, FH 3-1	12	19303254	815 250 H2	-

Pillar files, extra slim

Small and handy very slim pillar files, cut on two sides, for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.

Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
820	150	00	6	3	FH 2, FH 2-1	12	19304151	820 150 H00	-
		0	6	3	FH 2, FH 2-1	12	19304152	820 150 H0	-
		2	6	3	FH 2, FH 2-1	12	19304154	820 150 H2	-
	200	00	8	3.5	FH 2, FH 2-1	12	19304201	820 200 H00	-
		0	8	3.5	FH 2, FH 2-1	12	19304202	820 200 H0	-
		2	8	3.5	FH 2, FH 2-1	12	19304204	820 200 H2	-



Flat, thin

Small and handy rectangular files, tapered and cut on three sides, for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.

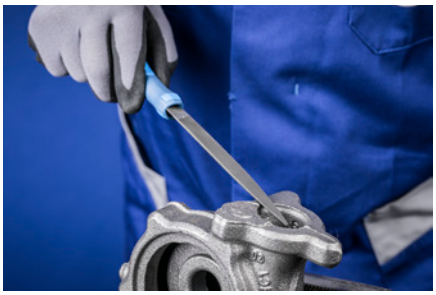
Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
830	150	0	16	2	FH 3, FH 3-1	12	19306152	830 150 H0	-
		2	16	2	FH 3, FH 3-1	12	19306154	830 150 H2	-



Half-round

Small and handy half-round files, cut on two sides, for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.



Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
835	100	00	12	3.5	FH 2, FH 2-1	12	19307101	835 100 H00	-
		0	12	3.5	FH 2, FH 2-1	12	19307102	835 100 H0	-
		1	12	3.5	FH 2, FH 2-1	12	19307103	835 100 H1	-
		2	12	3.5	FH 2, FH 2-1	12	19307104	835 100 H2	-
		4	12	3.5	FH 2, FH 2-1	12	19307106	835 100 H4	-
	150	00	16	4.5	FH 3, FH 3-1	12	19307151	835 150 H00	-
		0	16	4.5	FH 3, FH 3-1	12	19307152	835 150 H0	-
		1	16	4.5	FH 3, FH 3-1	12	19307153	835 150 H1	-
		2	16	4.5	FH 3, FH 3-1	12	19307154	835 150 H2	-
		3	16	4.5	FH 3, FH 3-1	12	19307155	835 150 H3	-
		4	16	4.5	FH 3, FH 3-1	12	19307156	835 150 H4	-
	200	00	21	6	FH 4/1	12	19307201	835 200 H00	-
		0	21	6	FH 4/1	12	19307202	835 200 H0	-
		1	21	6	FH 4/1	12	19307203	835 200 H1	-
		2	21	6	FH 4/1	12	19307204	835 200 H2	-
		3	21	6	FH 4/1	12	19307205	835 200 H3	-
	250	00	25	7	FH 4/1	12	19307251	835 250 H00	-
		0	25	7	FH 4/1	12	19307252	835 250 H0	-
		1	25	7	FH 4/1	12	19307253	835 250 H1	-



Half-round, slim

Small and handy slim, half-round files, cut on two sides, for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.

Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
840	150	00	12	3.5	FH 3, FH 3-1	12	19308151	840 150 H00	-
		0	12	3.5	FH 3, FH 3-1	12	19308152	840 150 H0	-
		1	12	3.5	FH 3, FH 3-1	12	19308153	840 150 H1	-
		2	12	3.5	FH 3, FH 3-1	12	19308154	840 150 H2	-

Round

Small and handy round files with circumferential cut for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.

Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	ø [mm]	Matching handle		Item no.	Designation	Price/unit EUR
845	100	2	4	FH 2, FH 2-1	12	19309104	845 100 H2	-
	150	0	6	FH 3, FH 3-1	12	19309152	845 150 H0	-
		1	6	FH 3, FH 3-1	12	19309153	845 150 H1	-
		2	6	FH 3, FH 3-1	12	19309154	845 150 H2	-
		3	6	FH 3, FH 3-1	12	*19309155*	845 150 H3	-
	200	1	8	FH 4	12	19309203	845 200 H1	-
		2	8	FH 4	12	19309204	845 200 H2	-



Three square

Small and handy triangular files, tapered and cut on three sides, for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.

Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	Width [mm]	Matching handle		Item no.	Designation	Price/unit EUR
855	100	1	6	FH 2, FH 2-1	12	19311103	855 100 H1	-
		2	6	FH 2, FH 2-1	12	19311104	855 100 H2	-
	150	0	10	FH 3, FH 3-1	12	19311152	855 150 H0	-
		1	10	FH 3, FH 3-1	12	19311153	855 150 H1	-
		2	10	FH 3, FH 3-1	12	19311154	855 150 H2	-
	200	0	14	FH 4	12	19311202	855 200 H0	-
		1	14	FH 4	12	19311203	855 200 H1	-
		2	14	FH 4	12	19311204	855 200 H2	-
		3	14	FH 4	12	*19311205*	855 200 H3	-

Square

Small and handy square files, tapered and cut on four sides, for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.

Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	Width [mm]	Matching handle		Item no.	Designation	Price/unit EUR
860	150	0	6	FH 3, FH 3-1	12	19312152	860 150 H0	-
		2	6	FH 3, FH 3-1	12	19312154	860 150 H2	-
	200	3	8	FH 4	12	*19312205*	860 200 H3	-



Crossing oval

Small and handy crossing oval files for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.

Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
865	150	2	16	4.5	FH 3, FH 3-1	12	19313154	865 150 H2	-





Knives

Small and handy triangular files with knife profile, cut on two sides, for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.

Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
870	150	0	18	4	FH 3, FH 3-1	12	19314152	870 150 H0	-
		2	18	4	FH 3, FH 3-1	12	19314154	870 150 H2	-
	200	0	22	5	FH 4/1	12	19314202	870 200 H0	-
		2	22	5	FH 4/1	12	19314204	870 200 H2	-





Barrette

Small and handy barette files, cut on one side, for use on delicate steel components up to 1,200 N/mm². For all precision files, the cross section is measured at the uncut part of the file.

Special features:
- Meet the highest demands when it comes to geometric accuracy, cutting performance and tool life.
- More exact in their geometry compared to machinist's files.
- Also suitable for assembling tasks and building complex devices and machines to the highest precision standards.

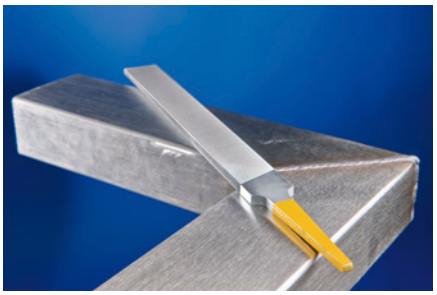
Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
875	150	0	16	4	FH 3, FH 3-1	12	19315152	875 150 H0	-
		2	16	4	FH 3, FH 3-1	12	19315154	875 150 H2	-
	200	0	21	5	FH 4/1	12	19315202	875 200 H0	-
		2	21	5	FH 4/1	12	19315204	875 200 H2	-





Pottance files, hand

Hand pottance files, cut on three sides. The extremely wear-resistant and sturdy CORINOX files have an exceptional surface hardness grade of 1,200 HV (Vickers scale).



Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
COR 800	150	00	18	4	FH 3	12	19600151	COR 800 150 H00	-
		0	18	4	FH 3	12	19600152	COR 800 150 H0	-
	200	00	22	5	FH 4/1	12	19600201	COR 800 200 H00	-
		0	22	5	FH 4/1	12	19600202	COR 800 200 H0	-
		2	22	5	FH 4/1	12	19600204	COR 800 200 H2	-
	250	00	25	6	FH 4/1	12	19600251	COR 800 250 H00	-
		0	25	6	FH 4/1	12	19600252	COR 800 250 H0	-
		2	25	6	FH 4/1	12	19600254	COR 800 250 H2	-





Pillar files, regular

Pillar files, cut on two sides. The extremely wear-resistant and sturdy CORINOX files have an exceptional surface hardness grade of 1,200 HV (Vickers scale).



Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
COR 810	150	00	13	4	FH 3	12	19602151	COR 810 150 H00	-
		0	13	4	FH 3	12	19602152	COR 810 150 H0	-
	200	00	15	5	FH 4/1	12	19602201	COR 810 200 H00	-
		0	15	5	FH 4/1	12	19602202	COR 810 200 H0	-
		2	15	5	FH 4/1	12	19602204	COR 810 200 H2	-





Tang files, half-round

Half-round tang files, cut on two sides. The extremely wear-resistant and sturdy CORINOX files have an exceptional surface hardness grade of 1,200 HV (Vickers scale).

Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Matching handle		Item no.	Designation	Price/unit EUR
COR 835	150	0	16	4.5	FH 3	12	19607152	COR 835 150 H0	-
	200	0	21	6	FH 4/1	12	19607202	COR 835 200 H0	-
		2	21	6	FH 4/1	12	19607204	COR 835 200 H2	-



Round

Round files with circumferential cut. The extremely wear-resistant and sturdy CORINOX files have an exceptional surface hardness grade of 1,200 HV (Vickers scale).

Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

Profile	Length [mm]	Swiss cut	ø [mm]	Matching handle		Item no.	Designation	Price/unit EUR
COR 845	200	0	8	FH 4	12	19609202	COR 845 200 H0	-
		2	8	FH 4	12	19609204	COR 845 200 H2	-





Three square

Triangular files, tapered and cut on three sides. The extremely wear-resistant and sturdy CORINOX files have an exceptional surface hardness grade of 1,200 HV (Vickers scale).

Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

Profile	Length [mm]	Swiss cut	Width [mm]	Matching handle		Item no.	Designation	Price/unit EUR
COR 855	200	0	14	FH 4	12	19611202	COR 855 200 H0	-
		2	14	FH 4	12	19611204	COR 855 200 H2	-



Square

Square files, tapered and cut on four sides. The extremely wear-resistant and sturdy CORINOX files have an exceptional surface hardness grade of 1,200 HV (Vickers scale).

Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

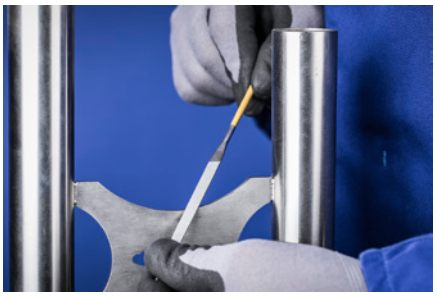
Profile	Length [mm]	Swiss cut	Width [mm]	Matching handle		Item no.	Designation	Price/unit EUR
COR 860	150	0	6	FH 3	12	19612152	COR 860 150 H0	-
		2	6	FH 3	12	19612154	COR 860 150 H2	-





Flat

Rectangular files, tapered and cut on four sides. The extremely wear-resistant and sturdy CORINOX needle files have an exceptional surface hardness grade of 1,200 HV (Vickers scale) and can be used to file very small and delicate components with precision.



Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
COR 2306	180	0	3.5	6	1.5	12	12471182	COR 2306 180 H0	-
		2	3.5	6	1.5	12	12471184	COR 2306 180 H2	-





Hand

Hand files, cut on three sides. The extremely wear-resistant and sturdy CORINOX needle files have an exceptional surface hardness grade of 1,200 HV (Vickers scale) and can be used to file very small and delicate components with precision.

Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
COR 2301	180	0	3.5	6	1.5	12	12472182	COR 2301 180 H0	-
		2	3.5	6	1.5	12	12472184	COR 2301 180 H2	-



Three square

Triangular files, tapered and cut on three sides. The extremely wear-resistant and sturdy CORINOX needle files have an exceptional surface hardness grade of 1,200 HV (Vickers scale) and can be used to file very small and delicate components with precision.

Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

Profile	Length [mm]	Swiss cut	Tang ø [mm]	ø [mm]		Item no.	Designation	Price/unit EUR
COR 2307	180	0	3.5	4.1	12	12474182	COR 2307 180 H0	-
		2	3.5	4.1	12	12474184	COR 2307 180 H2	-

Square

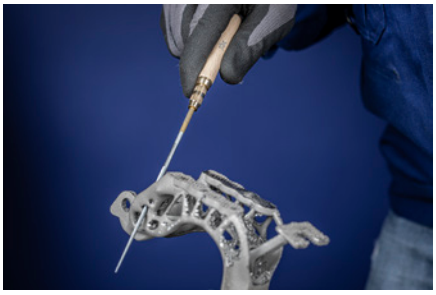
Square files, tapered and cut on four sides. The extremely wear-resistant and sturdy CORINOX needle files have an exceptional surface hardness grade of 1,200 HV (Vickers scale) and can be used to file very small and delicate components with precision.

Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

Profile	Length [mm]	Swiss cut	Tang ø [mm]	ø [mm]		Item no.	Designation	Price/unit EUR
COR 2308	180	0	3.5	2.7	12	12475182	COR 2308 180 H0	-
		2	3.5	2.7	12	12475184	COR 2308 180 H2	-

Round

Round files with circumferential cut. The extremely wear-resistant and sturdy CORINOX needle files have an exceptional surface hardness grade of 1,200 HV (Vickers scale) and can be used to file very small and delicate components with precision.

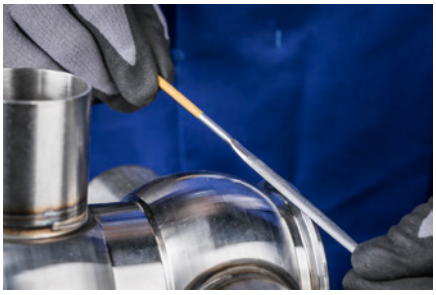


Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

Profile	Length [mm]	Swiss cut	Tang ø [mm]	ø [mm]		Item no.	Designation	Price/unit EUR
COR 2310	180	0	3.5	3.5	12	12476182	COR 2310 180 H0	-
		2	3.5	3.5	12	12476184	COR 2310 180 H2	-

Half-round

Half-round files, cut on two sides. The extremely wear-resistant and sturdy CORINOX needle files have an exceptional surface hardness grade of 1,200 HV (Vickers scale) and can be used to file very small and delicate components with precision.



Special features:
- Can also be used on materials that are difficult to machine, such as stainless steel (INOX), high-temperature-resistant materials, hard non-ferrous metals and fibre-reinforced thermosetting plastics (GRP, CRP).
- Lower tendency to cause chip adhesion.

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
COR 2302	180	0	3.5	6	2	12	12478182	COR 2302 180 H0	-
		2	3.5	6	2	12	12478184	COR 2302 180 H2	-





Flat

The rectangular, tapered files, cut on four sides, are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.

Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
Flat									
2406	140	0	3	5.1	1.3	12	12505061	2406 140 H0	-
		1	3	5.1	1.3	12	12505062	2406 140 H1	-
		2	3	5.1	1.3	12	12505063	2406 140 H2	-
	160	0	3.25	5.5	1.4	12	12505081	2406 160 H0	-
		1	3.25	5.5	1.4	12	12505082	2406 160 H1	-
		2	3.25	5.5	1.4	12	12505083	2406 160 H2	-
		3	3.25	5.5	1.4	12	12505084	2406 160 H3	-
	180	00	3.5	6	1.5	12	12505091	2406 180 H00	-
		0	3.5	6	1.5	12	12505092	2406 180 H0	-
		2	3.5	6	1.5	12	12505094	2406 180 H2	-





Hand

The rectangular files, cut on four sides, are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.

Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
Hand									
2401	140	0	3	5.1	1.3	12	12501061	2401 140 H0	-
		1	3	5.1	1.3	12	12501062	2401 140 H1	-
		2	3	5.1	1.3	12	12501063	2401 140 H2	-
		3	3	5.1	1.3	12	12501064	2401 140 H3	-
	160	0	3.25	5.5	1.4	12	12501081	2401 160 H0	-
		1	3.25	5.5	1.4	12	12501082	2401 160 H1	-
		2	3.25	5.5	1.4	12	12501083	2401 160 H2	-
		3	3.25	5.5	1.4	12	12501084	2401 160 H3	-
	180	00	3.5	6	1.5	12	12501091	2401 180 H00	-
		0	3.5	6	1.5	12	12501092	2401 180 H0	-
		1	3.5	6	1.5	12	12501093	2401 180 H1	-
		2	3.5	6	1.5	12	12501094	2401 180 H2	-
	200	00	3.75	6.4	1.6	12	12501101	2401 200 H00	-
		0	3.75	6.4	1.6	12	12501102	2401 200 H0	-
		1	3.75	6.4	1.6	12	12501103	2401 200 H1	-
		2	3.75	6.4	1.6	12	12501104	2401 200 H2	-



Crossing oval

The crossing oval files, cut on two sides, are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.

Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
Crossing oval shape									
2403	140	0	3	4.5	1.8	12	12504061	2403 140 H0	-
		1	3	4.5	1.8	12	12504062	2403 140 H1	-
		2	3	4.5	1.8	12	12504063	2403 140 H2	-
	160	0	3.25	5.2	2.3	12	12504081	2403 160 H0	-
		1	3.25	5.2	2.3	12	12504082	2403 160 H1	-
		2	3.25	5.2	2.3	12	12504083	2403 160 H2	-
		3	3.25	5.2	2.3	12	12504084	2403 160 H3	-
	180	0	3.5	5.7	2.5	12	12504092	2403 180 H0	-
		1	3.5	5.7	2.5	12	12504094	2403 180 H1	-
		2	3.5	5.7	2.5	12	12504093	2403 180 H2	-
2409	180	0	3.5	4	2.9	12	12510092	2409 180 H0	-



Three square

Triangular, tapered files, cut on three sides, are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.

Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]		Item no.	Designation	Price/unit EUR
Three square								
2407	140	0	3	3.5	12	12508061	2407 140 H0	-
		1	3	3.5	12	12508062	2407 140 H1	-
		2	3	3.5	12	12508063	2407 140 H2	-
		3	3	3.5	12	12508064	2407 140 H3	-
	160	0	3.25	3.7	12	12508081	2407 160 H0	-
		1	3.25	3.7	12	12508082	2407 160 H1	-
		2	3.25	3.7	12	12508083	2407 160 H2	-
		3	3.25	3.7	12	12508084	2407 160 H3	-
	180	00	3.5	4.1	12	12508091	2407 180 H00	-
		0	3.5	4.1	12	12508092	2407 180 H0	-
		2	3.5	4.1	12	12508093	2407 180 H2	-
		3	3.5	4.1	12	12508094	2407 180 H3	-
	200	00	3.75	4.4	12	12508101	2407 200 H00	-
		0	3.75	4.4	12	12508102	2407 200 H0	-
		2	3.75	4.4	12	12508103	2407 200 H2	-
		3	3.75	4.4	12	12508104	2407 200 H3	-



Square

Square, tapered files, cut on four sides, are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.

Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]		Item no.	Designation	Price/unit EUR
Square								
2408	140	0	3	2.4	12	12511061	2408 140 H0	-
		1	3	2.4	12	12511062	2408 140 H1	-
		2	3	2.4	12	12511063	2408 140 H2	-
		3	3	2.4	12	12511064	2408 140 H3	-
	160	0	3.25	2.5	12	12511081	2408 160 H0	-
		1	3.25	2.5	12	12511082	2408 160 H1	-
		2	3.25	2.5	12	12511083	2408 160 H2	-
		3	3.25	2.5	12	12511084	2408 160 H3	-
	180	00	3.5	2.7	12	12511091	2408 180 H00	-
		0	3.5	2.7	12	12511092	2408 180 H0	-
		2	3.5	2.7	12	12511093	2408 180 H2	-
	200	00	3.75	3	12	12511101	2408 200 H00	-
		0	3.75	3	12	12511102	2408 200 H0	-
		2	3.75	3	12	12511103	2408 200 H2	-



Knives

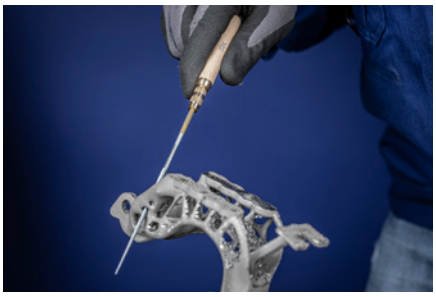
Triangular files with knife profile, cut on two sides, are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.

Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
Knife shape									
2405	140	0	3	5.5	1.5	12	12506061	2405 140 H0	-
		1	3	5.5	1.5	12	12506062	2405 140 H1	-
		2	3	5.5	1.5	12	12506063	2405 140 H2	-
	160	0	3.25	5.8	1.7	12	12506081	2405 160 H0	-
		1	3.25	5.8	1.7	12	12506082	2405 160 H1	-
		2	3.25	5.8	1.7	12	12506083	2405 160 H2	-
	180	00	3.5	6.2	1.8	12	12506091	2405 180 H00	-
		0	3.5	6.2	1.8	12	12506092	2405 180 H0	-
		2	3.5	6.2	1.8	12	12506093	2405 180 H2	-

Round

Round files with circumferential cut are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.



Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]		Item no.	Designation	Price/unit EUR
Round								
2410	140	0	3	3	12	12512061	2410 140 H0	-
		1	3	3	12	12512062	2410 140 H1	-
		2	3	3	12	12512063	2410 140 H2	-
		4	3	3	12	12512064	2410 140 H4	-
	160	0	3.25	3.25	12	12512081	2410 160 H0	-
		1	3.25	3.25	12	12512082	2410 160 H1	-
		2	3.25	3.25	12	12512083	2410 160 H2	-
		4	3.25	3.25	12	12512084	2410 160 H4	-
	180	00	3.5	3.5	12	12512090	2410 180 H00	-
		0	3.5	3.5	12	12512091	2410 180 H0	-
		1	3.5	3.5	12	12512092	2410 180 H1	-
		2	3.5	3.5	12	12512093	2410 180 H2	-
		3	3.5	3.5	12	12512094	2410 180 H3	-
	200	00	3.75	3.75	12	12512100	2410 200 H00	-
		0	3.75	3.75	12	12512101	2410 200 H0	-
		1	3.75	3.75	12	12512102	2410 200 H1	-
		2	3.75	3.75	12	12512103	2410 200 H2	-
		3	3.75	3.75	12	12512104	2410 200 H3	-

Half-round

Half-round files, cut on two sides, are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.

Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
Half-round									
2402	140	0	3	5	1.7	12	12509061	2402 140 H0	-
		1	3	5	1.7	12	12509062	2402 140 H1	-
		2	3	5	1.7	12	12509063	2402 140 H2	-
		3	3	5	1.7	12	12509064	2402 140 H3	-
	160	0	3.25	5.7	1.8	12	12509081	2402 160 H0	-
		1	3.25	5.7	1.8	12	12509082	2402 160 H1	-
		2	3.25	5.7	1.8	12	12509083	2402 160 H2	-
		3	3.25	5.7	1.8	12	12509084	2402 160 H3	-
	180	00	3.5	6	2	12	12509091	2402 180 H00	-

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Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
2402	180	0	3.5	6	2	12	12509092	2402 180 H0	-
		2	3.5	6	2	12	12509093	2402 180 H2	-
		3	3.5	6	2	12	12509094	2402 180 H3	-
	200	00	3.75	6.4	1.8	12	12509101	2402 200 H00	-
		0	3.75	6.4	1.8	12	12509102	2402 200 H0	-
		2	3.75	6.4	1.8	12	12509103	2402 200 H2	-
		3	3.75	6.4	1.8	12	12509104	2402 200 H3	-



Barrette

Barrette files, cut on one side, are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.

Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
Barrette shape									
2411	140	0	3	5	2.1	12	12503061	2411 140 H0	-
		1	3	5	2.1	12	12503062	2411 140 H1	-
		2	3	5	2.1	12	12503063	2411 140 H2	-
	160	0	3.25	5.3	2.1	12	12503081	2411 160 H0	-
		1	3.25	5.3	2.1	12	12503082	2411 160 H1	-
		2	3.25	5.3	2.1	12	12503083	2411 160 H2	-
		3	3.25	5.3	2.1	12	12503084	2411 160 H3	-
	180	0	3.5	5.6	2.3	12	12503092	2411 180 H0	-
		1	3.5	5.6	2.3	12	12503093	2411 180 H1	-
		2	3.5	5.6	2.3	12	12503094	2411 180 H2	-



Flat with round edges

The tapered files with round edges and circumferential cut are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.

Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
Flat with round edges									
2415	160	2	3.25	5.5	1.4	12	12515083	2415 160 H2	-
	180	0	3.5	6	1.5	12	12515092	2415 180 H0	-



Hand with round edges

The files with round edges and circumferential cut are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.

Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
Hand with round edges									
2416	140	1	3	5.1	1.3	12	12502062	2416 140 H1	-
	160	0	3.25	5.5	1.4	12	12502081	2416 160 H0	-
		1	3.25	5.5	1.4	12	12502082	2416 160 H1	-
		2	3.25	5.5	1.4	12	12502083	2416 160 H2	-
	180	0	3.5	6	1.5	12	12502092	2416 180 H0	-

Crossing oval round oval

The round-oval crossing oval files, cut on two sides, are ideal for working on very small surfaces, cut-outs, geometries, profiles and radii. Needle file cuts 00, 0, 1, 2, 3 and 4, which are not listed in the table, are not available from stock. The delivery time is approx. 8 weeks.

Special features:
- Can be used with or without a needle file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Tang ø [mm]	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
Crossing oval round oval									
2409	160	2	3.25	3.8	2.5	12	12510083	2409 160 H2	-

Needle file sets



266



NFB

Needle file sets

Contains an application-oriented selection of needle files.

Contents:
The set contains 12 needle files. The set comprises one each of the following needle files: flat (2406), hand (2401), crossing oval (2403), three square (2407), square (2408), round (2410), knife (2405), half-round (2402), barrette (2411), flat with round edges (2415), hand with round edges (2416), crossing oval round oval (2409).

Special features:
- Supplied in a PVC plastic pouch or a practical plastic box.

Length [mm]	Swiss cut	Contents [Piece]		Item no.	Designation	Price/unit EUR
140	1	12	1	12703062	266/14 P 140 H1	-
160	1	12	1	12704082	266/16 P 160 H1	-
180	0	12	1	12705092	266/18 P 180 H0	-
200	0	12	1	12706102	266/20 P 200 H0	-
140	1	12	1	12712003	NFB 2492 140 H1	-
	2	12	1	12712004	NFB 2492 140 H2	-
160	1	12	1	12799009	NFB 2493 160 H1	-
	2	12	1	12799010	NFB 2493 160 H2	-



Needle file handle set

Contains an application-oriented selection of PFERD needle files.

Contents:
The set contains six needle files. The set comprises one each of the following needle files: flat (101), hand (102), three square (104), half-round (108), square (105), round (106).

Special features:
- Supplied in a handy box to protect against dirt and damage.

Length [mm]	Swiss cut	Contents [Piece]		Item no.	Designation	Price/unit EUR
160	1	6	1	11260162	PF 263 160 H1	-

Handy files



Hand

Rectangular precision files similar to needle files, cut on three sides, in a slim, fine design. Suitable for work on the smallest areas of metals and plastics that are hard to reach, e.g. in tool and mould-making for reworking jobs.

Special features:
- The sturdy design enables a higher operating pressure.
- Can be used without a file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm² and plastics.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
2601	215	00	10.3	2.8	12	12463011	2601 215 H00	-
		1	10.3	2.8	12	12463013	2601 215 H1	-



Three square

Triangular, highly tapered precision files similar to needle files, cut on three sides, in a slim, fine design. Suitable for work on the smallest areas of metals and plastics that are hard to reach, e.g. in tool and mould-making for reworking jobs.

Special features:
- The sturdy design enables a higher operating pressure.
- Can be used without a file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm² and plastics.

Profile	Length [mm]	Swiss cut	Width [mm]		Item no.	Designation	Price/unit EUR
2607	215	00	10	12	12463021	2607 215 H00	-
		1	10	12	12463023	2607 215 H1	-

Square

Square, highly tapered precision files similar to needle files, cut on four sides, in a slim, fine design. Suitable for work on the smallest areas of metals and plastics that are hard to reach, e.g. in tool and mould-making for reworking jobs.

Special features:
- The sturdy design enables a higher operating pressure.
- Can be used without a file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm² and plastics.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
2608	215	00	6	6	12	12463031	2608 215 H00	-
		1	6	6	12	12463033	2608 215 H1	-



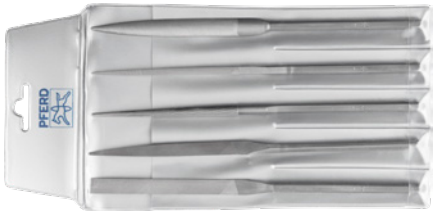
Half-round

Half-round, highly tapered precision files similar to needle files, cut on two sides, in a slim, fine design. Suitable for work on the smallest areas of metals and plastics that are hard to reach, e.g. in tool and mould-making for reworking jobs.

Special features:
- The sturdy design enables a higher operating pressure.
- Can be used without a file handle thanks to the forged tang.
- Suitable for use on steels up to 1,200 N/mm² and plastics.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
2602	215	00	12.8	3.7	12	12463051	2602 215 H00	-
		1	12.8	3.7	12	12463053	2602 215 H1	-

Handy file sets



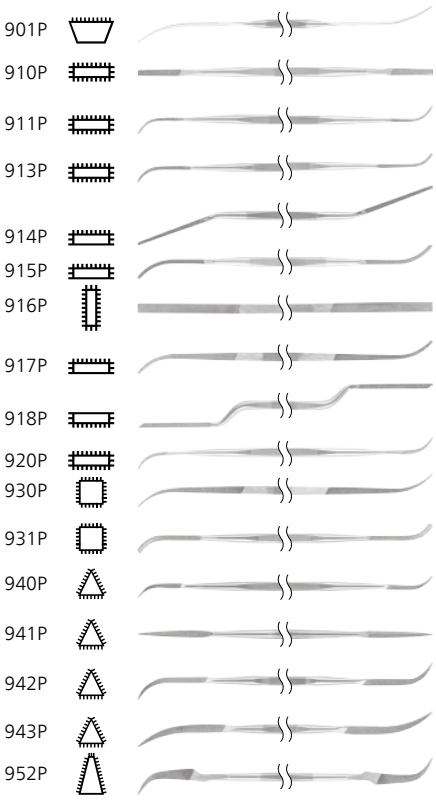
Handy file sets

Contain an application-oriented selection of handy files for work on the smallest areas that are hard to reach.

Contents:
The set contains five handy files. The set comprises one each of the following handy files: hand (2601), three square (2607), square (2608), round (2610), half-round (2602).

Special features:
- Supplied in a plastic pouch to protect against dirt, corrosion and damage.

Length [mm]	Swiss cut	Contents [Piece]		Item no.	Designation	Price/unit EUR
215	00	5	1	12732001	2627 215 mm H00	-
	1	5	1	12732003	2627 215 mm H1	-



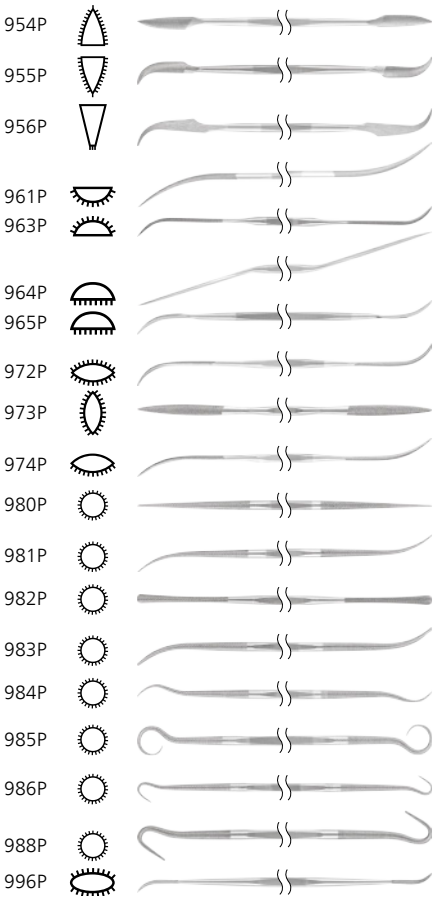
Riffler files series 901P–952P

Riffler files in length 150 mm (smallest version).

Special features:

- Can be used with or without riffler file holder.
- Width, application-oriented product selection.
- Suitable for use on steels up to 1,200 N/mm^2.

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Suitable arbors		Item no.	Designation	Price/unit EUR
901P	150	2	4	1.3	RFH 150	12	12409012	901P 150 H2	-
910P	150	4	2.3	1.2	RFH 150	12	12409104	910P 150 H4	-
911P	150	2	2.3	1.2	RFH 150	12	12409112	911P 150 H2	-
913P	150	2	2.7	1.5	RFH 150	12	12409132	913P 150 H2	-
914P	150	2	3.5	1.5	RFH 150	12	12409142	914P 150 H2	-
915P	150	2	3.5	1.5	RFH 150	12	12409152	915P 150 H2	-
916P	150	2	3.2	1.5	RFH 150	12	12409162	916P 150 H2	-
917P	150	2	3.2	1.5	RFH 150	12	12409172	917P 150 H2	-
918P	150	2	3.8	1.7	RFH 150	12	12409182	918P 150 H2	-
920P	150	2	4.9	1.5	RFH 150	12	12409202	920P 150 H2	-
930P	150	2	3.2	3.2	RFH 150	12	12409302	930P 150 H2	-
931P	150	2	1.7	1.7	RFH 150	12	12409312	931P 150 H2	-
940P	150	2	1.7	-	RFH 150	12	12409402	940P 150 H2	-
941P	150	2	2.2	-	RFH 150	12	12409412	941P 150 H2	-
942P	150	2	2.6	-	RFH 150	12	12409422	942P 150 H2	-
		4	2.6	-	RFH 150	12	12409424	942P 150 H4	-
943P	150	2	3	-	RFH 150	12	12409432	943P 150 H2	-
		4	3	-	RFH 150	12	12409434	943P 150 H4	-
952P	150	2	1.4	4.2	RFH 150	12	12409522	952P 150 H2	-
		4	1.4	4.2	RFH 150	12	12409524	952P 150 H4	-



Riffler files series 954P–996P

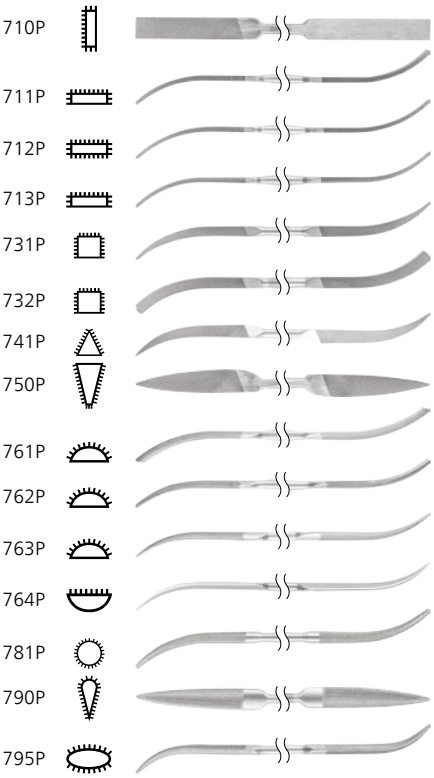
Riffler files in length 150 mm (smallest version).

Special features:

- Can be used with or without riffler file holder.
- Width, application-oriented product selection.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Suitable arbors		Item no.	Designation	Price/unit EUR
954P	150	2	1.5	4	RFH 150	12	12409542	954P 150 H2	-
955P	150	4	1.5	4	RFH 150	12	12409554	955P 150 H4	-
956P	150	2	1.6	4.1	RFH 150	12	12409562	956P 150 H2	-
961P	150	2	4.1	2.4	RFH 150	12	12409612	961P 150 H2	-
963P	150	2	4.6	1.3	RFH 150	12	12409632	963P 150 H2	-
964P	150	2	4.5	1.4	RFH 150	12	12409642	964P 150 H2	-
965P	150	2	5.2	1.5	RFH 150	12	12409652	965P 150 H2	-
972P	150	2	3.6	2.1	RFH 150	12	12409722	972P 150 H2	-
973P	150	2	3.6	2.1	RFH 150	12	12409732	973P 150 H2	-
974P	150	2	3.6	2.1	RFH 150	12	12409742	974P 150 H2	-
980P	150	2	3.5	-	RFH 150	12	12409802	980P 150 H2	-
981P	150	2	3.5	-	RFH 150	12	12409812	981P 150 H2	-
		4	3.5	-	RFH 150	12	12409814	981P 150 H4	-
982P	150	2	3	-	RFH 150	12	12409822	982P 150 H2	-
983P	150	2	3.2	-	RFH 150	12	12409832	983P 150 H2	-
984P	150	2	3.2	-	RFH 150	12	12409842	984P 150 H2	-
985P	150	2	3.2	-	RFH 150	12	12409852	985P 150 H2	-
		4	3.2	-	RFH 150	12	12409854	985P 150 H4	-
986P	150	2	2.6	-	RFH 150	12	12409862	986P 150 H2	-
988P	150	2	3.2	-	RFH 150	12	12409882	988P 150 H2	-
996P	150	2	2.2	1.4	RFH 150	12	12409962	996P 150 H2	-

Precision files
Riffler files, riffler rasps



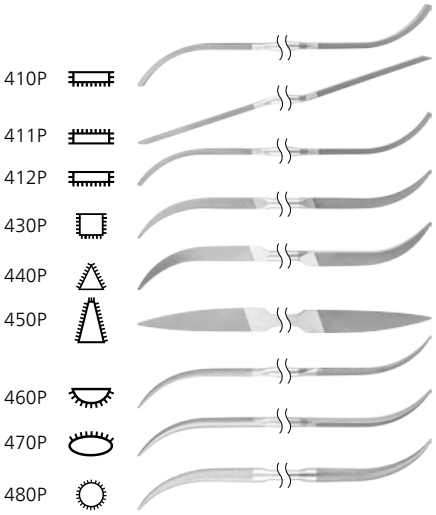
Riffler files series 710P–795P

Riffler files in length 180 mm (medium version).

Special features:

- Can be used with or without riffler file holder.
- Width, application-oriented product selection.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]	Suitable arbors		Item no.	Designation	Price/unit EUR
710P	180	0	8.5	2.5	RFH 180	12	12407100	710P 180 H0	-
		2	8.5	2.5	RFH 180	12	12407102	710P 180 H2	-
711P	180	0	8.5	2.5	RFH 180	12	12407110	711P 180 H0	-
		2	8.5	2.5	RFH 180	12	12407112	711P 180 H2	-
712P	180	0	8.2	2.5	RFH 180	12	12407120	712P 180 H0	-
		2	8.2	2.5	RFH 180	12	12407122	712P 180 H2	-
713P	180	0	8.2	2.5	RFH 180	12	12407130	713P 180 H0	-
		2	8.2	2.5	RFH 180	12	12407132	713P 180 H2	-
731P	180	0	4.5	4.5	RFH 180	12	12407310	731P 180 H0	-
		2	4.5	4.5	RFH 180	12	12407312	731P 180 H2	-
732P	180	0	4.5	4.5	RFH 180	12	12407320	732P 180 H0	-
		2	4.5	4.5	RFH 180	12	12407322	732P 180 H2	-
741P	180	0	6.5	-	RFH 180	12	12407410	741P 180 H0	-
		2	6.5	-	RFH 180	12	12407412	741P 180 H2	-
750P	180	0	9.5	2.5	RFH 180	12	12407500	750P 180 H0	-
		2	9.5	2.5	RFH 180	12	12407502	750P 180 H2	-
761P	180	0	9.2	3.2	RFH 180	12	12407610	761P 180 H0	-
		2	9.2	3.2	RFH 180	12	12407612	761P 180 H2	-
762P	180	2	9.3	3.2	RFH 180	12	12407622	762P 180 H2	-
763P	180	0	9.5	3.3	RFH 180	12	12407630	763P 180 H0	-
		2	9.5	3.3	RFH 180	12	12407632	763P 180 H2	-
764P	180	2	9.5	3.3	RFH 180	12	12407642	764P 180 H2	-
781P	180	0	5	-	RFH 180	12	12407810	781P 180 H0	-
		2	5	-	RFH 180	12	12407812	781P 180 H2	-
790P	180	2	8.5	4	RFH 180	12	12407902	790P 180 H2	-
795P	180	2	8	4.3	RFH 180	12	12407952	795P 180 H2	-



Riffler files series 410P–480P

Riffler files in length 300 mm (longest version).

Special features:
- Can be used with or without riffler file holder.
- Width, application-oriented product selection.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Width [mm]	Height [mm]		Item no.	Designation	Price/unit EUR
410P	300	0	15	4	6	12404100	410P 300 H0	-
		2	15	4	6	12404102	410P 300 H2	-
411P	300	0	15	4.4	6	12404110	411P 300 H0	-
		2	15	4.4	6	12404112	411P 300 H2	-
412P	300	0	15	4.4	6	12404120	412P 300 H0	-
430P	300	0	8	8	6	12404300	430P 300 H0	-
		2	8	8	6	12404302	430P 300 H2	-
440P	300	0	12	12	6	12404400	440P 300 H0	-
		2	12	12	6	12404402	440P 300 H2	-
450P	300	0	15	12	6	12404500	450P 300 H0	-
460P	300	0	15	6	6	12404600	460P 300 H0	-
470P	300	0	14	7	6	12404700	470P 300 H0	-
780P	300	0	10	-	6	12404800	480P 300 H0	-
480P	300	2	10	-	6	12404802	480P 300 H2	-

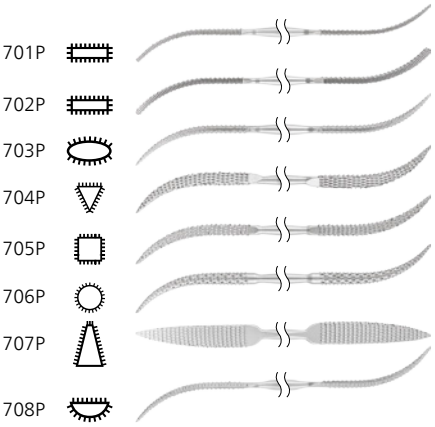


Riffler file set PF 900

Contains an application-oriented selection of riffler files. Matching arbor = RFH 150.

Special features:
- Can be used with or without riffler file holder.
- Width, application-oriented product selection.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Contents [Piece]		Item no.	Designation	Price/unit EUR
PF 900	150	2	4	1	11261900	PF 900	-



Riffler rasp series 701P–708P

190 mm long riffler rasps with precise Swiss rasp cut.

Special features:
- Can be used with or without riffler file holder.
- Width, application-oriented product selection.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss rasp cut	Width [mm]	Height [mm]	Suitable arbors		Item no.	Designation	Price/unit EUR
701P	190	0	8.2	3.3	RFH 180	12	12457190	701P 190 H0	-
702P	190	0	8.1	3.5	RFH 180	12	12457290	702P 190 H0	-
703P	190	0	7.6	4.4	RFH 180	12	12457390	703P 190 H0	-
704P	190	0	6.4	-	RFH 180	12	12457490	704P 190 H0	-
705P	190	0	4.9	-	RFH 180	12	12457590	705P 190 H0	-
706P	190	0	5.5	-	RFH 180	12	12457690	706P 190 H0	-
707P	190	0	9.2	3.6	RFH 180	12	12457790	707P 190 H0	-
708P	190	0	9.3	3.8	RFH 180	12	12457890	708P 190 H0	-



Riffler rasp set 720P

Contains an application-oriented selection of riffler rasps. Matching arbor = RFH 180.

Special features:
- Can be used with or without riffler file holder.
- Width, application-oriented product selection.
- Suitable for use on steels up to 1,200 N/mm².

Profile	Length [mm]	Swiss cut	Contents [Piece]		Item no.	Designation	Price/unit EUR
720P	190	0	8	1	12707202	720P	-

FH 2+3



FH 4+5



FH 4/1



FH 5/1



Ergonomic file handles

Ergonomic file handles for comfortable and safe work. Soft plastic without plasticizer on the outside with a hard, stable inner part.

Special features:
- Protects hands against sharp edges and corners.
- Ergonomic shape with optimized handle.
- Files do not roll away.

Suitable for file length [mm]	Total length [mm]	Suitable for		Item no.	Designation	Price/unit EUR
100, 125, 150	110	Key files	10	12617120	FH 2-10	-
			100	12617220	FH 2-100	-
		all tangs	10	12617130	FH 3-10	-
			100	12617230	FH 3-100	-
200, 250	115	Profiles: three square (file handle FH 5 is suitable for a file length of 250 mm), square, round, special shapes	10	12617140	FH 4-10	-
			100	12617240	FH 4-100	-
		Profiles hand, flat, half-round	10	12617141	FH 4/1-10	-
			100	12617241	FH 4/1-100	-
300, 350	115	Profiles three square, square, round, special shapes	10	12617150	FH 5-10	-
			100	12617250	FH 5-100	-
		Profiles hand, flat, half-round	10	12617151	FH 5/1-10	-
			100	12617251	FH 5/1-100	-

PH 8
PH 9



PH 11



PH 13



Plastic file handles

Stable plastic file handles for good guidance and power transmission.

Special features:
- Wide collar guarantees work with low levels of fatigue and increases safety.
- Good power transmission and control of the file.
- Air chambers help absorb hand moisture.

Suitable for file length [mm]	Total length [mm]	Suitable for		Item no.	Designation	Price/unit EUR
100, 125, 150	90	Key files	10	12616108	PH 08/10	-
			100	12616208	PH 08/100	-
		all tangs	10	12616109	PH 09/10	-
			100	12616209	PH 09/100	-
200, 250	110	all tangs	10	12616111	PH 11/10	-
			100	12616211	PH 11/100	-
300, 350	120	all tangs	10	12616113	PH 13/10	-
			100	12616213	PH 13/100	-

File handles, file sleeves, file brush
Quick-mounting handles



Quick-mounting handle

Quick-mounting handle for needle files, diamond files and smaller machinist's and precision files.

Special features:
- Reliably clamps the file tangs into the handle by simply twisting the two halves of the handle.

Suitable for file length [mm]	Suitable for tang diameter [mm]	Total length [mm]		Item no.	Designation	Price/unit EUR
140, 160, 180, 200	3,0 / 3,25 / 3,5 / 3,75	90	10	12605004	SH 220	-

NFH 211



NFH 212



Needle file holder

Quick-mounting handles for needle files with 3–4.5 mm tang diameter.

Special features:
- Practical and lightweight.
- Available in two materials.

Suitable for tang diameter [mm]	Total length [mm]		Item no.	Designation	Price/unit EUR
3,0 / 3,25 / 3,5 / 3,75	100	10	12299004	NFH 211-3 K	-
	92	10	12299010	NFH 212	-

Riffler file holder



Riffler file holder

Riffler file holder without plasticizer for files in 150 and 180 mm lengths.

Special features:
- Safe and optimum file control.
- One of the file points is always covered safely by the file handle.
- Quick and easy tool changes.

Suitable for file length [mm]		Item no.	Designation	Price/unit EUR
150	10	12602172	RFH 150	-
180	10	12604224	RFH 180	-

Empty plastic sleeves



Empty plastic sleeves

Plastic sleeves for storing individual files without a handle.

Special features:
- Enables the file to be hung up by the eyelet.
- Protects against damage, dirt and corrosion.

Suitable for file length [mm]		Item no.	Designation	Price/unit EUR
150	25	12621150	KH 150	-
200	25	12622200	KH 200	-
250	25	12623250	KH 250	-
300	25	12624300	KH 300	-



File brush

The file brush effortlessly cleans chips from a clogged file. With robust wooden handle with wear-resistant steel wire filament.



Special features:
- Easy to clean.
- Long tool life.

Length [mm]		Item no.	Designation	Price/unit EUR
232	5	12601000	HBF 10 ST 0,15	-



Hand deburrer

Easy change blades and countersinks for efficient deburring, chamfering and reworking of different materials and contours. Hard-to-reach areas, bores, inner and outer diameters, thread and grooves can be worked on effortlessly by hand.



Special features:
- Easy to control and use with the special holder.
- The pivot-mounted adapter system makes handling and changing the deburrer very easy.
- Ergonomic file handle protects hands against sharp edges and prevents the tool from rolling away.

ø [mm]	Use for	Countersink dia. [mm]		Item no.	Designation	Price/unit EUR
Holder for hand deburrer						
-	all types	-	1	12605005	H 4	-
Deburring blades						
3	Steel, aluminium	-	10	14300010	BS 1010	-
	Plastics, other soft materials	-	10	14300020	BS 1018	-
	Non-ferrous metals, cast iron	-	10	14300030	BS 2010	-
Mini blade						
3	general use	-	1	14300040	BD 5010	-
Deburring countersink						
3	general use	10.4	1	14300050	BC 1041	-
		16.5	1	14300060	BC 1651	-

PFERD

2

2



Milling, drilling and countersinking tools

Milling, drilling and countersinking tools
Table of contents

2

Milling, drilling and countersinking tools

- Highlights from the PFERD range 3
- General information 4
- Burr shapes 4
- The quick way to find the perfect tool 6



TC burrs for universal applications

- For fine and coarse stock removal 14



TC burrs for high-performance applications

- ALLROUND cut for versatile use 29
- STEEL cut for steel and cast steel 35
- INOX cut for stainless steel (INOX) 42
- ALU cut for aluminium/non-ferrous metals 47
- NON-FERROUS cut for non-ferrous metals 51
- CAST cut for cast iron 52
- TITANIUM cut for titanium 57
- PLAST cut for GRP/CRP 60
- FVK and FVKS cuts for GRP/CRP 60
- TOUGH and TOUGH-S cuts for tough applications 61
- MICRO cut for finishing work 66
- TC burrs for flexible and defined work on edges 71



TC copy milling burrs

- Universal cut KSF 4 75
- MICRO cut for finishing work 76



TC profile cylinder burrs

- Profile cylinder burrs PZF 77
- Strike plate burrs SBF 77



HSS rotary cutters

- For fine and coarse stock removal 80
- HSS rotary cutters for special shapes 87
- HSS finishing cutters 88



Milling tools with cutting inserts

- **ALU**MASTER High Speed Disc 92
- High Speed Torus Cutter 95
- EDGE FINISH system for work on edges 96



Drilling tools

- HSS spiral drill 99
- HSS step drills 107



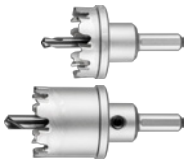
Countersink tools

- HSS countersink 111
- HSS flat countersink 118



HSS hole saws, sets and accessories

- HSS hole saws 119
- HSS hole saw sets 120
- Accessories 122



TC hole cutters and accessories

- TC hole cutter 124
- HSS pilot drill for TC hole cutters 125

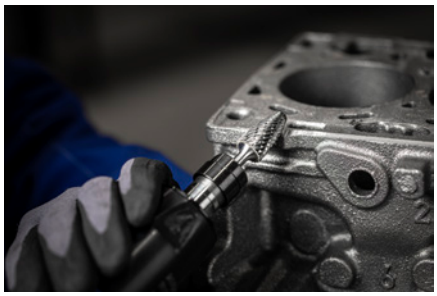
Milling, drilling and countersinking tools
Highlights from the PFERD range

Tungsten carbide burrs for high-performance applications

Tungsten carbide burrs from the high-performance line provide fast and efficient solutions.

The innovative and sophisticated system for work on surfaces includes a wide range of high-performance cuts for a variety of materials and applications.

Scan the QR code to find out more about the PFERD cuts for specific materials and applications.



Advantages:
- Optimum stock removal rate, high aggressiveness and good guidance.
- High economic efficiency compared with conventional burrs.
- The highly accurate concentricity enables impact-free working without creating chatter marks.
- Significant time savings.
- Also available with a high-quality HICOAT coating.

Milling tools with cutting inserts

A high stock removal rate, a lower tendency to clog up and the production of large chips rather than hazardous dust are just three reasons to use milling tools when machining aluminium.

PFERD has developed innovative milling tools with cutting inserts such as the High Speed Disc **ALU**MASTER and the High Speed Torus Cutter for safe and efficient processing of aluminium. Whether used for milling out, work on weld seams and fillet welds or for edge and surface work, the unique milling tools are versatile and also suitable for robot-assisted applications.

Scan the QR code to find out more about PFERD tools with cutting inserts.



Advantages:
- Do not generate hazardous or explosive dust.
- An extraction system is not required.
- Exceptionally high stock removal rate.
- Turnable and replaceable tungsten carbide cutting inserts.

HICOAT coating

PFERD offers tools with HICOAT coatings to tackle particularly demanding applications. Two different coatings are available. The HICOAT coating HC-FEP is specifically designed for iron and steel materials.

The HICOAT coating HC-NFE is mainly used for long-chipping and lubricating aluminium alloys and non-ferrous metals. In general, all PFERD tungsten carbide burrs are also available with HICOAT coatings.

Scan the QR code to find out more about PFERD's HICOAT coatings.

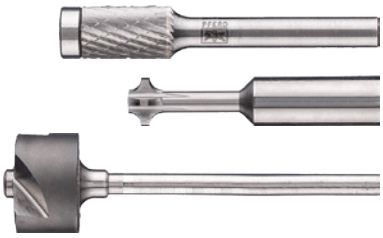


Advantages:
- Improved anti-adhesion characteristics.
- Effective chip discharge.
- Lower thermal loads.
- Increased tool life.
- Burrs with the HICOAT coating HC-FEP achieve a much higher stock removal rate than uncoated burrs.

Milling, drilling and countersinking tools
General information

Custom-made products

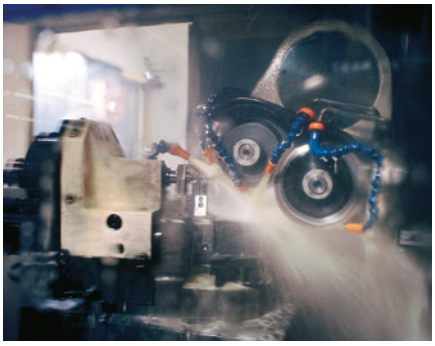
If you cannot find the solution for your particular application in our comprehensive catalogue range, we are happy to produce milling tools to meet your wishes and requirements. Our sales representatives and technical advisers will be happy to assist you in analyzing your task. Your specifications and wishes, drawings relating to cuts, shank diameters, special lengths, special shapes and coatings can thus be taken into account.



Resharpening

PFERD offers resharpening of tungsten carbide burrs, subject to a minimum resharpening quantity of 25 units (unmixed items). Regrinding of HSS rotary cutters or tungsten carbide burrs with a shank diameter of 3 mm is not recommended for economic reasons. In each case, our production specialists will decide whether resharpening makes sense from an economic point of view and is technically feasible. The following cuts can be resharpened (only applies to a shank diameter of 6 and 8 mm):

- Cut 1
- Cut 3
- Cut 3 PLUS
- Cut 4
- Cut 5
- INOX
- ALU
- TITANIUM
- TOUGH
- TOUGH-S
- MICRO



Safety notes

- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.

Wear eye protection!

Wear gloves!

Wear a dust mask!

Wearing protective gloves is recommended. Handle the tool drive with both hands.

Observe the recommended rotational speed, especially when using burrs with long shanks!

Observe the contact angle of 5–60° (**ALU**MASTER HSD-F)!

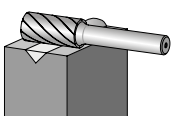
Tighten the bolts!

Do not use if damaged!

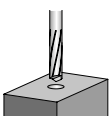
Do not use for cutting!

CE-marked

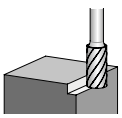
Burr shapes



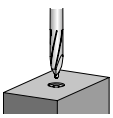
ZYA
Cylindrical shape



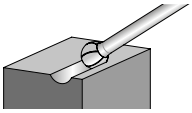
ZYA BS
Cylindrical shape with drill cut



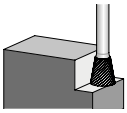
ZYAS/HSS A-ST
Cylindrical shape with end cut



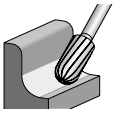
ZYA ZBS
Cylindrical shape with centre drill



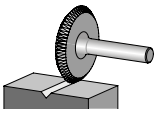
KUD/HSS F
Ball shape



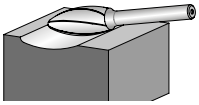
WKNS/HSS W-ST
Inverted cones with end cut



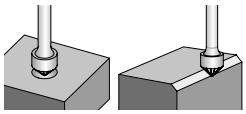
WRC/HSS C
Cylindrical shape with radius end



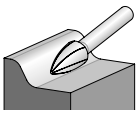
N
Disc shape



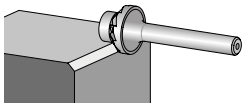
B
Flame shape



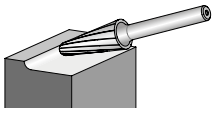
KSK
Conical counterbore shape 90°



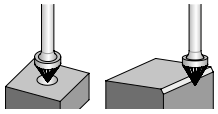
SPG/ HSS K
Pointed tree shape



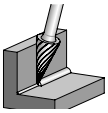
KSK EDGE
EDGE 45°



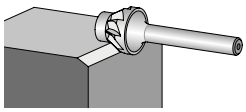
KEL/HSS L
Conical shape with radius end



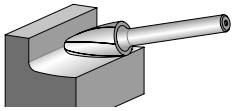
KSJ
Conical counterbore shape 60°



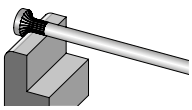
SKM/HSS G
Conical pointed shape



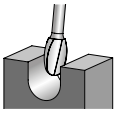
KSJ EDGE
EDGE 30°



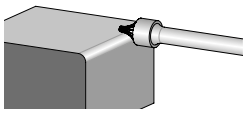
RBF/HSS H
Tree shape with radius end



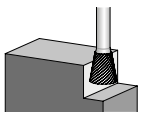
R
Radius burrs



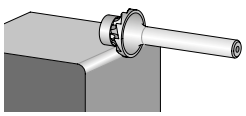
TRE/HSS O
Oval shape



V
Concave radius burrs



WKN
Inverted cones



V EDGE
EDGE R3.0

Milling, drilling and countersinking tools

The quick way to find the perfect tool

Application	Material group			Used for	High-performance application	Universal application
Deburring, chamfering, milling out for the preparation of build-up welding, machining weld seams, machining contours, cleaning cast material	Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, tempering steels	Coarse stock removal	STEEL ALLROUND	3 PLUS
				Fine stock removal	MICRO	5
		Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel	Coarse stock removal	STEEL ALLROUND	3 PLUS
				Fine stock removal	MICRO	5
	Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse stock removal	INOX ALLROUND	4
				Fine stock removal	MICRO	5
	Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys	Coarse stock removal	ALU	1
				Fine stock removal		-
			Brass, copper, zinc	Coarse stock removal	NON-FERROUS ALU ALLROUND	1
				Fine stock removal	ALU	3
		Hard non-ferrous metals	Bronze, titanium/ titanium alloys, hard aluminium alloys (high Si content)	Coarse stock removal	TITANIUM ALU NON-FERROUS INOX ALLROUND	4
				Fine stock removal	MICRO	5
		High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	Coarse stock removal	On request	4
				Fine stock removal	MICRO	5
	Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	Coarse stock removal	CAST ALLROUND	3 PLUS
				Fine stock removal	MICRO	3
Milling out, machining contours	Plastics, other materials	Thermoplastics, fibre-reinforced plastics (GRP/CRP) with a fibre content ≤ 40%		Coarse stock removal	PLAST	-
Trimming, contour milling, cutting out holes		Thermoplastics, fibre-reinforced plastics (GRP/CRP) with a fibre content > 40%			FVK/FVKS ALU NON-FERROUS	

Special applications

Application	High-performance application	Universal application
Work on edges	TC burrs for work on edges	-
	EDGE FINISH system for work on edges	-
Problems with broken teeth	TC burrs – TOUGH, TOUGH-S cuts	HSS rotary cutters
Cutting out round holes	TC hole cutter	HSS step drills, HSS hole saws
Machining butt welds and fillet welds, work on edges/ chamfering using an angle grinder	**ALU**MASTER High Speed Disc	-
Machining butt welds and fillet welds, work on edges	High Speed Torus Cutter	-

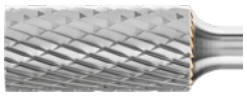
PFERD cuts for universal applications



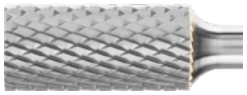
Cut 1 (C according to DIN 8033)
- Machining of non-ferrous metals, steel and cast iron.
- High stock removal.



Cut 3 (MY according to DIN 8033)
- Machining of steel, cast iron, stainless steel (INOX), nickel-based alloys and titanium alloys.
- High stock removal.
- Good surface.



Cut 3 PLUS (MX according to DIN 8033)
- Similar to the 3 cut, but with cross cut.
- Machining of steel, cast iron, stainless steel (INOX), nickel-based alloys and titanium alloys.
- High stock removal.
- Burrs with the HICOAT coating HC-FEP achieve a much higher stock removal rate than uncoated burrs.

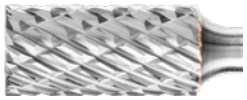


Cut 4 (MX according to DIN 8033)
- Machining of stainless steel (INOX), steel and high-temperature-resistant materials such as nickel-based and cobalt-based alloys.
- High stock removal with short chips.
- Good surface.

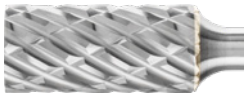


Cut 5 (F according to DIN 8033)
- Fine machining of steel, cast iron, stainless steel (INOX) and high-temperature-resistant materials such as nickel-based and cobalt-based alloys.
- Good surface.

PFERD cuts for high-performance applications



ALLROUND cut
- High stock removal rate on key materials such as steel, cast steel, stainless steel (INOX), non-ferrous metals and cast iron.
- Similar to the 3 PLUS cut but with a significantly higher stock removal rate.
- Burrs with the HICOAT coating HC-FEP achieve a much higher stock removal rate than uncoated burrs.



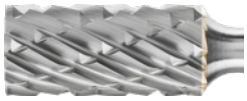
STEEL cut
- Extremely high stock removal rate on steel and cast steel.
- Smooth milling.
- Reduced vibration and less noise.
- Burrs with the HICOAT coating HC-FEP achieve a much higher stock removal rate than uncoated burrs.



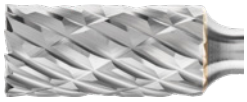
INOX cut
- Extremely high stock removal rate on all austenitic, rust and acid-resistant steels, stainless steel (INOX) and soft titanium alloys (tensile strength < 500 N/mm²).
- Significantly reduced vibration and less noise.
- Burrs with the HICOAT coating HC-FEP achieve a much higher stock removal rate than uncoated burrs.



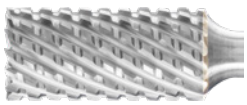
ALU cut
- High stock removal rate on aluminium and aluminium alloys, non-ferrous metals and plastics.
- Smooth milling.
- HICOAT coating HC-NFE for long-chipping and lubricating aluminium alloys and non-ferrous metals.



NON-FERROUS cut
- High stock removal rate on non-ferrous metals, brass, copper, plastics and fibre-reinforced plastics.
- Suitable for universal use.



CAST cut
- Extremely high stock removal rate on cast iron.
- Smooth milling.
- Reduced vibration and less noise.



TITANIUM cut
- Outstanding stock removal rate and tool life on hard titanium alloys.
- Tangibly more aggressive, large chips and very good chip removal.
- Reduced vibration and less noise.
- For soft titanium alloys (tensile strength < 500 N/mm²), PFERD recommends the INOX cut.



EDGE cut
- Creates exact edge shapes – with either 30° or 45° chamfering or a defined radius of 3.0 mm.
- Safe and comfortable to guide.

TC burrs
PFERD cuts



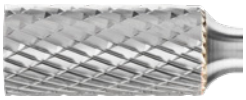
PLAST cut
- Trimming and contour milling of workpieces made from less hard glass and carbon-fibre-reinforced duroplastics (GRP and CRP with ≤ 40 % fibre content) and fibre-reinforced thermoplastics.
- Minimized delamination and fraying through straight cut.
- Highly suitable for use on machines and on robots.
- Reduced vibration and less noise.



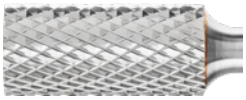
FVK cut
- Trimming and contour milling of workpieces made from hard glass and carbon-fibre-reinforced duroplastics (also GRP and CRP > 40 %).



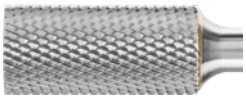
FVKS cut
- Similar to the FVK cut.
- Smooth milling.



TOUGH cut
- High stock removal rate on cast iron, steel < 54 HRC.
- Extremely resistant to impacts.
- Also suitable for use with high surface contact angles > 1/3 and under impact loads.



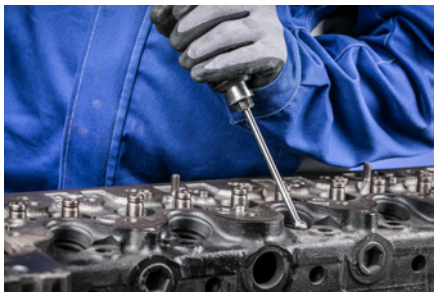
TOUGH-S cut
- High stock removal rate on cast iron, steel < 54 HRC.
- Similar to the TOUGH cut, but with smoother milling and shorter chips.
- Extremely resistant to impacts.
- Also suitable for use with high surface contact angles > 1/3 and under impact loads.



MICRO cut
- Good stock removal on almost all materials < 68 HRC.
- High surface quality.
- Reduced vibration and less noise.

Note
- On tungsten carbide burrs designed for high-performance applications, blue discolouration cannot be avoided on account of the very high stock removal rate. However, this does not constitute a safety risk.

Tungsten carbide burrs with a long shank

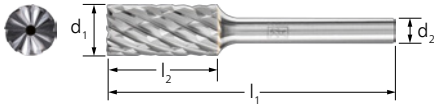


Tungsten carbide burrs with long shanks are particularly well suited to working in hard-to-reach areas. PFERD holds long-shank versions in stock for the respective product groups. Long-shank versions are available with the 3 PLUS, STEEL, Z5 and TOUGH cuts. Additional variants can be custom-made on request. Tungsten carbide burrs with a long shank should only be used with rigid clamping systems and drives. Long-shank versions are not suitable for robotic or stationary applications. There is a risk that they may break off!

In some applications, drive spindle extensions are an economic alternative to customized burrs with long shanks.

For more information please see catalogue section 9.

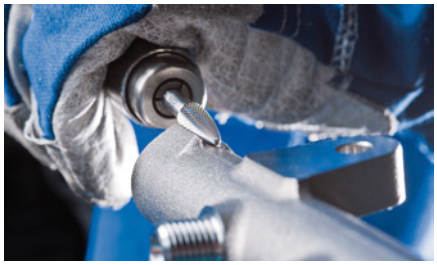
Explanation of the code system



d_1 = Burr dia.
l_2 = Cut length
d_2 = Shank dia.
l_1 = Total length

Recommendations for use

An optimum rotational speed and power output for the tool drive are required for cost-effective use of tungsten carbide burrs. Using tungsten carbide burrs on drives with an elastically mounted spindle significantly improves comfort when working. What's more, the grinder's elastically mounted spindle guarantees a longer tool life, especially when using tungsten carbide burrs. Scan the QR code with your mobile device to obtain more handy recommendations for use relating to milling work.



TC burrs
Cutting speeds – burrs for universal applications

Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:
① Select the material group to be machined.
② Determine the type of application.
③ Select the cut.
④ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:
⑤ Select the required burr diameter.
⑥ The cutting speed range and the burr diameter determine the recommended rotational speed range.



① Material group			② Used for	③ Cut	④ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, tempering steels	Coarse stock removal	1	600–900 m/min
				3 PLUS	450–600 m/min
				3 PLUS HC-FEP	450–750 m/min
			Fine stock removal	5	450–600 m/min
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel	Coarse stock removal	3	250–350 m/min
				3 PLUS	
				4	
				3 PLUS HC-FEP	250–450 m/min
			Fine stock removal	5	350–450 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse stock removal	1	250–450 m/min
				3	250–350 m/min
				3 PLUS	
				4	250–450 m/min
			Fine stock removal	5	350–450 m/min
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys	Coarse stock removal	1	600–900 m/min
		Brass, copper, zinc	Coarse stock removal	1	600–900 m/min
			Fine stock removal	3	450–600 m/min
	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	Coarse stock removal	3	250–350 m/min
				4	
			Fine stock removal	5	350–450 m/min
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	Coarse stock removal	3 PLUS	250–450 m/min
				4	
			Fine stock removal	5	350–600 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	Coarse stock removal	1	600–900 m/min
				3 PLUS	450–600 m/min
			Fine stock removal	3	450–600 m/min



① Material group			② Used for	③ Cut	④ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (below 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, tempering steels	Coarse stock removal	ALLROUND	450–750 m/min
				ALLROUND HC-FEP	450–900 m/min
				STEEL	450–750 m/min
				STEEL HC-FEP	450–900 m/min
	Hardened, heat-treated steels over 1,200 N/mm² (over 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel	Coarse stock removal	ALLROUND	250–450 m/min
				ALLROUND HC-FEP	250–600 m/min
				STEEL	450–750 m/min
				STEEL HC-FEP	450–900 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse stock removal	ALLROUND	450–600 m/min
				INOX	450–600 m/min
			Fine stock removal	INOX HC-FEP	450–750 m/min
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys	Coarse stock removal	ALU	600–1,100 m/min
				ALU HC-NFE	600–1,300 m/min
			Fine stock removal	ALU	900–1,100 m/min
				ALU HC-NFE	900–1,300 m/min
		Brass, copper, zinc	Coarse stock removal	ALLROUND	450–750 m/min
				ALLROUND HC-FEP	450–900 m/min
				ALU	600–1,100 m/min
				ALU HC-NFE	600–1,300 m/min
				NON-FERROUS	450–600 m/min
			Fine stock removal	ALU	900–1,100 m/min
				ALU HC-NFE	900–1,300 m/min
	Hard non-ferrous metals	Titanium/titanium alloys, hard aluminium alloys (high Si content)	Coarse stock removal	ALLROUND	450–600 m/min
				ALLROUND HC-FEP	450–750 m/min
				INOX	250–450 m/min
				INOX HC-FEP	250–600 m/min
		Hard titanium alloys	Coarse stock removal	TITANIUM	250–450 m/min
		Bronze	Coarse stock removal	ALLROUND	450–600 m/min
				ALLROUND HC-FEP	450–750 m/min
				ALU	600–900 m/min
				ALU HC-NFE	600–1,300 m/min
				NON-FERROUS	600–900 m/min
			Fine stock removal	ALU	900–1,100 m/min
				ALU HC-NFE	900–1,300 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/ nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	Coarse stock removal	ALLROUND	450–900 m/min
				CAST	450–750 m/min
Plastics, other materials	Thermoplastics, Fibre-reinforced plastics (GRP/CRP)		Coarse stock removal	NON-FERROUS	600–1,100 m/min
				ALU	
				ALU HC-NFE	600–1,300 m/min
				PLAST	450–900 m/min
				FVK	
			Fine stock removal	ALU	600–1,100 m/min
				ALU HC-NFE	600–1,300 m/min
				FVKS	450–900 m/min

TC burrs
Cutting speeds – burrs for special applications

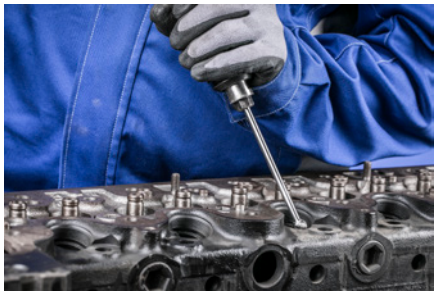
① Material group			② Used for	③ Cut	④ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (below 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, tempering steels	Coarse stock removal with impact load	TOUGH	250–600 m/min
				TOUGH-S	
			Work on edges	3	450–600 m/min
				3 PLUS	
				SP	
				EDGE	600–900 m/min
			Fine stock removal	MICRO	600–750 m/min
	Hardened, heat-treated steels over 1,200 N/mm² (over 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel	Coarse stock removal with impact load	TOUGH	250–350 m/min
				TOUGH-S	
			Work on edges	3	250–350 m/min
				3 PLUS	
				SP	
				5	350–450 m/min
				EDGE	600–750 m/min
			Fine stock removal	MICRO	450–600 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Work on edges	3	250–350 m/min
				3 PLUS	
				SP	
				5	350–450 m/min
			Fine stock removal	MICRO	450–600 m/min
Non-ferrous metals	Soft non-ferrous metals	Soft aluminium alloys	Work on edges	EDGE ALU	900–1,100 m/min
		Brass, copper, zinc	Work on edges	3	600–900 m/min
				3 PLUS	
				SP	
				EDGE ALU	900–1,100 m/min
				EDGE	600–900 m/min
	Hard non-ferrous metals	Bronze, hard aluminium alloys (high Si content)	Work on edges	3	250–450 m/min
				3 PLUS	
				EDGE ALU	900–1,100 m/min
				EDGE	250–450 m/min
			Fine stock removal	MICRO	450–600 m/min
		Titanium/titanium alloys	Work on edges	SP	250–450 m/min
				EDGE	
			Fine stock removal	MICRO	450–600 m/min
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	Work on edges	5	350–600 m/min
				EDGE	250–450 m/min
			Fine stock removal	MICRO	450–600 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	Coarse stock removal with impact load	TOUGH	250–600 m/min
				TOUGH-S	
			Work on edges	3	450–600 m/min
				3 PLUS	
				SP	
			Fine stock removal	MICRO	600–750 m/min
Plastics, other materials	Fibre-reinforced plastics (GRP/CRP), thermoplastics		Work on edges	EDGE ALU	750–1,100 m/min

Example:
TC burr,
ALLROUND cut,
Burr dia. 12 mm.
Coarse stock removal on steels up to 1,200 N/mm².
Cutting speed: 450–750 m/min
Rotational speed range:
12.000–20.000 RPM

⑤ Burr dia. [mm]	⑥ Cutting speeds [m/min]							
	250	350	450	600	750	900	1,100	1,300
	Rotational speeds [RPM]							
1.5	53,000	74,000	95,000	127,000	159,000	191,000	233,000	275,000
2	40,000	56,000	72,000	95,000	119,000	143,000	175,000	206,000
3	27,000	37,000	48,000	64,000	80,000	95,000	117,000	138,000
4	20,000	28,000	36,000	48,000	60,000	72,000	88,000	104,000
5	16,000	22,000	29,000	40,000	48,000	57,000	70,000	83,000
6	13,000	19,000	24,000	32,000	40,000	48,000	59,000	70,000
8	10,000	14,000	18,000	24,000	30,000	36,000	44,000	52,000
10	8,000	11,000	14,000	19,000	24,000	29,000	35,000	41,000
12	7,000	9,000	12,000	16,000	20,000	24,000	30,000	34,000
13	6,000	9,000	11,000	15,000	22,500	22,000	27,000	32,000
16	5,000	7,000	9,000	12,000	15,000	18,000	22,000	26,000
20	4,000	6,000	7,000	10,000	12,000	14,000	17,000	20,000
25	3,000	4,000	6,000	8,000	10,000	11,000	13,000	16,000

Tungsten carbide burrs with long shanks

Tungsten carbide burrs with long shanks are particularly well suited to working in hard-to-reach areas. PFERD holds long-shank versions in stock for the respective product groups. Long-shank versions are available with the 3 PLUS, STEEL, Z5 and TOUGH cuts. All long shanks can be individually shortened. Tungsten carbide burrs with the designation GL 75 mm are made from solid tungsten carbide, which means they can only be shortened using diamond tools. Additional variants can be custom-made on request. In some applications, drive spindle extensions are an economic alternative to customized burrs with long shanks. For more information please see catalogue section 9.



Safety notes:

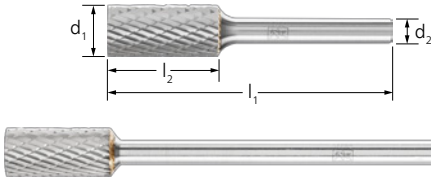
- Tungsten carbide burrs with long shanks are not suitable for robotic or stationary applications. There is a risk that they may break off. Use only rigid clamping systems/drives.
- When working with long shank lengths, it is crucial that the tool is in contact with the workpiece (or inserted in the bore or slot to be machined) before the drive system is turned on. As a rule, the tool must remain in contact with the workpiece for as long as the machine is running. Failure to observe this procedure may result in burr failure (bending) and hence an increased risk of accidents. If continuous contact between the tool and the workpiece is not guaranteed, the ⑧ maximum idling speeds stated in the table must not be exceeded.
- For safety reasons, the maximum application speeds ⑦ with contact with the workpiece require a reduction in the recommended rotational speed of tungsten carbide burrs with standard shanks. The reduced rotational speeds are stated in the table below.

To determine the recommended rotational speed range [RPM], please proceed as follows:
① Select the required burr diameter.
⑦ For the maximum application speed [RPM] with contact with the workpiece, please refer to the right-hand side of the table.

Example:
TC burr, SL 150 mm,
Cut 3 PLUS,
Burr dia. 12 mm.
Coarse stock removal on steels up to 1,200 N/mm².
Maximum application speed with contact with the workpiece: 7.000 RPM

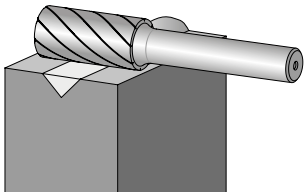
	⑧ Maximum idling speed [RPM] without contact with the workpiece		⑦ Maximum application speed [RPM] with contact with the workpiece	
	Shank length [mm]			
① Burr dia. [mm]	75	150	75	150
3	10,000	-	31,000	-
6	6,000	8,000	15,000	15,000
8	-	6,000	-	11,000
10	-	4,000	-	9,000
12	-	3,000	-	7,000

TC burrs for universal applications
For fine and coarse stock removal



Cylindrical shape ZYA without end cut

Cylindrical burrs according to DIN 8032 with cut conforming to DIN 8033 for general use on all materials. A good stock removal rate is achieved through optimum matching of tungsten carbide, geometry, cut and available coating.

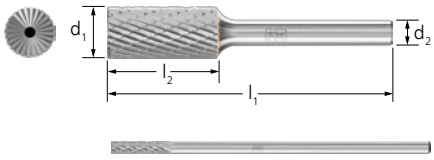


Special features:
- Long tool life and high surface quality.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.
- Cut 3 PLUS is also available with the high-quality HICOAT coating for a much higher stock removal rate.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
2	10	3	40	3 PLUS	1	21201183	ZYA 0210/3 Z3 PLUS	-
				4	1	21201143	ZYA 0210/3 Z4	-
				5	1	21201153	ZYA 0210/3 Z5	-
3	13	3	43	3 PLUS	1	21201283	ZYA 0313/3 Z3 PLUS	-
				4	1	21201243	ZYA 0313/3 Z4	-
				5	1	21201253	ZYA 0313/3 Z5	-
6	7	3	37	3 PLUS	1	21201383	ZYA 0607/3 Z3 PLUS	-
				5	1	21201353	ZYA 0607/3 Z5	-
	13	3	43	3 PLUS	1	21201483	ZYA 0613/3 Z3 PLUS	-
				5	1	21201453	ZYA 0613/3 Z5	-
Long shank diameter of 3 mm, shank length SL 75 mm (long steel shank)/total length GL 75 mm (solid tungsten carbide)								
3	13	3	75	3 PLUS	1	21201287	ZYA 0313/3 Z3 PLUS GL 75	-
				5	1	21201257	ZYA 0313/3 Z5 GL 75	-
6	13	3	88	3 PLUS	1	21201487	ZYA 0613/3 Z3 PLUS SL 75	-
				5	1	21201457	ZYA 0613/3 Z5 SL 75	-
Shank diameter 6 mm								
4	13	6	55	3 PLUS	1	21101526	ZYA 0413/6 Z3 PLUS	-
				4	1	21101546	ZYA 0413/6 Z4	-
				5	1	21101556	ZYA 0413/6 Z5	-
6	16	6	55	3	1	21101606	ZYA 0616/6 Z3	-
				3 PLUS	1	21101626	ZYA 0616/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21101624	ZYA 0616/6 Z3 PLUS HC-FEP	-
				4	1	21101646	ZYA 0616/6 Z4	-
				5	1	21101656	ZYA 0616/6 Z5	-
8	20	6	60	3	1	21101706	ZYA 0820/6 Z3	-
				3 PLUS	1	21101726	ZYA 0820/6 Z3 PLUS	-
				4	1	21101746	ZYA 0820/6 Z4	-
				5	1	21101756	ZYA 0820/6 Z5	-
10	13	6	53	3 PLUS	1	21101826	ZYA 1013/6 Z3 PLUS	-
				4	1	21101846	ZYA 1013/6 Z4	-
				5	1	21101856	ZYA 1013/6 Z5	-
	20	6	60	1	1	21102116	ZYA 1020/6 Z1	-
				3	1	21102106	ZYA 1020/6 Z3	-
				3 PLUS	1	21102126	ZYA 1020/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21102124	ZYA 1020/6 Z3 PLUS HC-FEP	-
				4	1	21102146	ZYA 1020/6 Z4	-
				5	1	21102156	ZYA 1020/6 Z5	-
	25	6	65	3 PLUS	1	21102226	ZYA 1025/6 Z3 PLUS	-
				4	1	21102246	ZYA 1025/6 Z4	-
12	25	6	65	1	1	21101916	ZYA 1225/6 Z1	-
				3	1	21101906	ZYA 1225/6 Z3	-

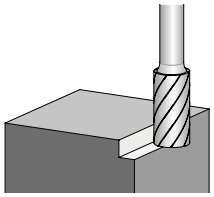
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d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
12	25	6	65	3 PLUS	1	21101926	ZYA 1225/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21101924	ZYA 1225/6 Z3 PLUS HC-FEP	-
				4	1	21101946	ZYA 1225/6 Z4	-
				5	1	21101956	ZYA 1225/6 Z5	-
16	25	6	65	3	1	21102006	ZYA 1625/6 Z3	-
				3 PLUS	1	21102026	ZYA 1625/6 Z3 PLUS	-
				4	1	21102046	ZYA 1625/6 Z4	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)								
6	16	6	172	3 PLUS	1	21101627	ZYA 0616/6 Z3 PLUS SL 150	-
8	20	6	170	3 PLUS	1	21101727	ZYA 0820/6 Z3 PLUS SL 150	-
10	20	6	170	3 PLUS	1	21102127	ZYA 1020/6 Z3 PLUS SL 150	-
12	25	6	175	3 PLUS	1	21101927	ZYA 1225/6 Z3 PLUS SL 150	-
Shank diameter 8 mm								
12	25	8	65	3 PLUS	1	21101928	ZYA 1225/8 Z3 PLUS	-
16	25	8	65	3 PLUS	1	21102028	ZYA 1625/8 Z3 PLUS	-



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut conforming to DIN 8033 for general use on all materials. A good stock removal rate is achieved through optimum matching of tungsten carbide, geometry, cut and available coating.



Special features:
- Long tool life and high surface quality.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

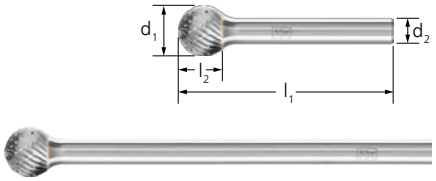
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
2	10	3	40	3 PLUS	1	21200183	ZYAS 0210/3 Z3 PLUS	-
				4	1	21200143	ZYAS 0210/3 Z4	-
				5	1	21200153	ZYAS 0210/3 Z5	-
3	13	3	43	3 PLUS	1	21200283	ZYAS 0313/3 Z3 PLUS	-
				4	1	21200243	ZYAS 0313/3 Z4	-
				5	1	21200253	ZYAS 0313/3 Z5	-
6	7	3	37	3 PLUS	1	21200383	ZYAS 0607/3 Z3 PLUS	-
				5	1	21200353	ZYAS 0607/3 Z5	-
	13	3	43	3 PLUS	1	21200483	ZYAS 0613/3 Z3 PLUS	-
				4	1	21200443	ZYAS 0613/3 Z4	-
				5	1	21200453	ZYAS 0613/3 Z5	-
Long shank diameter of 3 mm, total length GL 75 mm (solid tungsten carbide)								
3	13	3	75	3 PLUS	1	21200287	ZYAS 0313/3 Z3 PLUS GL 75	-
				5	1	21200257	ZYAS 0313/3 Z5 GL 75	-
Shank diameter 6 mm								
4	13	6	55	3 PLUS	1	21100126	ZYAS 0413/6 Z3 PLUS	-
				4	1	21100146	ZYAS 0413/6 Z4	-
				5	1	21100156	ZYAS 0413/6 Z5	-
6	16	6	55	3	1	21100206	ZYAS 0616/6 Z3	-
				3 PLUS	1	21100226	ZYAS 0616/6 Z3 PLUS	-
				4	1	21100246	ZYAS 0616/6 Z4	-
				5	1	21100256	ZYAS 0616/6 Z5	-

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TC burrs for universal applications

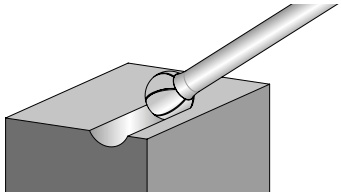
For fine and coarse stock removal

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
8	20	6	60	3	1	21100306	ZYAS 0820/6 Z3	-
				3 PLUS	1	21100326	ZYAS 0820/6 Z3 PLUS	-
				4	1	21100346	ZYAS 0820/6 Z4	-
				5	1	21100356	ZYAS 0820/6 Z5	-
10	13	6	53	3 PLUS	1	21100426	ZYAS 1013/6 Z3 PLUS	-
	20	6	60	3	1	21100706	ZYAS 1020/6 Z3	-
				3 PLUS	1	21100726	ZYAS 1020/6 Z3 PLUS	-
				4	1	21100746	ZYAS 1020/6 Z4	-
				5	1	21100756	ZYAS 1020/6 Z5	-
	25	6	65	3 PLUS	1	21100826	ZYAS 1025/6 Z3 PLUS	-
				4	1	21100846	ZYAS 1025/6 Z4	-
12	25	6	65	3	1	21100506	ZYAS 1225/6 Z3	-
				3 PLUS	1	21100526	ZYAS 1225/6 Z3 PLUS	-
				4	1	21100546	ZYAS 1225/6 Z4	-
				5	1	21100556	ZYAS 1225/6 Z5	-
16	25	6	65	3	1	21100606	ZYAS 1625/6 Z3	-
				3 PLUS	1	21100626	ZYAS 1625/6 Z3 PLUS	-
				4	1	21100646	ZYAS 1625/6 Z4	-
				5	1	21100656	ZYAS 1625/6 Z5	-
Shank diameter 8 mm								
12	25	8	65	3 PLUS	1	21100528	ZYAS 1225/8 Z3 PLUS	-



Ball shape KUD

Ball-shaped burr according to DIN 8032 with cut conforming to DIN 8033 for general use on all materials. A good stock removal rate is achieved through optimum matching of tungsten carbide, geometry, cut and available coating.



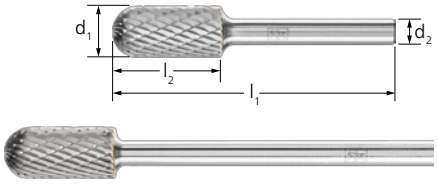
Special features:

- Long tool life and high surface quality.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.
- Cut 3 PLUS is also available with the high-quality HICOAT coating for a much higher stock removal rate.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
1.5	1	3	33	3 PLUS	1	21211013	KUD 01,51/3 Z3 PLUS	-
				5	1	21211015	KUD 01,51/3 Z5	-
2	1.5	3	33	3 PLUS	1	21211023	KUD 021,5/3 Z3 PLUS	-
				5	1	21211025	KUD 021,5/3 Z5	-
3	2	3	33	3 PLUS	1	21211083	KUD 0302/3 Z3 PLUS	-
				4	1	21211043	KUD 0302/3 Z4	-
				5	1	21211053	KUD 0302/3 Z5	-
4	3	3	34	3 PLUS	1	21212583	KUD 0403/3 Z3 PLUS	-
				4	1	21212543	KUD 0403/3 Z4	-
				5	1	21212553	KUD 0403/3 Z5	-
6	5	3	35	3 PLUS	1	21213083	KUD 0605/3 Z3 PLUS	-
				4	1	21213043	KUD 0605/3 Z4	-
				5	1	21213053	KUD 0605/3 Z5	-
Long shank diameter of 3 mm, shank length SL 75 mm (long steel shank)/total length GL 75 mm (solid tungsten carbide)								
3	2	3	75	3 PLUS	1	21211087	KUD 0302/3 Z3 PLUS GL 75	-
				5	1	21211057	KUD 0302/3 Z5 GL 75	-

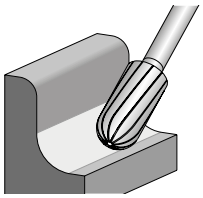
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d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
6	5	3	80	3 PLUS	1	21213087	KUD 0605/3 Z3 PLUS SL 75	-
				5	1	21213057	KUD 0605/3 Z5 SL 75	-
Shank diameter 6 mm								
4	3	6	45	3 PLUS	1	21112026	KUD 0403/6 Z3 PLUS	-
				5	1	21112056	KUD 0403/6 Z5	-
6	5	6	45	1	1	21112516	KUD 0605/6 Z1	-
				3	1	21112536	KUD 0605/6 Z3	-
				3 PLUS	1	21112526	KUD 0605/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21112524	KUD 0605/6 Z3 PLUS HC-FEP	-
				4	1	21112546	KUD 0605/6 Z4	-
				5	1	21112556	KUD 0605/6 Z5	-
8	7	6	47	1	1	21112616	KUD 0807/6 Z1	-
				3	1	21112636	KUD 0807/6 Z3	-
				3 PLUS	1	21112626	KUD 0807/6 Z3 PLUS	-
				4	1	21112646	KUD 0807/6 Z4	-
				5	1	21112656	KUD 0807/6 Z5	-
10	9	6	49	1	1	21112716	KUD 1009/6 Z1	-
				3	1	21112706	KUD 1009/6 Z3	-
				3 PLUS	1	21112726	KUD 1009/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21112724	KUD 1009/6 Z3 PLUS HC-FEP	-
				4	1	21112746	KUD 1009/6 Z4	-
				5	1	21112756	KUD 1009/6 Z5	-
12	10	6	51	3	1	21112806	KUD 1210/6 Z3	-
				3 PLUS	1	21112826	KUD 1210/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21112824	KUD 1210/6 Z3 PLUS HC-FEP	-
				4	1	21112846	KUD 1210/6 Z4	-
				5	1	21112856	KUD 1210/6 Z5	-
16	14	6	54	1	1	21112916	KUD 1614/6 Z1	-
				3 PLUS	1	21112926	KUD 1614/6 Z3 PLUS	-
				4	1	21112946	KUD 1614/6 Z4	-
				5	1	21112956	KUD 1614/6 Z5	-
20	18	6	58	3	1	21113006	KUD 2018/6 Z3	-
				3 PLUS	1	21113026	KUD 2018/6 Z3 PLUS	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)								
6	5	6	155	3 PLUS	1	21112527	KUD 0605/6 Z3 PLUS SL 150	-
8	7	6	157	3 PLUS	1	21112627	KUD 0807/6 Z3 PLUS SL 150	-
10	9	6	159	3 PLUS	1	21112727	KUD 1009/6 Z3 PLUS SL 150	-
12	10	6	160	3 PLUS	1	21112827	KUD 1210/6 Z3 PLUS SL 150	-
Shank diameter 8 mm								
12	10	8	51	3 PLUS	1	21112828	KUD 1210/8 Z3 PLUS	-
16	14	8	54	3 PLUS	1	21112928	KUD 1614/8 Z3 PLUS	-
20	18	8	58	3 PLUS	1	21113028	KUD 2018/8 Z3 PLUS	-



Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032 with cut conforming to DIN 8033 for general use on all materials. A good stock removal rate is achieved through optimum matching of tungsten carbide, geometry, cut and available coating.

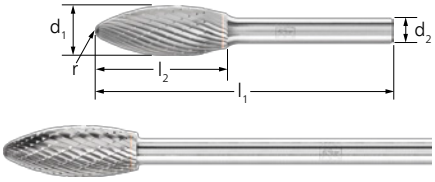


Special features:
- Long tool life and high surface quality.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.
- Cut 3 PLUS is also available with the high-quality HICOAT coating for a much higher stock removal rate.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
2	10	3	40	3 PLUS	1	21205083	WRC 0210/3 Z3 PLUS	-
				4	1	21205043	WRC 0210/3 Z4	-
				5	1	21205053	WRC 0210/3 Z5	-
3	13	3	43	3 PLUS	1	21205183	WRC 0313/3 Z3 PLUS	-
				4	1	21205143	WRC 0313/3 Z4	-
				5	1	21205153	WRC 0313/3 Z5	-
6	13	3	43	3 PLUS	1	21205283	WRC 0613/3 Z3 PLUS	-
				4	1	21205243	WRC 0613/3 Z4	-
				5	1	21205253	WRC 0613/3 Z5	-
Long shank diameter of 3 mm, shank length SL 75 mm (long steel shank)/total length GL 75 mm (solid tungsten carbide)								
3	13	3	75	3 PLUS	1	21205187	WRC 0313/3 Z3 PLUS GL 75	-
				5	1	21205157	WRC 0313/3 Z5 GL 75	-
6	13	3	88	3 PLUS	1	21205287	WRC 0613/3 Z3 PLUS SL 75	-
				5	1	21205257	WRC 0613/3 Z5 SL 75	-
Shank diameter 6 mm								
4	13	6	55	3 PLUS	1	21104926	WRC 0413/6 Z3 PLUS	-
				4	1	21104946	WRC 0413/6 Z4	-
6	16	6	55	1	1	21105016	WRC 0616/6 Z1	-
				3	1	21105006	WRC 0616/6 Z3	-
				3 PLUS	1	21105026	WRC 0616/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21105024	WRC 0616/6 Z3 PLUS HC-FEP	-
				4	1	21105046	WRC 0616/6 Z4	-
				5	1	21105056	WRC 0616/6 Z5	-
8	20	6	60	1	1	21105116	WRC 0820/6 Z1	-
				3	1	21105106	WRC 0820/6 Z3	-
				3 PLUS	1	21105126	WRC 0820/6 Z3 PLUS	-
				4	1	21105146	WRC 0820/6 Z4	-
				5	1	21105156	WRC 0820/6 Z5	-
10	20	6	60	1	1	21105216	WRC 1020/6 Z1	-
				3	1	21105206	WRC 1020/6 Z3	-
				3 PLUS	1	21105226	WRC 1020/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21105224	WRC 1020/6 Z3 PLUS HC-FEP	-
				4	1	21105246	WRC 1020/6 Z4	-
				5	1	21105256	WRC 1020/6 Z5	-
	25	6	65	3	1	21105506	WRC 1025/6 Z3	-
				3 PLUS	1	21105526	WRC 1025/6 Z3 PLUS	-
				4	1	21105546	WRC 1025/6 Z4	-
12	25	6	65	1	1	21105316	WRC 1225/6 Z1	-
				3	1	21105306	WRC 1225/6 Z3	-
				3 PLUS	1	21105326	WRC 1225/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21105324	WRC 1225/6 Z3 PLUS HC-FEP	-

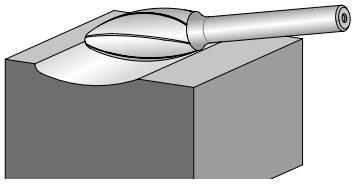
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d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
12	25	6	65	4	1	21105346	WRC 1225/6 Z4	-
				5	1	21105356	WRC 1225/6 Z5	-
16	25	6	65	1	1	21105416	WRC 1625/6 Z1	-
				3	1	21105406	WRC 1625/6 Z3	-
				3 PLUS	1	21105426	WRC 1625/6 Z3 PLUS	-
				4	1	21105446	WRC 1625/6 Z4	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)								
6	16	6	172	3 PLUS	1	21105027	WRC 0616/6 Z3 PLUS SL 150	-
8	20	6	170	3 PLUS	1	21105127	WRC 0820/6 Z3 PLUS SL 150	-
10	20	6	170	3 PLUS	1	21105227	WRC 1020/6 Z3 PLUS SL 150	-
12	25	6	175	3 PLUS	1	21105327	WRC 1225/6 Z3 PLUS SL 150	-
Shank diameter 8 mm								
10	20	8	60	3 PLUS	1	21105228	WRC 1020/8 Z3 PLUS	-
12	25	8	65	3 PLUS	1	21105328	WRC 1225/8 Z3 PLUS	-
				4	1	21105348	WRC 1225/8 Z4	-
16	25	8	65	3 PLUS	1	21105428	WRC 1625/8 Z3 PLUS	-



Flame-shaped B

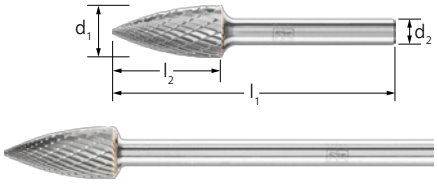
Flame-shaped burr according to ISO 7755/8 with cut conforming to DIN 8033 for general use on all materials. A good stock removal rate is achieved through optimum matching of tungsten carbide, geometry, cut and available coating.



Special features:
- Long tool life and high surface quality.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.
- Cut 3 PLUS is also available with the high-quality HICOAT coating for a much higher stock removal rate.

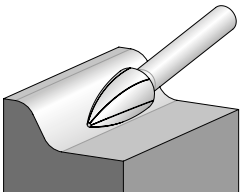
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	0.8	3 PLUS	1	21202533	B 0307/3 Z3 PLUS	-
					5	1	21202553	B 0307/3 Z5	-
6	13	3	43	1	3 PLUS	1	21203633	B 0613/3 Z3 PLUS	-
					5	1	21203653	B 0613/3 Z5	-
Shank diameter 6 mm									
8	20	6	60	1.5	3	1	21103106	B 0820/6 Z3	-
					3 PLUS	1	21103126	B 0820/6 Z3 PLUS	-
10	25	6	65	1.7	3 PLUS	1	21103226	B 1025/6 Z3 PLUS	-
					3 PLUS HC-FEP	1	21103224	B 1025/6 Z3 PLUS HC-FEP	-
12	30	6	70	2.1	3	1	21103306	B 1230/6 Z3	-
					3 PLUS	1	21103326	B 1230/6 Z3 PLUS	-
					3 PLUS HC-FEP	1	21103324	B 1230/6 Z3 PLUS HC-FEP	-
16	35	6	75	2.6	3 PLUS	1	21103426	B 1635/6 Z3 PLUS	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)									
8	20	6	170	1.5	3 PLUS	1	21103127	B 0820/6 Z3 PLUS SL 150	-
10	25	6	175	1.7	3 PLUS	1	21103287	B 1025/6 Z3 PLUS SL 150	-
12	30	6	180	2.1	3 PLUS	1	21103327	B 1230/6 Z3 PLUS SL 150	-

TC burrs for universal applications
For fine and coarse stock removal



Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032 with cut conforming to DIN 8033 and flat-tened tip for general use on all materials. A good stock removal rate is achieved through optimum matching of tungsten carbide, geometry, cut and available coating.

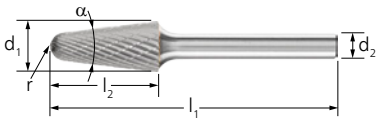


Special features:
- Long tool life and high surface quality.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.
- Cut 3 PLUS is also available with the high-quality HICOAT coating for a much higher stock removal rate.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	7	3	37	3 PLUS	1	21222583	SPG 0307/3 Z3 PLUS	-
				4	1	21222543	SPG 0307/3 Z4	-
				5	1	21222553	SPG 0307/3 Z5	-
	13	3	43	3 PLUS	1	21222683	SPG 0313/3 Z3 PLUS	-
				4	1	21222643	SPG 0313/3 Z4	-
				5	1	21222653	SPG 0313/3 Z5	-
6	13	3	43	3 PLUS	1	21222783	SPG 0613/3 Z3 PLUS	-
				4	1	21222743	SPG 0613/3 Z4	-
				5	1	21222753	SPG 0613/3 Z5	-
Long shank diameter of 3 mm, shank length SL 75 mm (long steel shank)/total length GL 75 mm (solid tungsten carbide)								
3	13	3	75	3 PLUS	1	21222687	SPG 0313/3 Z3 PLUS GL 75	-
				5	1	21222657	SPG 0313/3 Z5 GL 75	-
6	13	3	88	3 PLUS	1	21222787	SPG 0613/3 Z3 PLUS SL 75	-
				5	1	21222757	SPG 0613/3 Z5 SL 75	-
Shank diameter 6 mm								
6	18	6	55	1	1	21122516	SPG 0618/6 Z1	-
				3	1	21122506	SPG 0618/6 Z3	-
				3 PLUS	1	21122526	SPG 0618/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21122524	SPG 0618/6 Z3 PLUS HC-FEP	-
				4	1	21122546	SPG 0618/6 Z4	-
				5	1	21122556	SPG 0618/6 Z5	-
8	20	6	60	3 PLUS	1	21122589	SPG 0820/6 Z3 PLUS	-
				5	1	21122595	SPG 0820/6 Z5	-
10	20	6	60	1	1	21122616	SPG 1020/6 Z1	-
				3	1	21122606	SPG 1020/6 Z3	-
				3 PLUS	1	21122626	SPG 1020/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21122624	SPG 1020/6 Z3 PLUS HC-FEP	-
				4	1	21122646	SPG 1020/6 Z4	-
				5	1	21122656	SPG 1020/6 Z5	-
12	25	6	65	1	1	21122716	SPG 1225/6 Z1	-
				3	1	21122706	SPG 1225/6 Z3	-
				3 PLUS	1	21122726	SPG 1225/6 Z3 PLUS	-
				3 PLUS HC-FEP	1	21122724	SPG 1225/6 Z3 PLUS HC-FEP	-
				4	1	21122746	SPG 1225/6 Z4	-
				5	1	21122756	SPG 1225/6 Z5	-
	30	6	70	1	1	21123416	SPG 1230/6 Z1	-
				3	1	21123406	SPG 1230/6 Z3	-
				3 PLUS	1	21123426	SPG 1230/6 Z3 PLUS	-
				4	1	21123446	SPG 1230/6 Z4	-
				5	1	21123456	SPG 1230/6 Z5	-
16	30	6	70	1	1	21122816	SPG 1630/6 Z1	-

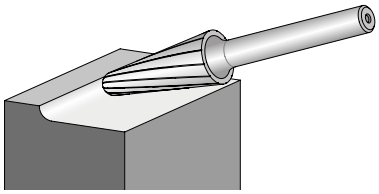
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d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
16	30	6	70	3	1	21122806	SPG 1630/6 Z3	-
				3 PLUS	1	21122826	SPG 1630/6 Z3 PLUS	-
				4	1	21122846	SPG 1630/6 Z4	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)								
6	18	6	172	3 PLUS	1	21122527	SPG 0618/6 Z3 PLUS SL 150	-
8	20	6	170	3 PLUS	1	21122597	SPG 0820/6 Z3 PLUS SL 150	-
10	20	6	170	3 PLUS	1	21122627	SPG 1020/6 Z3 PLUS SL 150	-
12	25	6	175	3 PLUS	1	21122727	SPG 1225/6 Z3 PLUS SL 150	-
Shank diameter 8 mm								
10	20	8	60	3 PLUS	1	21122628	SPG 1020/8 Z3 PLUS	-
12	25	8	65	3 PLUS	1	21122728	SPG 1225/8 Z3 PLUS	-
16	30	8	70	1	1	21122818	SPG 1630/8 Z1	-
				3 PLUS	1	21122828	SPG 1630/8 Z3 PLUS	-



Conical shape with radius end KEL

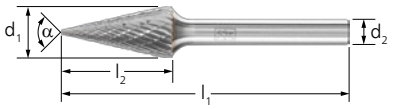
Conical burr with round radius end according to DIN 8032 and cut conforming to DIN 8033 for general use on all materials. A good stock removal rate is achieved through optimum matching of tungsten carbide, geometry, cut and available coating.



Special features:
- Long tool life and high surface quality.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.
- Cut 3 PLUS is also available with the high-quality HICOAT coating for a much higher stock removal rate.

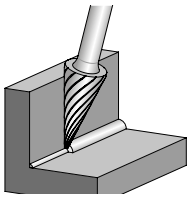
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
8	20	6	60	16	1.25	3 PLUS	1	21124996	KEL 0820/6 Z3 PLUS	-
						4	1	21124994	KEL 0820/6 Z4	-
10	20	6	60	14	2.9	3	1	21125006	KEL 1020/6 Z3	-
						3 PLUS	1	21125026	KEL 1020/6 Z3 PLUS	-
						3 PLUS HC-FEP	1	21125024	KEL 1020/6 Z3 PLUS HC-FEP	-
						4	1	21125046	KEL 1020/6 Z4	-
12	25	6	65	14	3.3	3	1	21125106	KEL 1225/6 Z3	-
						3 PLUS	1	21125126	KEL 1225/6 Z3 PLUS	-
						3 PLUS HC-FEP	1	21125124	KEL 1225/6 Z3 PLUS HC-FEP	-
						4	1	21125146	KEL 1225/6 Z4	-
	30	6	70	14	2.6	1	1	21125216	KEL 1230/6 Z1	-
						3	1	21125206	KEL 1230/6 Z3	-
						3 PLUS	1	21125226	KEL 1230/6 Z3 PLUS	-
						3 PLUS HC-FEP	1	21125224	KEL 1230/6 Z3 PLUS HC-FEP	-
						4	1	21125246	KEL 1230/6 Z4	-
						5	1	21125256	KEL 1230/6 Z5	-
16	30	6	70	14	4.8	3 PLUS	1	21125326	KEL 1630/6 Z3 PLUS	-
						4	1	21125346	KEL 1630/6 Z4	-
Shank diameter 8 mm										
12	25	8	65	14	3.3	3 PLUS	1	21125128	KEL 1225/8 Z3 PLUS	-
	30	8	70	14	2.6	3 PLUS	1	21125228	KEL 1230/8 Z3 PLUS	-

TC burrs for universal applications
For fine and coarse stock removal



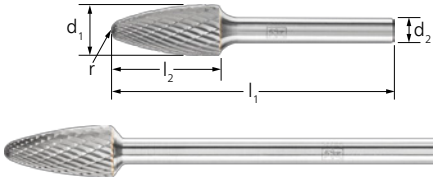
Conical pointed shape SKM

Conical pointed burr according to DIN 8032 with cut conforming to DIN 8033 and flattened tip for general use on all materials. A good stock removal rate is achieved through optimum matching of tungsten carbide, geometry, cut and available coating.



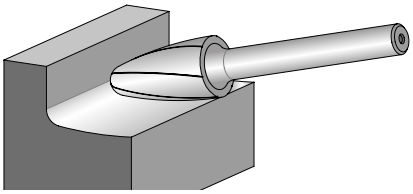
Special features:
- Long tool life and high surface quality.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.
- Cut 3 PLUS is also available with the high-quality HICOAT coating for a much higher stock removal rate.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	21	3 PLUS	1	21214083	SKM 0307/3 Z3 PLUS	-
					5	1	21214053	SKM 0307/3 Z5	-
	11	3	41	14	3 PLUS	1	21214183	SKM 0311/3 Z3 PLUS	-
					4	1	21214143	SKM 0311/3 Z4	-
					5	1	21214153	SKM 0311/3 Z5	-
6	13	3	43	25	3 PLUS	1	21215083	SKM 0613/3 Z3 PLUS	-
					5	1	21215053	SKM 0613/3 Z5	-
Shank diameter 6 mm									
6	18	6	55	18	1	1	21115016	SKM 0618/6 Z1	-
					3	1	21115006	SKM 0618/6 Z3	-
					3 PLUS	1	21115026	SKM 0618/6 Z3 PLUS	-
					3 PLUS HC-FEP	1	21115024	SKM 0618/6 Z3 PLUS HC-FEP	-
					4	1	21115046	SKM 0618/6 Z4	-
					5	1	21115056	SKM 0618/6 Z5	-
10	20	6	60	28	3	1	21115106	SKM 1020/6 Z3	-
					3 PLUS	1	21115126	SKM 1020/6 Z3 PLUS	-
					3 PLUS HC-FEP	1	21115124	SKM 1020/6 Z3 PLUS HC-FEP	-
					4	1	21115146	SKM 1020/6 Z4	-
					5	1	21115156	SKM 1020/6 Z5	-
12	25	6	65	26	1	1	21115216	SKM 1225/6 Z1	-
					3	1	21115206	SKM 1225/6 Z3	-
					3 PLUS	1	21115226	SKM 1225/6 Z3 PLUS	-
					3 PLUS HC-FEP	1	21115224	SKM 1225/6 Z3 PLUS HC-FEP	-
					4	1	21115246	SKM 1225/6 Z4	-
					5	1	21115256	SKM 1225/6 Z5	-
Shank diameter 8 mm									
12	25	8	65	26	3 PLUS	1	21115228	SKM 1225/8 Z3 PLUS	-



Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032 with cut conforming to DIN 8033 for general use on all materials. A good stock removal rate is achieved through optimum matching of tungsten carbide, geometry, cut and available coating.



Special features:
- Long tool life and high surface quality.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.
- Cut 3 PLUS is also available with the high-quality HICOAT coating for a much higher stock removal rate.

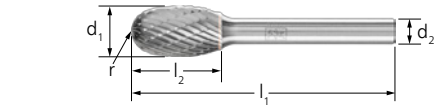
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	0.75	3 PLUS	1	21217583	RBF 0307/3 Z3 PLUS	-
					5	1	21217553	RBF 0307/3 Z5	-
	13	3	43	0.75	3 PLUS	1	21218133	RBF 0313/3 Z3 PLUS	-
					5	1	21218155	RBF 0313/3 Z5	-
6	13	3	43	1.5	3 PLUS	1	21230083	RBF 0613/3 Z3 PLUS	-
					4	1	21230043	RBF 0613/3 Z4	-
					5	1	21230053	RBF 0613/3 Z5	-
Long shank diameter of 3 mm, shank length SL 75 mm (long steel shank)/total length GL 75 mm (solid tungsten carbide)									
3	7	3	75	0.75	3 PLUS	1	21217587	RBF 0307/3 Z3 PLUS GL 75	-
					5	1	21217557	RBF 0307/3 Z5 GL 75	-
6	13	3	88	1.5	3 PLUS	1	21230087	RBF 0613/3 Z3 PLUS SL 75	-
					5	1	21230057	RBF 0613/3 Z5 SL 75	-
Shank diameter 6 mm									
6	18	6	55	1.5	3	1	21117306	RBF 0618/6 Z3	-
					3 PLUS	1	21117326	RBF 0618/6 Z3 PLUS	-
					3 PLUS HC-FEP	1	21117324	RBF 0618/6 Z3 PLUS HC-FEP	-
					4	1	21117346	RBF 0618/6 Z4	-
					5	1	21117356	RBF 0618/6 Z5	-
8	20	6	60	1.2	3	1	21117606	RBF 0820/6 Z3	-
					3 PLUS	1	21117626	RBF 0820/6 Z3 PLUS	-
					4	1	21117646	RBF 0820/6 Z4	-
10	20	6	60	2.5	3	1	21117706	RBF 1020/6 Z3	-
					3 PLUS	1	21117726	RBF 1020/6 Z3 PLUS	-
					3 PLUS HC-FEP	1	21117724	RBF 1020/6 Z3 PLUS HC-FEP	-
					4	1	21117746	RBF 1020/6 Z4	-
					5	1	21117756	RBF 1020/6 Z5	-
12	25	6	65	2.5	1	1	21117816	RBF 1225/6 Z1	-
					3	1	21117806	RBF 1225/6 Z3	-
					3 PLUS	1	21117826	RBF 1225/6 Z3 PLUS	-
					3 PLUS HC-FEP	1	21117824	RBF 1225/6 Z3 PLUS HC-FEP	-
					4	1	21117846	RBF 1225/6 Z4	-
					5	1	21117856	RBF 1225/6 Z5	-
16	30	6	70	3.6	3	1	21117906	RBF 1630/6 Z3	-
					3 PLUS	1	21117926	RBF 1630/6 Z3 PLUS	-
					4	1	21117946	RBF 1630/6 Z4	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)									
6	18	6	172	1.5	3 PLUS	1	21117327	RBF 0618/6 Z3 PLUS SL 150	-
8	20	6	170	1.2	3 PLUS	1	21117627	RBF 0820/6 Z3 PLUS SL 150	-
10	20	6	170	2.5	3 PLUS	1	21117727	RBF 1020/6 Z3 PLUS SL 150	-
12	25	6	175	2.5	3 PLUS	1	21117827	RBF 1225/6 Z3 PLUS SL 150	-

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TC burrs for universal applications

For fine and coarse stock removal

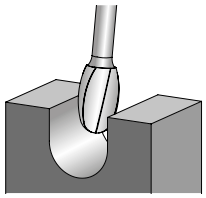
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 8 mm									
12	25	8	65	2.5	3 PLUS	1	21117828	RBF 1225/8 Z3 PLUS	-
16	30	8	70	3.6	3 PLUS	1	21117928	RBF 1630/8 Z3 PLUS	-





Oval shape TRE

Oval burr according to DIN 8032 with cut conforming to DIN 8033 for general use on all materials. A good stock removal rate is achieved through optimum matching of tungsten carbide, geometry, cut and available coating.



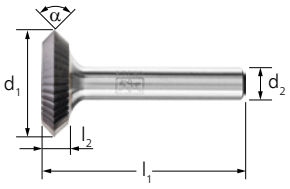
Special features:

- Long tool life and high surface quality.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.
- Cut 3 PLUS is also available with the high-quality HICOAT coating for a much higher stock removal rate.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	1.2	3 PLUS	1	21210083	TRE 0307/3 Z3 PLUS	-
					5	1	21210053	TRE 0307/3 Z5	-
6	10	3	40	2.8	3 PLUS	1	21235083	TRE 0610/3 Z3 PLUS	-
					5	1	21235053	TRE 0610/3 Z5	-
Long shank diameter of 3 mm, shank length SL 75 mm (long steel shank)/total length GL 75 mm (solid tungsten carbide)									
3	7	3	75	1.2	3 PLUS	1	21210087	TRE 0307/3 Z3 PLUS GL 75	-
					5	1	21210057	TRE 0307/3 Z5 GL 75	-
6	10	3	85	2.8	3 PLUS	1	21235087	TRE 0610/3 Z3 PLUS SL 75	-
					5	1	21235057	TRE 0610/3 Z5 SL 75	-
Shank diameter 6 mm									
6	10	6	50	2.8	3 PLUS	1	21134826	TRE 0610/6 Z3 PLUS	-
					3 PLUS HC-FEP	1	21134824	TRE 0610/6 Z3 PLUS HC-FEP	-
					5	1	21134856	TRE 0610/6 Z5	-
8	13	6	53	3.7	3 PLUS	1	21135026	TRE 0813/6 Z3 PLUS	-
					4	1	21135046	TRE 0813/6 Z4	-
					5	1	21135056	TRE 0813/6 Z5	-
10	16	6	56	4	3 PLUS	1	21134926	TRE 1016/6 Z3 PLUS	-
					3 PLUS HC-FEP	1	21134924	TRE 1016/6 Z3 PLUS HC-FEP	-
					4	1	21134946	TRE 1016/6 Z4	-
12	20	6	60	5	1	1	21135116	TRE 1220/6 Z1	-
					3	1	21135106	TRE 1220/6 Z3	-
					3 PLUS	1	21135126	TRE 1220/6 Z3 PLUS	-
					3 PLUS HC-FEP	1	21135124	TRE 1220/6 Z3 PLUS HC-FEP	-
					4	1	21135146	TRE 1220/6 Z4	-
					5	1	21135156	TRE 1220/6 Z5	-
16	25	6	65	6.5	1	1	21135216	TRE 1625/6 Z1	-
					3 PLUS	1	21135226	TRE 1625/6 Z3 PLUS	-
					4	1	21135246	TRE 1625/6 Z4	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)									
6	10	6	160	2.8	3 PLUS	1	21134827	TRE 0610/6 Z3 PLUS SL 150	-
8	13	6	163	3.7	3 PLUS	1	21135027	TRE 0813/6 Z3 PLUS SL 150	-
10	16	6	166	4	3 PLUS	1	21134927	TRE 1016/6 Z3 PLUS SL 150	-
12	20	6	170	5	3 PLUS	1	21135127	TRE 1220/6 Z3 PLUS SL 150	-

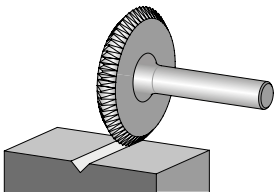
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d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 8 mm									
12	20	8	60	5	3 PLUS	1	21135128	TRE 1220/8 Z3 PLUS	-
16	25	8	65	6.5	3 PLUS	1	21135228	TRE 1625/8 Z3 PLUS	-



Rim shape N

Rim-shaped burr, circumferential cut is 90° and symmetric, tapered tip. The rim shape is particularly well suited to producing and processing prism-shaped keyways. A good stock removal rate is achieved through optimum matching of tungsten carbide, geometry, cut and available coating.



Special features:
- Long tool life and high surface quality.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 8 mm									
25	3	8	43	90	3	1	21134038	N 2503/8 Z3	-
	6	8	46	90	3	1	21134338	N 2506/8 Z3	-



Set 1500 cuts 3 PLUS and 5

Set 1500 – cuts 3 PLUS (shank dia. 6 mm) and 5 (shank dia. 3 mm) – contains 22 tungsten carbide burrs in the most common shapes and dimensions for general applications.

Contents:
The set comprises one each of the following: ZYAS 0616/6 Z3 PLUS, ZYAS 1013/6 Z3 PLUS, ZYAS 1225/6 Z3 PLUS, KUD 0605/6 Z3 PLUS, KUD 0807/6 Z3 PLUS, KUD 1210/6 Z3 PLUS, KUD 1614/6 Z3 PLUS, WRC 0616/6 Z3 PLUS, WRC 1225/6 Z3 PLUS, SPG 0618/6 Z3 PLUS, SPG 1020/6 Z3 PLUS, SPG 1225/6 Z3 PLUS, SKM 0618/6 Z3 PLUS and SKM 1020/6 Z3 PLUS, as well as one each of the following: ZYAS 0210/3 Z5, ZYAS 0313/3 Z5, WRC 0210/3 Z5, WRC 0313/3 Z5, SPG 0307/3 Z5, RBF 0307/3 Z5, TRE 0307/3 Z5 and WKN 0307/3 Z5.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 3 and 6 mm				
3 PLUS, 5	1	21901500	1500 Z3 PLUS/Z5	-

TC burrs for universal applications
For fine and coarse stock removal



Set 1501 cut 5

Set 1501 – cut 5 – contains 15 small tungsten carbide burrs in the most common shapes and dimensions for general applications.

Contents:
The set comprises one each of the following: ZYAS 0210/3 Z5, ZYAS 0313/3 Z5, ZYAS 0607/3 Z5, ZYAS 0613/3 Z5, B 0307/3 Z5, KUD 0403/3 Z5, WRC 0210/3 Z5, WRC 0313/3 Z5, SPG 0307/3 Z5, SKM 0613/3 Z5, RBF 0307/3 Z5, RBF 0613/3 Z5, TRE 0307/3 Z5, TRE 0610/3 Z5 and WKNS 0307/3 Z5 with a shank diameter of 3 mm, cut 5.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm				
5	1	21901501	1501 Z5	-



Set 1503 cut 3 PLUS

Set 1503 – cut 3 PLUS – contains 15 small tungsten carbide burrs in the most common shapes and dimensions for general applications.

Contents:
The set comprises one each of the following: ZYAS 0313/3 Z3 PLUS, ZYAS 0613/3 Z3 PLUS, KUD 0302/3 Z3 PLUS, KUD 0403/3 Z3 PLUS, KUD 0605/3 Z3 PLUS, WRC 0313/3 Z3 PLUS, WRC 0613/3 Z3 PLUS, SPG 0313/3 Z3 PLUS, SPG 0613/3 Z3 PLUS, SKM 0311/3 Z3 PLUS, SKM 0613/3 Z3 PLUS, RBF 0307/3 Z3 PLUS, RBF 0613/3 Z3 PLUS, TRE 0307/3 Z3 PLUS and TRE 0610/3 Z3 PLUS with a shank diameter of 3 mm, cut 3 PLUS.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm				
3 PLUS	1	21901505	1503 Z3 PLUS	-



Set 1504 cut 3 PLUS

Set 1504 – cut 3 PLUS – contains three small tungsten carbide burrs in the most common shapes and dimensions for applications in the workshop.

Contents:
The set comprises one each of the following: ZYAS 0313/3 Z3 PLUS, WRC 0313/3 Z3 PLUS and RBF 0313/3 Z3 PLUS with a shank diameter of 3 mm, cut 3 PLUS.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm				
3 PLUS	1	21901504	1504 Z3 PLUS	-



Set 1505 cut 3 PLUS

Set 1505 – cut 3 PLUS – contains three tungsten carbide burrs in the most common shapes and dimensions for applications in the workshop.

Contents:
The set comprises one each of the following: ZYAS 0616/6 Z3 PLUS, WRC 0616/6 Z3 PLUS and RBF 0618/6 Z3 PLUS with a shank diameter of 6 mm, cut 3 PLUS.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm				
3 PLUS	1	21901508	1505 Z3 PLUS 3TLG	-



Set 1507 cut 3 PLUS

Set 1507 – cut 3 PLUS – contains three tungsten carbide burrs in the most common shapes and dimensions for applications in the workshop.

Contents:
The set comprises one each of the following: ZYAS 1225/6 Z3 PLUS, WRC 1225/6 Z3 PLUS and RBF 1225/6 Z3 PLUS with a shank diameter of 6 mm, cut 3 PLUS.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm				
3 PLUS	1	21901507	1507 Z3 PLUS 3TLG	-



Set 1506 cut 3 PLUS

Set 1506 – cut 3 PLUS – contains five tungsten carbide burrs in the most common shapes and dimensions for applications in the workshop.

Contents:
The set comprises one each of the following: ZYA 0616/6 Z3 PLUS, KUD 0605/6 Z3 PLUS, WRC 0616/6 Z3 PLUS, SPG 0618/6 Z3 PLUS and RBF 0618/6 Z3 PLUS with a shank diameter of 6 mm, cut 3 PLUS.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.
- The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
- Five further unused slots are available for other burrs.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm				
3 PLUS	1	21901506	1506 Z3 PLUS	-



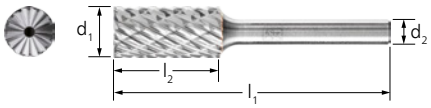
Set 1512 cut 3 PLUS

Set 1512 – cut 3 PLUS – contains five tungsten carbide burrs in the most common shapes and dimensions for applications in the workshop.

Contents:
The set comprises one each of the following: ZYA 1225/6 Z3 PLUS, KUD 1210/6 Z3 PLUS, WRC 1225/6 Z3 PLUS, SPG 1225/6 Z3 PLUS and RBF 1225/6 Z3 PLUS with a shank diameter of 6 mm, cut 3 PLUS.

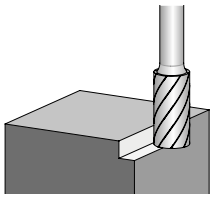
Special features:
- The sturdy plastic box protects the tools against dirt and damage.
- The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
- Five further unused slots are available for other burrs.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm				
3 PLUS	1	21901512	1512 Z3 PLUS	-



Cylindrical shape ZYAS with end cut

Cylindrical burrs according to DIN 8032 with circumferential and end cut for versatile, economical and time-saving use on steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron. Also available with wear-resistant HICOAT coating.



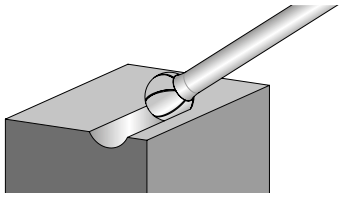
Special features:
- 30% higher stock removal rate when used on steel than conventional cross-cut burrs.
- Comfortable working thanks to reduced vibration and less noise.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	13	3	43	ALLROUND	1	21001061	ZYAS 0313/3 ALLROUND	-
6	13	3	43	ALLROUND	1	21001062	ZYAS 0613/3 ALLROUND	-
Shank diameter 6 mm								
6	16	6	55	ALLROUND	1	21001000	ZYAS 0616/6 ALLROUND	-
8	20	6	60	ALLROUND	1	21001001	ZYAS 0820/6 ALLROUND	-
10	20	6	60	ALLROUND	1	21001002	ZYAS 1020/6 ALLROUND	-
				ALLROUND HC-FEP	1	21001043	ZYAS 1020/6 ALLROUND HC-FEP	-
12	25	6	65	ALLROUND	1	21001003	ZYAS 1225/6 ALLROUND	-
				ALLROUND HC-FEP	1	21001044	ZYAS 1225/6 ALLROUND HC-FEP	-
16	25	6	65	ALLROUND	1	21001004	ZYAS 1625/6 ALLROUND	-



Ball shape KUD

Ball-shaped burr according to DIN 8032 for versatile, economical and time-saving use on steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron. Also available with wear-resistant HICOAT coating.

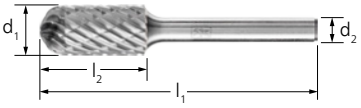


Special features:
- 30% higher stock removal rate when used on steel than conventional cross-cut burrs.
- Comfortable working thanks to reduced vibration and less noise.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	2	3	33	ALLROUND	1	21001063	KUD 0302/3 ALLROUND	-
4	3	3	34	ALLROUND	1	21001064	KUD 0403/3 ALLROUND	-
6	5	3	35	ALLROUND	1	21001065	KUD 0605/3 ALLROUND	-
Shank diameter 6 mm								
6	5	6	45	ALLROUND	1	21001005	KUD 0605/6 ALLROUND	-
8	7	6	47	ALLROUND	1	21001006	KUD 0807/6 ALLROUND	-
10	9	6	49	ALLROUND	1	21001007	KUD 1009/6 ALLROUND	-
				ALLROUND HC-FEP	1	21001045	KUD 1009/6 ALLROUND HC-FEP	-
12	10	6	51	ALLROUND	1	21001008	KUD 1210/6 ALLROUND	-
				ALLROUND HC-FEP	1	21001046	KUD 1210/6 ALLROUND HC-FEP	-
16	14	6	54	ALLROUND	1	21001009	KUD 1614/6 ALLROUND	-

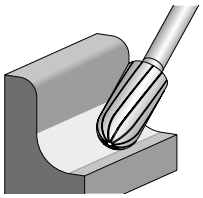
TC burrs for high-performance applications

ALLROUND cut for versatile use



Cylindrical shape with radius end WRC

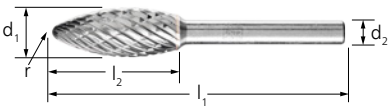
Cylindrical burr with radius end according to DIN 8032 for versatile, economical and time-saving use on steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron. Also available with wear-resistant HICOAT coating.



Special features:

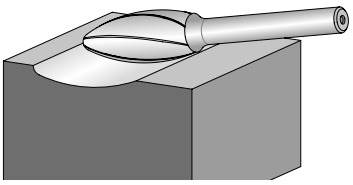
- 30% higher stock removal rate when used on steel than conventional cross-cut burrs.
- Comfortable working thanks to reduced vibration and less noise.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	13	3	43	ALLROUND	1	21001066	WRC 0313/3 ALLROUND	-
6	13	3	43	ALLROUND	1	21001067	WRC 0613/3 ALLROUND	-
Shank diameter 6 mm								
6	16	6	55	ALLROUND	1	21001010	WRC 0616/6 ALLROUND	-
8	20	6	60	ALLROUND	1	21001011	WRC 0820/6 ALLROUND	-
10	20	6	60	ALLROUND	1	21001012	WRC 1020/6 ALLROUND	-
				ALLROUND HC-FEP	1	21001047	WRC 1020/6 ALLROUND HC-FEP	-
12	25	6	65	ALLROUND	1	21001013	WRC 1225/6 ALLROUND	-
				ALLROUND HC-FEP	1	21001048	WRC 1225/6 ALLROUND HC-FEP	-
16	25	6	65	ALLROUND	1	21001014	WRC 1625/6 ALLROUND	-



Flame-shaped B

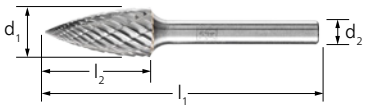
Flame-shaped burr according to ISO 7755/8 for versatile, economical and time-saving use on steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron. Also available with wear-resistant HICOAT coating.



Special features:

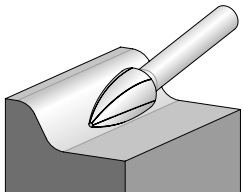
- 30% higher stock removal rate when used on steel than conventional cross-cut burrs.
- Comfortable working thanks to reduced vibration and less noise.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	0.8	ALLROUND	1	21001068	B 0307/3 ALLROUND	-
6	13	3	43	1	ALLROUND	1	21001069	B 0613/3 ALLROUND	-
Shank diameter 6 mm									
8	20	6	60	1.5	ALLROUND	1	21001015	B 0820/6 ALLROUND	-
10	25	6	65	1.7	ALLROUND	1	21001016	B 1025/6 ALLROUND	-
					ALLROUND HC-FEP	1	21001049	B 1025/6 ALLROUND HC-FEP	-
12	30	6	70	2.1	ALLROUND	1	21001017	B 1230/6 ALLROUND	-
					ALLROUND HC-FEP	1	21001050	B 1230/6 ALLROUND HC-FEP	-
16	35	6	75	2.6	ALLROUND	1	21001018	B 1635/6 ALLROUND	-



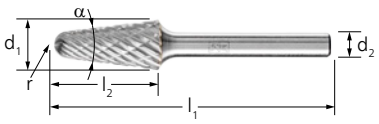
Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032 with flattened tip for versatile, economical and time-saving use on steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron. Also available with wear-resistant HICOAT coating.



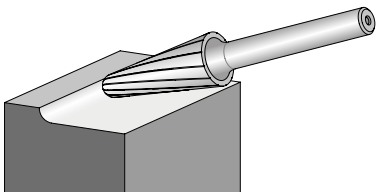
Special features:
- 30% higher stock removal rate when used on steel than conventional cross-cut burrs.
- Comfortable working thanks to reduced vibration and less noise.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	7	3	37	ALLROUND	1	21001070	SPG 0307/3 ALLROUND	-
	13	3	43	ALLROUND	1	21001071	SPG 0313/3 ALLROUND	-
6	13	3	43	ALLROUND	1	21001072	SPG 0613/3 ALLROUND	-
Shank diameter 6 mm								
6	18	6	55	ALLROUND	1	21001019	SPG 0618/6 ALLROUND	-
8	20	6	60	ALLROUND	1	21001020	SPG 0820/6 ALLROUND	-
10	20	6	60	ALLROUND	1	21001021	SPG 1020/6 ALLROUND	-
				ALLROUND HC-FEP	1	21001051	SPG 1020/6 ALLROUND HC-FEP	-
12	25	6	65	ALLROUND	1	21001022	SPG 1225/6 ALLROUND	-
				ALLROUND HC-FEP	1	21001052	SPG 1225/6 ALLROUND HC-FEP	-
16	30	6	70	ALLROUND	1	21001023	SPG 1630/6 ALLROUND	-



Conical shape with radius end KEL

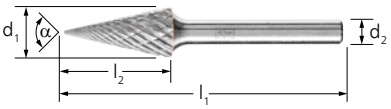
Conical burr with round radius end according to DIN 8032 for versatile, economical and time-saving use on steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron. Also available with wear-resistant HICOAT coating.



Special features:
- 30% higher stock removal rate when used on steel than conventional cross-cut burrs.
- Comfortable working thanks to reduced vibration and less noise.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

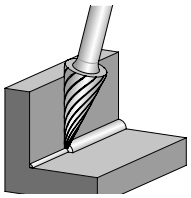
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
8	20	6	60	16	1.25	ALLROUND	1	21001025	KEL 0820/6 ALLROUND	-
10	20	6	60	14	2.9	ALLROUND	1	21001026	KEL 1020/6 ALLROUND	-
						ALLROUND HC-FEP	1	21001053	KEL 1020/6 ALLROUND HC-FEP	-
12	25	6	65	14	3.3	ALLROUND	1	21001027	KEL 1225/6 ALLROUND	-
			70	14	3.3	ALLROUND HC-FEP	1	21001054	KEL 1225/6 ALLROUND HC-FEP	-
16	30	6	70	14	4.8	ALLROUND	1	21001028	KEL 1630/6 ALLROUND	-

TC burrs for high-performance applications
ALLROUND cut for versatile use



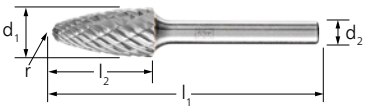
Conical pointed shape SKM

Conical pointed burr according to DIN 8032 with flattened tip for versatile, economical and time-saving use on steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron. Also available with wear-resistant HICOAT coating.



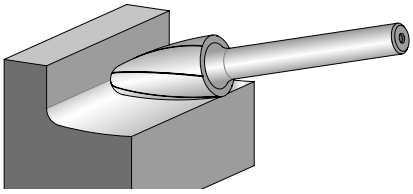
Special features:
- 30% higher stock removal rate when used on steel than conventional cross-cut burrs.
- Comfortable working thanks to reduced vibration and less noise.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	21	ALLROUND	1	21001073	SKM 0307/3 ALLROUND	-
	11	3	41	14	ALLROUND	1	21001074	SKM 0311/3 ALLROUND	-
6	13	3	43	25	ALLROUND	1	21001075	SKM 0613/3 ALLROUND	-
Shank diameter 6 mm									
6	18	6	55	18	ALLROUND	1	21001034	SKM 0618/6 ALLROUND	-
8	20	6	60	22	ALLROUND	1	21001035	SKM 0820/6 ALLROUND	-
10	20	6	60	28	ALLROUND	1	21001036	SKM 1020/6 ALLROUND	-
					ALLROUND HC-FEP	1	21001057	SKM 1020/6 ALLROUND HC-FEP	-
12	25	6	65	26	ALLROUND	1	21001037	SKM 1225/6 ALLROUND	-
					ALLROUND HC-FEP	1	21001058	SKM 1225/6 ALLROUND HC-FEP	-



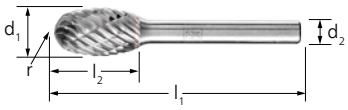
Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032 for versatile, economical and time-saving use on steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron. Also available with wear-resistant HICOAT coating.



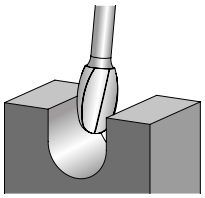
Special features:
- 30% higher stock removal rate when used on steel than conventional cross-cut burrs.
- Comfortable working thanks to reduced vibration and less noise.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	0.75	ALLROUND	1	21001076	RBF 0307/3 ALLROUND	-
	13	3	43	0.75	ALLROUND	1	21001077	RBF 0313/3 ALLROUND	-
6	13	3	43	1.5	ALLROUND	1	21001078	RBF 0613/3 ALLROUND	-
Shank diameter 6 mm									
6	18	6	55	1.5	ALLROUND	1	21001029	RBF 0618/6 ALLROUND	-
8	20	6	60	1.2	ALLROUND	1	21001030	RBF 0820/6 ALLROUND	-
10	20	6	60	2.5	ALLROUND	1	21001031	RBF 1020/6 ALLROUND	-
					ALLROUND HC-FEP	1	21001055	RBF 1020/6 ALLROUND HC-FEP	-
12	25	6	65	2.5	ALLROUND	1	21001032	RBF 1225/6 ALLROUND	-
					ALLROUND HC-FEP	1	21001056	RBF 1225/6 ALLROUND HC-FEP	-
16	30	6	70	3.6	ALLROUND	1	21001033	RBF 1630/6 ALLROUND	-



Oval shape TRE

Oval burr according to DIN 8032 for versatile, economical and time-saving use on steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron. Also available with wear-resistant HICOAT coating.



Special features:
- 30% higher stock removal rate when used on steel than conventional cross-cut burrs.
- Comfortable working thanks to reduced vibration and less noise.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	1.2	ALLROUND	1	21001079	TRE 0307/3 ALLROUND	-
6	10	6	40	2.8	ALLROUND	1	21001080	TRE 0610/3 ALLROUND	-
Shank diameter 6 mm									
6	10	6	50	2.8	ALLROUND	1	*21001038*	TRE 0610/6 ALLROUND	-
8	13	6	53	3.7	ALLROUND	1	21001039	TRE 0813/6 ALLROUND	-
10	16	6	56	4	ALLROUND	1	21001040	TRE 1016/6 ALLROUND	-
					ALLROUND HC-FEP	1	21001059	TRE 1016/6 ALLROUND HC-FEP	-
12	20	6	60	5	ALLROUND	1	21001041	TRE 1220/6 ALLROUND	-
					ALLROUND HC-FEP	1	21001060	TRE 1220/6 ALLROUND HC-FEP	-
16	25	6	65	6.5	ALLROUND	1	21001042	TRE 1625/6 ALLROUND	-



Set 1412 ALLROUND

Set 1412 ALLROUND contains five versatile tungsten carbide burrs for use on important materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions.

Contents:
The set comprises one each of the following:
ZYAS 1225/6 ALLROUND,
KUD 1210/6 ALLROUND,
WRC 1225/6 ALLROUND, SPG 1225/6 ALLROUND and RBF 1225/6 ALLROUND with a shank diameter of 6 mm, cut ALLROUND.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.
- The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
- Five further unused slots are available for other burrs.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	ALLROUND	1	21901412	1412 ALLROUND	-

TC burrs for high-performance applications
ALLROUND cut for versatile use



Set 1403 ALLROUND

Set 1403 ALLROUND contains three versatile small tungsten carbide burrs for use on important materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYAS 0313/3 ALLROUND, WRC 0313/3 ALLROUND and RBF 0313/3 ALLROUND with a shank diameter of 3 mm, cut ALLROUND.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm					
3	ALLROUND	1	21901403	1403 ALLROUND	-



Set 1404 ALLROUND

Set 1404 ALLROUND contains three versatile small tungsten carbide burrs for use on important materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYAS 0613/3 ALLROUND, WRC 0613/3 ALLROUND and RBF 0613/3 ALLROUND with a shank diameter of 3 mm, cut ALLROUND.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm					
3	ALLROUND	1	21901404	1404 ALLROUND	-



Set 1406 ALLROUND

Set 1406 ALLROUND contains three versatile tungsten carbide burrs for use on important materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYAS 0616/6 ALLROUND, WRC 0616/6 ALLROUND and RBF 0618/6 ALLROUND with a shank diameter of 6 mm, cut ALLROUND.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	ALLROUND	1	21901406	1406 ALLROUND	-



Set 1414 ALLROUND

Set 1414 ALLROUND contains three versatile tungsten carbide burrs for use on important materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYAS 1225/6 ALLROUND, WRC 1225/6 ALLROUND and RBF 1225/6 ALLROUND with a shank diameter of 6 mm, cut ALLROUND.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	ALLROUND	1	21901414	1414 ALLROUND	-



Set 1414 ALLROUND HC-FEP

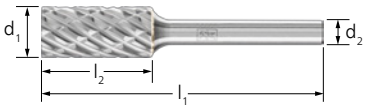
Set 1414 ALLROUND HC-FEP contains three versatile tungsten carbide burrs with high-quality HICOAT coating for use on important materials such as steel and cast steel, stainless steel (INOX), non-ferrous metals and cast iron in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYAS 1225/6 ALLROUND HC-FEP, WRC 1225/6 ALLROUND HC-FEP and RBF 1225/6 ALLROUND HC-FEP with a shank diameter of 6 mm, cut ALLROUND.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

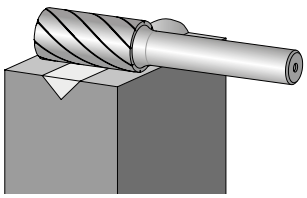
d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	ALLROUND HC-FEP	1	21901415	1414 ALLROUND HC-FEP	-

STEEL cut for steel and cast steel



Cylindrical shape ZYA without end cut

Cylindrical burrs according to DIN 8032 for machining steel and cast steel. Tangibly more aggressive combined with good guidance, guaranteeing safe and precise work. Also available with wear-resistant HICOAT coating.

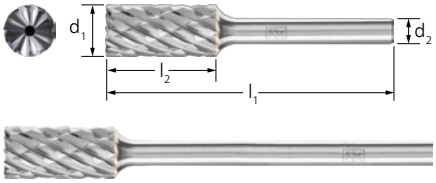


Special features:
- Up to 50% higher stock removal rate when used on steel and cast steel than conventional cross-cut burrs.
- Workpieces are protected through significantly lower thermal load.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
6	16	6	55	STEEL	1	21101687	ZYA 0616/6 STEEL	-
8	20	6	60	STEEL	1	21101787	ZYA 0820/6 STEEL	-
10	20	6	60	STEEL	1	21102187	ZYA 1020/6 STEEL	-

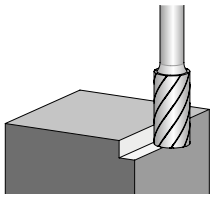
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d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
10	20	6	60	STEEL HC-FEP	1	21102190	ZYA 1020/6 STEEL HC-FEP	-
12	25	6	65	STEEL	1	21101987	ZYA 1225/6 STEEL	-
				STEEL HC-FEP	1	21101990	ZYA 1225/6 STEEL HC-FEP	-
16	25	6	65	STEEL	1	21102037	ZYA 1625/6 STEEL	-
10	20	6	60	STEEL HC-FEP	1	21100490	ZYAS 1020/6 STEEL HC-FEP	-



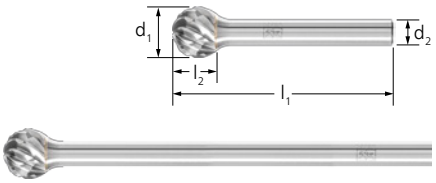
Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut for machining steel and cast steel. Tangibly more aggressive combined with good guidance, guaranteeing safe and precise work. Also available with wear-resistant HICOAT coating.



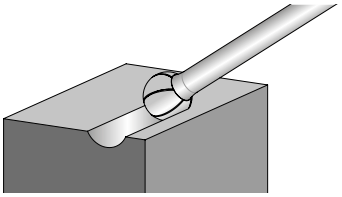
Special features:
- Up to 50% higher stock removal rate when used on steel and cast steel than conventional cross-cut burrs.
- Workpieces are protected through significantly lower thermal load.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
6	16	6	55	STEEL	1	21100287	ZYAS 0616/6 STEEL	-
8	20	6	60	STEEL	1	21100387	ZYAS 0820/6 STEEL	-
10	20	6	60	STEEL	1	21100487	ZYAS 1020/6 STEEL	-
12	25	6	65	STEEL	1	21100587	ZYAS 1225/6 STEEL	-
				STEEL HC-FEP	1	21100590	ZYAS 1225/6 STEEL HC-FEP	-
16	25	6	65	STEEL	1	21100687	ZYAS 1625/6 STEEL	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)								
8	20	6	170	STEEL	1	21100327	ZYAS 0820/6 STEEL SL 150	-
10	20	6	170	STEEL	1	21100727	ZYAS 1020/6 STEEL SL 150	-
12	25	6	175	STEEL	1	21100527	ZYAS 1225/6 STEEL SL 150	-



Ball shape KUD

Ball-shaped burr according to DIN 8032 for machining steel and cast steel. Tangibly more aggressive combined with good guidance, guaranteeing safe and precise work. Also available with wear-resistant HICOAT coating.

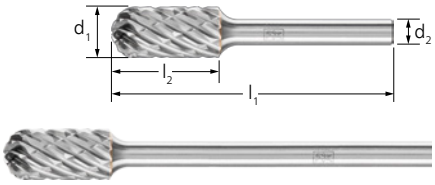


Special features:
- Up to 50% higher stock removal rate when used on steel and cast steel than conventional cross-cut burrs.
- Workpieces are protected through significantly lower thermal load.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
6	5	6	45	STEEL	1	21112587	KUD 0605/6 STEEL	-
8	7	6	47	STEEL	1	21112687	KUD 0807/6 STEEL	-
10	9	6	49	STEEL	1	21112787	KUD 1009/6 STEEL	-
				STEEL HC-FEP	1	21112790	KUD 1009/6 STEEL HC-FEP	-

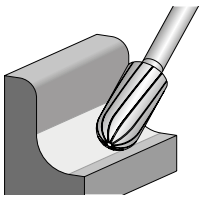
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d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
12	10	6	51	STEEL	1	21112887	KUD 1210/6 STEEL	-
				STEEL HC-FEP	1	21112890	KUD 1210/6 STEEL HC-FEP	-
16	14	6	54	STEEL	1	21112987	KUD 1614/6 STEEL	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)								
10	9	6	159	STEEL	1	21112789	KUD 1009/6 STEEL SL 150	-
12	10	6	160	STEEL	1	21112889	KUD 1210/6 STEEL SL 150	-



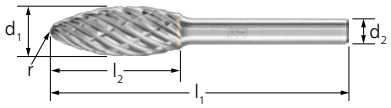
Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032 for machining steel and cast steel. Tangibly more aggressive combined with good guidance, guaranteeing safe and precise work. Also available with wear-resistant HICOAT coating.



Special features:
- Up to 50% higher stock removal rate when used on steel and cast steel than conventional cross-cut burrs.
- Workpieces are protected through significantly lower thermal load.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

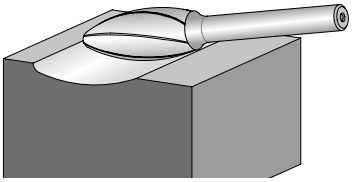
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
6	16	6	55	STEEL	1	21105087	WRC 0616/6 STEEL	-
8	20	6	60	STEEL	1	21105187	WRC 0820/6 STEEL	-
10	20	6	60	STEEL	1	21105287	WRC 1020/6 STEEL	-
				STEEL HC-FEP	1	21105290	WRC 1020/6 STEEL HC-FEP	-
12	25	6	65	STEEL	1	21105387	WRC 1225/6 STEEL	-
				STEEL HC-FEP	1	21105390	WRC 1225/6 STEEL HC-FEP	-
16	25	6	65	STEEL	1	21105487	WRC 1625/6 STEEL	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)								
8	20	6	170	STEEL	1	21105186	WRC 0820/6 STEEL SL 150	-
10	20	6	170	STEEL	1	21105286	WRC 1020/6 STEEL SL 150	-
12	25	6	175	STEEL	1	21105389	WRC 1225/6 STEEL SL 150	-





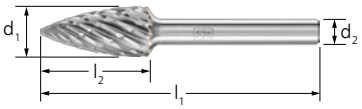
Flame-shaped B

Flame-shaped burr according to ISO 7755/8 for machining steel and cast steel. Tangibly more aggressive combined with good guidance, guaranteeing safe and precise work. Also available with wear-resistant HICOAT coating.



Special features:
- Up to 50% higher stock removal rate when used on steel and cast steel than conventional cross-cut burrs.
- Workpieces are protected through significantly lower thermal load.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

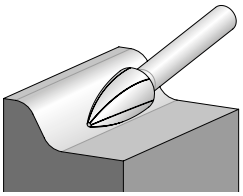
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
8	20	6	60	1.5	STEEL	1	21103187	B 0820/6 STEEL	-
10	25	6	65	1.7	STEEL	1	21103286	B 1025/6 STEEL	-
					STEEL HC-FEP	1	21103290	B 1025/6 STEEL HC-FEP	-
12	30	6	70	2.1	STEEL	1	21103387	B 1230/6 STEEL	-
					STEEL HC-FEP	1	21103390	B 1230/6 STEEL HC-FEP	-
16	35	6	75	2.6	STEEL	1	21103436	B 1635/6 STEEL	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)									
10	25	6	175	1.7	STEEL	1	21103227	B 1025/6 STEEL SL 150	-
12	30	6	180	2.1	STEEL	1	21103386	B 1230/6 STEEL SL 150	-





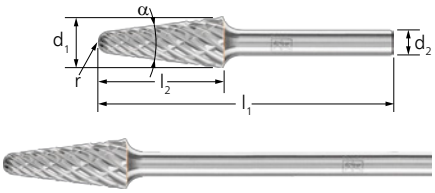
Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032 with flattened tip for machining steel and cast steel. Tangibly more aggressive combined with good guidance, guaranteeing safe and precise work. Also available with wear-resistant HICOAT coating.



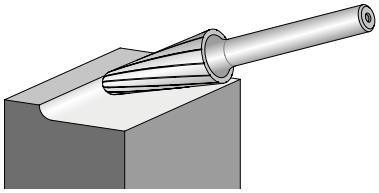
Special features:
- Up to 50% higher stock removal rate when used on steel and cast steel than conventional cross-cut burrs.
- Workpieces are protected through significantly lower thermal load.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
6	18	6	55	STEEL	1	21122587	SPG 0618/6 STEEL	-
8	20	6	60	STEEL	1	21122588	SPG 0820/6 STEEL	-
10	20	6	60	STEEL	1	21122687	SPG 1020/6 STEEL	-
				STEEL HC-FEP	1	21122690	SPG 1020/6 STEEL HC-FEP	-
12	25	6	65	STEEL	1	21122787	SPG 1225/6 STEEL	-
				STEEL HC-FEP	1	21122790	SPG 1225/6 STEEL HC-FEP	-
16	30	6	70	STEEL	1	21122887	SPG 1630/6 STEEL	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)								
8	20	6	170	STEEL	1	*21122586*	SPG 0820/6 STEEL SL 150	-
12	25	6	175	STEEL	1	*21122788*	SPG 1225/6 STEEL SL 150	-



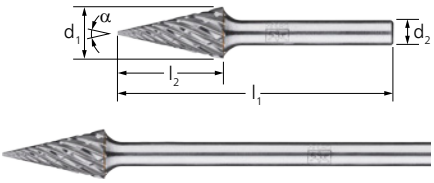
Conical shape with radius end KEL

Conical burr with round radius end according to DIN 8032 for machining steel and cast steel. Tangibly more aggressive combined with good guidance, guaranteeing safe and precise work. Also available with wear-resistant HICOAT coating.



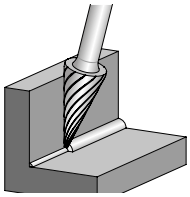
Special features:
- Up to 50% higher stock removal rate when used on steel and cast steel than conventional cross-cut burrs.
- Workpieces are protected through significantly lower thermal load.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
10	20	6	60	14	2.9	STEEL	1	21125087	KEL 1020/6 STEEL	-
						STEEL HC-FEP	1	21125090	KEL 1020/6 STEEL HC-FEP	-
12	30	6	70	14	2.6	STEEL	1	21125287	KEL 1230/6 STEEL	-
						STEEL HC-FEP	1	21125290	KEL 1230/6 STEEL HC-FEP	-
16	30	6	70	14	4.8	STEEL	1	21125387	KEL 1630/6 STEEL	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)										
10	20	6	170	14	2.9	STEEL	1	21125089	KEL 1020/6 STEEL SL 150	-
12	30	6	180	14	2.6	STEEL	1	21125289	KEL 1230/6 STEEL SL 150	-



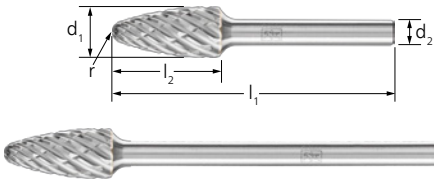
Conical pointed shape SKM

Conical pointed burr according to DIN 8032 with flattened tip for machining steel and cast steel. Tangibly more aggressive combined with good guidance, guaranteeing safe and precise work. Also available with wear-resistant HICOAT coating.



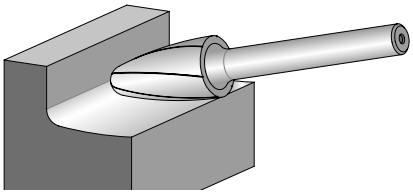
Special features:
- Up to 50% higher stock removal rate when used on steel and cast steel than conventional cross-cut burrs.
- Workpieces are protected through significantly lower thermal load.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
6	18	6	55	18	STEEL	1	21115077	SKM 0618/6 STEEL	-
8	20	6	60	22	STEEL	1	21115087	SKM 0820/6 STEEL	-
10	20	6	60	28	STEEL	1	21115187	SKM 1020/6 STEEL	-
					STEEL HC-FEP	1	21115190	SKM 1020/6 STEEL HC-FEP	-
12	25	6	65	26	STEEL	1	21115287	SKM 1225/6 STEEL	-
					STEEL HC-FEP	1	21115290	SKM 1225/6 STEEL HC-FEP	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)									
10	20	6	170	28	STEEL	1	*21115189*	SKM 1020/6 STEEL SL 150	-
12	25	6	175	26	STEEL	1	*21115289*	SKM 1225/6 STEEL SL 150	-



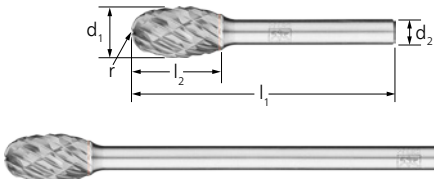
Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032 for machining steel and cast steel. Tangibly more aggressive combined with good guidance, guaranteeing safe and precise work. Also available with wear-resistant HICOAT coating.



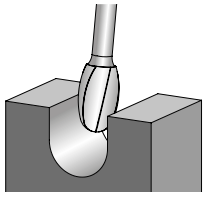
Special features:
- Up to 50% higher stock removal rate when used on steel and cast steel than conventional cross-cut burrs.
- Workpieces are protected through significantly lower thermal load.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
6	18	6	55	1.5	STEEL	1	21117387	RBF 0618/6 STEEL	-
8	20	6	60	1.2	STEEL	1	21117687	RBF 0820/6 STEEL	-
10	20	6	60	2.5	STEEL	1	21117787	RBF 1020/6 STEEL	-
					STEEL HC-FEP	1	21117790	RBF 1020/6 STEEL HC-FEP	-
12	25	6	65	2.5	STEEL	1	21117887	RBF 1225/6 STEEL	-
					STEEL HC-FEP	1	21117890	RBF 1225/6 STEEL HC-FEP	-
16	30	6	70	3.6	STEEL	1	21117987	RBF 1630/6 STEEL	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)									
8	20	6	170	1.2	STEEL	1	*21117689*	RBF 0820/6 STEEL SL 150	-
12	25	6	175	2.5	STEEL	1	*21117889*	RBF 1225/6 STEEL SL 150	-



Oval shape TRE

Oval burr according to DIN 8032 for machining steel and cast steel. Tangibly more aggressive combined with good guidance, guaranteeing safe and precise work. Also available with wear-resistant HICOAT coating.



Special features:
- Up to 50% higher stock removal rate when used on steel and cast steel than conventional cross-cut burrs.
- Workpieces are protected through significantly lower thermal load.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
8	13	6	53	3.7	STEEL	1	21135087	TRE 0813/6 STEEL	-
10	16	6	56	4	STEEL	1	21134987	TRE 1016/6 STEEL	-
					STEEL HC-FEP	1	21134990	TRE 1016/6 STEEL HC-FEP	-
12	20	6	60	5	STEEL	1	21135187	TRE 1220/6 STEEL	-
					STEEL HC-FEP	1	21135190	TRE 1220/6 STEEL HC-FEP	-
16	25	6	65	6.5	STEEL	1	21135287	TRE 1625/6 STEEL	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)									
10	16	6	160	4	STEEL	1	21134988	TRE 1016/6 STEEL SL 150	-
12	20	6	170	5	STEEL	1	21135189	TRE 1220/6 STEEL SL 150	-



Set 1812 STEEL

Set 1812 STEEL contains five tungsten carbide burrs for processing steel and cast steel in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYA 1225/6 STEEL, KUD 1210/6 STEEL, WRC 1225/6 STEEL, SPG 1225/6 STEEL and RBF 1225/6 STEEL with a shank diameter of 6 mm, cut STEEL.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.
- The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
- Five further slots are available for other burrs.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	STEEL	1	21901812	1812 STEEL	-



Set 1806 STEEL

Set 1806 STEEL contains three tungsten carbide burrs for processing steel and cast steel in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYAS 0616/6 STEEL, WRC 0616/6 STEEL and RBF 0618/6 STEEL with a shank diameter of 6 mm, cut STEEL.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	STEEL	1	21901806	1806 STEEL 3TLG	-



Set 1807 STEEL

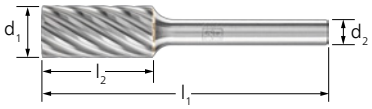
Set 1807 STEEL contains three tungsten carbide burrs for processing steel and cast steel in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYAS 1225/6 STEEL, WRC 1225/6 STEEL and RBF 1225/6 STEEL with a shank diameter of 6 mm, cut STEEL.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

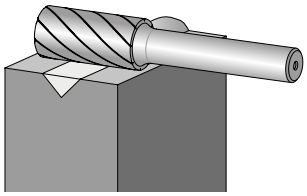
d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	STEEL	1	21901807	1807 STEEL 3TLG	-

TC burrs for high-performance applications
INOX cut for stainless steel (INOX)



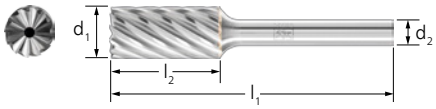
Cylindrical shape ZYA without end cut

Cylindrical burrs according to DIN 8032 for machining stainless steel (INOX). The cut impresses with an extremely high stock removal rate and long tool life as well as much lower vibration than comparable cross cuts. Also available with wear-resistant HICOAT coating.



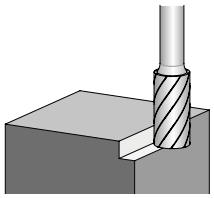
Special features:
- Achieves high surface qualities through optimum chip formation.
- Prevents heat discolouration in the material due to reduced heat production.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	13	3	43	INOX	1	21201282	ZYA 0313/3 INOX	-
6	13	3	43	INOX	1	21201482	ZYA 0613/3 INOX	-
Shank diameter 6 mm								
6	16	6	55	INOX	1	21101682	ZYA 0616/6 INOX	-
8	20	6	60	INOX	1	21101782	ZYA 0820/6 INOX	-
10	20	6	60	INOX	1	21102182	ZYA 1020/6 INOX	-
				INOX HC-FEP	1	21102181	ZYA 1020/6 INOX HC-FEP	-
12	25	6	65	INOX	1	21101982	ZYA 1225/6 INOX	-
				INOX HC-FEP	1	21101981	ZYA 1225/6 INOX HC-FEP	-



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut for machining stainless steel (INOX). The cut impresses with an extremely high stock removal rate and long tool life as well as much lower vibration than comparable cross cuts. Also available with wear-resistant HICOAT coating.



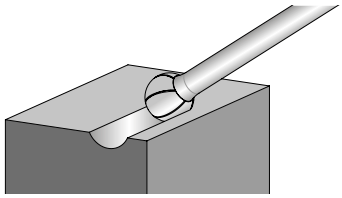
Special features:
- Achieves high surface qualities through optimum chip formation.
- Prevents heat discolouration in the material due to reduced heat production.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	13	3	43	INOX	1	21200282	ZYAS 0313/3 INOX	-
6	13	3	43	INOX	1	21200482	ZYAS 0613/3 INOX	-
Shank diameter 6 mm								
6	16	6	55	INOX	1	21100282	ZYAS 0616/6 INOX	-
12	25	6	65	INOX	1	21100582	ZYAS 1225/6 INOX	-
				INOX HC-FEP	1	21100581	ZYAS 1225/6 INOX HC-FEP	-



Ball shape KUD

Ball-shaped burr according to DIN 8032 for machining stainless steel (INOX). The cut impresses with an extremely high stock removal rate and long tool life as well as much lower vibration than comparable cross cuts. Also available with wear-resistant HICOAT coating.



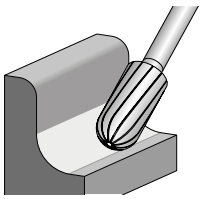
Special features:
- Achieves high surface qualities through optimum chip formation.
- Prevents heat discolouration in the material due to reduced heat production.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	2	3	33	INOX	1	21211082	KUD 0302/3 INOX	-
4	3	3	34	INOX	1	21212582	KUD 0403/3 INOX	-
5	4	3	35	INOX	1	21212682	KUD 0504/3 INOX	-
6	5	3	35	INOX	1	21213082	KUD 0605/3 INOX	-
Shank diameter 6 mm								
6	5	6	45	INOX	1	21112582	KUD 0605/6 INOX	-
8	7	6	47	INOX	1	21112682	KUD 0807/6 INOX	-
10	9	6	49	INOX	1	21112782	KUD 1009/6 INOX	-
				INOX HC-FEP	1	21112781	KUD 1009/6 INOX HC-FEP	-
12	10	6	51	INOX	1	21112882	KUD 1210/6 INOX	-
				INOX HC-FEP	1	21112881	KUD 1210/6 INOX HC-FEP	-



Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032 for machining stainless steel (INOX). The cut impresses with an extremely high stock removal rate and long tool life as well as much lower vibration than comparable cross cuts. Also available with wear-resistant HICOAT coating.

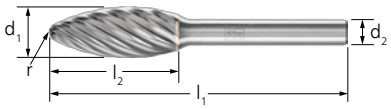


Special features:
- Achieves high surface qualities through optimum chip formation.
- Prevents heat discolouration in the material due to reduced heat production.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	13	3	43	INOX	1	21205182	WRC 0313/3 INOX	-
6	13	3	43	INOX	1	21205282	WRC 0613/3 INOX	-
Shank diameter 6 mm								
6	16	6	55	INOX	1	21105082	WRC 0616/6 INOX	-
8	20	6	60	INOX	1	21105182	WRC 0820/6 INOX	-
10	20	6	60	INOX	1	21105282	WRC 1020/6 INOX	-
				INOX HC-FEP	1	21105281	WRC 1020/6 INOX HC-FEP	-
12	25	6	65	INOX	1	21105382	WRC 1225/6 INOX	-
				INOX HC-FEP	1	21105381	WRC 1225/6 INOX HC-FEP	-

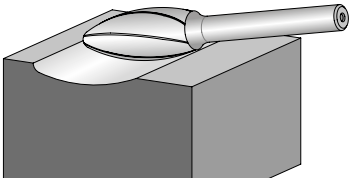
TC burrs for high-performance applications

INOX cut for stainless steel (INOX)



Flame-shaped B

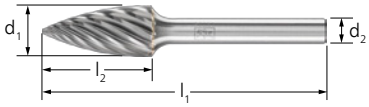
Flame-shaped burr according to ISO 7755/8 for machining stainless steel (INOX). The cut impresses with an extremely high stock removal rate and long tool life as well as much lower vibration than comparable cross cuts. Also available with wear-resistant HICOAT coating.



Special features:

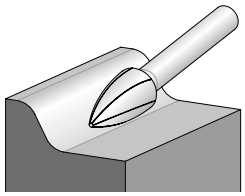
- Achieves high surface qualities through optimum chip formation.
- Prevents heat discolouration in the material due to reduced heat production.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
8	20	6	60	1.5	INOX	1	21103182	B 0820/6 INOX	-
10	25	6	65	1.7	INOX	1	21103282	B 1025/6 INOX	-
					INOX HC-FEP	1	21103281	B 1025/6 INOX HC-FEP	-
12	30	6	70	2.1	INOX	1	21103382	B 1230/6 INOX	-
					INOX HC-FEP	1	21103381	B 1230/6 INOX HC-FEP	-



Pointed tree shape SPG

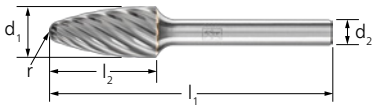
Pointed tree-shaped burr according to DIN 8032 with flattened tip for machining stainless steel (INOX). The cut impresses with an extremely high stock removal rate and long tool life as well as much lower vibration than comparable cross cuts. Also available with wear-resistant HICOAT coating.



Special features:

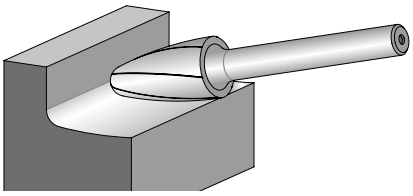
- Achieves high surface qualities through optimum chip formation.
- Prevents heat discolouration in the material due to reduced heat production.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	7	3	37	INOX	1	21222582	SPG 0307/3 INOX	-
	13	3	43	INOX	1	21222682	SPG 0313/3 INOX	-
6	13	3	43	INOX	1	21222782	SPG 0613/3 INOX	-
Shank diameter 6 mm								
6	18	6	55	INOX	1	21122582	SPG 0618/6 INOX	-
8	20	6	60	INOX	1	21122592	SPG 0820/6 INOX	-
10	20	6	60	INOX	1	21122682	SPG 1020/6 INOX	-
				INOX HC-FEP	1	21122681	SPG 1020/6 INOX HC-FEP	-
12	25	6	65	INOX	1	21122782	SPG 1225/6 INOX	-
				INOX HC-FEP	1	21122780	SPG 1225/6 INOX HC-FEP	-



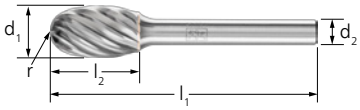
Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032 for machining stainless steel (INOX). The cut impresses with an extremely high stock removal rate and long tool life as well as much lower vibration than comparable cross cuts. Also available with wear-resistant HICOAT coating.



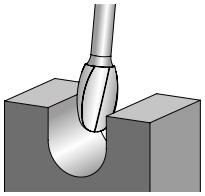
Special features:
- Achieves high surface qualities through optimum chip formation.
- Prevents heat discolouration in the material due to reduced heat production.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	13	3	43	0.75	INOX	1	21218132	RBF 0313/3 INOX	-
6	13	3	43	1.5	INOX	1	21230082	RBF 0613/3 INOX	-
Shank diameter 6 mm									
6	18	6	55	1.5	INOX	1	21117382	RBF 0618/6 INOX	-
8	20	6	60	1.2	INOX	1	21117682	RBF 0820/6 INOX	-
10	20	6	60	2.5	INOX	1	21117782	RBF 1020/6 INOX	-
					INOX HC-FEP	1	21117781	RBF 1020/6 INOX HC-FEP	-
12	25	6	65	2.5	INOX	1	21117882	RBF 1225/6 INOX	-
					INOX HC-FEP	1	21117881	RBF 1225/6 INOX HC-FEP	-



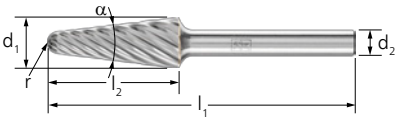
Oval shape TRE

Oval burr according to DIN 8032 for machining stainless steel (INOX). The cut impresses with an extremely high stock removal rate and long tool life as well as much lower vibration than comparable cross cuts. Also available with wear-resistant HICOAT coating.



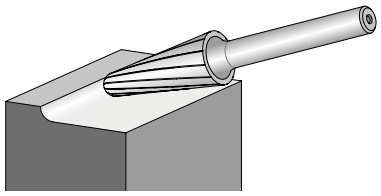
Special features:
- Achieves high surface qualities through optimum chip formation.
- Prevents heat discolouration in the material due to reduced heat production.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
8	13	6	53	3.7	INOX	1	21135082	TRE 0813/6 INOX	-
10	16	6	56	4	INOX	1	21134982	TRE 1016/6 INOX	-
					INOX HC-FEP	1	21134981	TRE 1016/6 INOX HC-FEP	-
12	20	6	60	5	INOX	1	21135182	TRE 1220/6 INOX	-
					INOX HC-FEP	1	21135181	TRE 1220/6 INOX HC-FEP	-



Conical shape with radius end KEL

Conical burr with round radius end according to DIN 8032 for machining stainless steel (INOX). The cut impresses with an extremely high stock removal rate and long tool life as well as much lower vibration than comparable cross cuts. Also available with wear-resistant HICOAT coating.



Special features:
- Achieves high surface qualities through optimum chip formation.
- Prevents heat discolouration in the material due to reduced heat production.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
8	20	6	60	16	1.25	INOX	1	21124982	KEL 0820/6 INOX	-
10	20	6	60	14	2.9	INOX	1	21125082	KEL 1020/6 INOX	-
						INOX HC-FEP	1	21125081	KEL 1020/6 INOX HC-FEP	-
12	30	6	70	14	2.6	INOX	1	21125282	KEL 1230/6 INOX	-
						INOX HC-FEP	1	21125281	KEL 1230/6 INOX HC-FEP	-



Set 1912 INOX

Set 1912 INOX contains five tungsten carbide burrs for processing stainless steel (INOX) in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYA 1225/6 INOX, KUD 1210/6 INOX, WRC 1225/6 INOX, RBF 1225/6 INOX and SPG 1225/6 INOX with a shank diameter of 6 mm, cut INOX.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.
- The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
- Five further slots are available for other burrs.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	INOX	1	21901912	1912 INOX	-



Set 1907 INOX

Set 1907 INOX contains five tungsten carbide burrs for processing stainless steel (INOX) in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYAS 1225/6 INOX, WRC 1225/6 INOX and RBF 1225/6 INOX with a shank diameter of 6 mm, cut INOX.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	INOX	1	21901907	1907 INOX 3TLG	-



Set 1906 INOX

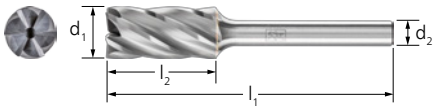
Set 1906 INOX contains five tungsten carbide burrs for processing stainless steel (INOX) in the most common shapes and dimensions

Contents:
The set comprises one each of the following: ZYAS 0616/6 INOX, WRC 0616/6 INOX and RBF 0618/6 INOX with a shank diameter of 6 mm, cut INOX.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

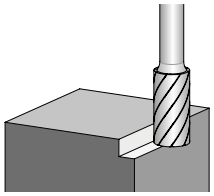
d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	INOX	1	21901906	1906 INOX 3TLG	-

ALU cut for aluminium/non-ferrous metals



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut for an extremely high stock removal rate, long tool life and smooth operation when machining aluminium.



Special features:
- Large chips and reduced material adhesion.
- Can be used with cutting speeds of up to 1,100 m/min (HC-NFE: up to 1,300 m/min).
- HC-NFE coating prevents material adhesion when working on long-chipping and lubricating non-ferrous metals.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	13	3	43	ALU	1	21200295	ZYAS 0313/3 ALU	-
6	13	3	43	ALU	1	21200495	ZYAS 0613/3 ALU	-
Shank diameter 6 mm								
6	16	6	55	ALU	1	21100986	ZYAS 0616/6 ALU	-
8	20	6	60	ALU	1	21100388	ZYAS 0820/6 ALU	-
10	20	6	60	ALU	1	21100786	ZYAS 1020/6 ALU	-
12	25	6	65	ALU	1	21100586	ZYAS 1225/6 ALU	-
				ALU HC-NFE	1	21100595	ZYAS 1225/6 ALU HC-NFE	-
16	25	6	65	ALU	1	21100658	ZYAS 1625/6 ALU	-
Shank diameter 8 mm								
12	25	8	65	ALU	1	21100588	ZYAS 1225/8 ALU	-

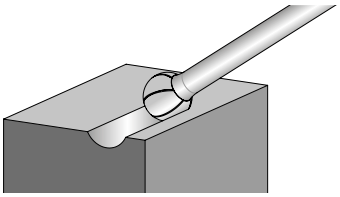
TC burrs for high-performance applications

ALU cut for aluminium/non-ferrous metals



Ball shape KUD

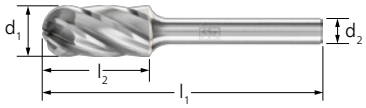
Ball-shaped burr according to DIN 8032 with circumferential and end cut for an extremely high stock removal rate, long tool life and smooth operation when machining aluminium.



Special features:

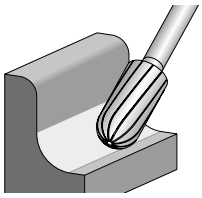
- Large chips and reduced material adhesion.
- Can be used with cutting speeds of up to 1,100 m/min (HC-NFE: up to 1,300 m/min).
- HC-NFE coating prevents material adhesion when working on long-chipping and lubricating non-ferrous metals.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	2	3	33	ALU	1	21211095	KUD 0302/3 ALU	-
6	5	3	35	ALU	1	21213095	KUD 0605/3 ALU	-
Shank diameter 6 mm								
6	5	6	45	ALU	1	21112586	KUD 0605/6 ALU	-
8	7	6	47	ALU	1	21112686	KUD 0807/6 ALU	-
10	9	6	49	ALU	1	21112788	KUD 1009/6 ALU	-
12	10	6	51	ALU	1	21112886	KUD 1210/6 ALU	-
				ALU HC-NFE	1	21112901	KUD 1210/6 ALU HC-NFE	-
16	14	6	54	ALU	1	21112978	KUD 1614/6 ALU	-



Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032 for an extremely high stock removal rate, long tool life and smooth operation when machining aluminium.



Special features:

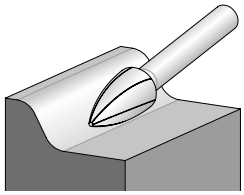
- Large chips and reduced material adhesion.
- Can be used with cutting speeds of up to 1,100 m/min (HC-NFE: up to 1,300 m/min).
- HC-NFE coating prevents material adhesion when working on long-chipping and lubricating non-ferrous metals.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	13	3	43	ALU	1	21205195	WRC 0313/3 ALU	-
6	13	3	43	ALU	1	21205295	WRC 0613/3 ALU	-
Shank diameter 6 mm								
6	16	6	55	ALU	1	21105786	WRC 0616/6 ALU	-
8	20	6	60	ALU	1	21105188	WRC 0820/6 ALU	-
10	20	6	60	ALU	1	21105288	WRC 1020/6 ALU	-
12	25	6	65	ALU	1	21105386	WRC 1225/6 ALU	-
				ALU HC-NFE	1	21105401	WRC 1225/6 ALU HC-NFE	-
16	25	6	65	ALU	1	21105458	WRC 1625/6 ALU	-
Shank diameter 8 mm								
12	25	8	65	ALU	1	21105388	WRC 1225/8 ALU	-



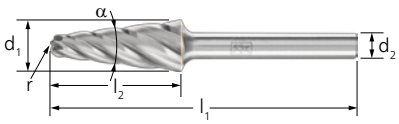
Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032, flattened tip for an extremely high stock removal rate, long tool life and smooth operation when machining aluminium.



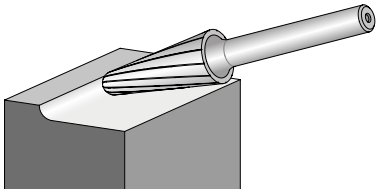
Special features:
- Large chips and reduced material adhesion.
- Can be used with cutting speeds of up to 1,100 m/min (HC-NFE: up to 1,300 m/min).
- HC-NFE coating prevents material adhesion when working on long-chipping and lubricating non-ferrous metals.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	7	3	37	ALU	1	21222563	SPG 0307/3 ALU	-
	13	3	43	ALU	1	21222663	SPG 0313/3 ALU	-
6	13	3	43	ALU	1	21222763	SPG 0613/3 ALU	-
Shank diameter 6 mm								
6	18	6	55	ALU	1	21122566	SPG 0618/6 ALU	-
8	20	6	60	ALU	1	21122596	SPG 0820/6 ALU	-
10	20	6	60	ALU	1	21122676	SPG 1020/6 ALU	-
12	25	6	65	ALU	1	21122766	SPG 1225/6 ALU	-
				ALU HC-NFE	1	21122767	SPG 1225/6 ALU HC-NFE	-



Conical shape with radius end KEL

Conical burr with round radius end according to DIN 8032 for an extremely high stock removal rate, long tool life and smooth operation when machining aluminium.

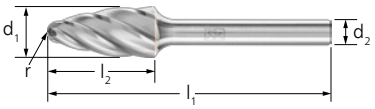


Special features:
- Large chips and reduced material adhesion.
- Can be used with cutting speeds of up to 1,100 m/min (HC-NFE: up to 1,300 m/min).
- HC-NFE coating prevents material adhesion when working on long-chipping and lubricating non-ferrous metals.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
8	20	6	60	16	1.25	ALU	1	21124988	KEL 0820/6 ALU	-
10	20	6	60	14	2.9	ALU	1	21125088	KEL 1020/6 ALU	-
12	30	6	70	14	2.6	ALU	1	21125286	KEL 1230/6 ALU	-
						ALU HC-NFE	1	21125285	KEL 1230/6 ALU HC-NFE	-
16	30	6	70	14	4.8	ALU	1	21125358	KEL 1630/6 ALU	-
Shank diameter 8 mm										
12	30	8	70	14	2.6	ALU	1	21125288	KEL 1230/8 ALU	-

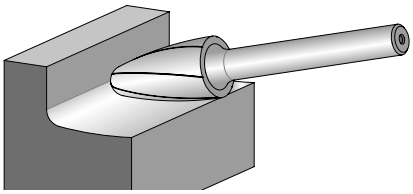
TC burrs for high-performance applications

ALU cut for aluminium/non-ferrous metals



Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032 for an extremely high stock removal rate, long tool life and smooth operation when machining aluminium.



Special features:

- Large chips and reduced material adhesion.
- Can be used with cutting speeds of up to 1,100 m/min (HC-NFE: up to 1,300 m/min).
- HC-NFE coating prevents material adhesion when working on long-chipping and lubricating non-ferrous metals.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	13	3	43	0.75	ALU	1	21218135	RBF 0313/3 ALU	-
6	13	3	43	1.5	ALU	1	21230095	RBF 0613/3 ALU	-
Shank diameter 6 mm									
6	18	6	55	1.5	ALU	1	21117386	RBF 0618/6 ALU	-
8	20	6	60	1.2	ALU	1	21117688	RBF 0820/6 ALU	-
10	20	6	60	2.5	ALU	1	21117788	RBF 1020/6 ALU	-
12	25	6	65	2.5	ALU	1	21117886	RBF 1225/6 ALU	-
					ALU HC-NFE	1	21117885	RBF 1225/6 ALU HC-NFE	-
16	30	6	70	3.6	ALU	1	21117958	RBF 1630/6 ALU	-
Shank diameter 8 mm									
12	25	8	65	2.5	ALU	1	21117888	RBF 1225/8 ALU	-



Set 1603 ALU

Set 1603 ALU contains ten small tungsten carbide burrs for processing aluminium in the most common shapes and dimensions.

Contents:
The set comprises one each of the following:
ZYAS 0313/3 ALU, ZYAS 0613/3 ALU,
KUD 0302/3 ALU, KUD 0605/3 ALU,
WRC 0313/3 ALU, WRC 0613/3 ALU,
RBF 0313/3 ALU, RBF 0613/3 ALU,
SPG 0313/3 ALU and SPG 0613/3 ALU with a shank diameter of 3 mm, cut ALU.

Special features:

- The sturdy plastic box protects the tools against dirt and damage.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm					
3	ALU	1	21901603	1603 ALU	-



Set 1612 ALU

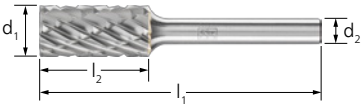
Set 1612 ALU contains five tungsten carbide burrs for processing aluminium in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYAS 1225/6 ALU, KUD 1210/6 ALU, WRC 1225/6 ALU, RBF 1225/6 ALU and KEL 1230/6 ALU with a shank diameter of 6 mm, cut ALU.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.
- The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
- Five further slots are available for other burrs.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	ALU	1	21901612	1612 ALU	-

NON-FERROUS cut for non-ferrous metals



Cylindrical shape ZYA without end cut

Cylindrical burr according to DIN 8032 for general-purpose use on non-ferrous metals and fibre-reinforced plastics.

Special features:
- Very good stock removal rate when used on non-ferrous metals such as brass and copper, plastics and fibre-reinforced plastics.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
6	16	6	55	NON-FERROUS	1	21101696	ZYA 0616/6 NON-FERROUS	-
12	25	6	65	NON-FERROUS	1	21101996	ZYA 1225/6 NON-FERROUS	-
Shank diameter 8 mm								
12	25	8	65	NON-FERROUS	1	21101998	ZYA 1225/8 NON-FERROUS	-



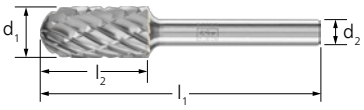
Ball shape KUD

Ball-shaped burr according to DIN 8032 for general-purpose use on non-ferrous metals and fibre-reinforced plastics.

Special features:
- Very good stock removal rate when used on non-ferrous metals such as brass and copper, plastics and fibre-reinforced plastics.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
8	7	6	47	NON-FERROUS	1	21112696	KUD 0807/6 NON-FERROUS	-
12	10	6	51	NON-FERROUS	1	21112896	KUD 1210/6 NON-FERROUS	-

TC burrs for high-performance applications
NON-FERROUS cut for non-ferrous metals

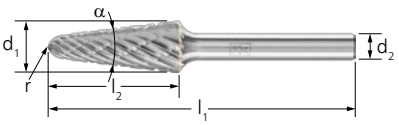


Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032 for general-purpose use on non-ferrous metals and fibre-reinforced plastics.

Special features:
- Very good stock removal rate when used on non-ferrous metals such as brass and copper, plastics and fibre-reinforced plastics.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
6	16	6	55	NON-FERROUS	1	21105096	WRC 0616/6 NON-FERROUS	-
12	25	6	65	NON-FERROUS	1	21105396	WRC 1225/6 NON-FERROUS	-



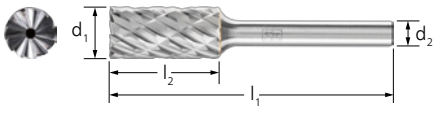
Conical shape with radius end KEL

Conical burr with round radius end according to DIN 8032 for general-purpose use on non-ferrous metals and fibre-reinforced plastics.

Special features:
- Very good stock removal rate when used on non-ferrous metals such as brass and copper, plastics and fibre-reinforced plastics.

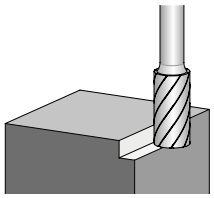
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
10	20	6	60	14	2.9	NON-FERROUS	1	21125096	KEL 1020/6 NON-FERROUS	-
12	30	6	70	14	2.6	NON-FERROUS	1	21125296	KEL 1230/6 NON-FERROUS	-
Shank diameter 8 mm										
16	30	8	70	14	4.8	NON-FERROUS	1	21125398	KEL 1630/8 NON-FERROUS	-

CAST cut for cast iron



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut for machining cast iron. The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



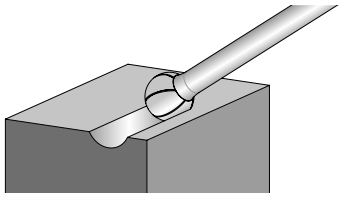
Special features:
- Up to 100% higher stock removal rate on cast iron when compared with conventional cross cuts.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
6	16	6	55	CAST	1	21100283	ZYAS 0616/6 CAST	-
10	20	6	60	CAST	1	21100483	ZYAS 1020/6 CAST	-
12	25	6	65	CAST	1	21100583	ZYAS 1225/6 CAST	-
Shank diameter 8 mm								
12	25	8	65	CAST	1	21100585	ZYAS 1225/8 CAST	-



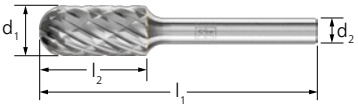
Ball shape KUD

Ball-shaped burr according to DIN 8032 for machining cast iron. The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



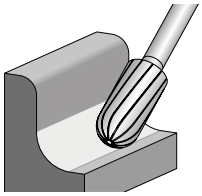
Special features:
- Up to 100% higher stock removal rate on cast iron when compared with conventional cross cuts.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
10	9	6	49	CAST	1	*21112783*	KUD 1009/6 CAST	-
12	10	6	51	CAST	1	*21112883*	KUD 1210/6 CAST	-
Shank diameter 8 mm								
12	10	8	51	CAST	1	*21112885*	KUD 1210/8 CAST	-



Cylindrical shape with radius end WRC

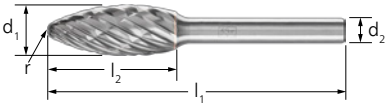
Cylindrical burr with radius end according to DIN 8032 for machining cast iron. The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



Special features:
- Up to 100% higher stock removal rate on cast iron when compared with conventional cross cuts.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

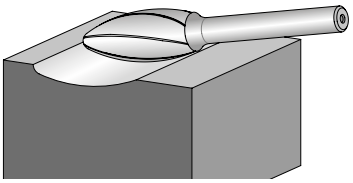
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
6	16	6	55	CAST	1	21105083	WRC 0616/6 CAST	-
10	20	6	60	CAST	1	21105283	WRC 1020/6 CAST	-
12	25	6	65	CAST	1	21105383	WRC 1225/6 CAST	-
Shank diameter 8 mm								
12	25	8	65	CAST	1	21105385	WRC 1225/8 CAST	-

TC burrs for high-performance applications
CAST cut for cast iron



Flame-shaped B

Flame-shaped burr according to ISO 7755/8 for machining cast iron. The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



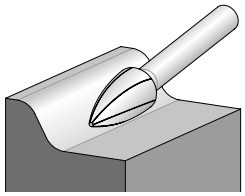
Special features:
- Up to 100% higher stock removal rate on cast iron when compared with conventional cross cuts.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
12	30	6	70	2.1	CAST	1	21103383	B 1230/6 CAST	-
Shank diameter 8 mm									
12	30	8	70	2.1	CAST	1	21103384	B 1230/8 CAST	-



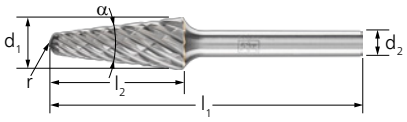
Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032 with flattened tip for machining cast iron. The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



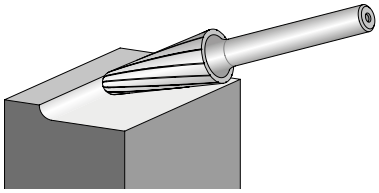
Special features:
- Up to 100% higher stock removal rate on cast iron when compared with conventional cross cuts.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
6	18	6	55	CAST	1	*21122583*	SPG 0618/6 CAST	-
10	20	6	60	CAST	1	21122683	SPG 1020/6 CAST	-
12	25	6	70	CAST	1	21122783	SPG 1225/6 CAST	-
Shank diameter 8 mm								
12	25	8	70	CAST	1	*21122781*	SPG 1225/8 CAST	-



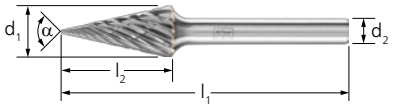
Conical shape with radius end KEL

Conical burr with round radius end according to DIN 8032 for machining cast iron. The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



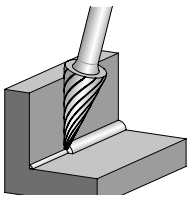
Special features:
- Up to 100% higher stock removal rate on cast iron when compared with conventional cross cuts.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
12	30	6	70	14	2.6	CAST	1	21125283	KEL 1230/6 CAST	-
Shank diameter 8 mm										
12	30	8	70	14	2.6	CAST	1	21125284	KEL 1230/8 CAST	-



Conical pointed shape SKM

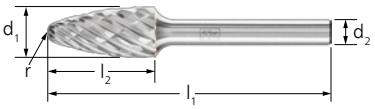
Conical pointed burr according to DIN 8032 with flattened tip for machining cast iron. The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



Special features:
- Up to 100% higher stock removal rate on cast iron when compared with conventional cross cuts.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

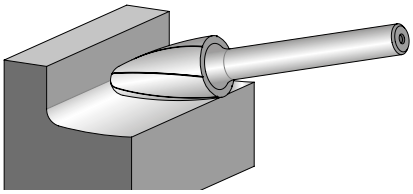
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
12	25	6	65	26	CAST	1	21115283	SKM 1225/6 CAST	-

TC burrs for high-performance applications
CAST cut for cast iron



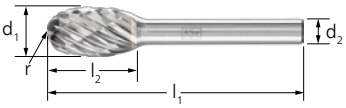
Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032 for machining cast iron. The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



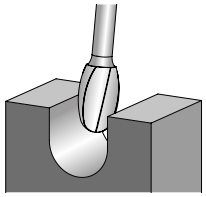
Special features:
- Up to 100% higher stock removal rate on cast iron when compared with conventional cross cuts.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
6	18	6	55	1.5	CAST	1	21117383	RBF 0618/6 CAST	-
10	20	6	60	2.5	CAST	1	21117783	RBF 1020/6 CAST	-
12	25	6	65	2.5	CAST	1	21117883	RBF 1225/6 CAST	-
Shank diameter 8 mm									
12	25	8	65	2.5	CAST	1	21117877	RBF 1225/8 CAST	-



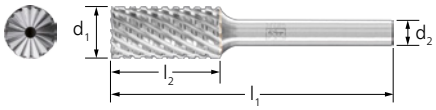
Oval shape TRE

Oval burr according to DIN 8032 for machining cast iron. The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



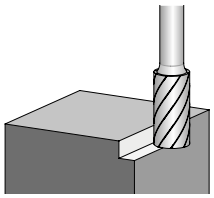
Special features:
- Up to 100% higher stock removal rate on cast iron when compared with conventional cross cuts.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
12	20	6	60	5	CAST	1	21135183	TRE 1220/6 CAST	-



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut for work on hard titanium materials (tensile strength > 500 N/mm²). The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



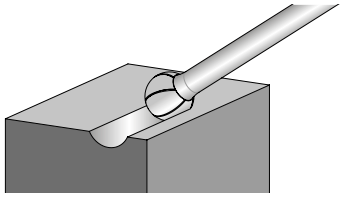
Special features:
- Excellent stock removal rate and tool life due to innovative tooth geometry.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut	RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	13	3	43	TITANIUM	27,000 – 48,000	1	21200284	ZYAS 0313/3 TITANIUM	-
6	13	3	43	TITANIUM	13,000 – 24,000	1	21200484	ZYAS 0613/3 TITANIUM	-
Shank diameter 6 mm									
6	16	6	55	TITANIUM	13,000 – 24,000	1	21100284	ZYAS 0616/6 TITANIUM	-
12	25	6	65	TITANIUM	7,000 – 12,000	1	21100584	ZYAS 1225/6 TITANIUM	-



Ball shape KUD

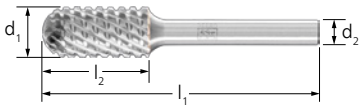
Ball-shaped burr according to DIN 8032 for work on hard titanium materials (tensile strength > 500 N/mm²). The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



Special features:
- Excellent stock removal rate and tool life due to innovative tooth geometry.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

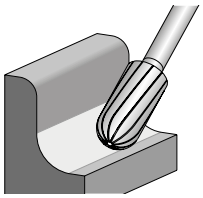
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut	RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	2	3	33	TITANIUM	27,000 – 48,000	1	21211084	KUD 0302/3 TITANIUM	-
4	3	3	34	TITANIUM	20,000 – 36,000	1	21212584	KUD 0403/3 TITANIUM	-
5	4	3	35	TITANIUM	16,000 – 29,000	1	21212684	KUD 0504/3 TITANIUM	-
6	5	3	35	TITANIUM	13,000 – 24,000	1	21213084	KUD 0605/3 TITANIUM	-
Shank diameter 6 mm									
6	5	6	45	TITANIUM	13,000 – 24,000	1	21112584	KUD 0605/6 TITANIUM	-
12	10	6	51	TITANIUM	7,000 – 12,000	1	21112884	KUD 1210/6 TITANIUM	-

TC burrs for high-performance applications
TITANIUM cut for titanium



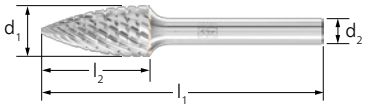
Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032 for work on hard titanium materials (tensile strength > 500 N/mm²). The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



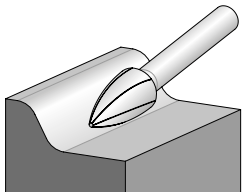
Special features:
- Excellent stock removal rate and tool life due to innovative tooth geometry.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut	RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	13	3	43	TITANIUM	27,000 – 48,000	1	21205184	WRC 0313/3 TITANIUM	-
6	13	3	43	TITANIUM	13,000 – 24,000	1	21205284	WRC 0613/3 TITANIUM	-
Shank diameter 6 mm									
6	16	6	55	TITANIUM	13,000 – 24,000	1	21105084	WRC 0616/6 TITANIUM	-
12	25	6	65	TITANIUM	7,000 – 12,000	1	21105384	WRC 1225/6 TITANIUM	-



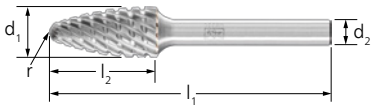
Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032 with flattened tip for work on hard titanium materials (tensile strength > 500 N/mm²). The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



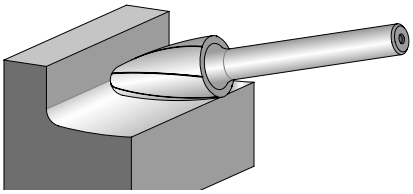
Special features:
- Excellent stock removal rate and tool life due to innovative tooth geometry.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut	RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	TITANIUM	27,000 – 48,000	1	*21222584*	SPG 0307/3 TITANIUM	-
	13	3	43	TITANIUM	27,000 – 48,000	1	21222684	SPG 0313/3 TITANIUM	-
6	13	3	43	TITANIUM	13,000 – 24,000	1	21222784	SPG 0613/3 TITANIUM	-
Shank diameter 6 mm									
6	18	6	55	TITANIUM	13,000 – 24,000	1	21122584	SPG 0618/6 TITANIUM	-
12	25	6	65	TITANIUM	7,000 – 12,000	1	21122784	SPG 1225/6 TITANIUM	-



Tree shape with radius end RBF

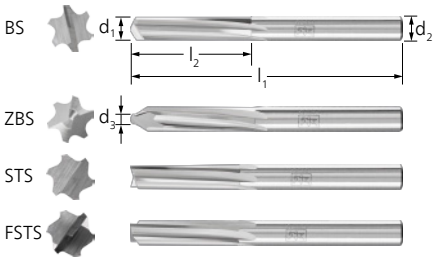
Tree-shaped burr with radius end according to DIN 8032 for work on hard titanium materials (tensile strength > 500 N/mm²). The cut impresses with its smooth milling performance with considerably reduced vibration and less noise.



Special features:
- Excellent stock removal rate and tool life due to innovative tooth geometry.
- Tangibly more aggressive, large chips and very good chip removal.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

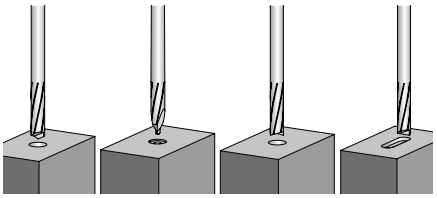
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut	RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm										
3	13	3	43	0.75	TITANIUM	27,000 – 48,000	1	21218184	RBF 0313/3 TITANIUM	-
6	13	3	43	1.5	TITANIUM	13,000 – 24,000	1	21230084	RBF 0613/3 TITANIUM	-
Shank diameter 6 mm										
6	18	6	55	1.5	TITANIUM	13,000 – 24,000	1	21117384	RBF 0618/6 TITANIUM	-
12	25	6	65	2.5	TITANIUM	7,000 – 12,000	1	21117884	RBF 1225/6 TITANIUM	-

TC burrs for high-performance applications
PLAST cut for GRP/CRP



Cylindrical shape ZYA

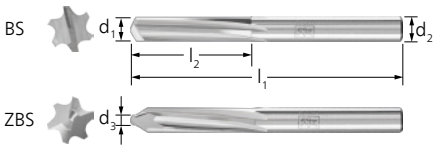
Cylindrical burr for use on less hard duroplastics (GRP and CRP ≤ 40% fibre content) and fibre-reinforced thermoplastics. The cut minimizes delamination and fraying and enables very low resistance and high feed rates.



Special features:
- Particularly suitable for use on machines and on robots.
- Drill cut BS and centre drill ZBS for combined drilling and milling work in manual, machine and robot applications.
- The versions with an end cut (STS) and flat end cut (FSTS) are suitable only for machine and robot applications.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Centre drill diameter d_3 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm with drill cut (BS)									
6	25	6	65	-	PLAST	1	21455696	ZYA 0625/6 PLAST BS	-
Shank diameter 8 mm with drill cut (BS)									
8	25	8	65	-	PLAST	1	21455896	ZYA 0825/8 PLAST BS	-
Shank diameter of 6 mm with centre drill (ZBS)									
6	25	6	65	2.5	PLAST	1	21456696	ZYA 0625/6 PLAST ZBS	-
Shank diameter 6 mm with end cut (STS)									
6	25	6	65	-	PLAST	1	*21454596*	ZYA 0625/6 PLAST STS	-
Shank diameter 8 mm with end cut (STS)									
8	25	8	65	-	PLAST	1	*21455596*	ZYA 0825/8 PLAST STS	-
Shank diameter 6 mm with flat end cut (FSTS)									
6	25	6	65	-	PLAST	1	*21456596*	ZYA 0625/6 PLAST FSTS	-
Shank diameter 8 mm with flat end cut (FSTS)									
8	25	8	65	-	PLAST	1	*21457596*	ZYA 0825/8 PLAST FSTS	-

FVK and FVKS cuts for GRP/CRP

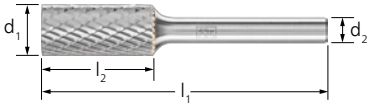


Cylindrical shape ZYA

Cylindrical burr for general use on hard duroplastics (also GRP and CRP with > 40% fibre content).

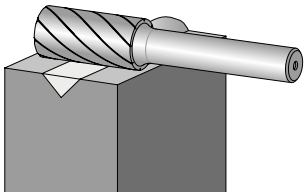
Special features:
- The FVKS cut for use on machines and robots with high feed rates.
- The FVKS cut produces smooth edges and enables smooth milling.
- Drill cut BS and centre drill ZBS for combined drilling and milling work in manual, machine and robot applications.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut	RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm with drill cut (BS)									
6	25	6	65	FVK	24,000 – 48,000	1	21458696	ZYA 0625/6 FVK BS	-
				FVKS	24,000 – 48,000	1	21458697	ZYA 0625/6 FVKS BS	-
Shank diameter 8 mm with drill cut (BS)									
8	25	8	65	FVK	18,000 – 36,000	1	21458898	ZYA 0825/8 FVK BS	-
				FVKS	18,000 – 36,000	1	21458897	ZYA 0825/8 FVKS BS	-
Shank diameter of 6 mm with centre drill (ZBS)									
6	25	6	65	FVK	24,000 – 48,000	1	21457696	ZYA 0625/6 FVK ZBS	-
				FVKS	24,000 – 48,000	1	21457697	ZYA 0625/6 FVKS ZBS	-



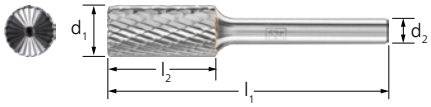
Cylindrical shape ZYA without end cut

Cylindrical burr according to DIN 8032 for tough applications in dockyards, foundries and steel construction. The extremely impact-resistant cut minimizes tooth chipping/breakage, splintering and burr failure. Ideal for use as long-shank variants.



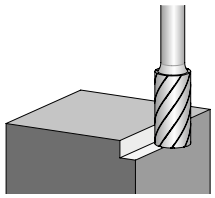
Special features:
- Type TOUGH enables aggressive milling with high stock removal, whereas type TOUGH-S is characterized by smooth milling and high stock removal.
- Can also be used in low rotational speed ranges.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
8	20	6	60	TOUGH	1	21000013	ZYA 0820/6 TOUGH	-
10	20	6	60	TOUGH	1	21000015	ZYA 1020/6 TOUGH	-
12	25	6	65	TOUGH	1	21000016	ZYA 1225/6 TOUGH	-
				TOUGH-S	1	21000017	ZYA 1225/6 TOUGH-S	-



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut for tough applications in dockyards, foundries and steel construction. The extremely impact-resistant cut minimizes tooth chipping/breakage, splintering and burr failure. Ideal for use as long-shank variants.



Special features:
- Type TOUGH enables aggressive milling with high stock removal.
- Can also be used in low rotational speed ranges.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
8	20	6	60	TOUGH	1	21000003	ZYAS 0820/6 TOUGH	-
10	20	6	60	TOUGH	1	21000005	ZYAS 1020/6 TOUGH	-
12	25	6	65	TOUGH	1	21000007	ZYAS 1225/6 TOUGH	-
Shank diameter 8 mm								
12	25	8	65	TOUGH	1	21000006	ZYAS 1225/8 TOUGH	-

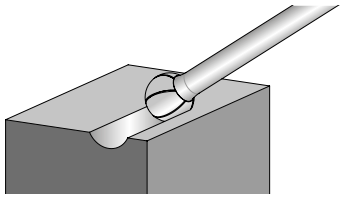
TC burrs for high-performance applications

TOUGH and TOUGH-S cuts for tough applications



Ball shape KUD

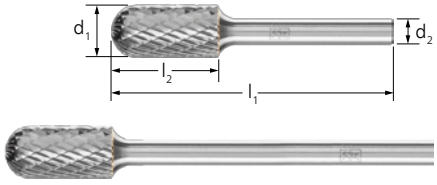
Ball-shaped burr according to DIN 8032 for tough applications in dockyards, foundries and steel construction. The extremely impact-resistant cut minimizes tooth chipping/breakage, splintering and burr failure. Ideal for use as long-shank variants.



Special features:

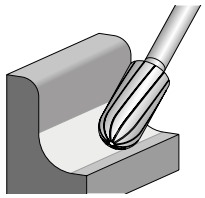
- Type TOUGH enables aggressive milling with high stock removal.
- Can also be used in low rotational speed ranges.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
8	7	6	47	TOUGH	1	21000054	KUD 0807/6 TOUGH	-
12	10	6	51	TOUGH	1	21000056	KUD 1210/6 TOUGH	-



Cylindrical shape with radius end WRC

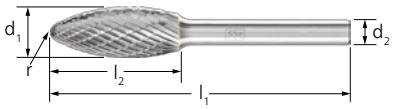
Cylindrical burr with radius end according to DIN 8032 for tough applications in dockyards, foundries and steel construction. The extremely impact-resistant cut minimizes tooth chipping/breakage, splintering and burr failure. Ideal for use as long-shank variants.



Special features:

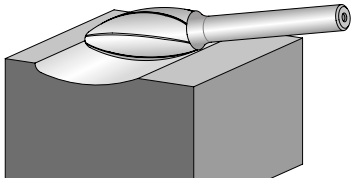
- Type TOUGH enables aggressive milling with high stock removal, whereas type TOUGH-S is characterized by smooth milling and high stock removal.
- Can also be used in low rotational speed ranges.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
8	20	6	60	TOUGH	1	21000033	WRC 0820/6 TOUGH	-
10	20	6	60	TOUGH	1	21000035	WRC 1020/6 TOUGH	-
12	25	6	65	TOUGH	1	21000036	WRC 1225/6 TOUGH	-
				TOUGH-S	1	21000038	WRC 1225/6 TOUGH-S	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)								
12	25	6	175	TOUGH	1	21000130	WRC 1225/6 TOUGH SL 150	-
Shank diameter 8 mm								
12	25	8	65	TOUGH	1	21000037	WRC 1225/8 TOUGH	-



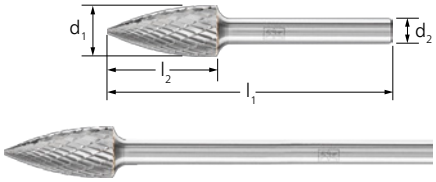
Flame-shaped B

Flame-shaped burr according to ISO 7755/8 for tough applications in dockyards, foundries and steel construction. The extremely impact-resistant cut minimizes tooth chipping/breakage, splintering and burr failure. Ideal for use as long-shank variants.



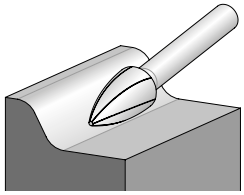
Special features:
- Type TOUGH enables aggressive milling with high stock removal.
- Can also be used in low rotational speed ranges.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
8	20	6	60	1.5	TOUGH	1	21000023	B 0820/6 TOUGH	-
12	30	6	70	2.1	TOUGH	1	21000026	B 1230/6 TOUGH	-
Shank diameter 8 mm									
12	30	8	70	2.1	TOUGH	1	21000027	B 1230/8 TOUGH	-



Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032 with flattened tip for tough applications in dockyards, foundries and steel construction. The extremely impact-resistant cut minimizes tooth chipping/breakage, splintering and burr failure. Ideal for use as long-shank variants.

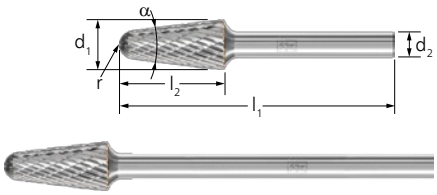


Special features:
- Type TOUGH enables aggressive milling with high stock removal, whereas type TOUGH-S is characterized by smooth milling and high stock removal.
- Can also be used in low rotational speed ranges.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
10	20	6	60	TOUGH	1	21000095	SPG 1020/6 TOUGH	-
				TOUGH-S	1	21000096	SPG 1020/6 TOUGH-S	-
12	25	6	65	TOUGH	1	21000097	SPG 1225/6 TOUGH	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)								
12	25	6	175	TOUGH	1	*21000128*	SPG 1225/6 TOUGH SL 150	-
Shank diameter 8 mm								
12	25	8	65	TOUGH	1	21000098	SPG 1225/8 TOUGH	-

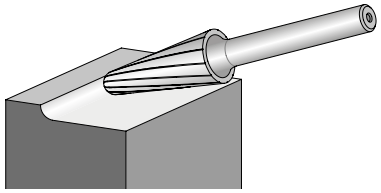
TC burrs for high-performance applications

TOUGH and TOUGH-S cuts for tough applications



Conical shape with radius end KEL

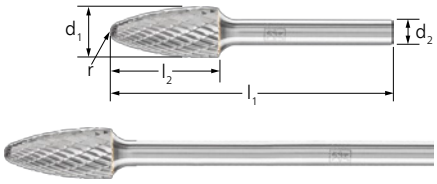
Conical burr with round radius end according to DIN 8032 for tough applications in dockyards, foundries and steel construction. The extremely impact-resistant cut minimizes tooth chipping/breakage, splintering and burr failure. Ideal for use as long-shank variants.



Special features:

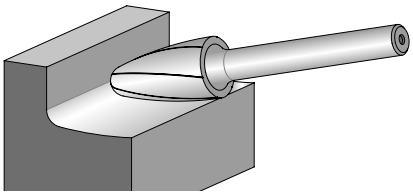
- Type TOUGH enables aggressive milling with high stock removal.
- Can also be used in low rotational speed ranges.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
12	25	6	65	14	3.3	TOUGH	1	21000116	KEL 1225/6 TOUGH	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)										
12	25	6	175	14	3.3	TOUGH	1	21000131	KEL 1225/6 TOUGH SL 150	-
Shank diameter 8 mm										
12	25	8	65	14	3.3	TOUGH	1	21000117	KEL 1225/8 TOUGH	-



Tree shape with radius end RBF

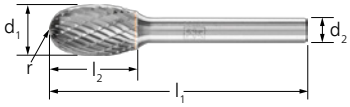
Tree-shaped burr with radius end according to DIN 8032 for tough applications in dockyards, foundries and steel construction. The extremely impact-resistant cut minimizes tooth chipping/breakage, splintering and burr failure. Ideal for use as long-shank variants.



Special features:

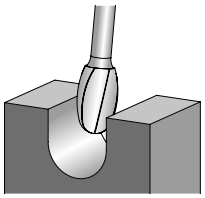
- Type TOUGH enables aggressive milling with high stock removal, whereas type TOUGH-S is characterized by smooth milling and high stock removal.
- Can also be used in low rotational speed ranges.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
8	20	6	60	1.2	TOUGH	1	21000073	RBF 0820/6 TOUGH	-
10	20	6	60	2.5	TOUGH	1	21000075	RBF 1020/6 TOUGH	-
12	25	6	65	2.5	TOUGH	1	21000076	RBF 1225/6 TOUGH	-
					TOUGH-S	1	21000078	RBF 1225/6 TOUGH-S	-
16	25	6	65	4.9	TOUGH	1	21000080	RBF 1625/6 TOUGH	-
Long shank diameter of 6 mm, shank length SL 150 mm (long steel shank)									
12	25	6	175	2.5	TOUGH	1	21000129	RBF 1225/6 TOUGH SL 150	-
Shank diameter 8 mm									
12	25	8	65	2.5	TOUGH	1	21000077	RBF 1225/8 TOUGH	-
					TOUGH-S	1	21000079	RBF 1225/8 TOUGH-S	-



Oval shape TRE

Oval burr according to DIN 8032 for tough applications in dockyards, foundries and steel construction. The extremely impact-resistant cut minimizes tooth chipping/breakage, splintering and burr failure. Ideal for use as long-shank variants.



Special features:
- Type TOUGH enables aggressive milling with high stock removal.
- Can also be used in low rotational speed ranges.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
10	16	6	56	4	TOUGH	1	21000124	TRE 1016/6 TOUGH	-
12	20	6	60	5	TOUGH	1	21000126	TRE 1220/6 TOUGH	-



Set 1712 TOUGH

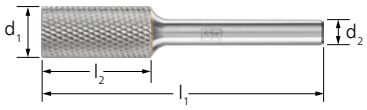
Set 1712 TOUGH contains five tungsten carbide burrs for tough applications in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: WRC 1225/6 TOUGH, SPG 1225/6 TOUGH, RBF 1225/6 TOUGH, KEL 1225/6 TOUGH and TRE 1220/6 TOUGH with a shank diameter of 6 mm, cut TOUGH.

Special features:
- Five further unused slots are available for other burrs.
- The sturdy plastic box protects the tools against dirt and damage.
- The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.

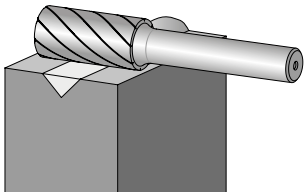
d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	TOUGH	1	21901712	1712 TOUGH	-

TC burrs for high-performance applications
MICRO cut for finishing work



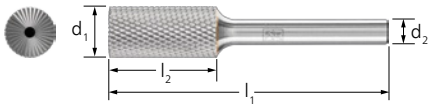
Cylindrical shape ZYA without end cut

Cylindrical burr according to DIN 8032 for fine stock removal. Burrs with the MICRO cut offer a higher stock removal rate and a high surface quality compared with conventionally milled surfaces. They also operate with low vibration and little noise.



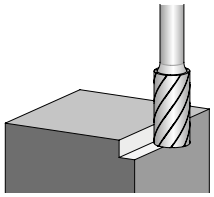
Special features:
- Unlike with mounted grinding points, there is no change in geometry due to wear and tear.
- Use on almost all materials up to 68 HRC.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
2	10	3	40	MICRO	1	21201173	ZYA 0210/3 MICRO	-
3	13	3	43	MICRO	1	21201273	ZYA 0313/3 MICRO	-
4	13	3	43	MICRO	1	21201303	ZYA 0413/3 MICRO	-
6	13	3	43	MICRO	1	21201473	ZYA 0613/3 MICRO	-
Shank diameter 6 mm								
6	16	6	55	MICRO	1	21101676	ZYA 0616/6 MICRO	-
8	20	6	60	MICRO	1	21101776	ZYA 0820/6 MICRO	-
10	20	6	60	MICRO	1	21102176	ZYA 1020/6 MICRO	-
12	25	6	65	MICRO	1	21101976	ZYA 1225/6 MICRO	-



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut for fine stock removal. Burrs with the MICRO cut offer a higher stock removal rate and a high surface quality compared with conventionally milled surfaces. They also operate with low vibration and little noise.



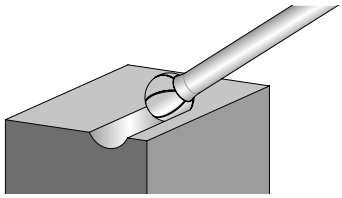
Special features:
- Unlike with mounted grinding points, there is no change in geometry due to wear and tear.
- Use on almost all materials up to 68 HRC.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm								
6	16	6	55	MICRO	1	21100276	ZYAS 0616/6 MICRO	-
8	20	6	60	MICRO	1	21100376	ZYAS 0820/6 MICRO	-
10	20	6	60	MICRO	1	21100776	ZYAS 1020/6 MICRO	-
12	25	6	65	MICRO	1	21100576	ZYAS 1225/6 MICRO	-



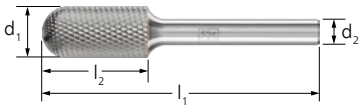
Ball shape KUD

Ball-shaped burr according to DIN 8032 for fine stock removal. Burrs with the MICRO cut offer a higher stock removal rate and a high surface quality compared with conventionally milled surfaces. They also operate with low vibration and little noise.



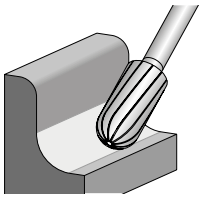
Special features:
- Unlike with mounted grinding points, there is no change in geometry due to wear and tear.
- Use on almost all materials up to 68 HRC.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
2	1.5	3	33	MICRO	1	21211033	KUD 021,5/3 MICRO	-
3	2	3	33	MICRO	1	21211073	KUD 0302/3 MICRO	-
4	3	3	34	MICRO	1	21212573	KUD 0403/3 MICRO	-
6	5	3	35	MICRO	1	21213073	KUD 0605/3 MICRO	-
Shank diameter 6 mm								
6	5	6	45	MICRO	1	21112576	KUD 0605/6 MICRO	-
8	7	6	47	MICRO	1	21112676	KUD 0807/6 MICRO	-
10	9	6	49	MICRO	1	21112776	KUD 1009/6 MICRO	-
12	10	6	51	MICRO	1	21112876	KUD 1210/6 MICRO	-



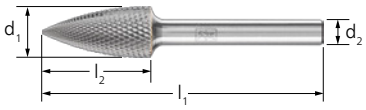
Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032 for fine stock removal. Burrs with the MICRO cut offer a higher stock removal rate and a high surface quality compared with conventionally milled surfaces. They also operate with low vibration and little noise.



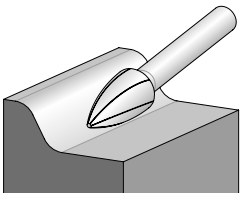
Special features:
- Unlike with mounted grinding points, there is no change in geometry due to wear and tear.
- Use on almost all materials up to 68 HRC.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
2	10	3	40	MICRO	1	21205073	WRC 0210/3 MICRO	-
3	13	3	43	MICRO	1	21205173	WRC 0313/3 MICRO	-
6	13	3	43	MICRO	1	21205273	WRC 0613/3 MICRO	-
Shank diameter 6 mm								
6	16	6	55	MICRO	1	21105076	WRC 0616/6 MICRO	-
8	20	6	60	MICRO	1	21105176	WRC 0820/6 MICRO	-
10	20	6	60	MICRO	1	21105276	WRC 1020/6 MICRO	-
12	25	6	65	MICRO	1	21105376	WRC 1225/6 MICRO	-



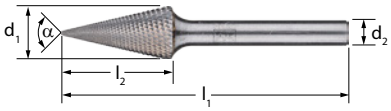
Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032 with flattened tip for fine stock removal. Burrs with the MICRO cut offer a higher stock removal rate and a high surface quality compared with conventionally milled surfaces. They also operate with low vibration and little noise.



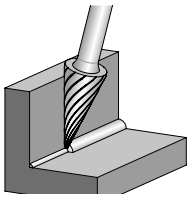
Special features:
- Unlike with mounted grinding points, there is no change in geometry due to wear and tear.
- Use on almost all materials up to 68 HRC.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm								
3	7	3	37	MICRO	1	21222573	SPG 0307/3 MICRO	-
	13	3	43	MICRO	1	21222673	SPG 0313/3 MICRO	-
6	13	3	43	MICRO	1	21222773	SPG 0613/3 MICRO	-
Shank diameter 6 mm								
6	18	6	55	MICRO	1	21122573	SPG 0618/6 MICRO	-
8	20	6	60	MICRO	1	21122593	SPG 0820/6 MICRO	-
10	20	8	60	MICRO	1	21122673	SPG 1020/6 MICRO	-
12	25	6	65	MICRO	1	21122773	SPG 1225/6 MICRO	-



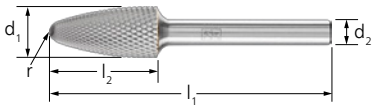
Conical pointed shape SKM

Conical pointed burr according to DIN 8032 with flattened tip for fine stock removal. Burrs with the MICRO cut offer a higher stock removal rate and a high surface quality compared with conventionally milled surfaces. They also operate with low vibration and little noise.



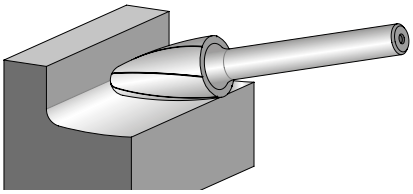
Special features:
- Unlike with mounted grinding points, there is no change in geometry due to wear and tear.
- Use on almost all materials up to 68 HRC.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	21	MICRO	1	21214073	SKM 0307/3 MICRO	-
	11	3	41	14	MICRO	1	21214173	SKM 0311/3 MICRO	-
6	13	3	43	25	MICRO	1	21215073	SKM 0613/3 MICRO	-
Shank diameter 6 mm									
6	18	6	55	18	MICRO	1	21115076	SKM 0618/6 MICRO	-
8	20	6	60	22	MICRO	1	21115086	SKM 0820/6 MICRO	-
10	20	6	60	28	MICRO	1	21115176	SKM 1020/6 MICRO	-
12	25	6	65	26	MICRO	1	21115276	SKM 1225/6 MICRO	-



Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032 for fine stock removal. Burrs with the MICRO cut offer a higher stock removal rate and a high surface quality compared with conventionally milled surfaces. They also operate with low vibration and little noise.



Special features:
- Unlike with mounted grinding points, there is no change in geometry due to wear and tear.
- Use on almost all materials up to 68 HRC.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	0.75	MICRO	1	21217593	RBF 0307/3 MICRO	-
	13	3	43	0.75	MICRO	1	21218173	RBF 0313/3 MICRO	-
6	13	3	43	1.5	MICRO	1	21230073	RBF 0613/3 MICRO	-
Shank diameter 6 mm									
6	18	6	55	1.5	MICRO	1	21157205	RBF 0618/6 MICRO	-
8	20	6	60	1.2	MICRO	1	21157208	RBF 0820/6 MICRO	-
10	20	6	60	2.5	MICRO	1	21157210	RBF 1020/6 MICRO	-
12	25	6	65	2.5	MICRO	1	21117876	RBF 1225/6 MICRO	-



Set 1502 MICRO

Set 1502 MICRO contains ten small tungsten carbide burrs for finishing work in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYA 0210/3 MICRO, ZYA 0313/3 MICRO, ZYA 0613/3 MICRO, WRC 0210/3 MICRO, WRC 0313/3 MICRO, WRC 0613/3 MICRO, KUD 0302/3 MICRO, KUD 0605/3 MICRO, RBF 0307/3 MICRO and RBF 0613/3 MICRO with a shank diameter of 3 mm, cut MICRO.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm					
3	MICRO	1	21901502	1502 MICRO	-

TC burrs for high-performance applications
MICRO cut for finishing work



Set 1303 MICRO

Set 1303 MICRO contains three small tungsten carbide burrs for finishing work in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYA 0313/3 MICRO, WRC 0313/3 MICRO and RBF 0313/3 MICRO with a shank diameter of 3 mm, cut MICRO.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm					
3	MICRO	1	21901303	1303 MICRO	-



Set 1306 MICRO

Set 1306 MICRO contains three tungsten carbide burrs for finishing work in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYAS 0616/6 MICRO, WRC 0616/6 MICRO and RBF 0618/6 MICRO with a shank diameter of 6 mm, cut MICRO.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	MICRO	1	21901306	1306 MICRO	-



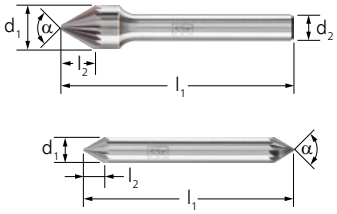
Set 1312 MICRO

Set 1312 MICRO contains three tungsten carbide burrs for finishing work in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: ZYAS 1225/6 MICRO, WRC 1225/6 MICRO and RBF 1225/6 MICRO with a shank diameter of 6 mm, cut MICRO.

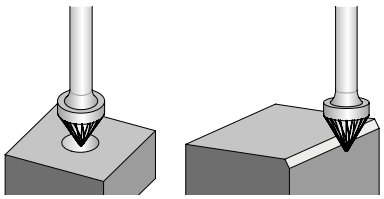
Special features:
- The sturdy plastic box protects the tools against dirt and damage.

d_2 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm					
6	MICRO	1	21901312	1312 MICRO	-



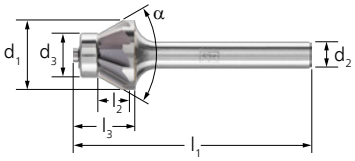
Conical counterbore shape KSJ and conical counterbore shape KSJ (double-ended)

Conical counterbore burr according to DIN 8032 with cut conforming to DIN 8033, with point angle (60°). The KSJ 0605/6 (double-ended) design is cut and usable on both sides. Suitable for flexible counterboring and chamfering.



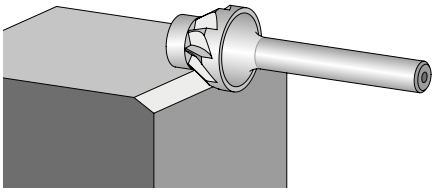
Special features:
- Can be guided as desired.
- Extremely flexible for use in hard-to-reach areas.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
6	5	6	50	60	3	1	21115536	KSJ 0605/6 Z3	-
10	8	6	53	60	3	1	21115736	KSJ 1008/6 Z3	-
16	13	6	56	60	3	1	21115336	KSJ 1613/6 Z3	-
					5	1	21115356	KSJ 1613/6 Z5	-



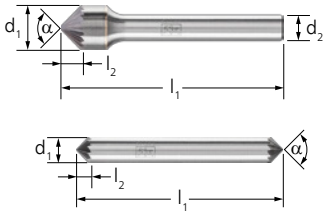
Conical counterbore shape KSJ EDGE

Conical counterbore burr for producing precisely defined 30° chamfer angles.



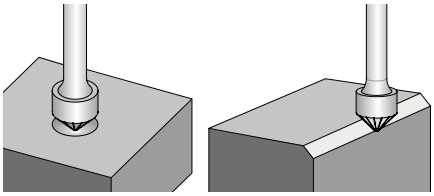
Special features:
- Special design for precise guidance, without damaging the workpiece.
- Safe and comfortable to guide thanks to design with ball bearings.
- Creates exact edge shapes in one single step.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	d_3 [mm]	l_3 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm											
16	5	6	54	10	14	60	EDGE	1	21115366	KSJ 1605/6 EDGE 30°	-
							EDGE ALU	1	21115367	KSJ 1605/6 EDGE ALU 30°	-



Conical counterbore shape KSK and conical counterbore shape KSK (double-ended)

Conical counterbore burr according to DIN 8032 with cut conforming to DIN 8033, with angle (90°). The KSK 0603/6 (double-ended) design is cut and usable on both sides. Suitable for flexible counterboring and chamfering.

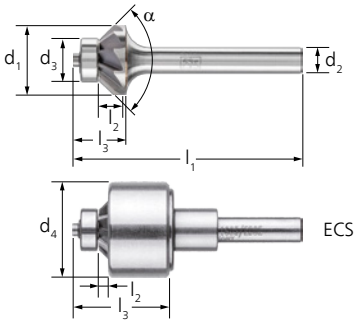


Special features:
- Can be guided as desired.
- Extremely flexible for use in hard-to-reach areas.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm									
6	3	6	50	90	3	1	21115636	KSK 0603/6 Z3	-
10	5	6	50	90	3	1	21115836	KSK 1005/6 Z3	-
16	8	6	53	90	3	1	21115436	KSK 1608/6 Z3	-
					5	1	21115456	KSK 1608/6 Z5	-

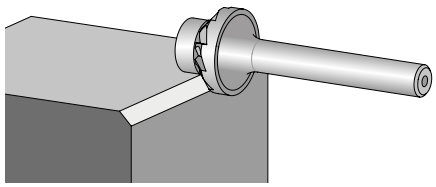
TC burrs for high-performance applications

TC burrs for flexible and defined work on edges



Conical counterbore shape KSK EDGE

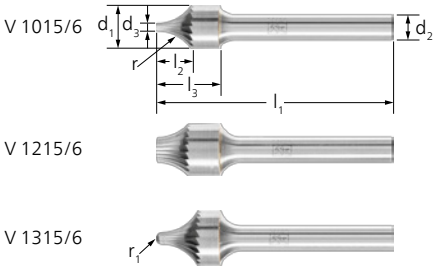
Conical counterbore burr for producing precisely defined 45° chamfer angles. The EDGE Cutting System (ECS) allows for chamfers that are 1.2 mm wide (+/- 0.2 mm). The ECS burr can be reordered and replaced. Matching burr: KSK 1603/6 EDGE (ALU) 45°.



Special features:

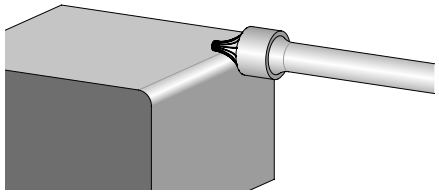
- Special design for precise guidance, without damaging the workpiece.
- Safe and comfortable to guide thanks to design with ball bearings.
- Creates exact edge shapes in one single step.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	d_3 [mm]	l_3 [mm]	d_4 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm												
16	3	6	52	10	12	-	90	EDGE	1	21115466	KSK 1603/6 EDGE 45°	-
	1	6	52	10	24	25	90	EDGE	1	21115467	KSK 1603/6 EDGE 45° ECS	-
	3	6	52	10	12	-	90	EDGE ALU	1	21115469	KSK 1603/6 EDGE ALU 45°	-
	1	6	52	10	24	25	90	EDGE ALU	1	*21115468*	KSK 1603/6 EDGE ALU 45° ECS	-



Concave radius burrs V

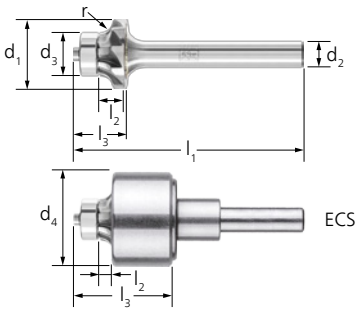
Concave radius burrs with concave end shape, cut conforming to DIN 8033. Suitable for the production and processing of outer radii and rounded edges.



Special features:

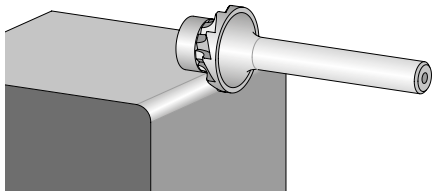
- Can be guided as desired.
- Extremely flexible for use in hard-to-reach areas.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	d_3 [mm]	l_3 [mm]	r [mm]	r_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm												
10	8	6	55	2	15	10	-	3	1	21152536	V 1015/6 Z3	-
12	7	6	55	6	15	10	-	3	1	21152836	V 1215/6 Z3	-
13	10	6	55	3	15	10	1.5	3	1	21152736	V 1315/6 Z3	-



Concave radius burrs V EDGE

Concave radius burrs for the production of precise radii. Suitable for the production and processing of 3 mm outer radii. The ECS burr can be reordered and replaced. Matching burr: V 1612/6 EDGE R3,0.

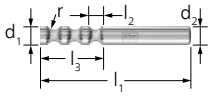


Special features:

- Special design for precise guidance, without damaging the workpiece.
- Safe and comfortable to guide thanks to design with ball bearings.
- Creates exact edge shapes in one single step.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	d_3 [mm]	l_3 [mm]	d_4 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm												
16	3	6	52	10	12	-	3	EDGE	1	21152936	V 1612/6 EDGE R3,0	-
					24	25	3	EDGE	1	21152946	V 1612/6 EDGE R3,0 ECS	-

R 0625/6
R 0830/8

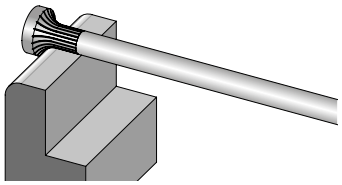


R 1618/8



Radius burrs R

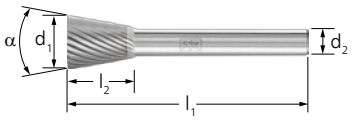
Radius burrs with a concave shape and special cut. Suitable for the production and processing of outer radii and rounded edges.



Special features:

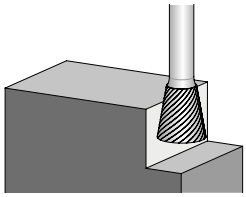
- Can be guided as desired.
- Extremely flexible for use in hard-to-reach areas.
- Available in two versions: Cylindrical with triple concave contour; or with concave shape, tapered towards shank.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	l_3 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
6	5	6	65	25	3	Special cut (SP)	1	21143086	R 0625/6 SP	-
Shank diameter 8 mm										
8	5	8	65	27	3	Special cut (SP)	1	21143288	R 0830/8 SP	-
16	12	8	118	18	6	Special cut (SP)	1	21143588	R 1618/8 SP	-



Inverted cones WKN without end cut

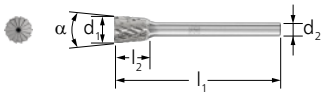
Inverted cone-shaped rotary cutter, tapered towards the shank according to DIN 8032 with cut conforming to DIN 8033. Suitable for work on hard-to-reach, reverse-side edges.



Special features:

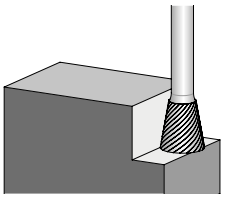
- Can be guided as desired.
- Extremely flexible for use in hard-to-reach areas.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	8	3 PLUS	1	21208583	WKN 0307/3 Z3 PLUS	-
					5	1	21208553	WKN 0307/3 Z5	-
6	7	3	37	10	3 PLUS	1	21208683	WKN 0607/3 Z3 PLUS	-
					5	1	21208653	WKN 0607/3 Z5	-
Shank diameter 6 mm									
10	13	6	53	10	3	1	21155036	WKN 1013/6 Z3	-
12	13	6	53	20	3	1	21155136	WKN 1213/6 Z3	-
16	13	6	53	20	3	1	21155236	WKN 1613/6 Z3	-



Inverted cones WKNS with end cut

Inverted cone-shaped rotary cutter, tapered towards the shank according to DIN 8032 with cut conforming to DIN 8033. Shape WKNS with end cut. Suitable for work on hard-to-reach, reverse-side edges.



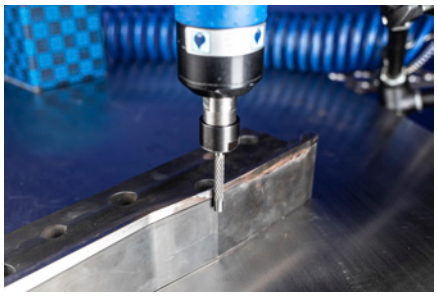
Special features:
- Can be guided as desired.
- Extremely flexible for use in hard-to-reach areas.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
3	7	3	37	8	3 PLUS	1	21207583	WKNS 0307/3 Z3 PLUS	-
					5	1	21207553	WKNS 0307/3 Z5	-
6	7	3	37	10	3 PLUS	1	21207683	WKNS 0607/3 Z3 PLUS	-
					5	1	21207653	WKNS 0607/3 Z5	-

Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:
① Select the material group to be machined.
② Determine the type of application.
③ Select the cut.
④ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:
⑤ Select the required burr diameter.
⑥ The cutting speed range and the burr diameter determine the recommended rotational speed range.



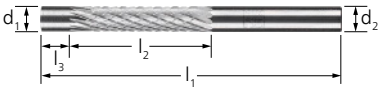
Cutting speeds – TC copy milling burrs

① Material group			② Used for	③ Cut	④ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, tempering steels	Coarse stock removal	4	450–600 m/min
			Fine stock removal	MICRO	600–750 m/min
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel	Coarse stock removal	4	250–350 m/min
			Fine stock removal	MICRO	450–600 m/min

Example:
TC copy milling burr,
MICRO cut,
burr dia. 8 mm.
Fine stock removal on steels up to 1,200 N/mm².
Cutting speed: 600–750 m/min
Rotational speed range:
24,000–30,000 RPM

⑤ Burr dia. [mm]	⑥ Cutting speeds [m/min]				
	250	350	450	600	750
	Rotational speeds [RPM]				
3	27,000	37,000	48,000	64,000	80,000
6	13,000	19,000	24,000	32,000	40,000
8	10,000	14,000	18,000	24,000	30,000

Universal cut KSF 4

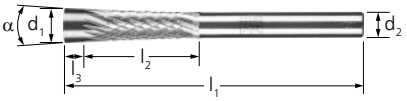


Cylindrical shape ZYA without end cut

Cylindrical burr for levelling elevations such as weld seams and for repairing cutting and punching blades in tool and mould-making. The uncut area provides optimum contour guidance and protects the workpiece against damage.

Special features:
- Cut 4 for coarse stock removal on steel and cast steel, tool steels as well as hardened and heat-treated steels over 1,200 N/mm².
- Long tool life and high surface quality.
- Reduced machining time.

d_1 [mm]	l_2 [mm]	l_3 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm									
3	25	7	3	65	4	1	21201289	ZYA 0325/3 Z4 7MM KFS	-
Shank diameter 6 mm									
6	30	7	6	70	4	1	21101699	ZYA 0630/6 Z4 7MM KFS	-
8	30	7	6	77	4	1	21101789	ZYA 0830/6 Z4 7MM KFS	-



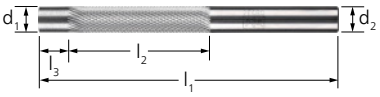
Inverted cones WKN without end cut

Inverted cone-shaped burr, tapered towards the shank for work on punching tools. The uncut area provides optimum contour guidance and protects the workpiece against damage.

Special features:
- Cut 4 for coarse stock removal on steel and cast steel, tool steels as well as hardened and heat-treated steels over 1,200 N/mm².
- Long tool life and high surface quality.
- Reduced machining time.

d_1 [mm]	l_2 [mm]	l_3 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
8	26	7	6	73	4	4	1	21155009	WKN 0826/6 Z4 7MM KFS	-

MICRO cut for finishing work

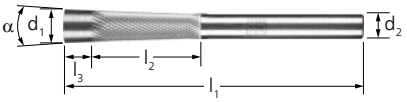


Cylindrical shape ZYA without end cut

Cylindrical burr for levelling elevations such as weld seams and for repairing cutting and punching blades in tool and mould-making. The uncut area provides optimum contour guidance and protects the workpiece against damage.

Special features:
- MICRO cut for fine stock removal on almost all materials up to a hardness of 68 HRC.
- Long tool life and high surface quality.
- Reduced machining time.

d_1 [mm]	l_2 [mm]	l_3 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm									
3	25	7	3	65	MICRO	1	21201288	ZYA 0325/3 MICRO 7 mm KFS	-
Shank diameter 6 mm									
6	30	7	6	30	MICRO	1	21101698	ZYA 0630/6 MICRO 7MM KFS	-
8	30	7	6	30	MICRO	1	21101788	ZYA 0830/6 MICRO 7 mm KFS	-



Inverted cones WKN without end cut

Inverted cone-shaped burr, tapered towards the shank for work on punching tools. The uncut area provides optimum contour guidance and protects the workpiece against damage.

Special features:
- MICRO cut for fine stock removal on almost all materials up to a hardness of 68 HRC.
- Long tool life and high surface quality.
- Reduced machining time.

d_1 [mm]	l_2 [mm]	l_3 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
8	26	7	6	73	4	MICRO	1	21155008	WKN 0826/6 MICRO 7 mm KFS	-



PZF 0622/6-60


PZF 0622/6-80


PZF 0422/6-60


PZF 0422/6-70

Cylindrical shape

Cylindrical burr with drill tip and cut cutting surfaces for time-saving milling of profile cylinders with pull protection. The integrated drill tip enables accurate centring for drilling with pin-point precision.

Special features:
- Enormous time savings thanks to very high stock removal rate.
- Less susceptible to breakage, as tool jamming is minimized.
- Good tool life, optimum chip removal and easy to use.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
4	22	6	60	MICRO	1	26007712	PZF 0422/6-60	-
			70	MICRO	1	26007713	PZF 0422/6-70	-
6	22	6	60	MICRO	1	26007674	PZF 0622/6-60	-
			80	MICRO	1	26007711	PZF 0622/6-80	-

Strike plate burrs SBF



Strike plate burrs SBF

Cylindrical burr with radius end according to DIN 8032 for milling strike plates (e.g. facings or security covers) in order to expose the profile cylinder behind it.

Special features:
- Specially developed burr geometry prevents built-up edges and tool clogging when working on particularly soft aluminium materials.
- Perfectly complements the profile cylinder burrs PZF.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/ unit EUR
6	20	6	80	ALU	1	26007714	SBF 0620/6-80	-

HSS rotary cutters
General information

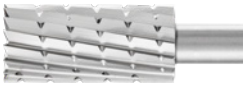
Overview of cuts



ALU cut
- Machining of soft non-ferrous metals, brass, copper, aluminium alloys, plastics, fibre-reinforced plastics and rubber.
- Rotational speed range of 4,000 to 6,000 RPM depending on the burr diameter.



Cut 1
- Machining of stainless steel (INOX), soft non-ferrous metals and plastics.
- Rotational speed range of 1,200 to 23,900 RPM depending on the burr diameter.



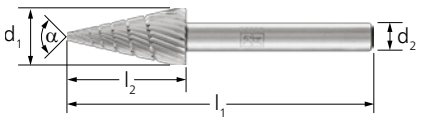
Cut 2 with chip breaker
- Machining of steel, cast steel and cast iron, stainless steel (INOX), non-ferrous metals and plastics.
- Rotational speed range of 1,200 to 13,200 RPM depending on the burr diameter.



Cut 3 with chip breaker
- Machining of steel, cast steel and cast iron.
- Rotational speed range of 1,200 to 7,900 RPM depending on the burr diameter.

Explanation of the code system

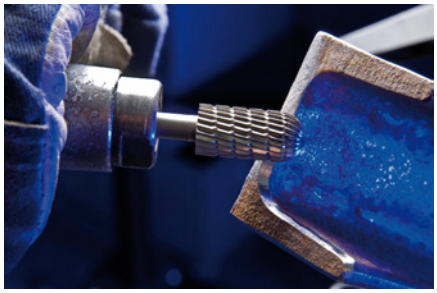
d_1 = Burr dia.
l_2 = Cut length
d_2 = Shank dia.
l_1 = Total length
α = Angle



Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:
① Select the material group to be machined.
② Determine the type of application.
③ Select the cut.
④ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:
⑤ Select the required burr diameter.
⑥ The cutting speed range and the burr diameter determine the recommended rotational speed range.



Cutting speeds – HSS rotary cutters

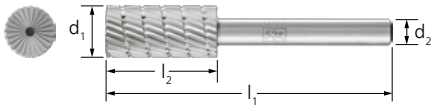
① Material group			② Used for	③ Cut	④ Cutting speed
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, tempering steels	Coarse stock removal	2	60–80 m/min
				3	
				SP	
			Fine stock removal	3	80–100 m/min
				SP	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse stock removal	1	60–80 m/min
			Fine stock removal	1	80–100 m/min
				2	60–80 m/min
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys, brass, copper, zinc	Coarse stock removal	ALU	200–300 m/min
				1	
			Fine stock removal	2	200–250 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	Coarse stock removal	2	60–80 m/min
				3	
				SP	
			Fine stock removal	3	80–100 m/min
				SP	
Plastics, other materials	Fibre-reinforced thermoplastics and duroplastics, hard rubber, wood		Coarse stock removal	ALU	200–300 m/min
				1	
			Fine stock removal	1	250–300 m/min
				2	200–250 m/min

HSS rotary cutters
General information

Example:
HSS rotary cutter,
Cut 2,
Burr dia. 12 mm.
Coarse stock removal on steels up to 1,200 N/mm².
Cutting speed: 60–80 m/min
Rotational speed range: 1.600–2.200 RPM

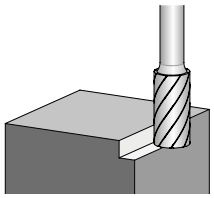
⑤ Burr dia. [mm]	⑥ Cutting speeds [m/min]					
	60	80	100	200	250	300
	Rotational speeds [RPM]					
1.6	12,000	16,000	19,900	39,800	49,800	59,700
2.3	8,400	11,100	13,900	27,700	34,600	41,600
3.0	6,000	8,000	10,000	19,900	24,900	29,900
3.2	6,000	8,000	10,000	19,900	24,900	29,900
4.0	4,800	6,400	8,000	16,000	19,900	23,900
4.2	4,800	6,400	8,000	16,000	19,900	23,900
5.0	3,900	5,100	6,400	12,800	16,000	19,100
5.2	3,900	5,100	6,400	12,800	16,000	19,100
6.0	3,200	4,300	5,400	10,700	13,300	16,000
6.2	3,200	4,300	5,400	10,700	13,300	16,000
7.0	2,800	3,700	4,600	9,100	11,400	13,700
8.0	2,400	3,200	4,000	8,000	10,000	12,000
8.2	2,400	3,200	4,000	8,000	10,000	12,000
10.0	2,000	2,600	3,200	6,400	8,000	9,600
12.0	1,600	2,200	2,700	5,400	6,700	8,000
14.0	1,400	1,900	2,300	4,600	5,700	6,900
16.0	1,200	1,600	2,000	4,000	5,000	6,000
20.0	900	1,300	1,600	3,200	4,000	4,800

For fine and coarse stock removal



Cylindrical shape with end cut A-ST

The cylindrical HSS rotary cutters with end cut and special tooth geometry, manufactured to a high quality. The burrs can also be used cost-effectively with low-power tool drives at low rotational speeds.



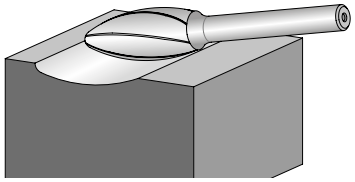
Special features:
- Suitable for use on steel, cast steel, stainless steel (INOX), non-ferrous metals, cast iron and plastics.
- Highly aggressive.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm								
4	13	6	60	3	1	22404336	HSS A 0413ST/6 Z3	-
6	16	6	60	1	1	22404716	HSS A 0616ST/6 Z1	-
				2	1	22404726	HSS A 0616ST/6 Z2	-
				3	1	22404736	HSS A 0616ST/6 Z3	-
8	20	6	60	3	1	22405036	HSS A 0820ST/6 Z3	-
10	13	6	53	1	1	22405316	HSS A 1013ST/6 Z1	-
				2	1	22405326	HSS A 1013ST/6 Z2	-
				3	1	22405336	HSS A 1013ST/6 Z3	-
	20	6	60	3	1	22405436	HSS A 1020ST/6 Z3	-
12	25	6	65	1	1	22405516	HSS A 1225ST/6 Z1	-
				2	1	22405526	HSS A 1225ST/6 Z2	-
				3	1	22405536	HSS A 1225ST/6 Z3	-
16	25	6	65	ALU	1	22405916	HSS A 1625ST/6 ALU	-
				2	1	22405826	HSS A 1625ST/6 Z2	-
				3	1	22405836	HSS A 1625ST/6 Z3	-



Flame-shaped B

The flame-shaped HSS rotary cutters with special tooth geometry, manufactured to a high quality. The burrs can also be used cost-effectively with low-power tool drives at low rotational speeds.



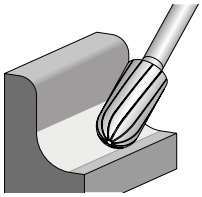
Special features:
- Suitable for use on steel, cast steel and cast iron.
- Highly aggressive.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm									
8	20	6	60	1.5	3	1	22407136	HSS B 0820/6 Z3	-
12	30	6	70	2	3	1	22407436	HSS B 1230/6 Z3	-
16	35	6	75	2.6	3	1	22407836	HSS B 1635/6 Z3	-



Cylindrical shape with radius end C

Cylindrical HSS rotary cutter with radius end, end cut and special tooth geometry, manufactured to a high quality. The burrs can also be used cost-effectively with low-power tool drives at low rotational speeds.



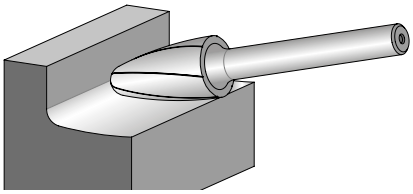
Special features:
- Suitable for use on steel, cast steel, stainless steel (INOX), non-ferrous metals, cast iron and plastics.
- Highly aggressive.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm								
6	16	6	60	1	1	22410716	HSS C 0616/6 Z1	-
				2	1	22410726	HSS C 0616/6 Z2	-
				3	1	22410736	HSS C 0616/6 Z3	-
8	20	6	60	3	1	22411036	HSS C 0820/6 Z3	-
10	20	6	60	3	1	22411336	HSS C 1020/6 Z3	-
12	25	6	65	1	1	22411516	HSS C 1225/6 Z1	-
				2	1	22411526	HSS C 1225/6 Z2	-
				3	1	22411536	HSS C 1225/6 Z3	-
16	25	6	65	ALU	1	22411816	HSS C 1625/6 ALU	-
				3	1	22411836	HSS C 1625/6 Z3	-



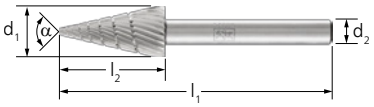
Tree shape with radius end H

Tree-shaped HSS rotary cutter with radius end, end cut and special tooth geometry, manufactured to a high quality. The burrs can also be used cost-effectively with low-power tool drives at low rotational speeds.



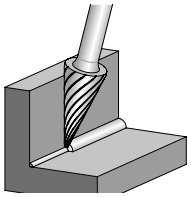
Special features:
- Suitable for use on steel, cast steel and cast iron.
- Highly aggressive.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm									
8	20	6	60	1.2	3	1	22431836	HSS H 0820/6 Z3	-
10	20	6	60	2.5	3	1	22432436	HSS H 1020/6 Z3	-
12	25	6	65	2.5	3	1	22433036	HSS H 1225/6 Z3	-
16	30	6	70	3.6	3	1	22434536	HSS H 1630/6 Z3	-



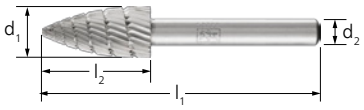
Conical pointed shape G

Conical pointed burr with flattened tip and special tooth geometry, manufactured to a high quality. The burrs can also be used cost-effectively with low-power tool drives at low rotational speeds.



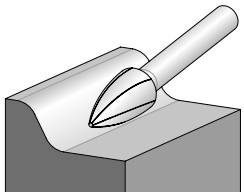
Special features:
- Suitable for use on steel, cast steel, stainless steel (INOX), cast iron, non-ferrous metals and plastics.
- Highly aggressive.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm									
6	18	6	60	14	3	1	22422736	HSS G 0618/6 Z3	-
10	20	6	60	28	1	1	22423316	HSS G 1020/6 Z1	-
					2	1	22423326	HSS G 1020/6 Z2	-
					3	1	22423336	HSS G 1020/6 Z3	-
12	25	6	65	27	1	1	22423516	HSS G 1225/6 Z1	-
					2	1	22423526	HSS G 1225/6 Z2	-
					3	1	22423536	HSS G 1225/6 Z3	-



Pointed tree shape K

Pointed tree-shaped burr with flattened tip and special tooth geometry, manufactured to a high quality. The burrs can also be used cost-effectively with low-power tool drives at low rotational speeds.



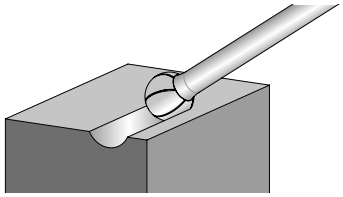
Special features:
- Suitable for use on steel, cast steel, stainless steel (INOX), cast iron, non-ferrous metals and plastics.
- Highly aggressive.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm								
6	18	6	60	2	1	22440726	HSS K 0618/6 Z2	-
				3	1	22440736	HSS K 0618/6 Z3	-
10	20	6	60	3	1	22441336	HSS K 1020/6 Z3	-
12	25	6	65	1	1	22441516	HSS K 1225/6 Z1	-
				3	1	22441536	HSS K 1225/6 Z3	-
	30	6	70	1	1	22441616	HSS K 1230/6 Z1	-
				2	1	22441626	HSS K 1230/6 Z2	-
				3	1	22441636	HSS K 1230/6 Z3	-
16	30	6	70	ALU	1	22441816	HSS K 1630/6 ALU	-
				2	1	22441826	HSS K 1630/6 Z2	-
				3	1	22441836	HSS K 1630/6 Z3	-



Ball shape F

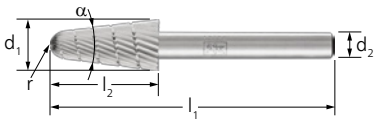
Ball-shaped burr with special tooth geometry, manufactured to a high quality. The burrs can also be used cost-effectively with low-power tool drives at low rotational speeds.



Special features:
- Suitable for use on steel, cast steel, stainless steel (INOX), cast iron, non-ferrous metals and plastics.
- Highly aggressive.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

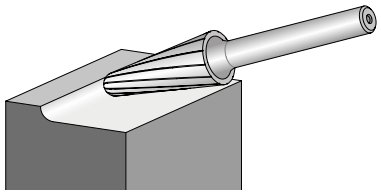
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm								
4	3	6	55	3	1	22418836	HSS F 0403/6 Z3	-
6	5	6	55	3	1	22419736	HSS F 0605/6 Z3	-
8	7	6	55	1	1	22420016	HSS F 0807/6 Z1	-
				3	1	22420036	HSS F 0807/6 Z3	-
10	9	6	49	3	1	22420336	HSS F 1009/6 Z3	-
12	10	6	51	1	1	22420516	HSS F 1210/6 Z1	-
				3	1	22420536	HSS F 1210/6 Z3	-
16	14	6	54	1	1	22420816	HSS F 1614/6 Z1	-
				2	1	*22420826*	HSS F 1614/6 Z2	-
				3	1	22420836	HSS F 1614/6 Z3	-

HSS rotary cutters
For fine and coarse stock removal



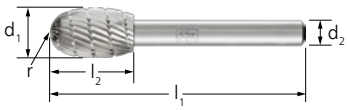
Conical shape with radius end L

Conical burr with radius end and special tooth geometry, manufactured to a high quality. The burrs can also be used cost-effectively with low-power tool drives at low rotational speeds.



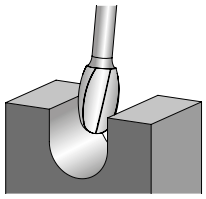
Special features:
- Suitable for use on steel, cast steel, cast iron, non-ferrous metals and plastics.
- Highly aggressive.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 6 mm										
10	20	6	60	14	2.9	3	1	22450136	HSS L 1020/6 Z3	-
12	25	6	65	14	3.3	3	1	22450736	HSS L 1225/6 Z3	-
	30	6	70	14	2.6	3	1	22451236	HSS L 1230/6 Z3	-
16	30	6	70	14	4.8	ALU	1	22451816	HSS L 1630/6 ALU	-
						3	1	22451836	HSS L 1630/6 Z3	-



Oval shape O

Oval burr with special tooth geometry, manufactured to a high quality. The burrs can also be used cost-effectively with low-power tool drives at low rotational speeds.



Special features:
- Suitable for use on steel, cast steel, stainless steel (INOX), cast iron, non-ferrous metals and plastics.
- Highly aggressive.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

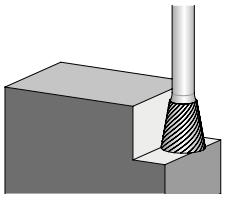
d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm									
6	10	6	55	2.8	3	1	22460136	HSS O 0610/6 Z3	-
10	16	6	56	4	3	1	22460836	HSS O 1016/6 Z3	-
12	20	6	60	5	3	1	22461436	HSS O 1220/6 Z3	-
16	25	6	65	6.5	ALU	1	22461816	HSS O 1625/6 ALU	-
					3	1	22461836	HSS O 1625/6 Z3	-





Inverted cone with end cut W-ST

Inverted cone-shaped burr, tapered towards the shank, with end cut and special tooth geometry, manufactured to a high quality. The burrs can also be used cost-effectively with low-power tool drives at low rotational speeds.



Special features:
- Suitable for use on steel, cast steel and cast iron.
- Highly aggressive.
- There is reduced wear on the tool drive due to impact-free work without chatter marks, thanks to the high concentricity.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm									
12	13	6	53	20	3	1	22471236	HSS W 1213ST/6 Z3	-



Set 81 HSS

Set 81 HSS contains 10 HSS rotary cutters in the most common shapes and dimensions.

Contents:
The set comprises one each of the following:
HSS A 0616ST/6 Z3, HSS A 1013ST/6 Z3,
HSS A 1225ST/6 Z3, HSS C 0616/6 Z3,
HSS C 1225/6 Z3, HSS K 0618/6 Z3,
HSS K 1230/6 Z3, HSS K 1630/6 Z3,
HSS F 1210/6 Z3 and HSS L 1630/6 Z3 with a shank diameter of 6 mm, cut 3.

Special features:
- The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm				
3	1	22900813	81 HSS	-



Set 82 HSS

Set 82 HSS contains 10 HSS rotary cutters in the most common shapes and dimensions.

Contents:
The set comprises one each of the following:
HSS A 1013ST/6 Z3, HSS A 1625ST/6 Z3,
HSS K 1630/6 Z3, HSS F 1614/6 Z3,
HSS G 1020/6 Z3, HSS L 1020/6 Z3,
HSS L 1630/6 Z3, HSS O 1625/6 Z3,
HSS W 1213ST/6 Z3 and HSS 45/6 Z3 with a shank diameter of 6 mm, cut 3.

Special features:
- The burrs are secured at the shanks, facilitating the selection and withdrawal of the tools.
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm				
3	1	22900823	82 HSS	-



Set 83 HSS

Set 83 HSS contains 18 HSS rotary cutters in the most common shapes and dimensions.

Contents:
The set comprises one each of the following:
HSS A 0616ST/6 Z3, HSS A 1225ST/6 Z3,
HSS C 0616/6 Z3, HSS C 1225/6 Z3,
HSS K 0618/6 Z3, HSS K 1225/6 Z3,
HSS K 1230/6 Z3, HSS F 0403/6 Z3,
HSS F 0807/6 Z3, HSS F 1210/6 Z3,
HSS F 1614/6 Z3, HSS G 0618/6 Z3,
HSS G 1225/6 Z3, HSS O 0610/6 Z3,
HSS O 1220/6 Z3, HSS 55/6 Z3,
HSS 63/6 Z3 and HSS 64/6 Z3 with a shank diameter of 6 mm, cut 3.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm				
3	1	22900833	83 HSS	-



Set 85 Z3

Set 85 Z3 contains three HSS rotary cutters for fine and coarse stock removal in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: A 0616ST/6 Z3, C 0616/6 Z3 and K 0618/6 Z3 with a shank diameter of 6 mm, cut 3.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm				
3	1	22900810	85 Z3	-



Set 86 Z3

Set 86 Z3 contains three HSS rotary cutters for fine and coarse stock removal in the most common shapes and dimensions.

Contents:
The set comprises one each of the following: A 1225ST/6 Z3, C 1225/6 Z3 and K 1225/6 Z3 with a shank diameter of 6 mm, cut 3.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm				
3	1	22900811	86 Z3	-

HSS 45/6



HSS 55/6



HSS 63ST/6



HSS 64/6

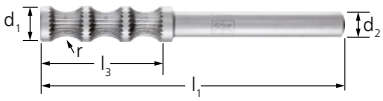


Special shapes shank dia. 6 mm

Rotary cutters in 4 special shapes with a shank diameter of 6 mm.

Special features:
- Suited to a range of milling work due to their different shapes.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm									
12	18	6	58	-	3	1	22104536	HSS 45/6 Z3	-
6	20	6	60	-	3	1	22105536	HSS 55/6 Z3	-
12	30	6	70	7	3	1	22106336	HSS 63ST/6 Z3	-
				-	3	1	22106436	HSS 64/6 Z3	-



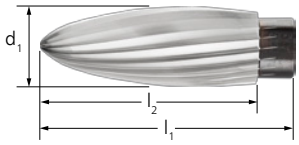
HSS edge trimming cutter

Due to the 3 identical cutting areas, this HSS edge trimming cutter provides three milling areas. Cylindrical rotary cutter with triple, concave contour and special cut, with a shank diameter of 6 mm. Cutting speed range of 60–80 m/min, rotational speed range of 3,100–4,200 RPM. When using the smallest burr diameter: max. 9,000 RPM.

Special features:
- Suitable for edge breaking to a defined radius.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/unit EUR
Shank diameter 8 mm									
8	30	6	70	5	Special cut (SP)	1	22215656	HSS 156/6 SP	-

HSS 119



HSS 120

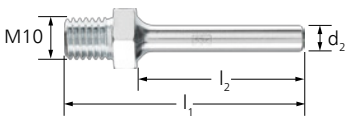


HSS rotary cutters for light metals with female thread

Multi-purpose HSS rotary cutters, similar to the tree shape. For work on soft non-ferrous metals: Cutting speed range of 200–300 m/min, rotational speed range of 3,100–4,700 RPM. For work on aluminium, up to max. 9.000 RPM.

Special features:
- Available in two different special cuts, with female thread M10.
- HSS 120 with chip breaker.

d_1 [mm]	l_1 [mm]	l_2 [mm]	Female thread DIN	Suitable arbors	Cut		Item no.	Designation	Price/unit EUR
20	62	53	M10	BO 6/10, BO 8/10	Special cut (SP)	1	22211989	HSS 119 M10 SP	-
	54	45	M10	BO 6/10, BO 8/10	Special cut (SP)	1	22212089	HSS 120 M10 SP	-



Arbor for tools with female thread

Suitable for tools with female thread M10.

d_2 [mm]	l_2 [mm]	l_1 [mm]	Thread	Suitable for		Item no.	Designation	Price/unit EUR
6	40	57	M10	HSS 119, HSS 120	1	23600610	BO 6/10 M10	-
8	40	57	M10	HSS 119, HSS 120	1	23600810	BO 8/10 M10	-

HSS rotary cutters

HSS rotary cutters for special shapes



HSS engraving cutters

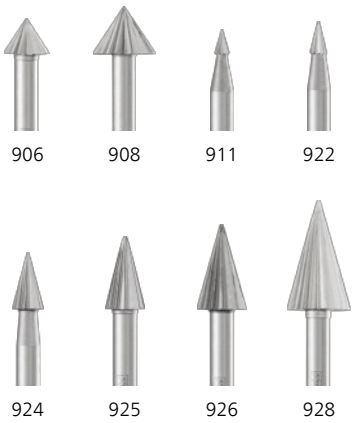
Suitable for fine stock removal in small and hard-to-reach places.

Special features:

- Available with special cut and in various shapes and dimensions.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 8 mm									
3	2.7	6	60	-	Special cut (SP)	1	22230156	301/6 SP	-
	4.5	6	60	34	Special cut (SP)	1	22230656	306/6 SP	-
6	5.6	6	60	-	Special cut (SP)	1	22231156	311/6 SP	-

HSS finishing cutters



906-928

Tools designed specifically for fine stock removal.

Special features:

- Available with special cut, 9 different rotary cutter shapes and dimensions, a shank diameter of 3 mm and a shank length of 30 mm.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
6	4.2	3	34.2	71	Special cut (SP)	1	22390653	906/3 SP	-
8	5.6	3	35.6	71	Special cut (SP)	1	22390853	908/3 SP	-
1.6	2.8	3	32.8	28	Special cut (SP)	1	*22391153*	911/3 SP	-
2.3	4	3	34	29	Special cut (SP)	1	*22392253*	922/3 SP	-
3.2	5.6	3	35.6	30	Special cut (SP)	1	22392353	923/3 SP	-
4.2	7	3	37	32	Special cut (SP)	1	22392453	924/3 SP	-
5.2	8.7	3	38.7	32	Special cut (SP)	1	22392553	925/3 SP	-
6.2	10.5	3	40.5	32	Special cut (SP)	1	22392653	926/3 SP	-
8.2	14	3	44	32	Special cut (SP)	1	22392853	928/3 SP	-



941–954

Tools designed specifically for fine stock removal.

Special features:

- Available with special cut, 12 different rotary cutter shapes and dimensions, a shank diameter of 3 mm and a shank length of 30 mm.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm									
1.6	1.4	3	31.4	-	Special cut (SP)	1	22394153	941/3 SP	-
2.3	1.7	3	31.7	-	Special cut (SP)	1	22394253	942/3 SP	-
3.2	2.2	3	32.2	-	Special cut (SP)	1	22394353	943/3 SP	-
4	2.9	3	32.9	-	Special cut (SP)	1	22394453	944/3 SP	-
5	4.4	3	34.4	-	Special cut (SP)	1	22394553	945/3 SP	-
6	5	3	35	-	Special cut (SP)	1	22394653	946/3 SP	-
7	6	3	36	-	Special cut (SP)	1	22394753	947/3 SP	-
8	7	3	37	-	Special cut (SP)	1	22394853	948/3 SP	-
	2	3	32	9.5	Special cut (SP)	1	22395153	951/3 SP	-
10	2.5	3	32.5	11.5	Special cut (SP)	1	22395253	952/3 SP	-
12	3	3	33	14	Special cut (SP)	1	22395353	953/3 SP	-
14	3.5	3	33.5	15.5	Special cut (SP)	1	22395453	954/3 SP	-



961–987

Tools designed specifically for fine stock removal.

Special features:
- Available with special cut, 10 different rotary cutter shapes and dimensions, a shank diameter of 3 mm and a shank length of 30 mm.
- HSS finishing cutters 987 with chip breaker.

d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α [°]	r [mm]	Cut		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm										
8	2	3	32	-	1.1	Special cut (SP)	1	22396153	961/3 SP	-
10	2.3	3	32.3	-	1.15	Special cut (SP)	1	22396253	962/3 SP	-
12	2.6	3	32.6	-	1.3	Special cut (SP)	1	22396353	963/3 SP	-
14	3	3	33	-	1.5	Special cut (SP)	1	22396453	964/3 SP	-
6	1	3	31	-	-	Special cut (SP)	1	22397153	971/3 SP	-
8	1	3	31	-	-	Special cut (SP)	1	22397253	972/3 SP	-
10	1	3	31	-	-	Special cut (SP)	1	22397353	973/3 SP	-



Set 84 HSS

Set 84 HSS contains 15 HSS finishing cutters for fine stock removal in the most common shapes and dimensions.

Contents:
The set comprises one each of the following:
923, 928, 943, 946, 952, 924, 941, 944, 947, 954, 926, 942, 945, 951 and 973 with a shank diameter of 3 mm, special cut.

Special features:
- The tools are suitable for fine stock removal in small and hard-to-reach places.
- The sturdy plastic box protects the tools against dirt and damage.

Cut		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm				
Special cut (SP)	1	22900845	84 HSS	-



High Speed Disc ALUMASTER
HSD-F 115/125
Type HSD-F 115/125 was developed specifically for use on angle grinders with a diameter of 115/125 mm and for flat working.

Matching tool drives:
Compressed-air angle grinder
PWT 26/120 HV M14
Electric angle grinder UWER 18/110 SI

Applications:
- Milling out
- Work on weld seams
- Work on fillet welds
- Work on edges/chamfering
- Surface work



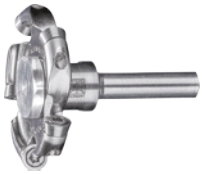
High Speed Disc ALUMASTER
HSD-R 115/125
Type HSD-R 115/125 has taken the HSD-F one step further and is also suitable for applications such as peripheral milling and milling out root seams.

Matching tool drives:
Compressed-air angle grinder
PWT 26/120 HV M14
Electric angle grinder UWER 18/110 SI

Applications:
- Milling out
- Work on weld seams
- Work on fillet welds
- Work on edges/chamfering
- Surface work
- Milling out root seams
- Circumferential milling







High Speed Disc ALUMASTER
HSD-R 50
Due to its small design, type HSD-R 50 is very well-suited to work in hard-to-reach places and on delicate components. Thanks to its specially developed arbor, the High Speed Disc **ALU**MASTER HSD-R 50 can also be used on straight grinders and flexible shafts as well as angle grinders (mount dia. 10 mm).

Matching tool drives:
Flexible shaft drive Mammoth Electronic ME 22/240
Compressed-air straight grinder PGAS 4/250 E-HV
Compressed-air angle grinder PWSA 4/200 HV

Applications:
- Milling out
- Work on weld seams
- Work on fillet welds
- Work on edges/chamfering
- Surface work
- Milling out root seams
- Circumferential milling



High Speed Torus Cutter
HSC-T 20 RS8
Thanks to its specially developed design, the High Speed Torus Cutter HSC-T 20 is suitable for work on grooves, pockets and narrow radii and contours, particularly in robot applications. The Cutter can also be used face down and perfectly complements the **ALU**MASTER High Speed Disc in the HSD-R 50 version and burrs with the ALU cut.

Matching tool drives:
Air-powered spindle PGAS 4/280 RS
Air-powered spindle PGAS 4/220 RS

Applications:
- Milling out
- Deburring
- Work on weld seams
- Work on fillet welds
- Work on edges/chamfering
- Surface work
- Circumferential milling
- Face milling
- Cleaning cast aluminium

Selecting suitable cutting inserts

- Uncoated cutting inserts are suitable for general use on soft non-ferrous metals (aluminium alloys, brass, copper, zinc).
- PFERD recommends cutting inserts with the high-quality HICOAT coating for high-performance applications on soft non-ferrous metals (aluminium alloys, brass, copper, zinc), hard non-ferrous metals (hard aluminium alloys with high Si content, bronze) as well as fibre-reinforced plastics (GRP/CRP) and thermoplastics.



ALUMASTER HSD-R High Speed Disc

High-performance tool for peripheral milling and milling out root seams using an angle grinder. The specially developed, turnable and replaceable tungsten carbide cutting inserts enable an extremely high stock removal rate on aluminium alloys.

Contents:
The delivery includes the High Speed Disc **ALU**MASTER HSD-R 115/125 incl. pre-mounted tungsten carbide cutting inserts, a TORX wrench and a plastic box.

Special features:
- An extraction system is not required as no hazardous or explosive dust is generated.
- Innovative, robust cut geometry for maximum safety, extreme durability and ease of work.

D [mm]	H [mm]	U [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
115	22.23	8	13,300	1	22000019	HSD-R 115/125 ALUMASTER	-



ALUMASTER HSD-R HICOAT High Speed Disc

High-performance tool for peripheral milling and milling out root seams using an angle grinder. The specially developed, turnable and replaceable tungsten carbide cutting inserts enable an extremely high stock removal rate on aluminium alloys.

Contents:
The delivery includes the High Speed Disc **ALU**MASTER HSD-R 115/125 HICOAT incl. pre-mounted tungsten carbide cutting inserts, a TORX wrench and a plastic box.

Special features:
- Cutting inserts with HICOAT coating for reduced material adhesion and a longer tool life.
- An extraction system is not required as no hazardous or explosive dust is generated.
- Innovative, robust cut geometry for maximum safety, extreme durability and ease of work.

D [mm]	H [mm]	U [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
115	22.23	8	13,300	1	22000021	HSD-R 115/125 ALUMASTER HICOAT	-



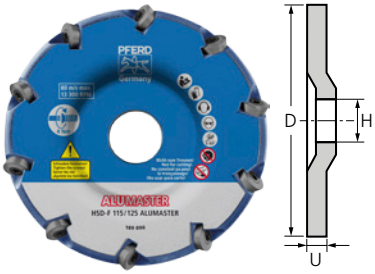
ALUMASTER HSD-F High Speed Disc

High-performance tool for surface work with an angle grinder. The specially developed, turnable and replaceable tungsten carbide cutting inserts enable an extremely high stock removal rate on aluminium alloys.

Contents:
The delivery includes the High Speed Disc **ALU**MASTER HSD-F 115/125 incl. pre-mounted tungsten carbide cutting inserts, a TORX wrench and a plastic box.

Special features:
- An extraction system is not required as no hazardous or explosive dust is generated.
- Innovative, robust cut geometry for maximum safety, extreme durability and ease of work.

D [mm]	H [mm]	U [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
115	22.23	13	13,300	1	22000009	HSD-F 115/125 ALUMASTER	-



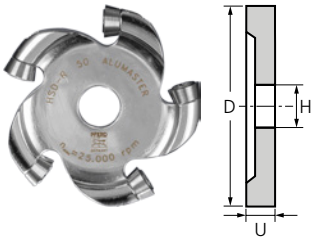
ALUMASTER HSD-F HICOAT High Speed Disc

High-performance tool for surface work with an angle grinder. The specially developed, turnable and replaceable tungsten carbide cutting inserts enable an extremely high stock removal rate on aluminium alloys.

Contents:
The delivery includes the High Speed Disc **ALU**MASTER HSD-F 115/125 HICOAT incl. pre-mounted tungsten carbide cutting inserts, a TORX wrench and a plastic box.

Special features:
- Cutting inserts with HICOAT coating for reduced material adhesion and a longer tool life.
- An extraction system is not required as no hazardous or explosive dust is generated.
- Innovative, robust cut geometry for maximum safety, extreme durability and ease of work.

D [mm]	H [mm]	U [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
115	22.23	13	13,300	1	22000012	HSD-F 115/125 ALUMASTER HICOAT	-



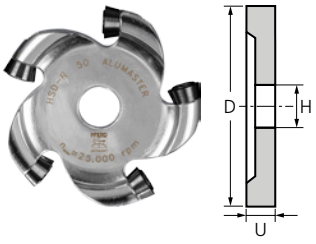
High Speed Disc ALUMASTER HSD-R 50

High-performance tool for hard-to-reach areas and delicate components. The specially developed, turnable and replaceable tungsten carbide cutting inserts enable an extremely high stock removal rate on aluminium alloys. A guard is not needed (tool diameter = 49 mm).

Contents:
The delivery includes the High Speed Disc **ALU**MASTER HSD-R 50 incl. pre-mounted tungsten carbide cutting inserts, a TORX wrench and a plastic box.

Special features:
- Can be used on angle grinders (mount dia. 10 mm), straight grinders and flexible shafts in conjunction with specially developed arbor.
- An extraction system is not required as no hazardous or explosive dust is generated.

D [mm]	H [mm]	U [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
49	10	8	25,000	1	22000025	HSD-R 50 ALUMASTER	-



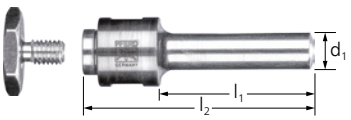
High Speed Disc ALUMASTER HSD-R 50 HICOAT

High-performance tool for hard-to-reach areas and delicate components. The specially developed, turnable and replaceable tungsten carbide cutting inserts enable an extremely high stock removal rate on very challenging aluminium alloys. A guard is not needed (tool diameter = 49 mm).

Contents:
The delivery includes the High Speed Disc **ALU**MASTER HSD-R 50 HICOAT incl. pre-mounted tungsten carbide cutting inserts, a TORX wrench and a plastic box.

Special features:
- Cutting inserts with HICOAT coating for reduced material adhesion and a longer tool life.
- Can be used on angle grinders (mount dia. 10 mm), straight grinders and flexible shafts in conjunction with specially developed arbor.
- An extraction system is not required as no hazardous or explosive dust is generated.

D [mm]	H [mm]	U [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
49	10	8	25,000	1	22000027	HSD-R 50 ALUMASTER HICOAT	-



Arbor for High Speed Disc ALUMASTER HSD-R 50

For use on flexible shaft drives and straight grinders.

d_1 [mm]	l_1 [mm]	l_2 [mm]	Suitable for		Item no.	Designation	Price/unit EUR
8		50	ALUMASTER HSD-R 50	1	22000011	BO 8/10 HSD-R 50	-



Cutting insert sets, HICOAT cutting insert sets

Cutting insert set for **ALU**MASTER High Speed Disc. Each set is available with or without the HICOAT coating.

D [mm]	Contents [Piece]	Suitable for		Item no.	Designation	Price/unit EUR
8	5	ALUMASTER HSD-R 50	1	22000026	WSP-A-8R 50 ALUMASTER	-
				22000028	WSP-A-8R 50 ALUMASTER HICOAT	-
	10	ALUMASTER HSD-R 115/125	1	22000020	WSP-A-8R 115/125 ALUMASTER	-
				22000022	WSP-A-8R 115/125 ALUMASTER HICOAT	-
12	10	ALUMASTER HSD-F	1	22000008	WSP-A-12R 115/125 ALUMASTER	-
				22000013	WSP-A-12R 115/125 ALUMASTER HICOAT	-



Bolt sets for cutting inserts

Bolt set for PFERD cutting inserts.

Suitable for cutting inserts	Contents [Piece]		Item no.	Designation	Price/unit EUR
EF-WSP-F, EF-WSP-R3	5	1	22000007	WSP-S-M4S	-



ALUMASTER **service set, ALU**MASTER **HICOAT service set**

For replacing individual cutting inserts on the **ALU**MASTER High Speed Disc. Each set is available with or without the HICOAT coating.

Contents:
The delivery includes two cutting inserts, two screws and a TORX wrench.

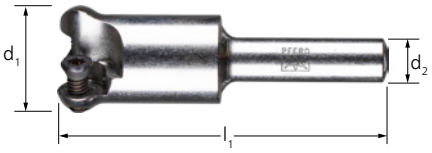
Suitable for		Item no.	Designation	Price/unit EUR
ALUMASTER HSD-R 50	1	22000029	ASS-R8 50 ALUMASTER	-
		22000030	ASS-R8 50 ALUMASTER HICOAT	-
ALUMASTER HSD-R 115/125	1	22000023	ASS-R8 115/125 ALUMASTER	-
		22000024	ASS-R8 115/125 ALUMASTER HICOAT	-
ALUMASTER HSD-F	1	22000014	ASS-R12 115/125 ALUMASTER	-
		22000015	ASS-R12 115/125 ALUMASTER HICOAT	-



Torque spanner and spare blade

WIHA torque spanner with a tightening torque of 4 Nm for optimally and securely mounting cutting inserts on the **ALU**MASTER High Speed Disc.

	Item no.	Designation	Price/unit EUR
Torque spanner for ALUMASTER			
1	22000017	DSWK WIHA Torque 4,0	-
Spare blade for torque spanner			
1	22000018	TWK WIHA Torque T15	-



High Speed Torus Cutter HSC-T 20

High Speed Torus Cutter including two mounting bolts. The tool for robot applications is used with two turnable and replaceable tungsten carbide cutting inserts and offers an extremely high stock removal rate on aluminium materials. The cutting inserts are not included in delivery.

Special features:
- Specially developed design for work on grooves, pockets and narrow radii and contours. Can also be used face down.
- An extraction system is not required as no hazardous or explosive dust is generated.
- Reduced vibration thanks to small contact surface.

d_1 [mm]	l_1 [mm]	d_2 [mm]	Suitable for cutting insert diameter [mm]	RPM [mm]		Item no.	Designation	Price/unit EUR
20	60	8	10	20,000 – 30,000	1	23000047	HSC-T 20 RS8	-



Cutting insert set

Cutting insert set for High Speed Torus Cutter HSC-T 20.

D [mm]	Contents [Piece]	Suitable for		Item no.	Designation	Price/unit EUR
10	4	High Speed Torus Cutter HSC-T 20 RS8	1	23000048	WSP-T 10R ALU	-



Bolt set for cutting inserts

Bolt set for the PFERD cutting inserts of the High Speed Torus Cutter HSC-T 20.

Suitable for cutting inserts	Contents [Piece]		Item no.	Designation	Price/unit EUR
WSP-T 10R ALU	4	1	23000049	WSP-S M4 HSC-T	-



High Speed Torus Cutter service set

For replacing individual cutting inserts on the High Speed Torus Cutter HSC-T 20.

Contents:
The delivery includes one cutting insert, one screw and a TORX wrench TX 15.

Suitable for		Item no.	Designation	Price/unit EUR
High Speed Torus Cutter HSC-T 20 RS8	1	23000050	TSS-10R ALU	-


EF-WSP-R3


EF-WSP-F

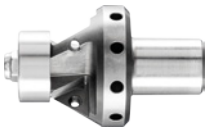
Cutting insert set with 3 mm radius, cutting insert set with chamfer

Cutting insert sets for the EDGE FINISH system for work on edges (see catalogue section 9).

Special features:
- Available as type STEEL, INOX and ALU for creating 30° and 45° chamfers.
- Radius version for steel for preparing for corrosion protection and for producing a defined radius of 3 mm.
- The best possible stock removal rate and a long tool life thanks to specially coated cutting inserts.

Suitable for cutting insert mounting	α [°]	r [mm]	Contents [Piece]	Version		Item no.	Designation	Price/unit EUR
Cutting insert set with 3 mm radius								
EF-WSP-A R3/45°	-	3	3	STEEL	1	22000001	EF-WSP-R3	-
Cutting inset set chamfer								
EF-WSP-A 30°, EF-WSP-A R3/45°	45	-	3	ALU	1	*22000010*	EF WSP-F ALU	-
				INOX	1	22000016	EF WSP-F INOX	-
				STEEL	1	22000002	EF-WSP-F STEEL	-


EF-WSP-A R3/45°


EF-WSP-A 30°

Cutting insert holder with 3 mm radius/45° chamfer, cutting insert holder with 30° chamfer

Cutting insert holders for the EDGE FINISH system for work on edges. The cutting inserts and matching bolt set are not included in delivery. Please order them separately.

Suitable for cutting inserts	Suitable for machine types	α [°]	r [mm]		Item no.	Designation	Price/unit EUR
Cutting insert holder with 3 mm radius/45° chamfer							
EF-WSP-F, EF-WSP-R3	UWER 18/110 EF	45	3	1	22000006	EF-WSP-A R3/45°	-
Cutting insert holder with 30° chamfer							
EF-WSP-F	UWER 18/110 EF	30	-	1	22000005	EF-WSP-A 30°	-


EF-FL-R3/45°


EF-FL-30°

Guide bearing with 3 mm radius/45° chamfer, guide bearing with 30° chamfer

Guide bearings for the EDGE FINISH system for work on edges. Delivery includes MG INOX locking nut.

Special features:
- Optimally guided along the edge to be machined.

Suitable for cutting insert mounting		Item no.	Designation	Price/unit EUR
Guide bearing with 3 mm radius/45° chamfer				
EF-WSP-A R3/45°	1	22000004	EF-FL-R3/45°	-
Guide bearing with 30° chamfer				
EF-WSP-A 30°	1	22000003	EF-FL-30°	-



Bolt set for cutting inserts

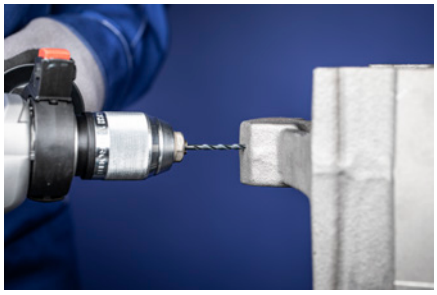
Bolt set for PFERD cutting inserts.

Suitable for cutting inserts	Contents [Piece]		Item no.	Designation	Price/unit EUR
EF-WSP-F, EF-WSP-R3	5	1	22000007	WSP-S-M4S	-

Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:
① Select the material group to be machined.
② Select the type.
③ Establish the cutting speed range.

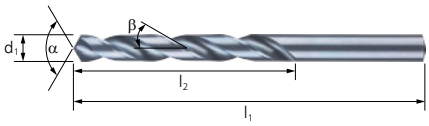
To determine the recommended rotational speed range [RPM], please proceed as follows:
④ Select the required diameter.
⑤ The cutting speed range and the diameter determine the recommended rotational speed range.



① Material group			② Design	③ Cutting speed
Steel, cast steel	Steels up to 700 N/mm² (< 220 HB)	Construction steels, carbon steels, tool steels, alloyed and non-alloyed steels, case-hardened steels, cast steel, tempering steels	STEEL	25–35 m/min
	Steels over 700 N/mm² (> 220 HB)		STEEL	20–25 m/min
			INOX	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	INOX	10–20 m/min
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys Brass, copper, zinc	STEEL	30–60 m/min
			INOX	
	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	STEEL	25–50 m/min
			INOX	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	STEEL	10–25 m/min
			INOX	
Plastics, other materials	Fibre-reinforced thermoplastics and duroplastics, hard rubber, wood		STEEL	15–40 m/min
			INOX	

Example:
Spiral drill,
SPB DIN 338 HSSG N 12.0 STEEL,
Tool dia. 12 mm.
Steels up to 700 N/mm².
Cutting speed: 25–35 m/min
Rotational speed range: 650–950 RPM

④ Tool dia. [mm]	⑤ Cutting speeds [m/min]								
	10	15	20	25	30	35	40	50	60
	Rotational speeds [RPM]								
1	3,185	4,777	6,369	7,962	9,554	11,146	12,739	15,924	19,108
1.1	2,895	4,343	5,790	7,238	8,686	10,133	11,581	14,476	17,371
1.2	2,654	3,981	5,308	6,635	7,962	9,289	10,616	13,270	15,924
1.3	2,450	3,675	4,900	6,124	7,349	8,574	9,799	12,249	14,699
1.4	2,275	3,412	4,550	5,687	6,824	7,962	9,099	11,374	13,649
1.5	2,123	3,185	4,246	5,308	6,369	7,431	8,493	10,616	12,739
1.6	1,990	2,986	3,981	4,976	5,971	6,967	7,962	9,952	11,943
1.7	1,873	2,810	3,747	4,683	5,620	6,557	7,493	9,367	11,240
1.8	1,769	2,654	3,539	4,423	5,308	6,192	7,077	8,846	10,616
1.9	1,676	2,514	3,352	4,190	5,028	5,867	6,705	8,381	10,057
2	1,592	2,389	3,185	3,981	4,777	5,573	6,369	7,962	9,554
2.1	1,517	2,275	3,033	3,791	4,550	5,308	6,066	7,583	9,099
2.2	1,448	2,171	2,895	3,619	4,343	5,067	5,790	7,238	8,686
2.3	1,385	2,077	2,769	3,462	4,154	4,846	5,539	6,923	8,308
2.4	1,327	1,990	2,654	3,317	3,981	4,644	5,308	6,635	7,962
2.5	1,274	1,911	2,548	3,185	3,822	4,459	5,096	6,369	7,643
2.6	1,225	1,837	2,450	3,062	3,675	4,287	4,900	6,124	7,349
2.7	1,180	1,769	2,359	2,949	3,539	4,128	4,718	5,898	7,077
2.8	1,137	1,706	2,275	2,843	3,412	3,981	4,550	5,687	6,824
2.9	1,098	1,647	2,196	2,745	3,295	3,844	4,393	5,491	6,589
3	1,062	1,592	2,123	2,654	3,185	3,715	4,246	5,308	6,369
3.1	1,027	1,541	2,055	2,568	3,082	3,596	4,109	5,137	6,164
3.2	995	1,493	1,990	2,488	2,986	3,483	3,981	4,976	5,971
3.3	965	1,448	1,930	2,413	2,895	3,378	3,860	4,825	5,790
3.4	937	1,405	1,873	2,342	2,810	3,278	3,747	4,683	5,620
3.5	910	1,365	1,820	2,275	2,730	3,185	3,640	4,550	5,460
3.6	885	1,327	1,769	2,212	2,654	3,096	3,539	4,423	5,308
3.7	861	1,291	1,721	2,152	2,582	3,013	3,443	4,304	5,164
3.8	838	1,257	1,676	2,095	2,514	2,933	3,352	4,190	5,028
3.9	817	1,225	1,633	2,041	2,450	2,858	3,266	4,083	4,900
4	796	1,194	1,592	1,990	2,389	2,787	3,185	3,981	4,777
4.5	708	1,062	1,415	1,769	2,123	2,477	2,831	3,539	4,246
5	637	955	1,274	1,592	1,911	2,229	2,548	3,185	3,822
5.5	579	869	1,158	1,448	1,737	2,027	2,316	2,895	3,474
6	531	796	1,062	1,327	1,592	1,858	2,123	2,654	3,185
6.5	490	735	980	1,225	1,470	1,715	1,960	2,450	2,940
7	455	682	910	1,137	1,365	1,592	1,820	2,275	2,730
7.5	425	637	849	1,062	1,274	1,486	1,699	2,123	2,548
8	398	597	796	995	1,194	1,393	1,592	1,990	2,389
8.5	375	562	749	937	1,124	1,311	1,499	1,873	2,248
9	354	531	708	885	1,062	1,238	1,415	1,769	2,123
9.5	335	503	670	838	1,006	1,173	1,341	1,676	2,011
10	318	478	637	796	955	1,115	1,274	1,592	1,911
10.5	303	455	607	758	910	1,062	1,213	1,517	1,820
11	290	434	579	724	869	1,013	1,158	1,448	1,737
11.5	277	415	554	692	831	969	1,108	1,385	1,662
12	265	398	531	663	796	929	1,062	1,327	1,592
12.5	255	382	510	637	764	892	1,019	1,274	1,529
13	245	367	490	612	735	857	980	1,225	1,470
13.5	236	354	472	590	708	826	944	1,180	1,415
14	227	341	455	569	682	796	910	1,137	1,365
14.5	220	329	439	549	659	769	879	1,098	1,318
15	212	318	425	531	637	743	849	1,062	1,274
15.5	205	308	411	514	616	719	822	1,027	1,233
16	199	299	398	498	597	697	796	995	1,194



DIN 338 HSSG N STEEL spiral drill

High-performance drilling tools in the STEEL in HSSG (M2) version for universal industrial use on steel, aluminium, brass, bronze, cast material and plastics. Fully ground, right-hand turning version with cross grinding.

Special features:
- Long tool life and easy centring.
- Good chip removal and high concentricity.

d_1 [mm]	l_2 [mm]	l_1 [mm]	α [°]	Spiral angle β [°]	Version		Item no.	Designation	Price/ unit EUR
1	12	34	118	25 – 30	STEEL	10	25203510	SPB DIN 338 HSSG N 1,0 STEEL	-
1.1	14	36	118	25 – 30	STEEL	10	25203586	SPB DIN 338 HSSG N 1,1 STEEL	-
1.2	16	38	118	25 – 30	STEEL	10	25203587	SPB DIN 338 HSSG N 1,2 STEEL	-
1.3	16	38	118	25 – 30	STEEL	10	25203588	SPB DIN 338 HSSG N 1,3 STEEL	-
1.4	18	40	118	25 – 30	STEEL	10	25203589	SPB DIN 338 HSSG N 1,4 STEEL	-
1.5	18	40	118	25 – 30	STEEL	10	25203511	SPB DIN 338 HSSG N 1,5 STEEL	-
1.6	20	43	118	25 – 30	STEEL	10	25203512	SPB DIN 338 HSSG N 1,6 STEEL	-
1.7	20	43	118	25 – 30	STEEL	10	25203590	SPB DIN 338 HSSG N 1,7 STEEL	-
1.8	22	46	118	25 – 30	STEEL	10	25203591	SPB DIN 338 HSSG N 1,8 STEEL	-
1.9	22	46	118	25 – 30	STEEL	10	25203592	SPB DIN 338 HSSG N 1,9 STEEL	-
2	24	49	118	25 – 30	STEEL	10	25203513	SPB DIN 338 HSSG N 2,0 STEEL	-
2.1	24	49	118	25 – 30	STEEL	10	25203593	SPB DIN 338 HSSG N 2,1 STEEL	-
2.2	27	53	118	25 – 30	STEEL	10	25203594	SPB DIN 338 HSSG N 2,2 STEEL	-
2.3	27	53	118	25 – 30	STEEL	10	25203595	SPB DIN 338 HSSG N 2,3 STEEL	-
2.4	30	57	118	25 – 30	STEEL	10	25203596	SPB DIN 338 HSSG N 2,4 STEEL	-
2.5	30	57	118	25 – 30	STEEL	10	25203514	SPB DIN 338 HSSG N 2,5 STEEL	-
2.6	30	57	118	25 – 30	STEEL	10	25203597	SPB DIN 338 HSSG N 2,6 STEEL	-
2.7	33	61	118	25 – 30	STEEL	10	25203598	SPB DIN 338 HSSG N 2,7 STEEL	-
2.8	33	61	118	25 – 30	STEEL	10	25203599	SPB DIN 338 HSSG N 2,8 STEEL	-
2.9	33	61	118	25 – 30	STEEL	10	25203650	SPB DIN 338 HSSG N 2,9 STEEL	-
3	33	61	118	25 – 30	STEEL	10	25203515	SPB DIN 338 HSSG N 3,0 STEEL	-
3.1	36	65	118	25 – 30	STEEL	10	25203516	SPB DIN 338 HSSG N 3,1 STEEL	-
3.2	36	65	118	25 – 30	STEEL	10	25203651	SPB DIN 338 HSSG N 3,2 STEEL	-
3.3	36	65	118	25 – 30	STEEL	10	25203517	SPB DIN 338 HSSG N 3,3 STEEL	-
3.4	39	70	118	25 – 30	STEEL	10	25203518	SPB DIN 338 HSSG N 3,4 STEEL	-
3.5	39	70	118	25 – 30	STEEL	10	25203519	SPB DIN 338 HSSG N 3,5 STEEL	-
3.6	39	70	118	25 – 30	STEEL	10	25203520	SPB DIN 338 HSSG N 3,6 STEEL	-
3.7	39	70	118	25 – 30	STEEL	10	25203652	SPB DIN 338 HSSG N 3,7 STEEL	-
3.8	43	75	118	25 – 30	STEEL	10	25203653	SPB DIN 338 HSSG N 3,8 STEEL	-
3.9	43	75	118	25 – 30	STEEL	10	25203654	SPB DIN 338 HSSG N 3,9 STEEL	-
4	43	75	118	25 – 30	STEEL	10	25203521	SPB DIN 338 HSSG N 4,0 STEEL	-
4.1	43	75	118	25 – 30	STEEL	10	25203522	SPB DIN 338 HSSG N 4,1 STEEL	-
4.2	43	75	118	25 – 30	STEEL	10	25203523	SPB DIN 338 HSSG N 4,2 STEEL	-
4.3	47	80	118	25 – 30	STEEL	10	25203655	SPB DIN 338 HSSG N 4,3 STEEL	-
4.4	47	80	118	25 – 30	STEEL	10	25203524	SPB DIN 338 HSSG N 4,4 STEEL	-
4.5	47	80	118	25 – 30	STEEL	10	25203525	SPB DIN 338 HSSG N 4,5 STEEL	-
4.6	47	80	118	25 – 30	STEEL	10	25203656	SPB DIN 338 HSSG N 4,6 STEEL	-
4.7	47	80	118	25 – 30	STEEL	10	25203657	SPB DIN 338 HSSG N 4,7 STEEL	-
4.8	53	86	118	25 – 30	STEEL	10	25203658	SPB DIN 338 HSSG N 4,8 STEEL	-
4.9	53	86	118	25 – 30	STEEL	10	25203659	SPB DIN 338 HSSG N 4,9 STEEL	-
5	52	86	118	25 – 30	STEEL	10	25203526	SPB DIN 338 HSSG N 5,0 STEEL	-
5.1	52	86	118	25 – 30	STEEL	10	25203527	SPB DIN 338 HSSG N 5,1 STEEL	-
5.2	52	86	118	25 – 30	STEEL	10	25203528	SPB DIN 338 HSSG N 5,2 STEEL	-
5.3	52	86	118	25 – 30	STEEL	10	25203529	SPB DIN 338 HSSG N 5,3 STEEL	-
5.4	57	93	118	25 – 30	STEEL	10	25203660	SPB DIN 338 HSSG N 5,4 STEEL	-
5.5	57	93	118	25 – 30	STEEL	10	25203530	SPB DIN 338 HSSG N 5,5 STEEL	-
5.6	57	93	118	25 – 30	STEEL	10	25203661	SPB DIN 338 HSSG N 5,6 STEEL	-

Continued on next page

d_1 [mm]	l_2 [mm]	l_1 [mm]	α [°]	Spiral angle β [°]	Version		Item no.	Designation	Price/ unit EUR
5.7	57	93	118	25 – 30	STEEL	10	25203662	SPB DIN 338 HSSG N 5,7 STEEL	-
5.8	57	93	118	25 – 30	STEEL	10	25203663	SPB DIN 338 HSSG N 5,8 STEEL	-
5.9	57	93	118	25 – 30	STEEL	10	25203664	SPB DIN 338 HSSG N 5,9 STEEL	-
6	57	93	118	25 – 30	STEEL	10	25203531	SPB DIN 338 HSSG N 6,0 STEEL	-
6.1	63	101	118	25 – 30	STEEL	10	25203665	SPB DIN 338 HSSG N 6,1 STEEL	-
6.2	63	101	118	25 – 30	STEEL	10	25203666	SPB DIN 338 HSSG N 6,2 STEEL	-
6.3	63	101	118	25 – 30	STEEL	10	25203667	SPB DIN 338 HSSG N 6,3 STEEL	-
6.4	63	101	118	25 – 30	STEEL	10	25203668	SPB DIN 338 HSSG N 6,4 STEEL	-
6.5	63	101	118	25 – 30	STEEL	10	25203532	SPB DIN 338 HSSG N 6,5 STEEL	-
6.6	63	101	118	25 – 30	STEEL	10	25203669	SPB DIN 338 HSSG N 6,6 STEEL	-
6.7	63	101	118	25 – 30	STEEL	10	25203670	SPB DIN 338 HSSG N 6,7 STEEL	-
6.8	69	109	118	25 – 30	STEEL	10	25203533	SPB DIN 338 HSSG N 6,8 STEEL	-
6.9	69	109	118	25 – 30	STEEL	10	25203671	SPB DIN 338 HSSG N 6,9 STEEL	-
7	69	109	118	25 – 30	STEEL	10	25203534	SPB DIN 338 HSSG N 7,0 STEEL	-
7.1	69	109	118	25 – 30	STEEL	10	25203672	SPB DIN 338 HSSG N 7,1 STEEL	-
7.2	69	109	118	25 – 30	STEEL	10	25203673	SPB DIN 338 HSSG N 7,2 STEEL	-
7.3	69	109	118	25 – 30	STEEL	10	25203674	SPB DIN 338 HSSG N 7,3 STEEL	-
7.4	69	117	118	25 – 30	STEEL	10	25203675	SPB DIN 338 HSSG N 7,4 STEEL	-
7.5	69	109	118	25 – 30	STEEL	10	25203535	SPB DIN 338 HSSG N 7,5 STEEL	-
7.6	75	117	118	25 – 30	STEEL	10	25203676	SPB DIN 338 HSSG N 7,6 STEEL	-
7.7	75	117	118	25 – 30	STEEL	10	25203677	SPB DIN 338 HSSG N 7,7 STEEL	-
7.8	75	117	118	25 – 30	STEEL	10	25203678	SPB DIN 338 HSSG N 7,8 STEEL	-
7.9	75	117	118	25 – 30	STEEL	10	25203679	SPB DIN 338 HSSG N 7,9 STEEL	-
8	75	117	118	25 – 30	STEEL	10	25203536	SPB DIN 338 HSSG N 8,0 STEEL	-
8.1	75	117	118	25 – 30	STEEL	10	25203680	SPB DIN 338 HSSG N 8,1 STEEL	-
8.2	75	117	118	25 – 30	STEEL	10	25203681	SPB DIN 338 HSSG N 8,2 STEEL	-
8.3	75	117	118	25 – 30	STEEL	10	25203682	SPB DIN 338 HSSG N 8,3 STEEL	-
8.4	75	117	118	25 – 30	STEEL	10	25203683	SPB DIN 338 HSSG N 8,4 STEEL	-
8.5	75	117	118	25 – 30	STEEL	10	25203537	SPB DIN 338 HSSG N 8,5 STEEL	-
8.6	81	125	118	25 – 30	STEEL	10	25203684	SPB DIN 338 HSSG N 8,6 STEEL	-
8.7	81	125	118	25 – 30	STEEL	10	25203685	SPB DIN 338 HSSG N 8,7 STEEL	-
8.8	81	125	118	25 – 30	STEEL	10	25203686	SPB DIN 338 HSSG N 8,8 STEEL	-
8.9	81	125	118	25 – 30	STEEL	10	25203687	SPB DIN 338 HSSG N 8,9 STEEL	-
9	75	125	118	25 – 30	STEEL	10	25203538	SPB DIN 338 HSSG N 9,0 STEEL	-
9.1	81	125	118	25 – 30	STEEL	10	25203688	SPB DIN 338 HSSG N 9,1 STEEL	-
9.2	81	125	118	25 – 30	STEEL	10	25203689	SPB DIN 338 HSSG N 9,2 STEEL	-
9.3	81	125	118	25 – 30	STEEL	10	25203690	SPB DIN 338 HSSG N 9,3 STEEL	-
9.4	81	125	118	25 – 30	STEEL	10	25203691	SPB DIN 338 HSSG N 9,4 STEEL	-
9.5	81	125	118	25 – 30	STEEL	10	25203539	SPB DIN 338 HSSG N 9,5 STEEL	-
9.6	87	133	118	25 – 30	STEEL	10	25203692	SPB DIN 338 HSSG N 9,6 STEEL	-
9.7	87	133	118	25 – 30	STEEL	10	25203693	SPB DIN 338 HSSG N 9,7 STEEL	-
9.8	87	133	118	25 – 30	STEEL	10	25203694	SPB DIN 338 HSSG N 9,8 STEEL	-
9.9	87	133	118	25 – 30	STEEL	10	25203695	SPB DIN 338 HSSG N 9,9 STEEL	-
10	87	133	118	25 – 30	STEEL	10	25203540	SPB DIN 338 HSSG N 10,0 STEEL	-
10.1	87	133	118	25 – 30	STEEL	5	25203696	SPB DIN 338 HSSG N 10,1 STEEL	-
10.2	87	133	118	25 – 30	STEEL	5	25203541	SPB DIN 338 HSSG N 10,2 STEEL	-
10.3	87	133	118	25 – 30	STEEL	5	25203697	SPB DIN 338 HSSG N 10,3 STEEL	-
10.4	87	133	118	25 – 30	STEEL	5	25203698	SPB DIN 338 HSSG N 10,4 STEEL	-
10.5	87	133	118	25 – 30	STEEL	5	25203542	SPB DIN 338 HSSG N 10,5 STEEL	-
10.6	94	133	118	25 – 30	STEEL	5	25203699	SPB DIN 338 HSSG N 10,6 STEEL	-
10.7	94	142	118	25 – 30	STEEL	5	25203700	SPB DIN 338 HSSG N 10,7 STEEL	-
10.8	87	142	118	25 – 30	STEEL	5	25203706	SPB DIN 338 HSSG N 10,8 STEEL	-
10.9	94	142	118	25 – 30	STEEL	5	25203707	SPB DIN 338 HSSG N 10,9 STEEL	-
11	94	142	118	25 – 30	STEEL	5	25203543	SPB DIN 338 HSSG N 11,0 STEEL	-

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d_1 [mm]	l_2 [mm]	l_1 [mm]	α [°]	Spiral angle β [°]	Version		Item no.	Designation	Price/ unit EUR
11.1	94	142	118	25 – 30	STEEL	5	25203708	SPB DIN 338 HSSG N 11,1 STEEL	-
11.2	94	142	118	25 – 30	STEEL	5	25203709	SPB DIN 338 HSSG N 11,2 STEEL	-
11.3	94	142	118	25 – 30	STEEL	5	25203710	SPB DIN 338 HSSG N 11,3 STEEL	-
11.4	94	142	118	25 – 30	STEEL	5	25203711	SPB DIN 338 HSSG N 11,4 STEEL	-
11.5	94	142	118	25 – 30	STEEL	5	25203544	SPB DIN 338 HSSG N 11,5 STEEL	-
11.6	94	142	118	25 – 30	STEEL	5	25203712	SPB DIN 338 HSSG N 11,6 STEEL	-
11.7	94	142	118	25 – 30	STEEL	5	25203713	SPB DIN 338 HSSG N 11,7 STEEL	-
11.8	94	142	118	25 – 30	STEEL	5	25203714	SPB DIN 338 HSSG N 11,8 STEEL	-
11.9	101	151	118	25 – 30	STEEL	5	25203715	SPB DIN 338 HSSG N 11,9 STEEL	-
12	101	151	118	25 – 30	STEEL	5	25203545	SPB DIN 338 HSSG N 12,0 STEEL	-
12.1	101	151	118	25 – 30	STEEL	5	25203716	SPB DIN 338 HSSG N 12,1 STEEL	-
12.2	101	151	118	25 – 30	STEEL	5	25203717	SPB DIN 338 HSSG N 12,2 STEEL	-
12.3	101	151	118	25 – 30	STEEL	5	25203718	SPB DIN 338 HSSG N 12,3 STEEL	-
12.4	101	151	118	25 – 30	STEEL	5	25203719	SPB DIN 338 HSSG N 12,4 STEEL	-
12.5	101	151	118	25 – 30	STEEL	5	25203546	SPB DIN 338 HSSG N 12,5 STEEL	-
12.6	101	151	118	25 – 30	STEEL	5	25203720	SPB DIN 338 HSSG N 12,6 STEEL	-
12.7	101	151	118	25 – 30	STEEL	5	25203721	SPB DIN 338 HSSG N 12,7 STEEL	-
12.8	101	151	118	25 – 30	STEEL	5	25203722	SPB DIN 338 HSSG N 12,8 STEEL	-
12.9	101	151	118	25 – 30	STEEL	5	25203818	SPB DIN 338 HSSG N 12,9 STEEL	-
13	101	151	118	25 – 30	STEEL	5	25203547	SPB DIN 338 HSSG N 13,0 STEEL	-
13.5	108	160	118	25 – 30	STEEL	1	25203723	SPB DIN 338 HSSG N 13,5 STEEL	-
14	108	160	118	25 – 30	STEEL	1	25203724	SPB DIN 338 HSSG N 14,0 STEEL	-
14.5	114	169	118	25 – 30	STEEL	1	25203725	SPB DIN 338 HSSG N 14,5 STEEL	-
15	114	169	118	25 – 30	STEEL	1	25203726	SPB DIN 338 HSSG N 15,0 STEEL	-
15.5	120	178	118	25 – 30	STEEL	1	25203727	SPB DIN 338 HSSG N 15,5 STEEL	-
16	120	178	118	25 – 30	STEEL	1	25203728	SPB DIN 338 HSSG N 16,0 STEEL	-



DIN 338 HSSG N STEEL spiral drills, 19-piece set

The set contains 19 HSS spiral drills in the STEEL in HSSG (M2) type for industrial uses.

Contents:
The set consists of 19 HSS spiral drills in the STEEL in HSSG (M2) version with dia. 1.0 to 10.0 mm, in increments of 0.5 mm.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.
- The securing of the HSS spiral drills facilitates the selection and withdrawal of the tools.

Contents [Piece]	Version		Item no.	Designation	Price/unit EUR
19	STEEL	1	25203701	SET SPB DIN 338 HSSG N 1-10 STEEL 19TLG	-



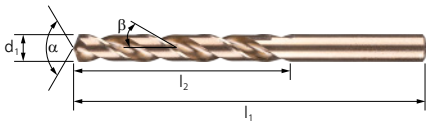
DIN 338 HSSG N STEEL spiral drills, 25-piece set

The set contains 25 HSS spiral drills in the STEEL in HSSG (M2) type for industrial uses.

Contents:
The set consists of 25 HSS spiral drills with dia. 1.0 to 13.0 mm, in increments of 0.5 mm.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.
- The securing of the HSS spiral drills facilitates the selection and withdrawal of the tools.

Contents [Piece]	Version		Item no.	Designation	Price/unit EUR
25	STEEL	1	25203702	SET SPB DIN 338 HSSG N 1-13 STEEL 25TLG	-



DIN 338 HSSE N INOX spiral drill

High-performance drilling tools in the INOX in HSSE-Co5 (M35) version for industrial uses on tough and hard materials such as alloyed and high-strength steel and stainless steel (INOX). Fully ground, right-hand turning version with cross grinding.

Special features:
- Very good temperature resistance due to Co content as well as robust tip profile.
- Very long tool life and easy centring.
- Good chip removal and high concentricity.

d_1 [mm]	l_2 [mm]	l_1 [mm]	α [°]	Spiral angle β [°]	Version		Item no.	Designation	Price/unit EUR
1	12	34	135	36	INOX	10	25203548	SPB DIN 338 HSSE N 1,0 INOX	-
1.1	14	36	135	36	INOX	10	25203729	SPB DIN 338 HSSE N 1,1 INOX	-
1.2	16	38	135	36	INOX	10	25203730	SPB DIN 338 HSSE N 1,2 INOX	-
1.3	16	38	135	36	INOX	10	25203731	SPB DIN 338 HSSE N 1,3 INOX	-
1.4	18	40	135	36	INOX	10	25203732	SPB DIN 338 HSSE N 1,4 INOX	-
1.5	18	40	135	36	INOX	10	25203549	SPB DIN 338 HSSE N 1,5 INOX	-
1.6	20	43	135	36	INOX	10	25203550	SPB DIN 338 HSSE N 1,6 INOX	-
1.7	20	43	135	36	INOX	10	25203733	SPB DIN 338 HSSE N 1,7 INOX	-
1.8	22	46	135	36	INOX	10	25203734	SPB DIN 338 HSSE N 1,8 INOX	-
1.9	22	46	135	36	INOX	10	25203735	SPB DIN 338 HSSE N 1,9 INOX	-
2	24	49	135	36	INOX	10	25203551	SPB DIN 338 HSSE N 2,0 INOX	-
2.1	24	49	135	36	INOX	10	25203736	SPB DIN 338 HSSE N 2,1 INOX	-
2.2	27	53	135	36	INOX	10	25203737	SPB DIN 338 HSSE N 2,2 INOX	-
2.3	27	53	135	36	INOX	10	25203738	SPB DIN 338 HSSE N 2,3 INOX	-
2.4	30	57	135	36	INOX	10	25203739	SPB DIN 338 HSSE N 2,4 INOX	-
2.5	30	57	135	36	INOX	10	25203552	SPB DIN 338 HSSE N 2,5 INOX	-
2.6	30	57	135	36	INOX	10	25203740	SPB DIN 338 HSSE N 2,6 INOX	-
2.7	33	53	135	36	INOX	10	25203741	SPB DIN 338 HSSE N 2,7 INOX	-
2.8	33	61	135	36	INOX	10	25203742	SPB DIN 338 HSSE N 2,8 INOX	-
2.9	33	61	135	36	INOX	10	25203743	SPB DIN 338 HSSE N 2,9 INOX	-
3	33	61	135	36	INOX	10	25203553	SPB DIN 338 HSSE N 3,0 INOX	-
3.1	36	65	135	36	INOX	10	25203554	SPB DIN 338 HSSE N 3,1 INOX	-
3.2	36	65	135	36	INOX	10	25203744	SPB DIN 338 HSSE N 3,2 INOX	-
3.3	36	65	135	36	INOX	10	25203555	SPB DIN 338 HSSE N 3,3 INOX	-
3.4	39	70	135	36	INOX	10	25203556	SPB DIN 338 HSSE N 3,4 INOX	-
3.5	39	70	135	36	INOX	10	25203557	SPB DIN 338 HSSE N 3,5 INOX	-
3.6	39	70	135	36	INOX	10	25203558	SPB DIN 338 HSSE N 3,6 INOX	-
3.7	39	70	135	36	INOX	10	25203745	SPB DIN 338 HSSE N 3,7 INOX	-

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d_1 [mm]	l_2 [mm]	l_1 [mm]	α [°]	Spiral angle β [°]	Version		Item no.	Designation	Price/ unit EUR
3.8	43	75	135	36	INOX	10	25203746	SPB DIN 338 HSSE N 3,8 INOX	-
3.9	43	75	135	36	INOX	10	25203747	SPB DIN 338 HSSE N 3,9 INOX	-
4	43	75	135	36	INOX	10	25203559	SPB DIN 338 HSSE N 4,0 INOX	-
4.1	43	75	135	36	INOX	10	25203560	SPB DIN 338 HSSE N 4,1 INOX	-
4.2	43	75	135	36	INOX	10	25203561	SPB DIN 338 HSSE N 4,2 INOX	-
4.3	47	80	135	36	INOX	10	25203748	SPB DIN 338 HSSE N 4,3 INOX	-
4.4	47	80	135	36	INOX	10	25203562	SPB DIN 338 HSSE N 4,4 INOX	-
4.5	47	80	135	36	INOX	10	25203563	SPB DIN 338 HSSE N 4,5 INOX	-
4.6	47	80	135	36	INOX	10	25203749	SPB DIN 338 HSSE N 4,6 INOX	-
4.7	47	86	135	36	INOX	10	25203750	SPB DIN 338 HSSE N 4,7 INOX	-
4.8	53	86	135	36	INOX	10	25203751	SPB DIN 338 HSSE N 4,8 INOX	-
4.9	53	86	135	36	INOX	10	25203752	SPB DIN 338 HSSE N 4,9 INOX	-
5	52	86	135	36	INOX	10	25203564	SPB DIN 338 HSSE N 5,0 INOX	-
5.1	52	86	135	36	INOX	10	25203565	SPB DIN 338 HSSE N 5,1 INOX	-
5.2	52	86	135	36	INOX	10	25203566	SPB DIN 338 HSSE N 5,2 INOX	-
5.3	52	86	135	36	INOX	10	25203567	SPB DIN 338 HSSE N 5,3 INOX	-
5.4	57	93	135	36	INOX	10	25203753	SPB DIN 338 HSSE N 5,4 INOX	-
5.5	57	93	135	36	INOX	10	25203568	SPB DIN 338 HSSE N 5,5 INOX	-
5.6	57	93	135	36	INOX	10	25203754	SPB DIN338 HSSE N 5,6 INOX	-
5.7	57	93	135	36	INOX	10	25203755	SPB DIN 338 HSSE N 5,7 INOX	-
5.8	57	93	135	36	INOX	10	25203756	SPB DIN 338 HSSE N 5,8 INOX	-
5.9	57	93	135	36	INOX	10	25203757	SPB DIN 338 HSSE N 5,9 INOX	-
6	57	93	135	36	INOX	10	25203569	SPB DIN 338 HSSE N 6,0 INOX	-
6.1	63	101	135	36	INOX	10	25203758	SPB DIN 338 HSSE N 6,1 INOX	-
6.2	63	101	135	36	INOX	10	25203759	SPB DIN 338 HSSE N 6,2 INOX	-
6.3	63	101	135	36	INOX	10	25203760	SPB DIN 338 HSSE N 6,3 INOX	-
6.4	63	101	135	36	INOX	10	25203761	SPB DIN 338 HSSE N 6,4 INOX	-
6.5	63	101	135	36	INOX	10	25203570	SPB DIN 338 HSSE N 6,5 INOX	-
6.6	63	101	135	36	INOX	10	25203762	SPB DIN 338 HSSE N 6,6 INOX	-
6.7	63	101	135	36	INOX	10	25203763	SPB DIN 338 HSSE N 6,7 INOX	-
6.8	69	109	135	36	INOX	10	25203571	SPB DIN 338 HSSE N 6,8 INOX	-
6.9	69	109	135	36	INOX	10	25203764	SPB DIN 338 HSSE N 6,9 INOX	-
7	69	109	135	36	INOX	10	25203572	SPB DIN 338 HSSE N 7,0 INOX	-
7.1	69	109	135	36	INOX	10	25203765	SPB DIN 338 HSSE N 7,1 INOX	-
7.2	69	109	135	36	INOX	10	25203766	SPB DIN 338 HSSE N 7,2 INOX	-
7.3	69	109	135	36	INOX	10	25203767	SPB DIN 338 HSSE N 7,3 INOX	-
7.4	69	109	135	36	INOX	10	25203768	SPB DIN 338 HSSE N 7,4 INOX	-
7.5	69	109	135	36	INOX	10	25203573	SPB DIN 338 HSSE N 7,5 INOX	-
7.6	75	117	135	36	INOX	10	25203769	SPB DIN 338 HSSE N 7,6 INOX	-
7.7	75	117	135	36	INOX	10	25203770	SPB DIN 338 HSSE N 7,7 INOX	-
7.8	75	117	135	36	INOX	10	25203771	SPB DIN 338 HSSE N 7,8 INOX	-
7.9	75	117	135	36	INOX	10	25203772	SPB DIN 338 HSSE N 7,9 INOX	-
8	75	117	135	36	INOX	10	25203574	SPB DIN 338 HSSE N 8,0 INOX	-
8.1	75	117	135	36	INOX	10	25203773	SPB DIN 338 HSSE N 8,1 INOX	-
8.2	75	117	135	36	INOX	10	25203774	SPB DIN 338 HSSE N 8,2 INOX	-
8.3	75	117	135	36	INOX	10	25203775	SPB DIN 338 HSSE N 8,3 INOX	-
8.4	75	117	135	36	INOX	10	25203776	SPB DIN 338 HSSE N 8,4 INOX	-
8.5	75	117	135	36	INOX	10	25203575	SPB DIN 338 HSSE N 8,5 INOX	-
8.6	81	125	135	36	INOX	10	25203777	SPB DIN 338 HSSE N 8,6 INOX	-
8.7	81	125	135	36	INOX	10	25203778	SPB DIN 338 HSSE N 8,7 INOX	-
8.8	81	125	135	36	INOX	10	25203779	SPB DIN 338 HSSE N 8,8 INOX	-
8.9	81	125	135	36	INOX	10	25203780	SPB DIN 338 HSSE N 8,9 INOX	-
9	75	125	135	36	INOX	10	25203576	SPB DIN 338 HSSE N 9,0 INOX	-
9.1	81	125	135	36	INOX	10	25203781	SPB DIN 338 HSSE N 9,1 INOX	-

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d_1 [mm]	l_2 [mm]	l_1 [mm]	α [°]	Spiral angle β [°]	Version		Item no.	Designation	Price/ unit EUR
9.2	81	125	135	36	INOX	10	25203782	SPB DIN 338 HSSE N 9,2 INOX	-
9.3	81	125	135	36	INOX	10	25203783	SPB DIN 338 HSSE N 9,3 INOX	-
9.4	81	125	135	36	INOX	10	25203784	SPB DIN 338 HSSE N 9,4 INOX	-
9.5	81	125	135	36	INOX	10	25203577	SPB DIN 338 HSSE N 9,5 INOX	-
9.6	87	133	135	36	INOX	10	25203785	SPB DIN 338 HSSE N 9,6 INOX	-
9.7	87	133	135	36	INOX	10	25203786	SPB DIN 338 HSSE N 9,7 INOX	-
9.8	87	133	135	36	INOX	10	25203787	SPB DIN 338 HSSE N 9,8 INOX	-
9.9	87	133	135	36	INOX	10	25203788	SPB DIN 338 HSSE N 9,9 INOX	-
10	87	133	135	36	INOX	10	25203578	SPB DIN 338 HSSE N 10,0 INOX	-
10.1	87	133	135	36	INOX	5	25203789	SPB DIN 338 HSSE N 10,1 INOX	-
10.2	87	133	135	36	INOX	5	25203579	SPB DIN 338 HSSE N 10,2 INOX	-
10.3	87	133	135	36	INOX	5	25203790	SPB DIN 338 HSSE N 10,3 INOX	-
10.4	87	133	135	36	INOX	5	25203791	SPB DIN 338 HSSE N 10,4 INOX	-
10.5	87	133	135	36	INOX	5	25203580	SPB DIN 338 HSSE N 10,5 INOX	-
10.6	87	133	135	36	INOX	5	25203792	SPB DIN 338 HSSE N 10,6 INOX	-
10.7	94	142	135	36	INOX	5	25203793	SPB DIN 338 HSSE N 10,7 INOX	-
10.8	94	142	135	36	INOX	5	25203794	SPB DIN 338 HSSE N 10,8 INOX	-
10.9	94	142	135	36	INOX	5	25203795	SPB DIN 338 HSSE N 10,9 INOX	-
11	94	142	135	36	INOX	5	25203581	SPB DIN 338 HSSE N 11,0 INOX	-
11.1	94	142	135	36	INOX	5	25203796	SPB DIN 338 HSSE N 11,1 INOX	-
11.2	94	142	135	36	INOX	5	25203797	SPB DIN 338 HSSE N 11,2 INOX	-
11.3	94	142	135	36	INOX	5	25203798	SPB DIN 338 HSSE N 11,3 INOX	-
11.4	94	142	135	36	INOX	5	25203799	SPB DIN 338 HSSE N 11,4 INOX	-
11.5	94	142	135	36	INOX	5	25203582	SPB DIN 338 HSSE N 11,5 INOX	-
11.6	94	142	135	36	INOX	5	25203800	SPB DIN 338 HSSE N 11,6 INOX	-
11.7	94	142	135	36	INOX	5	25203801	SPB DIN 338 HSSE N 11,7 INOX	-
11.8	94	142	135	36	INOX	5	25203802	SPB DIN 338 HSSE N 11,8 INOX	-
11.9	101	151	135	36	INOX	5	25203803	SPB DIN 338 HSSE N 11,9 INOX	-
12	101	151	135	36	INOX	5	25203583	SPB DIN 338 HSSE N 12,0 INOX	-
12.1	101	151	135	36	INOX	5	25203804	SPB DIN 338 HSSE N 12,1 INOX	-
12.2	101	151	135	36	INOX	5	25203805	SPB DIN 338 HSSE N 12,2 INOX	-
12.3	101	151	135	36	INOX	5	25203806	SPB DIN 338 HSSE N 12,3 INOX	-
12.4	101	151	135	36	INOX	5	25203807	SPB DIN 338 HSSE N 12,4 INOX	-
12.5	101	151	135	36	INOX	5	25203584	SPB DIN 338 HSSE N 12,5 INOX	-
12.6	101	151	135	36	INOX	5	25203808	SPB DIN 338 HSSE N 12,6 INOX	-
12.7	101	151	135	36	INOX	5	25203809	SPB DIN 338 HSSE N 12,7 INOX	-
12.8	101	151	135	36	INOX	5	25203810	SPB DIN 338 HSSE N 12,8 INOX	-
12.9	101	151	135	36	INOX	5	25203811	SPB DIN 338 HSSE N 12,9 INOX	-
13	101	151	135	36	INOX	5	25203585	SPB DIN 338 HSSE N 13,0 INOX	-
13.5	108	160	135	36	INOX	1	25203812	SPB DIN 338 HSSE N 13,5 INOX	-
14	108	160	135	36	INOX	1	25203813	SPB DIN 338 HSSE N 14,0 INOX	-
14.5	114	169	135	36	INOX	1	25203814	SPB DIN 338 HSSE N 14,5 INOX	-
15	114	169	135	36	INOX	1	25203815	SPB DIN 338 HSSE N 15,0 INOX	-
15.5	120	178	135	36	INOX	1	25203816	SPB DIN 338 HSSE N 15,5 INOX	-
16	120	178	135	36	INOX	1	25203817	SPB DIN 338 HSSE N 16,0 INOX	-



DIN 338 HSSE N INOX spiral drills, 19-piece set

The set contains 19 HSS spiral drills in the INOX in HSSE-Co5 (M35) type for industrial uses.

Contents:
The set consists of 19 HSS spiral drills with dia. 1.0 to 10.0 mm, in increments of 0.5 mm.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.
- The securing of the HSS spiral drills facilitates the selection and withdrawal of the tools.

Contents [Piece]	Version		Item no.	Designation	Price/unit EUR
19	INOX	1	25203703	SET SPB DIN 338 HSSE N 1-10 INOX 19TLG	-



DIN 338 HSSE N INOX spiral drills, 25-piece set

The set contains 25 HSS spiral drills in the INOX in HSSE-Co5 (M35) type for industrial uses.

Contents:
The set consists of 25 HSS spiral drills with dia. 1.0 to 13.0 mm, in increments of 0.5 mm.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.
- The securing of the HSS spiral drills facilitates the selection and withdrawal of the tools.

Contents [Piece]	Version		Item no.	Designation	Price/unit EUR
25	INOX	1	25203704	SET SPB DIN 338 HSSE N 1-13 INOX 25TLG	-

HSS step drills

Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:
① Select the material group to be machined.
② Select the type.
③ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:
④ Select the required diameter.
⑤ The cutting speed range and the diameter determine the recommended rotational speed range.



① Material group			② Design	③ Cutting speed
Steel, cast steel	Steels up to 700 N/mm²	Construction steels, carbon steels, tool steels, alloyed and non-alloyed steels, case-hardened steels, cast steel, tempering steels	HSS	20–30 m/min
			HICOAT HC-FEP	
	Steels over 700 N/mm²		HICOAT HC-FEP	10–20 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	HICOAT HC-FEP	10–20 m/min
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys, brass, copper, zinc	HSS	20–30 m/min
			HICOAT HC-FEP	
	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	HICOAT HC-FEP	
Plastics, other materials	Fibre-reinforced thermoplastics and duroplastics, hard rubber, wood		HSS	10–20 m/min
			HICOAT HC-FEP	

Example:
HSS step drill
STB HSS 04-30/10,
step dia. 4–30 mm.
Steels up to 700 N/mm².
Cutting speed: 20–30 m/min
Rotational speed range: 2.400–200 RPM

⑤ Step dia. [mm]	④ Cutting speeds [m/min]		
	10	20	30
	Rotational speeds [RPM]		
4	800	1,600	2,400
5	640	1,280	1,920
6	530	1,060	1,600
7	460	920	1,400
8	400	800	1,200
9	350	700	1,060
10	320	640	960
11	290	580	880
12	270	540	820
14	230	460	700
15	210	420	640
16	200	400	600
18	180	360	540
20	160	320	480
21	150	300	460
22	140	280	420
24	130	260	400
26	120	240	360
27	120	240	360
28	110	220	340
30	100	200	300
33	90	180	280
34	90	180	280
36	90	180	280
37	90	180	280
39	80	160	240



HSS step drills

Very smooth-running and sturdy high-performance tools for burr-free drilling and deburring of materials measuring up to 4 mm thick in just one work step. To ensure reliable torque transmission, all step drills have a three-surface shaft.

Special features:
- The high-quality drill tip ensures effortless centring and drilling, and the tool taper makes it easier to pull back.
- Chips which do not break are neatly removed as with a spiral drill.
- Use HSS type with cutting oil/compressed air where possible.

Drilling steps	d_2 [mm]	l_1 [mm]	Version		Item no.	Designation	Price/ unit EUR
4.0/5.0/6.0/7.0/8.0/9.0/10.0/11.0/12.0	6	65	HSS	1	25201036	STB HSS 04-12/6	-
4.0/6.0/8.0/10.0/12.0/14.0/16.0/18.0/20.0	8	75	HSS	1	25201037	STB HSS 04-20/8	-
4.0/6.0/8.0/10.0/12.0/14.0/16.0/18.0/20.0/ 22.0/24.0/26.0/28.0/30.0	10	100	HSS	1	25201038	STB HSS 04-30/10	-
4.0/6.0/9.0/12.0/15.0/18.0/21.0/24.0/27.0/ 30.0/33.0/36.0/39.0	10	107	HSS	1	25201039	STB HSS 04-39/10	-
6.0/9.0/12.5/15.2/18.6/20.4/22.5/26.0/ 28.3/30.5/34.0/37.0	10	100	HSS	1	25201040	STB HSS 06-37/10	-

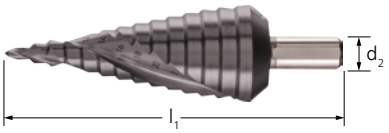


HSS step drill, 3-piece set

The set contains three HSS step drills in the versions 4–12 mm (9 steps), 4–20 mm (9 steps), 4–30 mm (14 steps) for industrial uses.

Special features:
- To ensure reliable torque transmission, all step drills have a three-surface shaft.
- The sturdy plastic box protects the tools against dirt and damage.
- The securing of the HSS step drills facilitates the selection and withdrawal of the tools.

Contents [Piece]	Version		Item no.	Designation	Price/unit EUR
3	HSS	1	25201046	SET STB HSS 3TLG	-



HSS step drill with HICOAT coating HC-FEP

Very smooth-running and sturdy high-performance tools for burr-free drilling and deburring of materials measuring up to 4 mm thick in just one work step. To ensure reliable torque transmission, all step drills have a three-surface shaft.

Special features:
- Thanks to the HICOAT coating, especially well-suited to use on stainless steel (INOX) and can be used without adding coolant.
- The high-quality drill tip ensures effortless centring and drilling, and the tool taper makes it easier to pull back.

Drilling steps	d_2 [mm]	l_1 [mm]	Version		Item no.	Designation	Price/ unit EUR
4.0/5.0/6.0/7.0/8.0/9.0/10.0/11.0/12.0	6	65	HC-FEP	1	25201041	STB HSS 04-12/6 HC-FEP	-
4.0/6.0/8.0/10.0/12.0/14.0/16.0/18.0/20.0	8	75	HC-FEP	1	25201042	STB HSS 04-20/8 HC-FEP	-
4.0/6.0/8.0/10.0/12.0/14.0/16.0/18.0/20.0/ 22.0/24.0/26.0/28.0/30.0	10	100	HC-FEP	1	25201043	STB HSS 04-30/10 HC-FEP	-
4.0/6.0/9.0/12.0/15.0/18.0/21.0/24.0/27.0/ 30.0/33.0/36.0/39.0	10	107	HC-FEP	1	25201044	STB HSS 04-39/10 HC-FEP	-
6.0/9.0/12.5/15.2/18.6/20.4/22.5/26.0/ 28.3/30.5/34.0/37.0	10	100	HC-FEP	1	25201045	STB HSS 06-37/10 HC-FEP	-



HSS step drill with HICOAT coating HC-FEP, 3-piece set

The set contains 3 HSS step drills in the versions 4–12 mm (9 steps), 4–20 mm (9 steps), 4–30 mm (14 steps) with a premium HICOAT coating HC-FEP for industrial uses.

Special features:
- To ensure reliable torque transmission, all step drills have a three-surface shaft.
- The sturdy plastic box protects the tools against dirt and damage.
- The securing of the HSS step drills facilitates the selection and withdrawal of the tools.

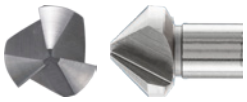
Contents [Piece]	Version		Item no.	Designation	Price/unit EUR
3	HC-FEP	1	25201047	SET STB HSS HC-FEP 3TLG	-

The range of PFERD countersinking tools comprises conical countersinks and flat countersinks of a high-quality industrial standard. PFERD also offers conical countersinks in the HSS Co5 type or with the high-quality HICOAT coating HC-FEP for working on particularly complex materials.

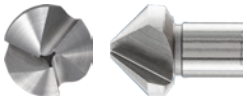


Types

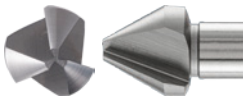
Conical countersink



HSS countersink 90°
- Particularly well suited to producing countersinks for 90° screws.



HSS countersink 90° UGT
- Particularly well suited to producing exact countersinks.
- Smooth running.
- Low countersinking force and a good surface quality.
- Specially developed geometry with wide flutes for optimal chip removal and heat dissipation.
- Particularly well suited to robotic and stationary applications.



HSS countersink 60°
- Particularly well suited to countersinking and deburring.

Flat countersink



Quality grade fine (F)
- Flat countersinks with the quality grade “fine” are suitable for producing flat countersinks at through holes or blind holes in the tolerance range “fine” with high mounting accuracy.



Quality grade medium (M)
- Flat countersinks with the quality grade “medium” are suitable for producing flat countersinks at through holes or blind holes in the tolerance range “medium” with extended mounting accuracy.



For tapping hole (GKL)
- Flat countersinks for the tapping hole are suitable for producing flat countersinks at core holes for female threads.

Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:
① Select the material group to be machined.
② Select the type.
③ Establish the cutting speed range.

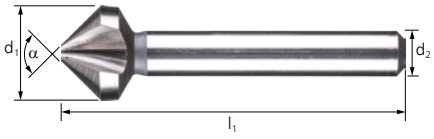
To determine the recommended rotational speed range [RPM], please proceed as follows:
④ Select the required diameter.
⑤ The cutting speed range and the diameter determine the recommended rotational speed range.



① Material group			② Design	③ Cutting speed
Steel, cast steel	Non-alloyed construction steels up to 700 N/mm²	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, tempering steels	HSS	15–20 m/min
			HSSE Co5	
			HICOAT HC-FEP	
	Alloyed construction steels over 700 N/mm²	Tool steels, tempering steels, alloyed steels, cast steel	HSSE Co5	10–15 m/min
			HICOAT HC-FEP	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	HSS	10–15 m/min
			HSSE Co5	
			HICOAT HC-FEP	
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys Brass, copper, zinc	HSS	15–20 m/min
			HSSE Co5	
			HICOAT HC-FEP	
	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	HSSE Co5	10–20 m/min
			HICOAT HC-FEP	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	HSS	10 m/min
			HSSE Co5	
			HICOAT HC-FEP	
Plastics, other materials	Fibre-reinforced thermoplastics and duroplastics, hard rubber, wood		HSS	10–15 m/min
			HSSE Co5	
			HICOAT HC-FEP	

Example:
Conical countersink
KES HSS DIN 335 C90°,
Countersink dia. 28.0 mm.
Steels up to 700 N/mm².
Cutting speed: 15–20 m/min
Rotational speed range: 170–220 RPM

④ Countersink dia. [mm]	⑤ Cutting speeds [m/min]		
	10	15	20
	Rotational speeds [RPM]		
4.30	800	1,200	1,600
5.00	640	960	1,280
5.30	640	960	1,280
6.00	530	800	1,060
6.30	530	800	1,060
7.00	460	680	920
8.00	400	600	800
8.30	400	600	800
10.00	320	470	640
10.40	320	470	640
11.50	280	420	560
12.40	260	390	520
12.50	260	390	520
15.00	210	320	420
16.00	190	290	380
16.50	190	290	380
19.00	170	260	340
20.00	150	230	300
20.50	150	230	300
23.00	140	210	280
25.00	130	200	260
28.00	110	170	220
31.00	100	150	200
37.00	90	140	180
40.00	80	120	160



Conical countersink HSS DIN 335 C 90°

High-performance tool with a countersink angle of 90° for countersinking 90° screws for all common materials such as steel, cast steel and non-ferrous metals. To ensure reliable torque transmission, conical countersinks have a three-surface shaft from a countersink diameter of 28 mm.

Special features:
- High stock removal rate and optimum chip removal.
- Burr-free results even at low cutting speeds.
- High workpiece surface quality and long tool life.

d_1 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Version		Item no.	Designation	Price/unit EUR
4.3	4	40	90	HSS	1	25202100	KES HSS DIN 335 C90° 4,3	-
5	4	40	90	HSS	1	25202101	KES HSS DIN 335 C90° 5,0	-
5.3	4	40	90	HSS	1	25202102	KES HSS DIN 335 C90° 5,3	-
6	5	45	90	HSS	1	25202103	KES HSS DIN 335 C90° 6,0	-
6.3	5	45	90	HSS	1	25202104	KES HSS DIN 335 C90° 6,3	-
7	6	50	90	HSS	1	25202105	KES HSS DIN 335 C90° 7,0	-
8	6	50	90	HSS	1	25202106	KES HSS DIN 335 C90° 8,0	-
8.3	6	50	90	HSS	1	25202107	KES HSS DIN 335 C90° 8,3	-
10	6	50	90	HSS	1	25202108	KES HSS DIN 335 C90° 10,0	-
10.4	6	50	90	HSS	1	25202109	KES HSS DIN 335 C90° 10,4	-
11.5	8	56	90	HSS	1	25202110	KES HSS DIN 335 C90° 11,5	-
12.4	8	56	90	HSS	1	25202111	KES HSS DIN 335 C90° 12,4	-
15	10	60	90	HSS	1	25202112	KES HSS DIN 335 C90° 15,0	-
16.5	10	60	90	HSS	1	25202113	KES HSS DIN 335 C90° 16,5	-
19	10	63	90	HSS	1	25202114	KES HSS DIN 335 C90° 19,0	-

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d_1 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Version		Item no.	Designation	Price/unit EUR
20.5	10	63	90	HSS	1	25202115	KES HSS DIN 335 C90° 20,5	-
23	10	67	90	HSS	1	25202116	KES HSS DIN 335 C90° 23,0	-
25	10	67	90	HSS	1	25202117	KES HSS DIN 335 C90° 25,0	-
28	12	71	90	HSS	1	25202118	KES HSS DIN 335 C90° 28,0	-
31	12	71	90	HSS	1	25202119	KES HSS DIN 335 C90° 31,0	-
37	12	90	90	HSS	1	25202120	KES HSS DIN 335 C90° 37,0	-
40	15	80	90	HSS	1	25202121	KES HSS DIN 335 C90° 40,0	-

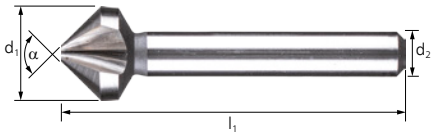


Conical countersink sets HSS DIN 335 C 90°

The sets include high-performance countersink tools with a countersink angle of 90° for countersinking 90° screws for all common materials such as steel, cast steel and non-ferrous metals.

Special features:
- The sturdy plastic box protects the tools against dirt and damage.

Contents [Piece]	Contents tool diameter [mm]	Version		Item no.	Designation	Price/unit EUR
3	6.3 / 10.4 / 16.5	HSS	1	25202152	SET KES HSS DIN 335 C90° 3TLG	-
5	6.3 / 10.4 / 16.5 / 20.5 / 25.0	HSS	1	25202153	SET KES HSS DIN 335 C90° 5TLG	-
6	6.3 / 8.3 / 10.4 / 12.4 / 16.5 / 20.5	HSS	1	25202154	SET KES HSS DIN 335 C90° 6TLG	-



Conical countersink with unequal pitch UGT HSS DIN 335 C 90°

High-performance tool with a countersink angle of 90° for precise countersinking of 90° screws for all common materials such as steel, cast steel and non-ferrous metals. To ensure reliable torque transmission, conical countersinks have a three-surface shaft from a countersink diameter of 28 mm.

Special features:
- Optimum chip removal and heat dissipation, smooth running and optimum results due to unequal pitch (UGT).
- Burr-free results even at low cutting speeds.
- Low countersinking force and a good surface quality as well as a long tool life.

d_1 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Version		Item no.	Designation	Price/unit EUR
6.3	5	45	90	HSS UGT	1	25202168	UGT HSS DIN 335 C90° 6,3	-
8.3	6	50	90	HSS UGT	1	25202169	UGT HSS DIN 335 C90° 8,3	-
10.4	6	50	90	HSS UGT	1	25202170	UGT HSS DIN 335 C90° 10,4	-
12.4	8	56	90	HSS UGT	1	25202171	UGT HSS DIN 335 C90° 12,4	-
15	10	60	90	HSS UGT	1	25202172	UGT HSS DIN 335 C90° 15,0	-
16.5	10	60	90	HSS UGT	1	25202173	UGT HSS DIN 335 C90° 16,5	-
19	10	63	90	HSS UGT	1	25202174	UGT HSS DIN 335 C90° 19,0	-
20.5	10	63	90	HSS UGT	1	25202175	UGT HSS DIN 335 C90° 20,5	-
23	10	67	90	HSS UGT	1	25202176	UGT HSS DIN 335 C90° 23,0	-
25	10	67	90	HSS UGT	1	25202177	UGT HSS DIN 335 C90° 25,0	-
31	12	71	90	HSS UGT	1	25202178	UGT HSS DIN 335 C90° 31,0	-

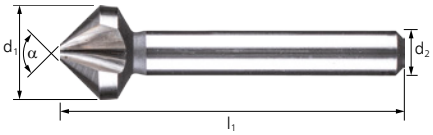


Conical countersink sets with unequal pitch UGT HSS DIN 335 C 90°

The sets include high-performance countersink tools with a countersink angle of 90° for countersinking 90° screws for all common materials such as steel, cast steel and non-ferrous metals.

Special features:
- Optimum chip removal and heat dissipation, smooth running and optimum results due to unequal pitch (UGT).
- The sturdy plastic box protects the tools against dirt and damage.

Contents [Piece]	Contents tool diameter [mm]	Version		Item no.	Designation	Price/ unit EUR
3	6.3 / 10.4 / 16.5	HSS UGT	1	25202190	SET UGT HSS DIN 335 C90° 3TLG	-
5	6.3 / 10.4 / 16.5 / 20.5 / 25.0	HSS UGT	1	25202191	SET UGT HSS DIN 335 C90° 5TLG	-
6	6.3 / 8.3 / 10.4 / 12.4 / 16.5 / 20.5	HSS UGT	1	25202192	SET UGT HSS DIN 335 C90° 6TLG	-



Conical countersink HSSE DIN 335 C 90°, type Co5

High-performance tool with a countersink angle of 90° for countersinking 90° screws with temperature-resistant Co content for particularly tough and hard materials. To ensure reliable torque transmission, conical countersinks have a three-surface shaft from a countersink diameter of 28 mm.

Special features:
- High stock removal rate and optimum chip removal.
- Burr-free results even at low cutting speeds.
- High workpiece surface quality and long tool life.

d_1 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Version		Item no.	Designation	Price/unit EUR
4.3	4	40	90	HSSE	1	25202122	KES HSSE DIN 335 C90° 4,3	-
5	4	40	90	HSSE	1	25202123	KES HSSE DIN 335 C90° 5,0	-
5.3	4	40	90	HSSE	1	25202124	KES HSSE DIN 335 C90° 5,3	-
6	5	45	90	HSSE	1	25202125	KES HSSE DIN 335 C90° 6,0	-
6.3	5	45	90	HSSE	1	25202126	KES HSSE DIN 335 C90° 6,3	-
8	6	50	90	HSSE	1	25202127	KES HSSE DIN 335 C90° 8,0	-
8.3	6	50	90	HSSE	1	25202128	KES HSSE DIN 335 C90° 8,3	-
10	6	50	90	HSSE	1	25202129	KES HSSE DIN 335 C90° 10,0	-
10.4	6	50	90	HSSE	1	25202130	KES HSSE DIN 335 C90° 10,4	-
11.5	8	56	90	HSSE	1	25202131	KES HSSE DIN 335 C90° 11,5	-
12.4	8	56	90	HSSE	1	25202132	KES HSSE DIN 335 C90° 12,4	-
15	10	60	90	HSSE	1	25202133	KES HSSE DIN 335 C90° 15,0	-
16.5	10	60	90	HSSE	1	25202134	KES HSSE DIN 335 C90° 16,5	-
19	10	63	90	HSSE	1	25202135	KES HSSE DIN 335 C90° 19,0	-
20.5	10	63	90	HSSE	1	25202136	KES HSSE DIN 335 C90° 20,5	-
23	10	67	90	HSSE	1	25202137	KES HSSE DIN 335 C90° 23,0	-
25	10	67	90	HSSE	1	25202138	KES HSSE DIN 335 C90° 25,0	-
28	12	71	90	HSSE	1	25202139	KES HSSE DIN 335 C90° 28,0	-
31	12	71	90	HSSE	1	25202140	KES HSSE DIN 335 C90° 31,0	-

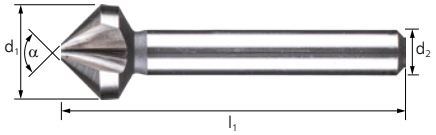


Conical countersink sets HSSE DIN 335 C 90°, type Co5

The sets include high-performance countersink tools with a countersink angle of 90° for countersinking 90° screws for particularly tough and hard materials such as alloyed and high-strength steel and stainless steel (INOX).

Special features:
- Long tool life and temperature-resistant version due to Co content.
- The sturdy plastic box protects the tools against dirt and damage.

Contents [Piece]	Contents tool diameter [mm]	Version		Item no.	Designation	Price/ unit EUR
3	6.3 / 10.4 / 16.5	HSSE	1	25202155	SET KES HSSE DIN 335 C90° 3TLG	-
5	6.3 / 10.4 / 16.5 / 20.5 / 25.0	HSSE	1	25202156	SET KES HSSE DIN 335 C90° 5TLG	-
6	6.3 / 8.3 / 10.4 / 12.4 / 16.5 / 20.5	HSSE	1	25202157	SET KES HSSE DIN 335 C90° 6TLG	-



Conical countersink with unequal pitch UGT HSS DIN 335 C 90°, type Co5

High-performance tool with a countersink angle of 90° for countersinking 90° screws with temperature-resistant Co content for particularly tough and hard materials. To ensure reliable torque transmission, conical countersinks have a three-surface shaft from a countersink diameter of 28 mm.

Special features:
- Optimum chip removal and heat dissipation, smooth running and optimum results due to unequal pitch (UGT).
- Burr-free results even at low cutting speeds.
- Low countersinking force and a good workpiece surface quality as well as a long tool life.

d_1 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Version		Item no.	Designation	Price/unit EUR
6.3	5	45	90	HSSE UGT	1	25202179	UGT HSSE DIN 335 C90° 6,3	-
8.3	6	50	90	HSSE UGT	1	25202180	UGT HSSE DIN 335 C90° 8,3	-
10.4	6	50	90	HSSE UGT	1	25202181	UGT HSSE DIN 335 C90° 10,4	-
12.4	8	56	90	HSSE UGT	1	25202182	UGT HSSE DIN 335 C90° 12,4	-
15	10	60	90	HSSE UGT	1	25202183	UGT HSSE DIN 335 C90° 15,0	-
16.5	10	60	90	HSSE UGT	1	25202184	UGT HSSE DIN 335 C90° 16,5	-
19	10	63	90	HSSE UGT	1	25202185	UGT HSSE DIN 335 C90° 19,0	-
20.5	10	63	90	HSSE UGT	1	25202186	UGT HSSE DIN 335 C90° 20,5	-
23	10	67	90	HSSE UGT	1	25202187	UGT HSSE DIN 335 C90° 23,0	-
25	10	67	90	HSSE UGT	1	25202188	UGT HSSE DIN 335 C90° 25,0	-
31	12	71	90	HSSE UGT	1	25202189	UGT HSSE DIN 335 C90° 31,0	-

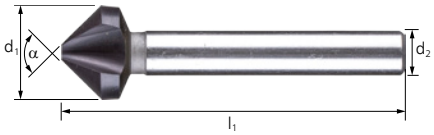


Conical countersink sets with unequal pitch UGT HSSE DIN 335 C 90°, type Co5

The sets include high-performance countersink tools with a countersink angle of 90° for countersinking 90° screws for particularly tough and hard materials such as alloyed and high-strength steel and stainless steel (INOX).

Special features:
- Long tool life and temperature-resistant version due to Co content.
- Optimum chip removal and heat dissipation, smooth running and optimum results due to unequal pitch (UGT).
- The sturdy plastic box protects the tools against dirt and damage.

Contents [Piece]	Contents tool diameter [mm]	Version		Item no.	Designation	Price/unit EUR
3	6.3 / 10.4 / 16.5	HSSE UGT	1	25202193	SET UGT HSSE DIN 335 C90° 3TLG	-
5	6.3 / 10.4 / 16.5 / 20.5 / 25.0	HSSE UGT	1	25202194	SET UGT HSSE DIN 335 C90° 5TLG	-
6	6.3 / 8.3 / 10.4 / 12.4 / 16.5 / 20.5	HSSE UGT	1	25202195	SET UGT HSSE DIN 335 C90° 6TLG	-



Conical countersink HSS DIN 335 C 90° with HICOAT coating HC-FEP

High-performance tool with a countersink angle of 90° for countersinking 90° screws for particularly tough and hard materials. To ensure reliable torque transmission, conical countersinks have a three-surface shaft from a countersink diameter of 28 mm.

Special features:
- High stock removal rate, optimum chip removal, high hardness and wear resistance thanks to HICOAT coating.
- Burr-free results even at low cutting speeds.
- High workpiece surface quality as well as particularly long tool life and high temperature resistance.

d_1 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Version		Item no.	Designation	Price/unit EUR
6.3	5	45	90	HC-FEP	1	25202141	KES HSS DIN 335 C90° HC-FEP 6,3	-
8.3	6	50	90	HC-FEP	1	25202142	KES HSS DIN 335 C90° HC-FEP 8,3	-
10.4	6	50	90	HC-FEP	1	25202143	KES HSS DIN 335 C90° HC-FEP 10,4	-
12.4	8	56	90	HC-FEP	1	25202144	KES HSS DIN 335 C90° HC-FEP 12,4	-
15	10	60	90	HC-FEP	1	25202145	KES HSS DIN 335 C90° HC-FEP 15,0	-
16.5	10	60	90	HC-FEP	1	25202146	KES HSS DIN 335 C90° HC-FEP 16,5	-
19	10	63	90	HC-FEP	1	25202147	KES HSS DIN 335 C90° HC-FEP 19,0	-
20.5	10	63	90	HC-FEP	1	25202148	KES HSS DIN 335 C90° HC-FEP 20,5	-
23	10	67	90	HC-FEP	1	25202149	KES HSS DIN 335 C90° HC-FEP 23,0	-
25	10	67	90	HC-FEP	1	25202150	KES HSS DIN 335 C90° HC-FEP 25,0	-
31	12	71	90	HC-FEP	1	25202151	KES HSS DIN 335 C90° HC-FEP 31,0	-

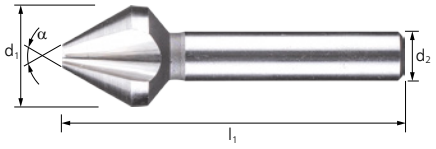


Conical countersink sets HSS DIN 335 C 90° with HICOAT coating HC-FEP

The sets include high-performance countersink tools with a countersink angle of 90° for countersinking 90° screws for particularly tough and hard materials such as alloyed and high-strength steel and stainless steel (INOX). High hardness and wear resistance thanks to HICOAT coating.

Special features:
- Particularly long tool life and very temperature-resistant.
- Can also be used in a higher cutting speed range and without coolants and lubricants.
- The sturdy plastic box protects the tools against dirt and damage.

Contents [Piece]	Contents tool diameter [mm]	Version		Item no.	Designation	Price/ unit EUR
3	6.3 / 10.4 / 16.5	HC-FEP	1	25202158	SET KES HSS DIN 335 C90° 3TLG HC-FEP	-
5	6.3 / 10.4 / 16.5 / 20.5 / 25.0	HC-FEP	1	25202159	SET KES HSS DIN 335 C90° 5TLG HC-FEP	-
6	6.3 / 8.3 / 10.4 / 12.4 / 16.5 / 20.5	HC-FEP	1	25202160	SET KES HSS DIN 335 C90° 6TLG HC-FEP	-



Conical countersink HSS DIN 334 C 60°

High-performance countersink tools with a countersink angle of 60° for deburring all common materials such as steel, cast steel and non-ferrous metals.

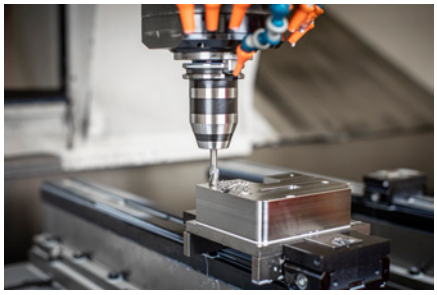
Special features:
- High stock removal rate and optimum chip removal.
- Burr-free results even at low cutting speeds.
- High workpiece surface quality and long tool life.

d_1 [mm]	d_2 [mm]	l_1 [mm]	α [°]	Version		Item no.	Designation	Price/unit EUR
6.3	5	45	60	HSS	1	25202161	KES HSS DIN 334 C60° 6,3	-
8	6	50	60	HSS	1	25202162	KES HSS DIN 334 C60° 8,0	-
10	6	50	60	HSS	1	25202163	KES HSS DIN 334 C60° 10,0	-
12.5	8	56	60	HSS	1	25202164	KES HSS DIN 334 C60° 12,5	-
16	10	63	60	HSS	1	25202165	KES HSS DIN 334 C60° 16,0	-
20	10	67	60	HSS	1	25202166	KES HSS DIN 334 C60° 20,0	-
25	10	71	60	HSS	1	25202167	KES HSS DIN 334 C60° 25,0	-

Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:
① Select the material group to be machined.
② Select the type.
③ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:
④ Select the required diameter.
⑤ The cutting speed range and the diameter determine the recommended rotational speed range.



① Material group			② Design	③ Cutting speed
Steel, cast steel	Steels up to 700 N/mm²	Construction steels, carbon steels, tool steels, alloyed and non-alloyed steels, case-hardened steels, cast steel, tempering steels	Fine (F)	10–20 m/min
			Medium (M)	
			Tapping hole (GKL)	
	Steels over 700 N/mm²		Fine (F)	10–15 m/min
			Medium (M)	
			Tapping hole (GKL)	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Fine (F)	10–15 m/min
			Medium (M)	
			Tapping hole (GKL)	
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys Brass, copper, zinc	Fine (F)	15–20 m/min
			Medium (M)	
			Tapping hole (GKL)	
	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	Fine (F)	10–20 m/min
			Medium (M)	
			Tapping hole (GKL)	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	Fine (F)	10 m/min
			Medium (M)	
			Tapping hole (GKL)	
Plastics, other materials	Fibre-reinforced thermoplastics and duroplastics, hard rubber, wood		Fine (F)	10–15 m/min
			Medium (M)	
			Tapping hole (GKL)	

Example:
Flat countersink
FLS HSS DIN 373 15.0 F,
Flat countersink dia. 15 mm.
Steels up to 700 N/mm².
Cutting speed: 10–20 m/min
Rotational speed range: 220–440 RPM

④ Countersink dia. [mm]	⑤ Cutting speeds [m/min]		
	10	15	20
	Rotational speeds [RPM]		
6.00	530	795	1,060
8.00	400	600	800
10.00	320	480	640
11.00	290	435	580
15.00	220	330	440
18.00	180	270	360
20.00	160	240	320



HSS flat countersink DIN 373 quality grade fine for through hole

High-performance flat countersink made of HSS according to DIN 373 with the quality grade of fine for producing flat countersinks at through holes or blind holes in the tolerance range of fine with high mounting accuracy. For through holes with the quality grade fine (F) according to ISO 273.

Special features:
- Optimum chip removal and smooth running.
- Burr-free results and good surface quality.
- Long tool life and very high stock removal rate.

d_1 [mm]	d_2 [mm]	d_3	l_1 [mm]	Version		Item no.	Designation	Price/unit EUR
6	5	3.2	71	F	1	25203100	FLS HSS DIN 373 6,0 F	-
8	5	4.3	71	F	1	25203101	FLS HSS DIN 373 8,0 F	-
10	8	5.3	80	F	1	25203102	FLS HSS DIN 373 10,0 F	-
11	8	6.4	80	F	1	25203103	FLS HSS DIN 373 11,0 F	-
15	12.5	8.4	100	F	1	25203104	FLS HSS DIN 373 15,0 F	-
18	12.5	10.5	100	F	1	25203105	FLS HSS DIN 373 18,0 F	-
20	12.5	13	100	F	1	25203106	FLS HSS DIN 373 20,0 F	-

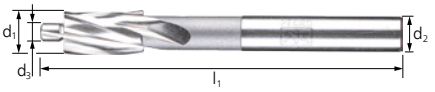


HSS flat countersink DIN 373 quality grade medium for through hole

High-performance flat countersink made of HSS according to DIN 373 with the quality grade of medium for producing flat countersinks at through holes or blind holes in the tolerance range of medium with extended mounting accuracy. For through holes with the quality grade medium (M) according to ISO 273.

Special features:
- Optimum chip removal and smooth running.
- Burr-free results and good surface quality.
- Long tool life and very high stock removal rate.

d_1 [mm]	d_2 [mm]	d_3	l_1 [mm]	Version		Item no.	Designation	Price/unit EUR
6	5	3.4	71	M	1	25203107	FLS HSS DIN 373 6,0 M	-
8	5	4.5	71	M	1	25203108	FLS HSS DIN 373 8,0 M	-
10	8	5.5	80	M	1	25203109	FLS HSS DIN 373 10,0 M	-
11	8	6.6	80	M	1	25203110	FLS HSS DIN 373 11,0 M	-
15	12.5	9	100	M	1	25203111	FLS HSS DIN 373 15,0 M	-
18	12.5	11	100	M	1	25203112	FLS HSS DIN 373 18,0 M	-
20	12.5	13.5	100	M	1	25203113	FLS HSS DIN 373 20,0 M	-

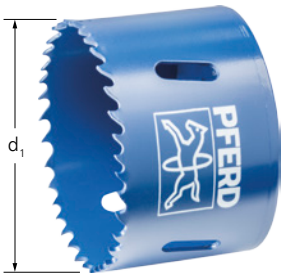


HSS flat countersink DIN 373 for thread core hole

High-performance flat countersink with guide pin for tapping hole (GKL) made of HSS according to DIN 373 for producing flat countersinks at core holes for female threads.

Special features:
- Optimum chip removal and smooth running.
- Burr-free results and good surface quality.
- Long tool life and very high stock removal rate.

d_1 [mm]	d_2 [mm]	d_3	l_1 [mm]	Version		Item no.	Designation	Price/unit EUR
6	5	2.5	71	GKL	1	25203114	FLS HSS DIN 373 6,0 GKL	-
8	5	3.3	71	GKL	1	25203115	FLS HSS DIN 373 8,0 GKL	-
10	8	4.2	80	GKL	1	25203116	FLS HSS DIN 373 10,0 GKL	-
11	8	5	80	GKL	1	25203117	FLS HSS DIN 373 11,0 GKL	-
15	12.5	6.8	100	GKL	1	25203118	FLS HSS DIN 373 15,0 GKL	-
18	12.5	8.5	100	GKL	1	25203119	FLS HSS DIN 373 18,0 GKL	-
20	12.5	10.2	100	GKL	1	25203120	FLS HSS DIN 373 20,0 GKL	-



HSS hole saws

Hole saws made of tough, shatter-proof, sturdy HSS bimetal for cost-effectively cutting out holes. The saw teeth are made of high-quality M42 (Co8) material.



Special features:
- High concentricity, and chattering during sawing is prevented by the alternating tooth pitch.
- Good chip removal.
- The hole saw is conveniently centred and guided via the replaceable HSS pilot drill.

d_1 [mm]	Max. cutting depth [mm]	Opt. RPM steel	Opt. RPM stainless steel (INOX)	Opt. RPM non-ferrous metals	Opt. RPM plastics		Item no.	Designation	Price/unit EUR
Thread version 1/2-20 UNF, suitable arbors LSS 1, LSS 4 or quick-mounting system PSL									
14	34	620	310	1,000	1,000	1	25100114	LS 14	-
16	34	550	275	880	880	1	25100116	LS 16	-
17	36	520	260	820	820	1	25100117	LS 17	-
19	36	460	230	740	740	1	25100119	LS 19	-
20	36	425	210	700	700	1	25100220	LS 20	-
21	36	410	205	670	670	1	25100221	LS 21	-
22	36	390	195	640	640	1	25100322	LS 22	-
24	36	360	180	580	580	1	25100424	LS 24	-
25	36	350	175	560	560	1	25100425	LS 25	-
27	36	325	160	520	520	1	25100527	LS 27	-
29	36	300	150	480	480	1	25100629	LS 29	-
30	36	285	145	470	470	1	25100730	LS 30	-
Thread version 5/8-18 UNF, suitable arbor LSS 2 or quick-mounting system PSL									
32	36	275	140	440	440	1	25100832	LS 32	-
33	36	260	135	420	420	1	25100933	LS 33	-
35	36	250	125	400	400	1	25101035	LS 35	-
37	36	235	115	370	370	1	25101137	LS 37	-
38	36	230	115	370	370	1	25101138	LS 38	-
40	36	215	110	350	350	1	25101240	LS 40	-
41	36	210	105	340	340	1	25101241	LS 41	-
43	31	200	100	330	330	1	25101343	LS 43	-
44	31	195	95	320	320	1	25101344	LS 44	-
46	31	185	90	300	300	1	25101346	LS 46	-
48	31	180	90	290	290	1	25101448	LS 48	-
51	31	170	85	270	270	1	25101551	LS 51	-
52	31	165	80	270	270	1	25101552	LS 52	-
54	31	160	80	260	260	1	25101654	LS 54	-
57	31	150	75	250	250	1	25101757	LS 57	-
59	31	145	70	240	240	1	25101859	LS 59	-
60	31	140	70	230	230	1	25101860	LS 60	-
64	31	135	65	220	220	1	25101963	LS 64	-
65	31	135	65	220	220	1	25101965	LS 65	-
67	31	130	65	210	210	1	25102067	LS 67	-
68	31	130	65	210	210	1	25102068	LS 68	-
70	31	125	60	200	200	1	25102170	LS 70	-
73	31	120	60	190	190	1	25102273	LS 73	-
76	31	115	55	180	180	1	25102376	LS 76	-
79	31	110	55	180	180	1	25102479	LS 79	-

Continued on next page

HSS hole saws, sets and accessories

HSS hole saws

d_1 [mm]	Max. cutting depth [mm]	Opt. RPM steel	Opt. RPM stainless steel (INOX)	Opt. RPM non-ferrous metals	Opt. RPM plastics		Item no.	Designation	Price/unit EUR
83	31	105	50	170	170	1	25102583	LS 83	-
86	31	100	50	160	160	1	25102586	LS 86	-
89	31	95	45	160	160	1	25102689	LS 89	-
92	31	95	45	150	150	1	25102792	LS 92	-
95	31	90	45	150	150	1	25102895	LS 95	-
98	31	90	45	140	140	1	25102898	LS 98	-
102	31	85	40	140	140	1	25102912	LS 102	-
105	31	80	40	130	130	1	25103015	LS 105	-
111	31	75	35	130	130	1	25103111	LS 111	-
114	31	75	35	120	120	1	25103114	LS 114	-
121	31	70	35	120	120	1	25103221	LS 121	-
127	31	65	30	110	110	1	25103227	LS 127	-
140	31	60	30	100	100	1	25103440	LS 140	-
152	31	55	25	90	90	1	25103552	LS 152	-
160	31	52	23	85	85	1	25103010	LS 160	-
168	31	50	23	82	82	1	25103011	LS 168	-
177	31	47	22	77	77	1	25103012	LS 177	-
210	31	40	18	65	65	1	25103013	LS 210	-

HSS hole saw sets



Set for tradespeople

The set contains five HSS hole saws in the most common diameters, including accessories, for use in professional trades. Operating instructions are included.

Contents:
The set consists of five HSS hole saws LS 22, LS 25, LS 29, LS 32 and LS 38, a hole saw arbor LSS 4, an LSA adapter for hole saw arbor LSS 4, an Allen key 4 mm and an ejection spring.

Special features:
- It is possible to use hole saws LS 32 and LS 38 with the LSA adapter and washer.
- Supplied in well-arranged plastic box which protects against dirt and damage.

L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
168	116	57	1	25900700	LS-SO 7 H	-



Set for fitters

The set contains six HSS hole saws in the most common diameters, including accessories, for plumbers and sanitary engineers. Operating instructions are included.

Contents:
The set consists of six HSS hole saws: LS 19, LS 22, LS 29, LS 38, LS 44 and LS 57, two hole saw arbors: LSS 2 and LSS 4, an LSA adapter for hole saw arbor LSS 4, an Alley key 4 mm and an ejection spring.

Special features:
- It is possible to use hole saw LS 38 with the LSA adapter and washer.
- Supplied in well-arranged plastic box which protects against dirt and damage.

L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
219	156	60	1	25900920	LS-SO 9 I	-



Set for electricians (international standard sizes)

The set contains six HSS hole saws in the most common international diameters, including accessories, for electricians. Operating instructions are included.

Contents:
The set consists of six HSS hole saws: LS 22, LS 29, LS 35, LS 44, LS 51 and LS 64, two hole saw arbors: LSS 2 and LSS 4, an LSA adapter for hole saw arbor LSS 4, an Allen key 4 mm and an ejection spring.

Special features:
- It is possible to use hole saw LS 35 with the LSA adapter and washer.
- Supplied in well-arranged plastic box which protects against dirt and damage.

L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
219	156	60	1	25900910	LS-SO 9 E-1	-



Set for electricians (German standard sizes)

The set contains nine HSS hole saws in the most common diameters, including accessories, for electricians in Germany. Operating instructions are included.

Contents:
The set consists of nine HSS hole saws: LS 19, LS 22, LS 25, LS 32, LS 38, LS 44, LS 51, LS 60 and LS 68, two hole saw arbors: LSS 2 and LSS 4, an LSA adapter for hole saw arbor LSS 4, a pilot drill LSB 6/90, an Allen key 4 mm and an ejection spring.

Special features:
- It is possible to use hole saws LS 32 and LS 38 with the LSA adapter and washer.
- Supplied in well-arranged plastic box which protects against dirt and damage.

L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
219	156	60	1	25900010	LS-SO 13 E-2	-



Set for mechanics

The set contains nine HSS hole saws in the most common diameters, including accessories, for mechanics in the construction, container and pipeline industries. Operating instructions are included.

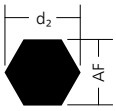
Contents:
The set consists of nine HSS hole saws: LS 19, LS 22, LS 29, LS 35, LS 38, LS 44, LS 51, LS 57 and LS 64, two hole saw arbors: LSS 2 and LSS 4, a pilot drill LSB 6/90, an LSA adapter for hole saw arbor LSS 4, an Allen key 4 mm and an ejection spring.

Special features:
- It is possible to use hole saws LS 35 and LS 38 with the LSA adapter and washer.
- Supplied in well-arranged plastic box which protects against dirt and damage.

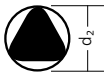
L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
219	180	66	1	25901300	LS-SO 13 M	-

Shank dimensions [mm]

Hexagonal



Round



LSS 1



LSS 2



LSS 4



Hole saw arbors LSS

Hole saw arbors are designed for mounting the hole saw and the pilot drill.

Special features:
- Hole saw arbors LSS 1 and LSS 2 are supplied with the HSS pilot drill LSB 6/60 and an ejection spring.
- The hole saw arbor LSS 4 is supplied with the HSS pilot drill LSB 6/90 and an ejection spring.
- The spring can easily be removed manually without the help of tools.

Suitable for hole saws	d_2 [mm]	Size [mm]	Shank type	Thread		Item no.	Designation	Price/unit EUR
LS 14-30	10.5	9.53	hexagonal	1/2–20 UNF	1	25200111	LSS 1	-
LS 32-210	10.5	9.53	hexagonal	5/8–18 UNF	1	25200211	LSS 2	-
LS 14-30	6.35	-	round	1/2–20 UNF	1	25200407	LSS 4	-

PSL 8,5
PSL 11



AD-PSL 14-30



AD-PSL 32-210



AD-PSL 102-210 HEAVY DUTY



Quick-mounting system for hole saws, adapters

Clamping system for easily and quickly using and changing HSS hole saws on conventional power drills. Adapter AD-PSL 14–30 for LS 14–30 mm, adapter AD-PSL 32–210 for LS 32–98 mm and adapter AD-PSL 32-210 HEAVY DUTY for LS 102-210 mm.

Special features:
- After the application is completed, the hole saw and quick-mounting system can be separated without the use of additional tools by simply pressing a button.
- Interchangeable HSS pilot drill.
- Due to the high torque levels involved, when using large hole saws PFERD recommends the use of the PSL quick-mounting systems in conjunction with the AD-PSL 102-210 HEAVY DUTY adapter.

Suitable for hole saws	Shank type	d_2 [mm]	Size [mm]		Item no.	Designation	Price/unit EUR
LS 14–210	hexagonal	9.3	8.5	1	25200901	PSL 8,5	-
		12.2	11	1	25200900	PSL 11	-
LS 14-30	-	-	-	3	25200910	AD-PSL 14-30	-
LS 32-210	-	-	-	3	25200920	AD-PSL 32-210	-
LS 102–210	-	-	-	3	25200921	AD-PSL 102-210 HEAVY DUTY	-

LSB 6/60



LSB 6/90

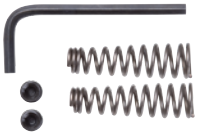


HSS pilot drill LSB

HSS pilot drills for HSS hole saw arbors and quick-mounting systems for hole saws.

Special features:
- Hole saw arbors LSS 1 and LSS 2 are supplied with the HSS pilot drill LSB 6/60.
- The hole saw arbor LSS 4 is supplied with the HSS pilot drill LSB 6/90.
- The HSS pilot drill LSB 6/90 can be used for the quick-mounting system PSL 11.

Suitable for hole saws	Suitable shanks	d_2 [mm]	l_1 [mm]	Shank type		Item no.	Designation	Price/unit EUR
LS 14–210	LSS 1, LSS 2	6.35	60	round	1	25202005	LSB 6/60	-
	LSS 4	6.35	90	round	1	25202007	LSB 6/90	-



Repair set for hole saw arbors

With the repair set for hole saw arbors, the most common parts can be replaced in case of loss or damage.

Contents:
The repair set consists of two ejection springs, two hexagon socket head screws and an SW 4 hexagon socket wrench.

	Item no.	Designation	Price/unit EUR
1	25200515	RSL-5	-



LSA adapter

Hole saws LS 32 to LS 38 can be used with the LSA adapter, a washer and the hole saw arbors LSS 1 and LSS 4.

Suitable for hole saws	Suitable shanks		Item no.	Designation	Price/unit EUR
LS 32-38	LSS 1, LSS 4	1	25203001	LSA	-

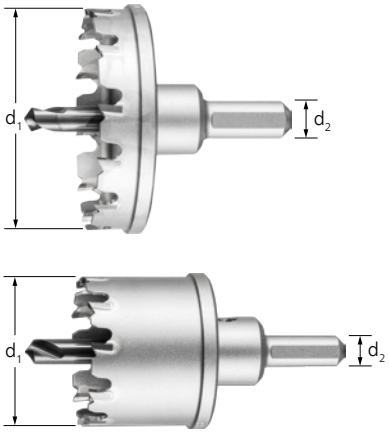


Arbor extension for hole saws

Arbor extension SVL-300 for extending HSS hole saw arbors LSS 1 and LSS 2 to provide the necessary distance between the drive and work area.

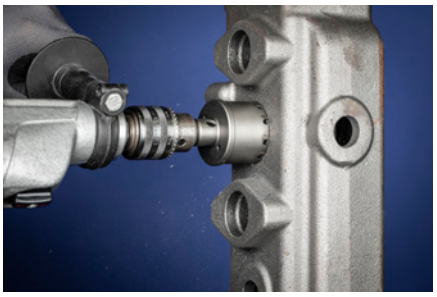
Special features:
- Suitable for working on components that are difficult to access and for work on hollow walls.
- Avoids damage to the workpiece and machine.
- Dust is not drawn into the tool drive during sawing.

Suitable shanks	Shank type	Hexagon socket d_1 [mm]	l_1 [mm]	d_2 [mm]	Size [mm]		Item no.	Designation	Price/unit EUR
LSS 1, LSS 2	hexagonal	9.53	300	12.2	11	1	25200516	SVL-300	-



TC hole cutter

Tungsten carbide hole cutter with sharp teeth made of high-quality tungsten carbide and interchangeable HSS pilot drill for quick, precise creation of cut-outs. Suitable for working on steels, stainless steel (INOX), non-ferrous metals and plastics.



Special features:

- **Flat type**: 8 mm tool height for work on flat material (max. material thickness: 4 mm). Available diameters: 16 to 105 mm.
- **Deep type**: 35 mm tool height (max. cutting depth: 32 mm) for work on pipes and curved surfaces. Available diameters: 16 to 60 mm.
- High concentricity, as the cutting head and shank are produced in one piece.

d_1 [mm]	d_2 [mm]	Opt. RPM steel	Opt. RPM stainless steel (INOX)	Opt. RPM non-ferrous metals	Opt. RPM plastics	Suitable drills		Item no.	Designation	Price/ unit EUR
Flat type, tool height of 8 mm										
16	7	790 – 1,200	400 – 1,000	400 – 1,000	880 – 1,310	LOSB 6/48	1	25401608	LOS HM 1608	-
18	7	710 – 1,060	350 – 880	350 – 880	780 – 1,170	LOSB 6/48	1	25401808	LOS HM 1808	-
19	7	670 – 1,000	330 – 840	330 – 840	740 – 1,110	LOSB 6/48	1	25401908	LOS HM 1908	-
20	7	630 – 950	320 – 800	320 – 800	700 – 1,050	LOSB 6/48	1	25402008	LOS HM 2008	-
22	7	580 – 870	290 – 720	290 – 720	640 – 950	LOSB 6/48	1	25402208	LOS HM 2208	-
23	10	550 – 830	280 – 690	280 – 690	610 – 910	LOSB 6/48	1	25402308	LOS HM 2308	-
24	10	530 – 800	270 – 660	270 – 660	580 – 880	LOSB 6/48	1	25402408	LOS HM 2408	-
25	10	510 – 760	260 – 640	260 – 640	560 – 840	LOSB 6/48	1	25402508	LOS HM 2508	-
27	10	470 – 710	240 – 590	240 – 590	520 – 780	LOSB 6/48	1	25402708	LOS HM 2708	-
28	10	455 – 680	230 – 570	230 – 570	500 – 750	LOSB 6/48	1	25402808	LOS HM 2808	-
30	10	425 – 635	210 – 530	210 – 530	470 – 700	LOSB 6/48	1	25403008	LOS HM 3008	-
32	10	400 – 600	200 – 500	200 – 500	440 – 660	LOSB 6/48	1	25403208	LOS HM 3208	-
34	10	375 – 560	185 – 470	185 – 470	410 – 620	LOSB 6/48	1	25403408	LOS HM 3408	-
35	10	365 – 545	180 – 450	180 – 450	400 – 600	LOSB 6/48	1	25403508	LOS HM 3508	-
38	10	335 – 505	170 – 420	170 – 420	370 – 550	LOSB 6/48	1	25403808	LOS HM 3808	-
40	10	320 – 480	160 – 400	160 – 400	350 – 530	LOSB 6/48	1	25404008	LOS HM 4008	-
42	10	305 – 455	150 – 380	150 – 380	330 – 500	LOSB 6/48	1	25404208	LOS HM 4208	-
43	10	295 – 445	150 – 370	150 – 370	330 – 490	LOSB 6/48	1	25404308	LOS HM 4308	-
45	10	285 – 425	140 – 355	140 – 355	310 – 470	LOSB 6/48	1	25404508	LOS HM 4508	-
48	10	265 – 400	135 – 330	135 – 330	290 – 440	LOSB 6/48	1	25404808	LOS HM 4808	-
50	10	255 – 380	125 – 320	125 – 320	280 – 420	LOSB 6/48	1	25405008	LOS HM 5008	-
52	10	245 – 370	120 – 305	120 – 305	270 – 400	LOSB 6/48	1	25405208	LOS HM 5208	-
54	10	235 – 355	120 – 295	120 – 295	260 – 390	LOSB 6/48	1	25405408	LOS HM 5408	-
55	10	230 – 350	115 – 290	115 – 290	250 – 380	LOSB 6/48	1	25405508	LOS HM 5508	-
60	12	210 – 320	105 – 265	105 – 265	230 – 350	LOSB 8/48	1	25406008	LOS HM 6008	-
65	12	195 – 295	100 – 245	100 – 245	220 – 320	LOSB 8/48	1	25406508	LOS HM 6508	-
68	12	190 – 280	95 – 235	95 – 235	210 – 310	LOSB 8/48	1	25406808	LOS HM 6808	-
70	12	180 – 270	90 – 230	90 – 230	200 – 300	LOSB 8/48	1	25407008	LOS HM 7008	-
75	12	170 – 255	85 – 215	85 – 215	190 – 280	LOSB 8/48	1	25407508	LOS HM 7508	-
80	12	160 – 240	80 – 200	80 – 200	180 – 260	LOSB 8/48	1	25408008	LOS HM 8008	-
90	12	140 – 210	70 – 180	70 – 180	160 – 230	LOSB 8/48	1	25409008	LOS HM 9008	-
100	12	125 – 190	65 – 160	65 – 160	140 – 210	LOSB 8/48	1	25410008	LOS HM 10008	-
105	12	120 – 180	60 – 150	60 – 150	130 – 200	LOSB 8/48	1	25410508	LOS HM 10508	-
Deep type, tool height of 35 mm										
16	7	790 – 1,200	400 – 1,000	400 – 1,000	880 – 1,310	LOSB 6/69	1	25461635	LOS HM 1635	-
17	7	750 – 1,130	370 – 930	370 – 930	820 – 1,240	LOSB 6/69	1	25461735	LOS HM 1735	-
18	7	710 – 1,060	350 – 880	350 – 880	780 – 1,170	LOSB 6/69	1	25461835	LOS HM 1835	-

Continued on next page

d_1 [mm]	d_2 [mm]	Opt. RPM steel	Opt. RPM stainless steel (INOX)	Opt. RPM non-ferrous metals	Opt. RPM plastics	Suitable drills		Item no.	Designation	Price/ unit EUR
19	7	670 – 1,000	330 – 840	330 – 840	740 – 1,110	LOSB 6/69	1	25461935	LOS HM 1935	-
20	7	630 – 950	320 – 800	320 – 800	700 – 1,050	LOSB 6/69	1	25462035	LOS HM 2035	-
21	7	600 – 910	300 – 760	300 – 760	670 – 1,000	LOSB 6/69	1	*25462135*	LOS HM 2135	-
22	7	580 – 870	290 – 720	290 – 720	640 – 950	LOSB 6/69	1	25462235	LOS HM 2235	-
24	10	530 – 800	270 – 660	270 – 660	580 – 880	LOSB 8/69	1	25462435	LOS HM 2435	-
25	10	510 – 760	260 – 640	260 – 640	560 – 840	LOSB 8/69	1	25462535	LOS HM 2535	-
26	10	490 – 740	250 – 610	250 – 610	540 – 810	LOSB 8/69	1	25462635	LOS HM 2635	-
27	10	470 – 710	240 – 590	240 – 590	520 – 780	LOSB 8/69	1	25462735	LOS HM 2735	-
28	10	455 – 680	230 – 570	230 – 570	500 – 750	LOSB 8/69	1	25462835	LOS HM 2835	-
30	10	425 – 635	210 – 530	210 – 530	470 – 700	LOSB 8/69	1	25463035	LOS HM 3035	-
32	10	400 – 600	200 – 500	200 – 500	440 – 660	LOSB 8/69	1	25463235	LOS HM 3235	-
35	10	365 – 545	180 – 450	180 – 450	400 – 600	LOSB 8/69	1	25463535	LOS HM 3535	-
38	10	335 – 505	170 – 420	170 – 420	370 – 550	LOSB 8/69	1	25463835	LOS HM 3835	-
40	10	320 – 480	160 – 400	160 – 400	350 – 530	LOSB 8/69	1	25464035	LOS HM 4035	-
42	10	305 – 455	150 – 380	150 – 380	330 – 500	LOSB 8/69	1	25464235	LOS HM 4235	-
43	10	295 – 445	150 – 370	150 – 370	330 – 490	LOSB 8/69	1	25464335	LOS HM 4335	-
45	10	285 – 425	140 – 355	140 – 355	310 – 470	LOSB 8/69	1	25464535	LOS HM 4535	-
48	10	265 – 400	135 – 330	135 – 330	290 – 440	LOSB 8/69	1	25464835	LOS HM 4835	-
50	10	255 – 380	125 – 320	125 – 320	280 – 420	LOSB 8/69	1	25465035	LOS HM 5035	-
52	10	245 – 370	120 – 305	120 – 305	270 – 400	LOSB 8/69	1	25465235	LOS HM 5235	-
55	10	230 – 350	115 – 290	115 – 290	250 – 380	LOSB 8/69	1	25465535	LOS HM 5535	-
60	12	210 – 320	105 – 265	105 – 265	230 – 350	LOSB 8/94	1	25466035	LOS HM 6060	-

HSS pilot drill for TC hole cutters



HSS pilot drill LOSB

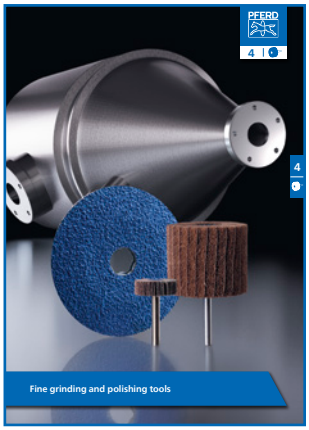
The HSS pilot drill is replaceable.

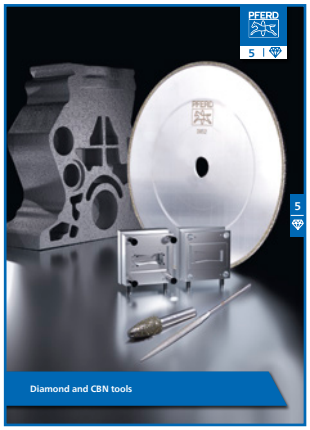
Suitable for tungsten carbide hole cutter	Tool height [mm]		Item no.	Designation	Price/unit EUR
LOS HM 16–55	8	1	25500648	LOSB 6/48	-
LOS HM 16–22	35	1	25500669	LOSB 6/69	-
LOS HM 60–105	8	1	25500848	LOSB 8/48	-
LOS HM 24–55	35	1	25500869	LOSB 8/69	-
Deep type, tool height of 60 mm					
LOS HM 60	60	1	25500894	LOSB 8/94	-





















New additions to the PFERD product range

Stay up to date and discover our new products digitally and online. Our new products have **blue** item numbers in the Tool Manual.

PFERD

3



Mounted points

Mounted points
Table of contents

Mounted points

- Highlights from the PFERD range 3
- The quick way to find the perfect tool 4
- General information 6



Mounted points

- For universal use on steel and cast steel 7
- For edge grinding on steel and cast steel 12
- For universal use on materials that are difficult to machine 21
- For universal use on stainless steel (INOX) 25
- For edge grinding on stainless steel (INOX) 26
- For universal use on soft non-ferrous metals 29
- For surface grinding on grey and nodular cast iron 29
- For edge grinding on grey and nodular cast iron 31
- For edge grinding on grey and nodular cast iron (foundries) 33
- For universal use on cast steel (foundries) 34
- For universal use on plastic 35
- Grinding points for saw chains 36



Grinding discs

- Bench grinding wheels 38
- Grinding discs for saw chains 40



Special tools for tool and mould-making

- Grinding and polishing stones 41



Accessories for mounted points and grinding discs

- Hand dressers 44

3

TOUGH mounted points



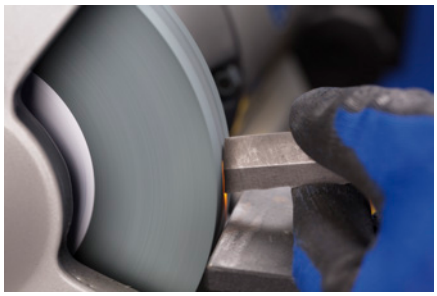
TOUGH type mounted points have a state-of-the-art vitrified bond comprising an aluminium oxide mixture of ceramic oxide grain and white aluminium oxide, which impresses as it is easy to break down. The mounted points have a long tool life and high stock removal performance with excellent removal rates thanks to the self-sharpening qualities of the ceramic oxide grain.

The TOUGH type is specifically designed for general use on titanium materials, nickel-based and cobalt-based alloys, hardened steel components and built-up weld deposits. TOUGH type mounted points can easily machine hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC).

Its applications include weld dressing on repair welds and reworking on turbine blades during aircraft maintenance, as well as regrinding of repair welds in tool and mould-making.

Scan the QR code to find out more about the PFERD grinding/mounted points.

Bench grinding wheels

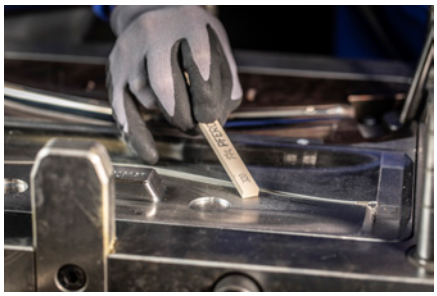


PFERD offers a very wide range of high-quality bench grinding wheels for work on a large variety of materials. Bench grinding wheels are very well-suited to deburring, work on edges and sharpening tools. The bench grinding wheels are available with different dimensions, grains and abrasives. The PFERD range has been adapted to the standard bench grinders on the market.

The bench grinding wheels impress with their long tool life, high dimensional stability and high abrasive performance. Thanks to the integrated adapter sleeves, the bench grinding wheels can be mounted on almost any bench grinder spindle. Dressing the wheel on a regular basis exposes sharp grain and maintains an even grinding area.

Scan the QR code to find out more about the PFERD bench grinding wheels.

Grinding and polishing stones



Grindstones and polishing stones are versatile tools for finish machining on moulds in tool and mould-making. They are used for step-by-step fine grinding after machining or after electrical discharge machining (EDM) to grind in a brushed finish/polish in the demoulding direction or to prepare for high-gloss polishing with diamond pastes. They are also used for rounding and finishing.

A quick-mounting handle is recommended in manual applications to make work more ergonomic. Grinding oil should be used to achieve a better surface finish. Polishing stones should be sorted by type to avoid grain being carried over.

Grindstones and polishing stones are versatile tools for finish machining on moulds in tool and mould-making. They are used for step-by-step fine grinding after machining or after electrical discharge machining (EDM) to grind in a brushed finish/polish in the demoulding direction or to prepare for high-gloss polishing with diamond pastes. They are also used for rounding and finishing.

A quick-mounting handle is recommended in manual applications to make work more ergonomic. Grinding oil should be used to achieve a better surface finish. Polishing stones should be sorted by type to avoid grain being carried over.

Mounted points
The quick way to find the perfect tool

The quick way to find the perfect tool

① **Material group**
Select the material to be machined.

② **Application**
Select the application.

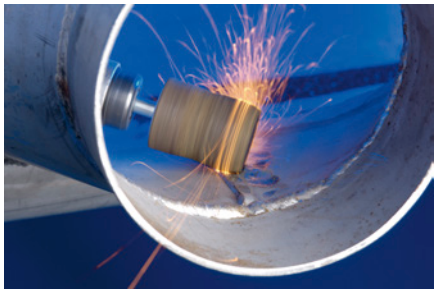
③ **Mounted point type**
After determining the application (see column ②), the type is selected in the horizontal row.

① Material group			Bond ▸	Resinoid bond		Vitrified bond							
			③ Mounted point type ▸	INOX	INOX EDGE	RUBBER	ALU	TOUGH	CAST	CAST STEEL	STEEL	STEEL EDGE	CAST EDGE
			Abrasive ▸	ADW	AN	AH	CN	AWCO	ARN	ADR	ADW	AR	CU
			Rec. cutting speed ▸	35–50 m/s	35–50 m/s	5–20 m/s	20–40 m/s	30–50 m/s	30–50 m/s	25–40 m/s	30–50 m/s	25–40 m/s	30–50 m/s
			② Application ▾										
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels	**Universal**								●		
			Surface	○							●	○	
			Edges		○						○	●	
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels	**Universal**								●		
			Surface					●			○		
			Edges					●				○	
	Cast steel	Non-alloyed cast steel, low-alloyed cast steel	**Universal**							●			
			Surface	○					○	○	●	○	
			Edges		○					○	○	●	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	**Surface**	●	○						○		
			Edges	○	●							○	
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Aluminium alloys, brass, copper, zinc	**Universal**	○			●						
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, hard aluminium alloys		●			○	●			○		
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)		○				●					
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	**Surface**	○	○				●	○		○	○
			Edges	○	○				○	○		○	●
Plastics, other materials	Fibre-reinforced plastics, thermoplastics, rubber, wood		**Universal**			●	○						

● = highly suitable ○ = suitable

Mounted points
General information

Applications of mounted points



General use

For general use on surfaces and edges, the emphasis is on the balance between abrasive performance and tool life.



Surface grinding

In surface grinding, the mounted points are subject to lower loads. The mounted point bond is therefore comparatively soft and has been designed to give high stock removal rates.

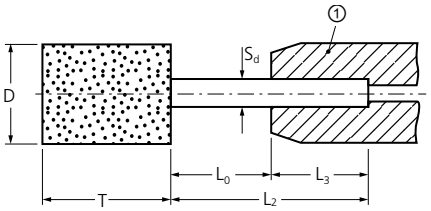


Edge grinding

In edge grinding, the mounted points must be dimensionally stable. The mounted point bond is therefore comparatively hard and designed for a long service life.

Explanation of the code system according to EN 12413

D = Mounted point outer dia.
T = Mounted point width
S_d = Shank dia.
L_0 = Unsupported shank length
L_2 = Shank length
L_3 = Clamping length of shank (① collet)



Safety notes

All PFERD mounted points are approved for a maximum operating speed of 50 m/s. The maximum permitted rotational speeds for the various shank lengths and shank diameters are defined in DIN 69170 based on EN 12413. These must be adhered to in order to avoid buckling of the shank during use. Regardless of the shank length, the clamping length (L_3) of the shank must be at least 10 mm.
The maximum permitted rotational speed calculated according to EN 12413 is determined by the following factors:

- Shape and dimensions of the mounted point
- Diameter of the steel shank S_d
- Unsupported shank length L_0


Wear eye protection!


Wear hearing protection!


Wear a dust mask!


Wear gloves!


Observe the safety notes!

Custom-made products

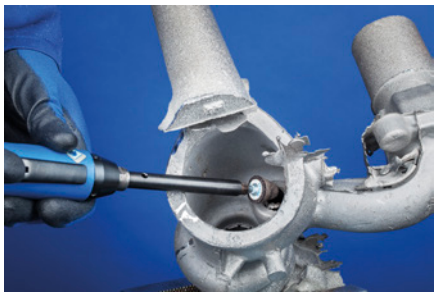
If you cannot find the solution for your particular application in our extensive catalogue range, we can produce grinding and mounted points in premium PFERD quality specifically for your application on request.

We can take into account your specifications and needs, drawings, information on dimensions and shapes, grit sizes and grain types, grain mixtures, shank diameters and shank lengths. Please speak to our sales representatives. We will be happy to advise you.

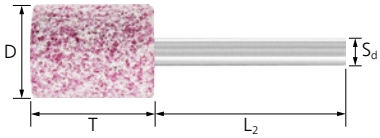


Extensions for drive spindles

Mounted points with a shank diameter of 3, 6 and 8 mm can be extended with drive spindle extensions. They allow access to hard-to-reach areas. The drive spindle extension is mounted in the collet of the tool drive (air grinder or electric grinder), or in the handpiece of the flexible shaft. In some applications, spindle extensions are an economical alternative to customized mounted points with long shanks. Further information on our drive spindle extensions can be found in catalogue section 9 “Tool drives”.



For universal use on steel and cast steel



STEEL cylindrical mounted points

These mounted points are exceptionally well suited for grinding high-speed steel (HSS) moulded parts and weld dressing of weld seams on steel constructions. The cylindrical shape ZY is ideal for grinding bores, radii and contours.



Special features:

- High grinding performance and stock removal rate in general use on steel materials.
- Shortened grinding times and thus cost savings due to the high stock removal rate.
- Particularly suitable for work on surfaces.

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 x 30 mm [S_d x L_2]									
2	5	100	W 141	150,000	201,800	10	31100250	ZY 0205 3 ADW 100 M5V STEEL	-
3	6	100	W 144	150,000	206,100	10	31103250	ZY 0306 3 ADW 100 M5V STEEL	-
4	8	60	-	150,000	175,100	10	31105256	ZY 0408 3 ADW 60 M5V STEEL	-
		100	-	150,000	175,100	10	31105250	ZY 0408 3 ADW 100 M5V STEEL	-
5	10	60	W 153	130,000	130,700	10	31107256	ZY 0510 3 ADW 60 M5V STEEL	-
		100	W 153	130,000	130,700	10	31107250	ZY 0510 3 ADW 100 M5V STEEL	-
6	13	60	W 163	93,600	93,600	10	31110256	ZY 0613 3 ADW 60 M5V STEEL	-
		100	W 163	93,600	93,600	10	31110250	ZY 0613 3 ADW 100 M5V STEEL	-
8	10	46	W 169	87,600	87,600	10	31112254	ZY 0810 3 ADW 46 M5V STEEL	-
		80	W 169	87,600	87,600	10	31112258	ZY 0810 3 ADW 80 M5V STEEL	-
	16	46	-	61,000	61,000	10	31114254	ZY 0816 3 ADW 46 M5V STEEL	-
		80	-	61,000	61,000	10	31114258	ZY 0816 3 ADW 80 M5V STEEL	-
10	2	100	W 172	85,000	95,400	10	31308250	ZY 1002 3 ADW 100 M5V STEEL	-
	13	46	W 176	58,400	58,400	10	31116254	ZY 1013 3 ADW 46 M5V STEEL	-
13	3	60	W 122	65,000	73,400	10	31311256	ZY 1303 3 ADW 60 M5V STEEL	-
		100	W 122	65,000	73,400	10	31311250	ZY 1303 3 ADW 100 M5V STEEL	-
Shank diameter 6 x 40 mm [S_d x L_2]									
3	6	100	W 144	150,000	206,100	10	31102250	ZY 0306 6 ADW 100 M5V STEEL	-
4	8	60	-	150,000	177,400	10	31104256	ZY 0408 6 ADW 60 M5V STEEL	-
5	10	60	W 153	130,000	157,800	10	31106256	ZY 0510 6 ADW 60 M5V STEEL	-
6	13	60	W 163	131,500	131,500	10	31109256	ZY 0613 6 ADW 60 M5V STEEL	-
		100	W 163	131,500	131,500	10	31109250	ZY 0613 6 ADW 100 M5V STEEL	-
8	10	80	W 169	110,000	119,300	10	31111258	ZY 0810 6 ADW 80 M5V STEEL	-

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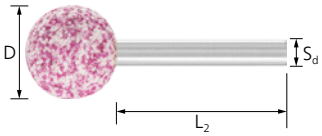
Mounted points
For universal use on steel and cast steel

PFERD

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
8	16	46	-	110,000	119,300	10	31113254	ZY 0816 6 ADW 46 M5V STEEL	-
		80	-	110,000	119,300	10	31113258	ZY 0816 6 ADW 80 M5V STEEL	-
10	13	46	W 176	85,000	95,400	10	31115254	ZY 1013 6 ADW 46 M5V STEEL	-
		80	W 176	85,000	95,400	10	31115258	ZY 1013 6 ADW 80 M5V STEEL	-
	20	46	W 177	85,000	95,400	10	31118254	ZY 1020 6 ADW 46 M5V STEEL	-
		80	W 177	85,000	95,400	10	31118258	ZY 1020 6 ADW 80 M5V STEEL	-
	25	46	W 178	83,200	83,200	10	31119254	ZY 1025 6 ADW 46 M5V STEEL	-
		80	W 178	83,200	83,200	10	31119258	ZY 1025 6 ADW 80 M5V STEEL	-
	32	46	W 179	62,800	62,800	10	31120254	ZY 1032 6 ADW 46 M5V STEEL	-
		80	W 179	62,800	62,800	10	31120258	ZY 1032 6 ADW 80 M5V STEEL	-
13	13	46	W 185	65,000	73,400	10	31121254	ZY 1313 6 ADW 46 M5V STEEL	-
	20	46	W 186	65,000	73,400	10	31124254	ZY 1320 6 ADW 46 M5V STEEL	-
		80	W 186	65,000	73,400	10	31124258	ZY 1320 6 ADW 80 M5V STEEL	-
	25	46	W 187	65,000	66,000	10	31125254	ZY 1325 6 ADW 46 M5V STEEL	-
		80	W 187	65,000	66,000	10	31125258	ZY 1325 6 ADW 80 M5V STEEL	-
	40	46	W 188	42,400	42,400	10	31146254	ZY 1340 6 ADW 46 M5V STEEL	-
16	4	46	-	55,000	59,600	10	31313254	ZY 1604 6 ADW 46 M5V STEEL	-
		80	-	55,000	59,600	10	31313258	ZY 1604 6 ADW 80 M5V STEEL	-
	20	30	W 195	55,000	59,600	10	31126253	ZY 1620 6 ADW 30 M5V STEEL	-
		60	W 195	55,000	59,600	10	31126256	ZY 1620 6 ADW 60 M5V STEEL	-
	32	30	-	51,200	51,200	10	31127253	ZY 1632 6 ADW 30 M5V STEEL	-
		60	-	51,200	51,200	10	31127256	ZY 1632 6 ADW 60 M5V STEEL	-
	40	30	-	40,500	40,500	10	31128253	ZY 1640 6 ADW 30 M5V STEEL	-
	50	30	W 197	31,300	31,300	10	31129253	ZY 1650 6 ADW 30 M5V STEEL	-
20	6	46	W 201	43,000	47,700	10	31317254	ZY 2006 6 ADW 46 M5V STEEL	-
		80	W 201	43,000	47,700	10	31317258	ZY 2006 6 ADW 80 M5V STEEL	-
	20	30	W 204	43,000	47,700	10	31130253	ZY 2020 6 ADW 30 M5V STEEL	-
		60	W 204	43,000	47,700	10	31130256	ZY 2020 6 ADW 60 M5V STEEL	-
	25	30	W 205	43,000	47,700	10	31131253	ZY 2025 6 ADW 30 M5V STEEL	-
		60	W 205	43,000	47,700	10	31131256	ZY 2025 6 ADW 60 M5V STEEL	-
	32	30	W 206	41,100	41,100	10	31132253	ZY 2032 6 ADW 30 M5V STEEL	-
		60	W 206	41,100	41,100	10	31132256	ZY 2032 6 ADW 60 M5V STEEL	-
	40	30	W 207	32,400	32,400	10	31133253	ZY 2040 6 ADW 30 M5V STEEL	-
		60	W 207	32,400	32,400	10	31133256	ZY 2040 6 ADW 60 M5V STEEL	-
25	6	46	W 216	35,000	38,100	10	31321254	ZY 2506 6 ADW 46 M5V STEEL	-
	25	30	W 220	35,000	38,100	10	31134253	ZY 2525 6 ADW 30 M5V STEEL	-
		60	W 220	35,000	38,100	10	31134256	ZY 2525 6 ADW 60 M5V STEEL	-
	32	30	-	32,900	32,900	10	31135253	ZY 2532 6 ADW 30 M5V STEEL	-
32	8	30	W 226	27,000	29,800	5	31325253	ZY 3208 6 ADW 30 M5V STEEL	-
		60	W 226	27,000	29,800	5	31325256	ZY 3208 6 ADW 60 M5V STEEL	-
	16	24	-	27,000	29,800	5	31326252	ZY 3216 6 ADW 24 M5V STEEL	-
	20	24	W 228	27,000	29,800	5	31327252	ZY 3220 6 ADW 24 M5V STEEL	-
		46	W 228	27,000	29,800	5	31327254	ZY 3220 6 ADW 46 M5V STEEL	-
	32	24	W 230	25,700	25,700	5	31136252	ZY 3232 6 ADW 24 M5V STEEL	-
		46	W 230	25,700	25,700	5	31136254	ZY 3232 6 ADW 46 M5V STEEL	-
	40	24	W 231	20,300	20,300	5	31137252	ZY 3240 6 ADW 24 M5V STEEL	-
		46	W 231	20,300	20,300	5	31137254	ZY 3240 6 ADW 46 M5V STEEL	-
40	6	46	W 235	22,000	23,800	5	31375254	ZY 4006 6 ADW 46 M5V STEEL	-
	10	30	W 236	22,000	23,800	5	31328253	ZY 4010 6 ADW 30 M5V STEEL	-
	20	24	-	22,000	23,800	5	31330252	ZY 4020 6 ADW 24 M5V STEEL	-
		46	-	22,000	23,800	5	31330254	ZY 4020 6 ADW 46 M5V STEEL	-
	40	24	W 238	16,200	16,200	5	31138252	ZY 4040 6 ADW 24 M5V STEEL	-
		46	W 238	16,200	16,200	5	31138254	ZY 4040 6 ADW 46 M5V STEEL	-
50	8	30	-	17,000	19,000	5	31378253	ZY 5008 6 ADW 30 M5V STEEL	-

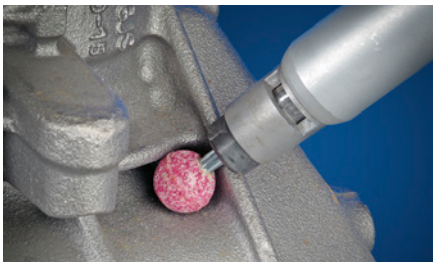
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D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
50	13	30	-	17,000	19,000	5	31331253	ZY 5013 6 ADW 30 M5V STEEL	-
	25	46	W 242	17,000	19,000	5	31332254	ZY 5025 6 ADW 46 M5V STEEL	-
Shank diameter 8 x 40 mm [S_d x L_2]									
50	25	24	W 242	17,000	19,000	5	31382252	ZY 5025 8 ADW 24 M5V STEEL	-



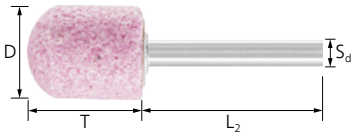
STEEL, ball type

These mounted points are exceptionally well suited for grinding high-speed steel (HSS) moulded parts and weld dressing of weld seams on steel constructions. The ball shape KU is often used for contour grinding and backside deburring.



Special features:
- High grinding performance and stock removal rate in general use on steel materials.
- Shortened grinding times and thus cost savings due to the high stock removal rate.
- Particularly suitable for work on surfaces.

D [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]							
13	46	65,000	73,400	10	31706254	KU 13 6 ADW 46 M5V STEEL	-
16	30	55,000	59,600	10	31707253	KU 16 6 ADW 30 M5V STEEL	-
	60	55,000	59,600	10	31707256	KU 16 6 ADW 60 M5V STEEL	-
20	30	43,000	47,700	10	31708253	KU 20 6 ADW 30 M5V STEEL	-
	60	43,000	47,700	10	31708256	KU 20 6 ADW 60 M5V STEEL	-
25	60	35,000	38,100	10	31709256	KU 25 6 ADW 60 M5V STEEL	-
32	24	27,000	29,800	5	31710252	KU 32 6 ADW 24 M5V STEEL	-
	46	27,000	29,800	5	31710254	KU 32 6 ADW 46 M5V STEEL	-



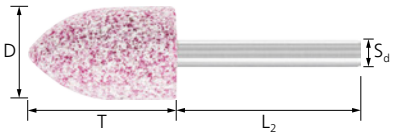
Cylindrical with radius end type STEEL

These mounted points are exceptionally well suited for grinding high-speed steel (HSS) moulded parts and weld dressing of weld seams on steel constructions. The cylindrical shape with radius end WR is suitable for a variety of deburring and grinding jobs.

Special features:
- High grinding performance and stock removal rate in general use on steel materials.
- Shortened grinding times and thus cost savings due to the high stock removal rate.
- Particularly suitable for work on surfaces.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
13	20	46	65,000	73,400	10	31406254	WR 1320 6 ADW 46 M5V STEEL	-
20	25	30	43,000	47,700	10	31407253	WR 2025 6 ADW 30 M5V STEEL	-
		60	43,000	47,700	10	31407256	WR 2025 6 ADW 60 M5V STEEL	-

Mounted points
For universal use on steel and cast steel

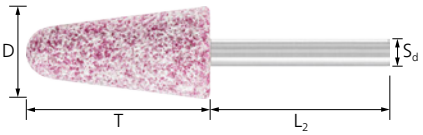


Pointed tree type STEEL

These mounted points are exceptionally well suited for grinding high-speed steel (HSS) moulded parts and weld dressing of weld seams on steel constructions. The pointed tree shape SP is suitable for machining small holes and bores.

Special features:
- High grinding performance and stock removal rate in general use on steel materials.
- Shortened grinding times and thus cost savings due to the high stock removal rate.
- Particularly suitable for work on surfaces.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
8	16	46	110,000	119,300	10	32105254	SP 0816 6 ADW 46 M5V STEEL	-
13	20	46	65,000	73,400	10	32107254	SP 1320 6 ADW 46 M5V STEEL	-
20	32	30	43,000	47,700	10	32109253	SP 2032 6 ADW 30 M5V STEEL	-
		60	43,000	47,700	10	32109256	SP 2032 6 ADW 60 M5V STEEL	-
	50	30	30,500	30,500	10	32111253	SP 2050 6 ADW 30 M5V STEEL	-
25	40	30	35,000	35,000	10	32114253	SP 2540 6 ADW 30 M5V STEEL	-



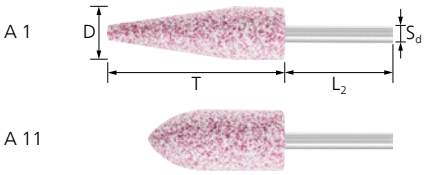
STEEL, tapered type

These mounted points are exceptionally well suited for grinding high-speed steel (HSS) moulded parts and weld dressing of weld seams on steel constructions. The conical shape KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



Special features:
- High grinding performance and stock removal rate in general use on steel materials.
- Shortened grinding times and thus cost savings due to the high stock removal rate.
- Particularly suitable for work on surfaces.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
10	25	46	85,000	95,400	10	32209254	KE 1025 6 ADW 46 M5V STEEL	-
		80	85,000	95,400	10	32209258	KE 1025 6 ADW 80 M5V STEEL	-
16	45	46	52,000	52,000	10	32210254	KE 1645 6 ADW 46 M5V STEEL	-
		80	52,000	52,000	10	32210258	KE 1645 6 ADW 80 M5V STEEL	-
20	32	30	43,000	47,700	10	32208253	KE 2032 6 ADW 30 M5V STEEL	-
		60	43,000	47,700	10	32208256	KE 2032 6 ADW 60 M5V STEEL	-
	40	30	43,000	47,700	10	32212253	KE 2040 6 ADW 30 M5V STEEL	-
		60	43,000	47,700	10	32212256	KE 2040 6 ADW 60 M5V STEEL	-
25	25	30	35,000	38,100	10	32206253	KE 2525 6 ADW 30 M5V STEEL	-
	45	30	34,000	34,000	10	32211253	KE 2545 6 ADW 30 M5V STEEL	-
		60	34,000	34,000	10	32211256	KE 2545 6 ADW 60 M5V STEEL	-
	70	30	20,400	20,400	10	32214253	KE 2570 6 ADW 30 M5V STEEL	-
32	32	24	27,000	29,800	5	32207252	KE 3232 6 ADW 24 M5V STEEL	-
		46	27,000	29,800	5	32207254	KE 3232 6 ADW 46 M5V STEEL	-



Series A STEEL

These mounted points are exceptionally well suited for grinding high-speed steel (HSS) moulded parts and weld dressing of weld seams on a wide range of different contours on steel constructions.

Special features:
- High grinding performance and stock removal rate in general use on steel materials.
- Shortened grinding times and thus cost savings due to the high stock removal rate.
- Particularly suitable for work on surfaces.

USA type	D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 6.35 x 40 mm [S_d x L_2]									
A 1	19	64	30	33,500	33,500	10	35001253	A 1 6,3 ADW 30 M5V STEEL	-
A 11	22	50	30	30,400	30,400	10	35011253	A 11 6,3 ADW 30 M5V STEEL	-



Mounted point set SSO 5300 STEEL

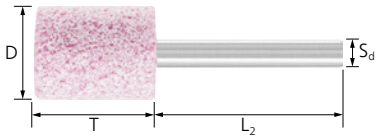
This set is exceptionally well suited for grinding high-speed steel (HSS) moulded parts and weld dressing of weld seams on steel constructions. It contains 100 mounted points with 6 mm shank diameter in the most common shapes and dimensions.

Contents:
Contains ten each of the following mounted points: ZY 1620, ZY 2025, ZY 2506, ZY 2532, ZY 3216, ZY 3232, ZY 4020, SP 2032, KE 2032, KE 2570.

Special features:
- High grinding performance and stock removal rate in general use on steel materials.
- Shortened grinding times and thus cost savings due to the high stock removal rate.
- Particularly suitable for work on surfaces.

S_d [mm]	Grit size		Item no.	Designation	Price/unit EUR
6	coarse	1	33930001	Assortments of Mounted Points SSO 5300 STEEL	-

Mounted points
For edge grinding on steel and cast steel



STEEL EDGE cylindrical mounted points

These mounted points are particularly suitable for edge grinding and for deburring work, as well as for grinding chamfers for weld seam preparation and weld dressing on contours. The cylindrical shape ZY is ideal for grinding bores, radii and contours.



Special features:
- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

3

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 x 30 mm [S_d x L_2]									
2	5	100	W 141	150,000	201,800	10	31100270	ZY 0205 3 AR 100 O5V STEEL EDGE	-
3	6	100	W 144	150,000	206,100	10	31103270	ZY 0306 3 AR 100 O5V STEEL EDGE	-
	10	100	W 145	131,400	131,400	10	35805270	ZY 0310 3 AR 100 O5V STEEL EDGE	-
	13	100	W 146	95,400	95,400	10	35806270	ZY 0313 3 AR 100 O5V STEEL EDGE	-
4	8	60	-	150,000	175,100	10	31105276	ZY 0408 3 AR 60 O5V STEEL EDGE	-
		100	-	150,000	175,100	10	31105270	ZY 0408 3 AR 100 O5V STEEL EDGE	-
5	10	60	W 153	130,000	130,700	10	31107276	ZY 0510 3 AR 60 O5V STEEL EDGE	-
		100	W 153	130,000	130,700	10	31107270	ZY 0510 3 AR 100 O5V STEEL EDGE	-
	13	100	W 154	114,800	114,800	10	35814270	ZY 0513 3 AR 100 O5V STEEL EDGE	-
	15	60	-	98,100	98,100	10	31142276	ZY 0515 3 AR 60 O5V STEEL EDGE	-
6	10	60	W 162	100,000	110,500	10	35822276	ZY 0610 3 AR 60 O5V STEEL EDGE	-
		100	W 162	100,000	110,500	10	35822270	ZY 0610 3 AR 100 O5V STEEL EDGE	-
	13	60	W 163	93,600	93,600	10	31110276	ZY 0613 3 AR 60 O5V STEEL EDGE	-
		100	W 163	93,600	93,600	10	31110270	ZY 0613 3 AR 100 O5V STEEL EDGE	-
	19	60	W 164	64,500	64,500	10	35824276	ZY 0619 3 AR 60 O5V STEEL EDGE	-
		100	W 164	64,500	64,500	10	35824270	ZY 0619 3 AR 100 O5V STEEL EDGE	-
	25	60	-	53,100	53,100	10	31140276	ZY 0625 3 AR 60 O5V STEEL EDGE	-
8	2	100	W 165	85,000	119,300	10	31305270	ZY 0802 3 AR 100 O5V STEEL EDGE	-
	10	46	W 169	85,000	87,600	10	31112274	ZY 0810 3 AR 46 O5V STEEL EDGE	-
		80	W 169	85,000	87,600	10	31112278	ZY 0810 3 AR 80 O5V STEEL EDGE	-
	13	46	W 170	74,400	74,400	10	35830274	ZY 0813 3 AR 46 O5V STEEL EDGE	-
		80	W 170	74,400	74,400	10	35830278	ZY 0813 3 AR 80 O5V STEEL EDGE	-
	16	46	-	61,000	61,000	10	31114274	ZY 0816 3 AR 46 O5V STEEL EDGE	-
		80	-	61,000	61,000	10	31114278	ZY 0816 3 AR 80 O5V STEEL EDGE	-
10	2	100	W 172	65,000	95,400	10	31308270	ZY 1002 3 AR 100 O5V STEEL EDGE	-
	3	60	W 173	65,000	100,500	10	35833276	ZY 1003 3 AR 60 O5V STEEL EDGE	-
	10	80	W 175	65,000	77,500	10	35835278	ZY 1010 3 AR 80 O5V STEEL EDGE	-
	13	46	W 176	58,400	58,400	10	31116274	ZY 1013 3 AR 46 O5V STEEL EDGE	-
		80	W 176	58,400	58,400	10	31116278	ZY 1013 3 AR 80 O5V STEEL EDGE	-
13	3	60	W 182	50,000	73,400	10	31311276	ZY 1303 3 AR 60 O5V STEEL EDGE	-
		100	W 182	50,000	73,400	10	31311270	ZY 1303 3 AR 100 O5V STEEL EDGE	-
	13	46	W 185	45,300	45,300	10	31122274	ZY 1313 3 AR 46 O5V STEEL EDGE	-
		80	W 185	45,300	45,300	10	31122278	ZY 1313 3 AR 80 O5V STEEL EDGE	-
16	3	60	W 191	42,000	60,000	10	35851276	ZY 1603 3 AR 60 O5V STEEL EDGE	-
	4	46	-	42,000	59,600	10	31314274	ZY 1604 3 AR 46 O5V STEEL EDGE	-
		80	-	42,000	59,600	10	31314278	ZY 1604 3 AR 80 O 5V STEEL EDGE	-
19	3	60	W 200	35,000	49,900	10	35860276	ZY 1903 3 AR 60 O5V STEEL EDGE	-
20	6	80	W 201	33,000	47,700	10	31340278	ZY 2006 3 AR 80 O5V STEEL EDGE	-

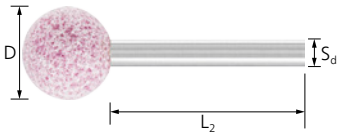
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D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
25	3	100	W 215	26,000	37,500	10	35875270	ZY 2503 3 AR 100 O5V STEEL EDGE	-
Shank diameter 6 x 40 mm [S_d x L_2]									
3	6	100	W 144	150,000	206,100	10	31102270	ZY 0306 6 AR 100 O5V STEEL EDGE	-
4	8	60	-	150,000	177,400	10	31104276	ZY 0408 6 AR 60 O5V STEEL EDGE	-
		100	-	150,000	177,400	10	31104270	ZY 0408 6 AR 100 O5V STEEL EDGE	-
5	10	60	W 153	130,000	157,800	10	31106276	ZY 0510 6 AR 60 O5V STEEL EDGE	-
		100	W 153	130,000	157,800	10	31106270	ZY 0510 6 AR 100 O5V STEEL EDGE	-
6	13	60	W 163	100,000	131,500	10	31109276	ZY 0613 6 AR 60 O5V STEEL EDGE	-
		100	W 163	100,000	131,500	10	31109270	ZY 0613 6 AR 100 O5V STEEL EDGE	-
	25	60	-	62,200	62,200	10	31139276	ZY 0625 6 AR 60 O5V STEEL EDGE	-
8	10	46	W 169	85,000	119,300	10	31111274	ZY 0810 6 AR 46 O5V STEEL EDGE	-
		80	W 169	85,000	119,300	10	31111278	ZY 0810 6 AR 80 O5V STEEL EDGE	-
	16	46	-	85,000	119,300	10	31113274	ZY 0816 6 AR 46 O5V STEEL EDGE	-
		80	-	85,000	119,300	10	31113278	ZY 0816 6 AR 80 O5V STEEL EDGE	-
10	13	46	W 176	65,000	95,400	10	31115274	ZY 1013 6 AR 46 O5V STEEL EDGE	-
		80	W 176	65,000	95,400	10	31115278	ZY 1013 6 AR 80 O5V STEEL EDGE	-
	20	46	W 177	65,000	95,400	10	31118274	ZY 1020 6 AR 46 O5V STEEL EDGE	-
		80	W 177	65,000	95,400	10	31118278	ZY 1020 6 AR 80 O5V STEEL EDGE	-
	25	46	W 178	65,000	83,200	10	31119274	ZY 1025 6 AR 46 O5V STEEL EDGE	-
		80	W 178	65,000	83,200	10	31119278	ZY 1025 6 AR 80 O5V STEEL EDGE	-
	32	46	W 179	62,800	62,800	10	31120274	ZY 1032 6 AR 46 O5V STEEL EDGE	-
		80	W 179	62,800	62,800	10	31120278	ZY 1032 6 AR 80 O5V STEEL EDGE	-
13	3	60	W 182	50,000	73,400	10	31310276	ZY 1303 6 AR 60 O5V STEEL EDGE	-
	13	46	W 185	50,000	73,400	10	31121274	ZY 1313 6 AR 46 O5V STEEL EDGE	-
		80	W 185	50,000	73,400	10	31121278	ZY 1313 6 AR 80 O5V STEEL EDGE	-
	20	46	W 186	50,000	73,400	10	31124274	ZY 1320 6 AR 46 O5V STEEL EDGE	-
		80	W 186	50,000	73,400	10	31124278	ZY 1320 6 AR 80 O5V STEEL EDGE	-
	25	46	W 187	50,000	66,000	10	31125274	ZY 1325 6 AR 46 O5V STEEL EDGE	-
		80	W 187	50,000	66,000	10	31125278	ZY 1325 6 AR 80 O5V STEEL EDGE	-
	40	46	W 188	42,400	42,400	10	31146274	ZY 1340 6 AR 46 O5V STEEL EDGE	-
16	4	46	-	42,000	59,600	10	31313274	ZY 1604 6 AR 46 O5V STEEL EDGE	-
		80	-	42,000	59,600	10	31313278	ZY 1604 6 AR 80 O5V STEEL EDGE	-
	10	30	W 193	42,000	59,600	10	31316273	ZY 1610 6 AR 30 O5V STEEL EDGE	-
	20	30	W 195	42,000	59,600	10	31126273	ZY 1620 6 AR 30 O5V STEEL EDGE	-
		60	W 195	42,000	59,600	10	31126276	ZY 1620 6 AR 60 O5V STEEL EDGE	-
	32	30	-	42,000	51,200	10	31127273	ZY 1632 6 AR 30 O5V STEEL EDGE	-
		60	-	42,000	51,200	10	31127276	ZY 1632 6 AR 60 O5V STEEL EDGE	-
	40	30	-	40,500	40,500	10	31128273	ZY 1640 6 AR 30 O5V STEEL EDGE	-
		60	-	40,500	40,500	10	31128276	ZY 1640 6 AR 60 O5V STEEL EDGE	-
	50	30	W 197	31,300	31,300	10	31129273	ZY 1650 6 AR 30 O5V STEEL EDGE	-
20	6	46	W 201	33,000	47,700	10	31317274	ZY 2006 6 AR 46 O5V STEEL EDGE	-
		80	W 201	33,000	47,700	10	31317278	ZY 2006 6 AR 80 O5V STEEL EDGE	-
	10	30	W 202	33,000	47,700	10	31319273	ZY 2010 6 AR 30 O5V STEEL EDGE	-
		60	W 202	33,000	47,700	10	31319276	ZY 2010 6 AR 60 O5V STEEL EDGE	-
	20	30	W 204	33,000	47,700	10	31130273	ZY 2020 6 AR 30 O5V STEEL EDGE	-
		60	W 204	33,000	47,700	10	31130276	ZY 2020 6 AR 60 O5V STEEL EDGE	-
	25	30	W 205	33,000	47,700	10	31131273	ZY 2025 6 AR 30 O5V STEEL EDGE	-
		60	W 205	33,000	47,700	10	31131276	ZY 2025 6 AR 60 O5V STEEL EDGE	-
	32	30	W 206	33,000	41,100	10	31132273	ZY 2032 6 AR 30 O5V STEEL EDGE	-
		60	W 206	33,000	41,100	10	31132276	ZY 2032 6 AR 60 O5V STEEL EDGE	-
	40	30	W 207	32,400	32,400	10	31133273	ZY 2040 6 AR 30 O5V STEEL EDGE	-
		60	W 207	32,400	32,400	10	31133276	ZY 2040 6 AR 60 O5V STEEL EDGE	-
	50	30	W 208	25,100	25,100	10	31148273	ZY 2050 6 AR 30 O5V STEEL EDGE	-

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Mounted points
For edge grinding on steel and cast steel

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
25	6	46	W 214	26,000	38,100	10	31321274	ZY 2506 6 AR 46 O5V STEEL EDGE	-
		80	W 214	26,000	38,100	10	31321278	ZY 2506 6 AR 80 O5V STEEL EDGE	-
	10	30	W 217	26,000	38,100	10	31322273	ZY 2510 6 AR 30 O5V STEEL EDGE	-
	13	30	W 218	26,000	38,100	10	31323273	ZY 2513 6 AR 30 O5V STEEL EDGE	-
	16	60	-	26,000	38,100	10	31324276	ZY 2516 6 AR 60 O5V STEEL EDGE	-
	25	30	W 220	26,000	38,100	10	31134273	ZY 2525 6 AR 30 O5V STEEL EDGE	-
		60	W 220	26,000	38,100	10	31134276	ZY 2525 6 AR 60 O5V STEEL EDGE	-
	32	30	-	26,000	32,900	10	31135273	ZY 2532 6 AR 30 O5V STEEL EDGE	-
		60	-	26,000	32,900	10	31135276	ZY 2532 6 AR 60 O5V STEEL EDGE	-
	40	30	W 221	26,000	26,000	10	31151273	ZY 2540 6 AR 30 O5V STEEL EDGE	-
32	6	46	W 225	21,000	30,000	5	35985274	ZY 3206 6 AR 46 O5V STEEL EDGE	-
	8	30	-	21,000	29,800	5	31325273	ZY 3208 6 AR 30 O5V STEEL EDGE	-
		60	-	21,000	29,800	5	31325276	ZY 3208 6 AR 60 O5V STEEL EDGE	-
	20	24	W 228	21,000	29,800	5	31327272	ZY 3220 6 AR 24 O5V STEEL EDGE	-
		46	W 228	21,000	29,800	5	31327274	ZY 3220 6 AR 46 O5V STEEL EDGE	-
	32	24	W 230	21,000	25,700	5	31136272	ZY 3232 6 AR 24 O5V STEEL EDGE	-
		46	W 230	21,000	25,700	5	31136274	ZY 3232 6 AR 46 O5V STEEL EDGE	-
	40	24	W 231	20,300	20,300	5	31137272	ZY 3240 6 AR 24 O5V STEEL EDGE	-
		46	W 231	20,300	20,300	5	31137274	ZY 3240 6 AR 46 O5V STEEL EDGE	-
40	6	46	W 235	16,000	23,800	5	31375274	ZY 4006 6 AR 46 O5V STEEL EDGE	-
	10	30	W 236	16,000	23,800	5	31328273	ZY 4010 6 AR 30 O5V STEEL EDGE	-
		60	W 236	16,000	23,800	5	31328276	ZY 4010 6 AR 60 O5V STEEL EDGE	-
	15	30	-	16,000	23,800	5	31329273	ZY 4015 6 AR 30 O5V STEEL EDGE	-
		60	-	16,000	23,800	5	31329276	ZY 4015 6 AR 60 O5V STEEL EDGE	-
	20	24	-	16,000	23,800	5	31330272	ZY 4020 6 AR 24 O5V STEEL EDGE	-
		46	-	16,000	23,800	5	31330274	ZY 4020 6 AR 46 O5V STEEL EDGE	-
	40	24	W 238	16,000	16,200	5	31138272	ZY 4040 6 AR 24 O5V STEEL EDGE	-
		46	W 238	16,000	16,200	5	31138274	ZY 4040 6 AR 46 O5V STEEL EDGE	-
50	8	30	-	13,000	19,000	5	31378273	ZY 5008 6 AR 30 O5V STEEL EDGE	-
	13	30	-	13,000	19,000	5	31331273	ZY 5013 6 AR 30 O5V STEEL EDGE	-
	25	24	W 242	13,000	19,000	5	31332272	ZY 5025 6 AR 24 O5V STEEL EDGE	-
		46	W 242	13,000	19,000	5	31332274	ZY 5025 6 AR 46 O5V STEEL EDGE	-
Shank diameter 8 x 40 mm [S_d x L_2]									
32	40	24	W 231	21,000	29,800	5	31187272	ZY 3240 8 AR 24 O5V STEEL EDGE	-
40	40	24	W 238	16,000	23,800	5	31188272	ZY 4040 8 AR 24 O5V STEEL EDGE	-



STEEL EDGE, ball type

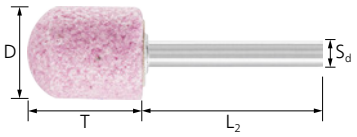
These mounted points are particularly suitable for edge grinding and for deburring work, as well as for grinding chamfers for weld seam preparation and weld dressing on contours. The ball shape KU is often used for contour grinding and backside deburring.

Special features:
- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

D [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 3 x 30 mm [S_d x L_2]							
3	100	150,000	300,200	10	31702270	KU 03 3 AR 100 O5V STEEL EDGE	-
5	60	130,000	190,900	10	31704276	KU 05 3 AR 60 O5V STEEL EDGE	-
	100	130,000	190,900	10	31704270	KU 05 3 AR 100 O5V STEEL EDGE	-
8	46	85,000	116,200	10	31715274	KU 08 3 AR 46 O5V STEEL EDGE	-
	80	85,000	116,200	10	31715278	KU 08 3 AR 80 O5V STEEL EDGE	-
10	46	65,000	83,300	10	31712274	KU 10 3 AR 46 O5V STEEL EDGE	-

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D [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
10	80	65,000	83,300	10	31712278	KU 10 3 AR 80 O5V STEEL EDGE	-
13	46	50,000	54,000	10	31717274	KU 13 3 AR 46 O5V STEEL EDGE	-
	80	50,000	54,000	10	31717278	KU 13 3 AR 80 O5V STEEL EDGE	-
Shank diameter 6 x 40 mm [S_d x L_2]							
3	100	150,000	317,300	10	31701270	KU 03 6 AR 100 O5V STEEL EDGE	-
5	60	130,000	190,900	10	31703276	KU 05 6 AR 60 O5V STEEL EDGE	-
	100	130,000	190,900	10	31703270	KU 05 6 AR 100 O5V STEEL EDGE	-
8	46	85,000	119,300	10	31705274	KU 08 6 AR 46 O5V STEEL EDGE	-
	80	85,000	119,300	10	31705278	KU 08 6 AR 80 O5V STEEL EDGE	-
10	46	65,000	95,400	10	31711274	KU 10 6 AR 46 O5V STEEL EDGE	-
	80	65,000	95,400	10	31711278	KU 10 6 AR 80 O5V STEEL EDGE	-
13	46	50,000	73,400	10	31706274	KU 13 6 AR 46 O5V STEEL EDGE	-
	80	50,000	73,400	10	31706278	KU 13 6 AR 80 O5V STEEL EDGE	-
16	30	42,000	59,600	10	31707273	KU 16 6 AR 30 O5V STEEL EDGE	-
	60	42,000	59,600	10	31707276	KU 16 6 AR 60 O5V STEEL EDGE	-
20	30	33,000	47,700	10	31708273	KU 20 6 AR 30 O5V STEEL EDGE	-
	60	33,000	47,700	10	31708276	KU 20 6 AR 60 O5V STEEL EDGE	-
25	30	26,000	38,100	10	31709273	KU 25 6 AR 30 O5V STEEL EDGE	-
	60	26,000	38,100	10	31709276	KU 25 6 AR 60 O5V STEEL EDGE	-
32	24	21,000	29,800	5	31710272	KU 32 6 AR 24 O5V STEEL EDGE	-
	46	21,000	29,800	5	31710274	KU 32 6 AR 46 O5V STEEL EDGE	-



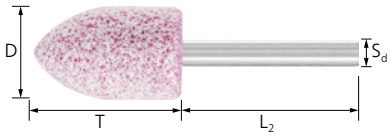
Cylindrical with radius end type STEEL EDGE

These mounted points are particularly suitable for edge grinding and for deburring work, as well as for grinding chamfers for weld seam preparation and weld dressing on contours. The cylindrical shape with radius end WR is perfect for a variety of deburring and grinding jobs.

Special features:
- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 3 x 30 mm [S_d x L_2]								
3	6	100	150,000	219,800	10	31402270	WR 0306 3 AR 100 O5V STEEL EDGE	-
5	10	60	130,000	136,500	10	31404276	WR 0510 3 AR 60 O5V STEEL EDGE	-
		100	130,000	136,500	10	31404270	WR 0510 3 AR 100 O5V STEEL EDGE	-
Shank diameter 6 x 40 mm [S_d x L_2]								
5	10	60	130,000	168,400	10	31403276	WR 0510 6 AR 60 O5V STEEL EDGE	-
8	16	46	85,000	119,300	10	31405274	WR 0816 6 AR 46 O5V STEEL EDGE	-
		80	85,000	119,300	10	31405278	WR 0816 6 AR 80 O5V STEEL EDGE	-
13	20	46	50,000	73,400	10	31406274	WR 1320 6 AR 46 O5V STEEL EDGE	-
		80	50,000	73,400	10	31406278	WR 1320 6 AR 80 O5V STEEL EDGE	-
20	25	30	33,000	47,700	10	31407273	WR 2025 6 AR 30 O5V STEEL EDGE	-
		60	33,000	47,700	10	31407276	WR 2025 6 AR 60 O5V STEEL EDGE	-

Mounted points
For edge grinding on steel and cast steel



Pointed tree type STEEL EDGE

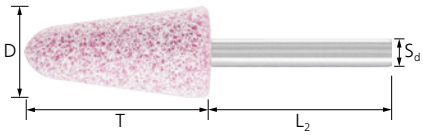
These mounted points are particularly suitable for edge grinding and for deburring work, as well as for grinding chamfers for weld seam preparation and weld dressing on contours. The pointed tree shape SP is exceptionally well-suited for machining small holes and bores.



Special features:
- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

3

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 3 x 30 mm [S_d x L_2]								
3	6	100	150,000	252,000	10	32102270	SP 0306 3 AR 100 O5V STEEL EDGE	-
5	10	60	130,000	149,500	10	32104276	SP 0510 3 AR 60 O5V STEEL EDGE	-
		100	130,000	149,500	10	32104270	SP 0510 3 AR 100 O5V STEEL EDGE	-
8	16	46	72,800	72,800	10	32106274	SP 0816 3 AR 46 O5V STEEL EDGE	-
		80	72,800	72,800	10	32106278	SP 0816 3 AR 80 O5V STEEL EDGE	-
Shank diameter 6 x 40 mm [S_d x L_2]								
3	6	100	150,000	255,500	10	32101270	SP 0306 6 AR 100 O5V STEEL EDGE	-
5	10	60	130,000	190,900	10	32103276	SP 0510 6 AR 60 O5V STEEL EDGE	-
		100	130,000	190,900	10	32103270	SP 0510 6 AR 100 O5V STEEL EDGE	-
8	16	46	85,000	119,300	10	32105274	SP 0816 6 AR 46 O5V STEEL EDGE	-
		80	85,000	119,300	10	32105278	SP 0816 6 AR 80 O5V STEEL EDGE	-
13	20	46	50,000	73,400	10	32107274	SP 1320 6 AR 46 O5V STEEL EDGE	-
		80	50,000	73,400	10	32107278	SP 1320 6 AR 80 O5V STEEL EDGE	-
20	32	30	33,000	47,700	10	32109273	SP 2032 6 AR 30 O5V STEEL EDGE	-
		60	33,000	47,700	10	32109276	SP 2032 6 AR 60 O5V STEEL EDGE	-
	50	30	30,500	30,500	10	32111273	SP 2050 6 AR 30 O5V STEEL EDGE	-
25	40	30	26,000	35,000	10	32114273	SP 2540 6 AR 30 O5V STEEL EDGE	-



STEEL EDGE, tapered type

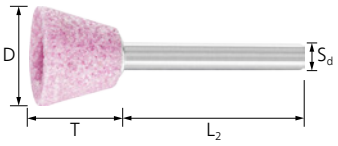
These mounted points are particularly suitable for edge grinding and for deburring work, as well as for grinding chamfers for weld seam preparation and weld dressing on contours. The conical shape KE is designed for a comfortable working position when smoothing out a ridge on a surface.



Special features:
- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 3 x 30 mm [S_d x L_2]								
10	10	46	65,000	95,400	10	32202274	KE 1010 3 AR 46 O5V STEEL EDGE	-
Shank diameter 6 x 40 mm [S_d x L_2]								
10	10	46	65,000	95,400	10	32201274	KE 1010 6 AR 46 O5V STEEL EDGE	-
	25	46	65,000	95,400	10	32209274	KE 1025 6 AR 46 O5V STEEL EDGE	-
		80	65,000	95,400	10	32209278	KE 1025 6 AR 80 O5V STEEL EDGE	-
13	13	46	50,000	73,400	10	32203274	KE 1313 6 AR 46 O5V STEEL EDGE	-
16	16	30	42,000	59,600	10	32204273	KE 1616 6 AR 30 O5V STEEL EDGE	-
		60	42,000	59,600	10	32204276	KE 1616 6 AR 60 O5V STEEL EDGE	-
	45	46	42,000	52,000	10	32210274	KE 1645 6 AR 46 O5V STEEL EDGE	-
		80	42,000	52,000	10	32210278	KE 1645 6 AR 80 O5V STEEL EDGE	-
20	20	30	33,000	47,700	10	32205273	KE 2020 6 AR 30 O5V STEEL EDGE	-
		60	33,000	47,700	10	32205276	KE 2020 6 AR 60 O5V STEEL EDGE	-
	32	30	33,000	47,700	10	32208273	KE 2032 6 AR 30 O5V STEEL EDGE	-
		60	33,000	47,700	10	32208276	KE 2032 6 AR 60 O5V STEEL EDGE	-
	40	30	33,000	47,700	10	32212273	KE 2040 6 AR 30 O5V STEEL EDGE	-
		60	33,000	47,700	10	32212276	KE 2040 6 AR 60 O5V STEEL EDGE	-
25	25	30	26,000	38,100	10	32206273	KE 2525 6 AR 30 O5V STEEL EDGE	-
		60	26,000	38,100	10	32206276	KE 2525 6 AR 60 O5V STEEL EDGE	-
	45	30	26,000	34,000	10	32211273	KE 2545 6 AR 30 O5V STEEL EDGE	-
		60	26,000	34,000	10	32211276	KE 2545 6 AR 60 O5V STEEL EDGE	-
	70	30	20,400	20,400	10	32214273	KE 2570 6 AR 30 O5V STEEL EDGE	-
32	32	24	21,000	29,800	5	32207272	KE 3232 6 AR 24 O5V STEEL EDGE	-
		46	21,000	29,800	5	32207274	KE 3232 6 AR 46 O5V STEEL EDGE	-
Shank diameter 8 x 40 mm [S_d x L_2]								
32	50	24	21,000	29,800	5	32216272	KE 3250 8 AR 24 O5V STEEL EDGE	-

Mounted points
For edge grinding on steel and cast steel



STEEL EDGE cups

These mounted points are particularly suitable for edge grinding and for deburring work, as well as for grinding chamfers for weld seam preparation and weld dressing on contours. The cup shape TO is ideal for work on profiles, planar surfaces and ledges, without the cylindrical surface being damaged.

Special features:
- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
20	16	30	33,000	47,700	10	32901273	TO 2016 6 AR 30 O5V STEEL EDGE	-
		60	33,000	47,700	10	32901276	TO 2016 6 AR 60 O5V STEEL EDGE	-
25	20	30	26,000	38,100	10	32902273	TO 2520 6 AR 30 O5V STEEL EDGE	-
32	25	24	21,000	29,800	5	32903272	TO 3225 6 AR 24 O5V STEEL EDGE	-
		46	21,000	29,800	5	32903274	TO 3225 6 AR 46 O5V STEEL EDGE	-



Series A STEEL EDGE

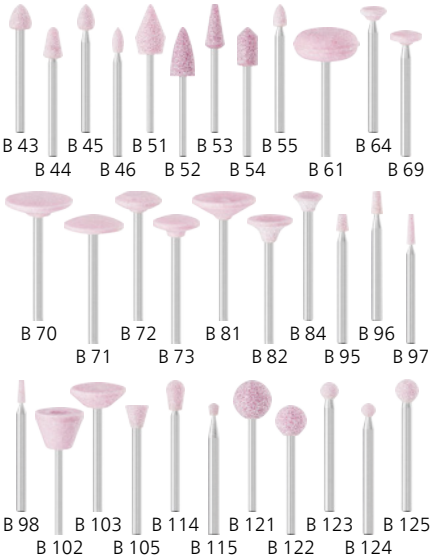
These mounted points are particularly suitable for edge grinding and for deburring work, as well as for grinding chamfers for weld seam preparation and weld dressing on a wide range of different contours.

Special features:
- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

USA type	D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]									
A 1	19	64	30	30,400	30,400	10	35501273	A 1 6 AR 30 O5V STEEL EDGE	-
A 2	25	32	30	26,000	37,500	10	35502273	A 2 6 AR 30 O5V STEEL EDGE	-
A 3	25	70	30	18,600	18,600	10	35503273	A 3 6 AR 30 O5V STEEL EDGE	-
A 4	32	32	30	21,000	30,000	5	35504273	A 4 6 AR 30 O5V STEEL EDGE	-
A 5	19	29	30	35,000	49,900	10	35505273	A 5 6 AR 30 O5V STEEL EDGE	-
A 6	19	29	30	35,000	49,900	10	35506273	A 6 6 AR 30 O5V STEEL EDGE	-
A 11	22	50	30	27,600	27,600	10	35511273	A 11 6 AR 30 O5V STEEL EDGE	-
A 12	17	32	30	40,000	54,500	10	35512273	A 12 6 AR 30 O5V STEEL EDGE	-
A 14	17	22	30	40,000	54,500	10	35514273	A 14 6 AR 30 O5V STEEL EDGE	-
A 15	6	27	60	100,000	112,900	10	35515296	A 15 6 AR 60 O5V STEEL EDGE	-
			100	100,000	112,900	10	35515290	A 15 6 AR 100 O5V STEEL EDGE	-
A 21	25	25	30	26,000	37,500	10	35521273	A 21 6 AR 30 O5V STEEL EDGE	-
A 24	6	19	60	100,000	117,400	10	35524276	A 24 6 AR 60 O5V STEEL EDGE	-
			100	100,000	117,400	10	35524270	A 24 6 AR 100 O5V STEEL EDGE	-
A 25	25	25	30	26,000	37,500	10	35525273	A 25 6 AR 30 O5V STEEL EDGE	-
A 26	16	16	30	42,000	60,000	10	35526273	A 26 6 AR 30 O5V STEEL EDGE	-
A 34	38	10	30	18,000	25,000	5	35534273	A 34 6 AR 30 O5V STEEL EDGE	-

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USA type	D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
A 36	41	10	60	16,000	23,100	5	35536276	A 36 6 AR 60 O5V STEEL EDGE	-
A 37	32	6	60	21,000	30,000	5	35537276	A 37 6 AR 60 O5V STEEL EDGE	-
Shank diameter 6.35 x 40 mm [S_d x L_2]									
A 1	19	64	30	33,500	33,500	10	35001273	A 1 6,3 AR 30 O5V STEEL EDGE	-
A 2	25	32	30	26,000	37,500	10	35002273	A 2 6,3 AR 30 O5V STEEL EDGE	-
A 3	25	70	30	18,600	18,600	10	35003273	A 3 6,3 AR 30 O5V STEEL EDGE	-
A 4	32	32	30	21,000	30,000	5	35004273	A 4 6,3 AR 30 O5V STEEL EDGE	-
A 5	19	29	30	35,000	49,900	10	35005273	A 5 6,3 AR 30 O5V STEEL EDGE	-
A 11	22	50	30	30,400	30,400	10	35011273	A 11 6,3 AR 30 O5V STEEL EDGE	-
A 12	17	32	30	40,000	54,500	10	35012273	A 12 6,3 AR 30 O5V STEEL EDGE	-
A 15	6	27	60	100,000	112,900	10	35015296	A 15 6,3 AR 60 O5V STEEL EDGE	-
A 24	6	19	60	100,000	117,400	10	35024276	A 24 6,3 AR 60 O5V STEEL EDGE	-
A 25	25	25	30	26,000	37,500	10	35025273	A 25 6,3 AR 30 O5V STEEL EDGE	-
A 36	41	10	60	16,000	23,100	5	35036276	A 36 6,3 AR 60 O5V STEEL EDGE	-
A 37	32	6	60	21,000	30,000	5	35037276	A 37 6,3 AR 60 O5V STEEL EDGE	-



Series B STEEL EDGE

These mounted points are particularly suitable for edge grinding and for deburring work, as well as for grinding chamfers for weld seam preparation and weld dressing on a wide range of different contours on smaller or more delicate components.

Special features:

- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

USA type	D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 x 30 mm [S_d x L_2]									
B 43	6	8	100	100,000	149,200	10	35603270	B 43 3 AR 100 O5V STEEL EDGE	-
B 44	6	10	100	100,000	141,100	10	35604270	B 44 3 AR 100 O5V STEEL EDGE	-
B 45	5	8	100	130,000	181,900	10	35605270	B 45 3 AR 100 O5V STEEL EDGE	-
B 46	3	8	100	150,000	267,100	10	35606270	B 46 3 AR 100 O5V STEEL EDGE	-
B 51	11	19	80	60,000	63,600	10	35611278	B 51 3 AR 80 O5V STEEL EDGE	-
B 52	10	19	46	65,000	66,200	10	35612274	B 52 3 AR 46 O5V STEEL EDGE	-
			80	65,000	66,200	10	35612278	B 52 3 AR 80 O5V STEEL EDGE	-
B 53	6	16	60	100,000	149,200	10	35613276	B 53 3 AR 60 O5V STEEL EDGE	-
			100	100,000	149,200	10	35613270	B 53 3 AR 100 O5V STEEL EDGE	-
B 54	6	13	60	100,000	101,500	10	35614276	B 54 3 AR 60 O5V STEEL EDGE	-
			100	100,000	101,500	10	35614270	B 54 3 AR 100 O5V STEEL EDGE	-
B 55	3	6	100	150,000	257,000	10	35615270	B 55 3 AR 100 O5V STEEL EDGE	-
B 61	19	8	80	35,000	45,000	10	35621278	B 61 3 AR 80 O5V STEEL EDGE	-
B 64	6	2	100	100,000	149,200	10	35624270	B 64 3 AR 100 O5V STEEL EDGE	-
B 69	8	2	100	85,000	120,800	10	35629270	B 69 3 AR 100 O5V STEEL EDGE	-

Continued on next page

Mounted points
For edge grinding on steel and cast steel

USA type	D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
B 70	19	3	100	35,000	49,900	10	35630270	B 70 3 AR 100 O5V STEEL EDGE	-
B 71	16	2	100	42,000	60,000	10	35631270	B 71 3 AR 100 O5V STEEL EDGE	-
B 72	13	3	100	50,000	75,100	10	35632270	B 72 3 AR 100 O5V STEEL EDGE	-
B 73	13	3	100	50,000	75,100	10	35633270	B 73 3 AR 100 O5V STEEL EDGE	-
B 81	19	8	100	35,000	49,900	10	35641270	B 81 3 AR 100 O5V STEEL EDGE	-
B 82	13	6	100	50,000	75,100	10	35642270	B 82 3 AR 100 O5V STEEL EDGE	-
B 95	3	5	100	150,000	260,300	10	35655270	B 95 3 AR 100 O5V STEEL EDGE	-
B 96	3	6	100	150,000	236,100	10	35656270	B 96 3 AR 100 O5V STEEL EDGE	-
B 97	2	10	100	107,300	107,300	10	35657270	B 97 3 AR 100 O5V STEEL EDGE	-
B 98	2	6	100	150,000	168,300	10	35658270	B 98 3 AR 100 O5V STEEL EDGE	-
B 102	16	13	80	42,000	46,400	10	35662278	B 102 3 AR 80 O5V STEEL EDGE	-
B 103	16	5	80	42,000	60,000	10	35663278	B 103 3 AR 80 O5V STEEL EDGE	-
B 105	6	6	100	100,000	149,200	10	35665270	B 105 3 AR 100 O5V STEEL EDGE	-
B 114	6	10	100	100,000	136,900	10	35674270	B 114 3 AR 100 O5V STEEL EDGE	-
B 115	2	3	100	150,000	299,400	10	*35675270*	B 115 3 AR 100 O5V STEEL EDGE	-
B 121	13	13	46	50,000	56,200	10	35681274	B 121 3 AR 46 O5V STEEL EDGE	-
B 122	10	10	46	65,000	90,200	10	35682274	B 122 3 AR 46 O5V STEEL EDGE	-
			80	65,000	90,200	10	35682278	B 122 3 AR 80 O5V STEEL EDGE	-
B 123	5	5	100	130,000	198,900	10	35683270	B 123 3 AR 100 O5V STEEL EDGE	-
B 124	3	3	100	150,000	291,800	10	35684270	B 124 3 AR 100 O5V STEEL EDGE	-
B 125	6	6	100	100,000	149,200	10	35685270	B 125 3 AR 100 O5V STEEL EDGE	-
Shank diameter 3.17 x 30 mm [S_d x L_2]									
B 125	6	6	100	100,000	149,200	10	*35185270*	B 125 3,1 AR 100 O5V STEEL EDGE	-



Mounted point set 2002 STEEL EDGE

This set is particularly suitable for edge grinding and for deburring work, as well as for grinding chamfers for weld seam preparation and weld dressing on contours. It contains 15 small mounted points in the most common shapes and dimensions for finishing work.

Contents:
Contains two each of the following mounted points: ZY 0510, ZY 0810, ZY 1604 and one each of the following mounted points: ZY 0408, ZY 0613, ZY 0802, ZY 1013, ZY 1303, WR 0510, KU 05, SP 0306, SP 0816.

Special features:
- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

S_d [mm]	Grit size		Item no.	Designation	Price/unit EUR
3	fine	1	33920231	2002 O F STEEL EDGE	-



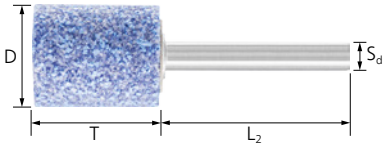
Mounted point set 2001 STEEL EDGE

This set is particularly suitable for edge grinding and for deburring work, as well as for grinding chamfers for weld seam preparation and weld dressing on contours. It contains 10 mounted points in the most common shapes and dimensions.

Contents:
Contains one each of the following mounted points: ZY 1013, ZY 1320, ZY 2006, ZY 2013, ZY 2025, KU 16, WR 2025, KE 2032, SP 1320, KE 2020.

Special features:
- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

S_d [mm]	Grit size		Item no.	Designation	Price/unit EUR
6	coarse	1	33920131	2001 O G STEEL EDGE	-



TOUGH, cylindrical type

These mounted points are particularly suitable for weld dressing on repair welds, reworking on turbine blades during aircraft maintenance, and regrinding of repair welds in tool and mould-making. The cylindrical shape ZY is ideal for grinding bores, radii and contours.



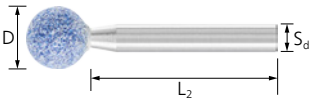
Special features:
- Cool grinding as the grain mix is easy to break down.
- High stock removal rates and very good tool life.
- Constant stock removal rates thanks to the self-sharpening qualities of the ceramic oxide grain.

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 x 30 mm [S_d x L_2]									
1	5	320	-	104,200	104,200	10	31191340	ZY 0105 3 AWCO 320 J5V TOUGH	-
1.5	8	320	-	104,700	104,700	10	31192340	ZY 1,508 3 AWCO 320 J5V TOUGH	-
1.7	8	320	-	112,300	112,300	10	31193340	ZY 1,708 3 AWCO 320 J5V TOUGH	-
2	5	80	W 141	150,000	201,800	10	31100340	ZY 0205 3 AWCO 80 J5V TOUGH	-
		100	W 141	150,000	201,800	10	31100350	ZY 0205 3 AWCO 100 J5V TOUGH	-
3	6	60	W 144	150,000	206,100	10	31103135	ZY 0306 3 AWCO 60 J5V TOUGH	-
		80	W 144	150,000	206,100	10	31103140	ZY 0306 3 AWCO 80 J5V TOUGH	-
		100	W 144	150,000	206,100	10	31103145	ZY 0306 3 AWCO 100 J5V TOUGH	-
4	8	60	-	150,000	175,100	10	31105135	ZY 0408 3 AWCO 60 J5V TOUGH	-
		80	-	150,000	175,100	10	31105140	ZY 0408 3 AWCO 80 J5V TOUGH	-
		100	-	150,000	175,100	10	31105145	ZY 0408 3 AWCO 100 J5V TOUGH	-
5	10	60	W 153	130,700	130,700	10	31107135	ZY 0510 3 AWCO 60 J5V TOUGH	-
		80	W 153	130,700	130,700	10	31107140	ZY 0510 3 AWCO 80 J5V TOUGH	-
		100	W 153	130,700	130,700	10	31107145	ZY 0510 3 AWCO 100 J5V TOUGH	-
6	13	46	W 163	93,600	93,600	10	31110130	ZY 0613 3 AWCO 46 J5V TOUGH	-
		60	W 163	93,600	93,600	10	31110138	ZY 0613 3 AWCO 60 J5V TOUGH	-
		80	W 163	93,600	93,600	10	31110140	ZY 0613 3 AWCO 80 J5V TOUGH	-
		100	W 163	93,600	93,600	10	31110145	ZY 0613 3 AWCO 100 J5V TOUGH	-
8	10	46	W 169	87,600	87,600	10	31112030	ZY 0810 3 AWCO 46 J5V TOUGH	-
	16	46	-	61,000	61,000	10	31114130	ZY 0816 3 AWCO 46 J5V TOUGH	-
		60	-	61,000	61,000	10	31114132	ZY 0816 3 AWCO 60 J5V TOUGH	-
		80	-	61,000	61,000	10	31114135	ZY 0816 3 AWCO 80 J5V TOUGH	-
10	13	80	W 176	58,400	58,400	10	31116230	ZY 1013 3 AWCO 80 J5V TOUGH	-
13	3	60	W 182	65,000	73,400	10	31311376	ZY 1303 3 AWCO 60 J5V TOUGH	-
20	6	46	W 201	45,000	47,700	10	31317370	ZY 2006 3 AWCO 46 J5V TOUGH	-
		60	W 201	45,000	47,700	10	31317376	ZY 2006 3 AWCO 60 J5V TOUGH	-
Shank diameter 6 x 40 mm [S_d x L_2]									
5	10	100	W 153	150,000	157,800	10	31106230	ZY 0510 6 AWCO 100 J5V TOUGH	-
8	16	46	-	100,000	119,300	10	31114136	ZY 0816 6 AWCO 46 J5V TOUGH	-
		80	-	100,000	119,300	10	31114140	ZY 0816 6 AWCO 80 J5V TOUGH	-
10	13	46	W 176	85,000	95,400	10	31115336	ZY 1013 6 AWCO 46 J5V TOUGH	-
		80	W 176	85,000	95,400	10	31115340	ZY 1013 6 AWCO 80 J5V TOUGH	-
	20	46	-	85,000	95,400	10	31118336	ZY 1020 6 AWCO 46 J5V TOUGH	-
		80	-	85,000	95,400	10	31118340	ZY 1020 6 AWCO 80 J5V TOUGH	-
13	25	46	W 187	65,000	66,000	10	31125336	ZY 1325 6 AWCO 46 J5V TOUGH	-
		80	W 187	65,000	66,000	10	31125340	ZY 1325 6 AWCO 80 J5V TOUGH	-
16	20	30	W 195	55,000	59,600	10	31126330	ZY 1620 6 AWCO 30 J5V TOUGH	-
		46	W 195	55,000	59,600	10	31126336	ZY 1620 6 AWCO 46 J5V TOUGH	-
		60	W 195	55,000	59,600	10	31126338	ZY 1620 6 AWCO 60 J5V TOUGH	-
	32	30	-	51,200	51,200	10	31127330	ZY 1632 6 AWCO 30 J5V TOUGH	-

Continued on next page

Mounted points
For universal use on materials that are difficult to machine

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
16	32	46	-	51,200	51,200	10	31127336	ZY 1632 6 AWCO 46 J5V TOUGH	-
		60	-	51,200	51,200	10	31127338	ZY 1632 6 AWCO 60 J5V TOUGH	-
20	25	30	W 205	45,000	47,700	10	31131330	ZY 2025 6 AWCO 30 J5V TOUGH	-
		46	W 205	45,000	47,700	10	31131336	ZY 2025 6 AWCO 46 J5V TOUGH	-
		60	W 205	45,000	47,700	10	31131338	ZY 2025 6 AWCO 60 J5V TOUGH	-
	40	30	W 207	32,400	32,400	10	31133259	ZY 2040 6 AWCO 30 J5V TOUGH	-
		46	W 207	32,400	32,400	10	31133260	ZY 2040 6 AWCO 46 J5V TOUGH	-
		60	W 207	32,400	32,400	10	31133263	ZY 2040 6 AWCO 60 J5V TOUGH	-
25	25	30	W 220	35,000	38,100	10	31134130	ZY 2525 6 AWCO 30 J5V TOUGH	-
32	16	46	-	27,000	29,800	5	31326130	ZY 3216 6 AWCO 46 J5V TOUGH	-
	32	24	W 230	25,700	25,700	5	31136330	ZY 3232 6 AWCO 24 J5V TOUGH	-
		46	W 230	25,700	25,700	5	31136336	ZY 3232 6 AWCO 46 J5V TOUGH	-
40	10	46	W 236	22,000	23,800	5	31328846	ZY 4010 6 AWCO 46 J5V TOUGH	-
		60	W 236	22,000	23,800	5	31328860	ZY 4010 6 AWCO 60 J5V TOUGH	-
	20	46	-	22,000	23,800	5	31138036	ZY 4020 6 AWCO 46 J5V TOUGH	-



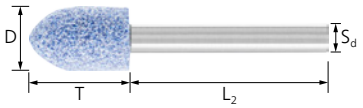
TOUGH, ball type

These mounted points are particularly suitable for weld dressing on repair welds, reworking on turbine blades during aircraft maintenance, and regrinding of repair welds in tool and mould-making. The ball shape KU is often used for contour grinding and backside deburring.



Special features:
- Cool grinding as the grain mix is easy to break down.
- High stock removal rates and very good tool life.
- Constant stock removal rates thanks to the self-sharpening qualities of the ceramic oxide grain.

D [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 3 x 30 mm [S_d x L_2]							
3	60	150,000	300,200	10	31702260	KU 03 3 AWCO 60 J5V TOUGH	-
	80	150,000	300,200	10	31702280	KU 03 3 AWCO 80 J5V TOUGH	-
6	60	140,000	159,100	10	31704530	KU 06 3 AWCO 60 J5V TOUGH	-
	80	140,000	159,100	10	31704540	KU 06 3 AWCO 80 J5V TOUGH	-
	100	140,000	159,100	10	31704545	KU 06 3 AWCO 100 J5V TOUGH	-
8	46	100,000	116,200	10	31705335	KU 08 3 AWCO 46 J5V TOUGH	-
	80	100,000	116,200	10	31705340	KU 08 3 AWCO 80 J5V TOUGH	-
	100	100,000	116,200	10	31705345	KU 08 3 AWCO 100 J5V TOUGH	-
Shank diameter 6 x 40 mm [S_d x L_2]							
13	46	65,000	73,400	10	31706336	KU 13 6 AWCO 46 J5V TOUGH	-
	60	65,000	73,400	10	31706338	KU 13 6 AWCO 60 J5V TOUGH	-
	80	65,000	73,400	10	31706340	KU 13 6 AWCO 80 J5V TOUGH	-



TOUGH, tree type

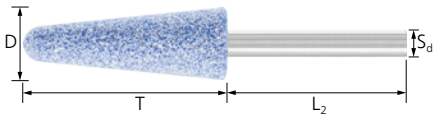
These mounted points are particularly suitable for weld dressing on repair welds, reworking on turbine blades during aircraft maintenance, and regrinding of repair welds in tool and mould-making. The pointed tree shape SP is exceptionally well-suited for machining small holes and bores.



Special features:
- Cool grinding as the grain mix is easy to break down.
- High stock removal rates and very good tool life.
- Constant stock removal rates thanks to the self-sharpening qualities of the ceramic oxide grain.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 3 x 30 mm [S_d x L_2]								
3	6	60	150,000	252,000	10	32102410	SP 0306 3 AWCO 60 J5V TOUGH	-
		80	150,000	252,000	10	32102420	SP 0306 3 AWCO 80 J5V TOUGH	-
		100	150,000	252,000	10	32102430	SP 0306 3 AWCO 100 J5V TOUGH	-
4	8	80	150,000	195,400	10	32102620	SP 0408 3 AWCO 80 J5V TOUGH	-
		100	150,000	195,400	10	32102630	SP 0408 3 AWCO 100 J5V TOUGH	-
5	10	100	149,500	149,500	10	32140230	SP 0510 3 AWCO 100 J5V TOUGH	-
6	10	60	134,100	134,100	10	32104410	SP 0610 3 AWCO 60 J5V TOUGH	-
	13	46	108,100	108,100	10	32104535	SP 0613 3 AWCO 46 J5V TOUGH	-
		80	108,100	108,100	10	32104540	SP 0613 3 AWCO 80 J5V TOUGH	-
		100	108,100	108,100	10	32104545	SP 0613 3 AWCO 100 J5V TOUGH	-
8	16	46	72,800	72,800	10	32105335	SP 0816 3 AWCO 46 J5V TOUGH	-
		60	72,800	72,800	10	32105338	SP 0816 3 AWCO 60 J5V TOUGH	-
		80	72,800	72,800	10	32105340	SP 0816 3 AWCO 80 J5V TOUGH	-
		100	72,800	72,800	10	32105345	SP 0816 3 AWCO 100 J5V TOUGH	-
Shank diameter 6 x 40 mm [S_d x L_2]								
13	20	46	65,000	73,400	10	32107336	SP 1320 6 AWCO 46 J5V TOUGH	-
		60	65,000	73,400	10	32107338	SP 1320 6 AWCO 60 J5V TOUGH	-
		80	65,000	73,400	10	32107340	SP 1320 6 AWCO 80 J5V TOUGH	-

Mounted points
For universal use on materials that are difficult to machine



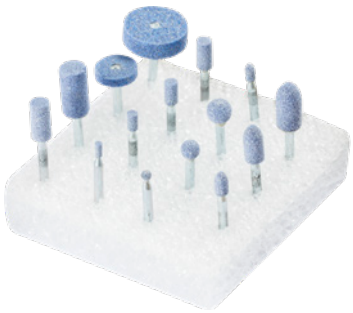
TOUGH, tapered type

These mounted points are particularly suitable for weld dressing on repair welds, reworking on turbine blades during aircraft maintenance, and regrinding of repair welds in tool and mould-making. The conical shape KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



Special features:
- Cool grinding as the grain mix is easy to break down.
- High stock removal rates and very good tool life.
- Constant stock removal rates thanks to the self-sharpening qualities of the ceramic oxide grain.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
10	25	46	85,000	95,400	10	32209336	KE 1025 6 AWCO 46 J5V TOUGH	-
		60	85,000	95,400	10	32209338	KE 1025 6 AWCO 60 J5V TOUGH	-
16	45	46	52,000	52,000	10	32210336	KE 1645 6 AWCO 46 J5V TOUGH	-
		60	52,000	52,000	10	32210338	KE 1645 6 AWCO 60 J5V TOUGH	-



Mounted point set 2002 TOUGH

This set is particularly suitable for weld dressing on repair welds, reworking on turbine blades during aircraft maintenance, and regrinding of repair welds in tool and mould-making. It contains 15 small mounted points with 3 mm shank diameter in the most common shapes for finishing work.

Contents:
Contains one each of the following mounted points: ZY 0205, ZY 0306, ZY 0408, ZY 0510, ZY 0613, ZY 0816, ZY 1303, ZY 2006, KU 03, KU 06, KU 08, SP 0306, SP 0408, SP 0613, SP 0816.

Special features:
- Cool grinding as the grain mix is easy to break down.
- High stock removal rates and very good tool life.
- Constant stock removal rates thanks to the self-sharpening qualities of the ceramic oxide grain.

S_d [mm]	Grit size		Item no.	Designation	Price/unit EUR
3	fine	1	33920235	2002 J F TOUGH	-



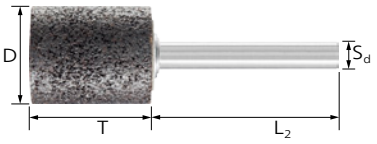
Mounted point set 2001 TOUGH

This set is particularly suitable for weld dressing on repair welds, reworking on turbine blades during aircraft maintenance, and regrinding of repair welds in tool and mould-making. It contains 10 mounted points with 6 mm shank diameter in the most common shapes and dimensions.

Contents:
Contains one each of the following mounted points: ZY 1013, ZY 1325, ZY 1620, ZY 2025, ZY 2040, ZY 4010, KU 13, SP 1320, KE 1025, KE 1645.

Special features:
- Cool grinding as the grain mix is easy to break down.
- High stock removal rates and very good tool life.
- Constant stock removal rates thanks to the self-sharpening qualities of the ceramic oxide grain.

S_d [mm]	Grit size		Item no.	Designation	Price/unit EUR
6	coarse	1	33920135	2001 J G TOUGH	-



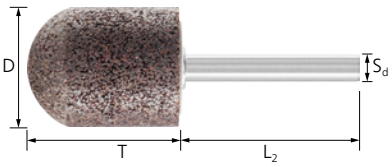
INOX cylindrical type

These mounted points are used for rough grinding of stainless steel (INOX) castings and grinding of moulded parts made of high-temperature-resistant alloys. The cylindrical shape ZY is ideal for grinding bores, radii and contours.



Special features:
- Due to cool grinding, particularly suitable for use on temperature-sensitive materials.
- High level of grinding comfort due to low-vibration grinding.

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]									
8	16	46	-	100,000	119,300	10	31113744	ZY 0816 6 ADW 46 L6B INOX	-
10	20	46	W 177	90,000	95,400	10	31118744	ZY 1020 6 ADW 46 L6B INOX	-
	32	46	W 179	62,800	62,800	10	31120744	ZY 1032 6 ADW 46 L6B INOX	-
16	32	30	-	51,200	51,200	10	31127743	ZY 1632 6 ADW 30 L6B INOX	-
20	25	30	W 205	45,000	47,700	10	31131743	ZY 2025 6 ADW 30 L6B INOX	-
		60	W 205	45,000	47,700	10	31131746	ZY 2025 6 ADW 60 L6B INOX	-
	40	30	W 207	32,400	32,400	10	31133743	ZY 2040 6 ADW 30 L6B INOX	-
25	13	30	W 218	37,000	38,100	10	31323743	ZY 2513 6 ADW 30 L6B INOX	-
	25	30	W 220	37,000	38,100	10	31134743	ZY 2525 6 ADW 30 L6B INOX	-
	32	30	-	32,900	32,900	10	31135743	ZY 2532 6 ADW 30 L6B INOX	-
32	16	24	-	29,000	29,800	5	31326742	ZY 3216 6 ADW 24 L6B INOX	-
	40	24	W 231	20,300	20,300	5	31137742	ZY 3240 6 ADW 24 L6B INOX	-
40	6	60	W 235	23,000	23,800	5	31375746	ZY 4006 6 ADW 60 L6B INOX	-
	10	30	W 236	23,000	23,800	5	31328743	ZY 4010 6 ADW 30 L6B INOX	-
	20	24	-	23,000	23,800	5	31330742	ZY 4020 6 ADW 24 L6B INOX	-
50	13	30	-	19,000	19,000	5	31331743	ZY 5013 6 ADW 30 L6B INOX	-
	25	24	W 242	19,000	19,000	5	31332742	ZY 5025 6 ADW 24 L6B INOX	-
Shank diameter 8 x 40 mm [S_d x L_2]									
32	40	24	W 231	28,500	29,800	5	31187742	ZY 3240 8 ADW 24 L6B INOX	-
50	40	24	W 243	19,000	19,000	5	31383742	ZY 5040 8 ADW 24 L6B INOX	-



INOX, cylindrical with radius end type

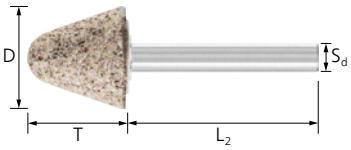
These mounted points are used for rough grinding of stainless steel (INOX) castings and grinding of moulded parts made of high-temperature-resistant alloys. The cylindrical shape with radius end WR is perfect for a variety of deburring and grinding jobs.



Special features:
- Due to cool grinding, particularly suitable for use on temperature-sensitive materials.
- High level of grinding comfort due to low-vibration grinding.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
25	32	30	37,000	37,300	10	31408253	WR 2532 6 ADW 30 L6B INOX	-

Mounted points
For universal use on stainless steel (INOX)

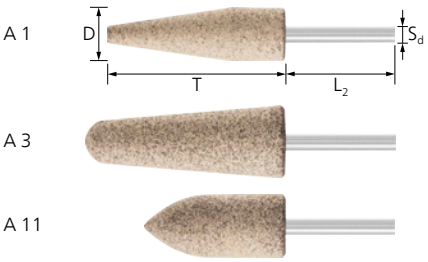


INOX, tapered type

These mounted points are used for rough grinding of stainless steel (INOX) castings and grinding of moulded parts made of high-temperature-resistant alloys. The conical shape KE is designed for a comfortable working position during surface grinding and grinding of chamfers.

Special features:
- Due to cool grinding, particularly suitable for use on temperature-sensitive materials.
- High level of grinding comfort due to low-vibration grinding.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
20	20	30	45,000	47,700	10	32205743	KE 2020 6 ADW 30 L6B INOX	-
25	45	30	34,000	34,000	10	32211743	KE 2545 6 ADW 30 L6B INOX	-



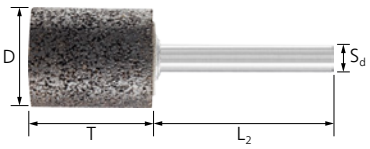
Series A INOX

These mounted points are used for rough grinding of a wide range of different contours on stainless steel (INOX) castings and grinding of moulded parts made of high-temperature-resistant alloys.

Special features:
- Due to cool grinding, particularly suitable for use on temperature-sensitive materials.
- High level of grinding comfort due to low-vibration grinding.

USA type	D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]									
A 1	19	64	60	30,400	30,400	10	35501746	A 1 6 ADW 60 L6B INOX	-
A 3	25	70	60	18,600	18,600	10	35503746	A 3 6 ADW 60 L6B INOX	-
A 11	22	50	60	27,600	27,600	10	35511746	A 11 6 ADW 60 L6B INOX	-

For edge grinding on stainless steel (INOX)



INOX EDGE, cylindrical type

Applications include weld dressing on fillet welds, removing burrs and grinding chamfers on high-temperature-resistant alloys and stainless steel components. The cylindrical shape ZY is ideal for grinding bores, radii and contours.

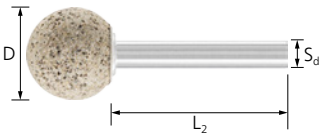


Special features:
- Due to cool grinding, particularly suitable for use on temperature-sensitive materials.
- High grinding comfort due to low-vibration grinding and high dimensional stability on edges.
- Economical to use due to the high edge stability even on low-speed tool drives.

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]									
8	16	46	-	100,000	119,300	10	31113614	ZY 0816 6 AN 46 N5B INOX EDGE	-
10	20	46	W 177	92,000	95,400	10	31118614	ZY 1020 6 AN 46 N5B INOX EDGE	-
	32	46	W 179	62,800	62,800	10	31120614	ZY 1032 6 AN 46 N5B INOX EDGE	-
13	25	46	W 187	66,000	66,000	10	31125614	ZY 1325 6 AN 46 N5B INOX EDGE	-

Continued on next page

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
16	32	30	-	51,200	51,200	10	31127613	ZY 1632 6 AN 30 N5B INOX EDGE	-
		60	-	51,200	51,200	10	31127616	ZY 1632 6 AN 60 N5B INOX EDGE	-
	50	30	W 197	31,300	31,300	10	31129613	ZY 1650 6 AN 30 N5B INOX EDGE	-
20	8	30	-	46,000	47,700	10	31318613	ZY 2008 6 AN 30 N5B INOX EDGE	-
	25	30	W 205	46,000	47,700	10	31131613	ZY 2025 6 AN 30 N5B INOX EDGE	-
	40	30	W 207	32,400	32,400	10	31133613	ZY 2040 6 AN 30 N5B INOX EDGE	-
25	6	46	W 216	37,000	38,100	10	31321614	ZY 2506 6 AN 46 N5B INOX EDGE	-
	13	30	W 218	37,000	38,100	10	31323613	ZY 2513 6 AN 30 N5B INOX EDGE	-
	32	30	-	32,900	32,900	10	31135613	ZY 2532 6 AN 30 N5B INOX EDGE	-
	40	30	W 221	26,000	26,000	10	31151613	ZY 2540 6 AN 30 N5B INOX EDGE	-
32	8	30	W 226	29,000	29,800	5	31325613	ZY 3208 6 AN 30 N5B INOX EDGE	-
	16	24	-	29,000	29,800	5	31326612	ZY 3216 6 AN 24 N5B INOX EDGE	-
	20	24	W 228	29,000	29,800	5	31327612	ZY 3220 6 AN 24 N5B INOX EDGE	-
	32	24	W 230	25,700	25,700	5	31136612	ZY 3232 6 AN 24 N5B INOX EDGE	-
	40	24	W 231	20,300	20,300	5	31137612	ZY 3240 6 AN 24 N5B INOX EDGE	-
40	6	46	W 235	23,000	23,800	5	31375614	ZY 4006 6 AN 46 N5B INOX EDGE	-
	10	30	-	23,000	23,800	5	31328613	ZY 4010 6 AN 30 N5B INOX EDGE	-
	20	24	-	23,000	23,800	5	31330612	ZY 4020 6 AN 24 N5B INOX EDGE	-
	40	24	W 238	16,200	16,200	5	31138612	ZY 4040 6 AN 24 N5B INOX EDGE	-
50	8	30	-	19,000	19,000	5	31378613	ZY 5008 6 AN 30 N5B INOX EDGE	-
	13	30	-	19,000	19,000	5	31331613	ZY 5013 6 AN 30 N5B INOX EDGE	-
	25	24	W 242	19,000	19,000	5	31332612	ZY 5025 6 AN 24 N5B INOX EDGE	-
Shank diameter 8 x 40 mm [S_d x L_2]									
32	40	24	W 231	28,500	29,800	5	31187612	ZY 3240 8 AN 24 N5B INOX EDGE	-



INOX EDGE, ball type

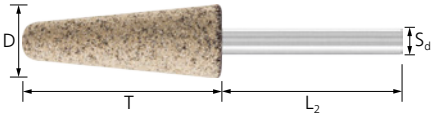
Applications include weld dressing on fillet welds, removing burrs and grinding chamfers on high-temperature-resistant alloys and stainless steel components. The ball shape KU is often used for contour grinding and backside deburring.

Special features:

- Due to cool grinding, particularly suitable for use on temperature-sensitive materials.
- High grinding comfort due to low-vibration grinding and high dimensional stability on edges.
- Economical to use due to the high edge stability even on low-speed tool drives.

D [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]							
16	30	58,000	59,600	10	31707613	KU 16 6 AN 30 N5B INOX EDGE	-
20	30	46,000	47,700	10	31708613	KU 20 6 AN 30 N5B INOX EDGE	-
25	30	37,000	38,100	10	31709613	KU 25 6 AN 30 N5B INOX EDGE	-

Mounted points
For edge grinding on stainless steel (INOX)



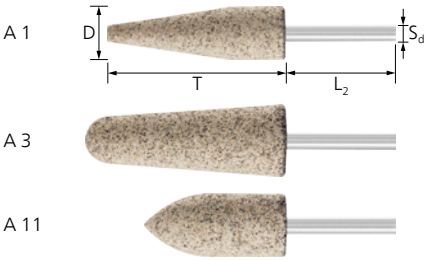
INOX EDGE, tapered type

Applications include weld dressing on fillet welds, removing burrs and grinding chamfers on high-temperature-resistant alloys and stainless steel components. The conical shape KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



Special features:
- Due to cool grinding, particularly suitable for use on temperature-sensitive materials.
- High grinding comfort due to low-vibration grinding and high dimensional stability on edges.
- Economical to use due to the high edge stability even on low-speed tool drives.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
10	25	46	92,000	95,400	10	32209614	KE 1025 6 AN 46 N5B INOX EDGE	-
16	45	46	52,000	52,000	10	32210614	KE 1645 6 AN 46 N5B INOX EDGE	-
25	45	30	34,000	34,000	10	32211613	KE 2545 6 AN 30 N5B INOX EDGE	-
32	32	24	29,000	29,800	5	32207612	KE 3232 6 AN 24 N5B INOX EDGE	-

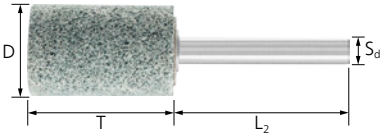


Series A INOX EDGE

Applications include weld dressing on fillet welds, removing burrs and grinding chamfers with different contours on high-temperature resistant alloys and stainless steel components.

Special features:
- Due to cool grinding, particularly suitable for use on temperature-sensitive materials.
- High grinding comfort due to low-vibration grinding and high dimensional stability on edges.
- Economical to use due to the high edge stability even on low-speed tool drives.

USA type	D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]									
A 1	19	64	30	30,400	30,400	10	35501613	A 1 6 AN 30 N5B INOX EDGE	-
A 3	25	70	30	18,600	18,600	10	35503613	A 3 6 AN 30 N5B INOX EDGE	-
A 11	22	50	30	27,600	27,600	10	35511613	A 11 6 AN 30 N5B INOX EDGE	-
Shank diameter 6.35 x 40 mm [S_d x L_2]									
A 11	22	50	30	30,400	30,400	10	35011613	A 11 6,3 AN 30 N5B INOX EDGE	-



ALU cylindrical mounted points

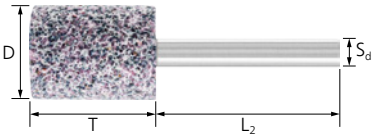
These mounted points are used to remove burrs on cast aluminium parts and for chamfering on aluminium profiles for weld-seam preparation. The cylindrical shape ZY is ideal for grinding bores, radii and contours.



Special features:
- The special impregnation means there is no clogging when working on soft, lubricating or tough materials.
- High grinding performance and stock removal rate.

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 x 30 mm [S_d x L_2]									
3	6	80	W 144	150,000	206,100	10	31103378	ZY 0306 3 CN 80 F10V ALU	-
6	13	80	W 163	93,600	93,600	10	31110378	ZY 0613 3 CN 80 F10V ALU	-
Shank diameter 6 x 40 mm [S_d x L_2]									
10	13	80	W 176	45,000	95,400	10	31115408	ZY 1013 6 CN 80 F10V ALU	-
13	20	80	W 186	35,000	73,400	10	31124408	ZY 1320 6 CN 80 F10V ALU	-
16	20	80	W 195	30,000	59,600	10	31126408	ZY 1620 6 CN 80 F10V ALU	-
	32	80	-	30,000	51,200	10	31127408	ZY 1632 6 CN 80 F10V ALU	-
20	32	80	W 206	24,000	41,100	10	31132408	ZY 2032 6 CN 80 F10V ALU	-
32	32	80	W 230	15,000	25,700	5	31136408	ZY 3232 6 CN 80 F10V ALU	-
40	20	80	-	12,000	23,800	5	31330408	ZY 4020 6 CN 80 F10V ALU	-

For surface grinding on grey and nodular cast iron



CAST cylindrical type

These mounted points are exceptionally well suited for cleaning workpieces and for grinding out shrinkage holes. The cylindrical shape ZY is ideal for grinding bores, radii and contours.



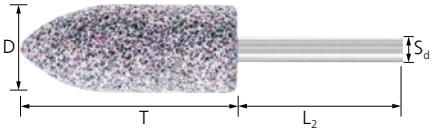
Special features:
- Suitable for use on surfaces and edges.
- Combined with high peripheral speeds, very well suited for surface use.
- High grinding performance and good tool life. High stock removal rates thanks to coarse grit size.

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]									
16	32	30	-	51,200	51,200	10	31127033	ZY 1632 6 ARN 30 K5V CAST	-
	50	30	W 197	31,300	31,300	10	31129033	ZY 1650 6 ARN 30 K5V CAST	-
20	25	30	W 205	43,000	47,700	10	31131033	ZY 2025 6 ARN 30 K5V CAST	-
	40	30	W 207	32,400	32,400	10	31133033	ZY 2040 6 ARN 30 K5V CAST	-
25	32	30	-	32,900	32,900	10	31135033	ZY 2532 6 ARN 30 K5V CAST	-
32	32	24	W 230	25,700	25,700	5	31136032	ZY 3232 6 ARN 24 K5V CAST	-
	40	24	W 231	20,300	20,300	5	31137032	ZY 3240 6 ARN 24 K5V CAST	-

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Mounted points
For surface grinding on grey and nodular cast iron

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
40	10	30	W 236	22,000	23,800	5	31328033	ZY 4010 6 ARN 30 K5V CAST	-
	20	24	-	22,000	23,800	5	31330033	ZY 4020 6 ARN 24 K5V CAST	-
50	8	30	-	18,000	19,000	5	31378233	ZY 5008 6 ARN 30 K5V CAST	-
	13	30	-	18,000	19,000	5	31331033	ZY 5013 6 ARN 30 K5V CAST	-
Shank diameter 8 x 40 mm [S_d x L_2]									
32	40	24	W 231	27,000	29,800	5	31187032	ZY 3240 8 ARN 24 K5V CAST	-
50	25	24	W 242	18,000	19,000	5	31382032	ZY 5025 8 ARN 24 K5V CAST	-

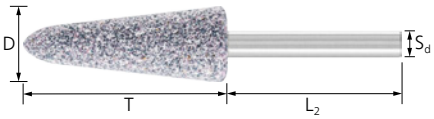


CAST, tree type

These mounted points are exceptionally well suited for cleaning workpieces and for grinding out shrinkage holes. The pointed tree shape SP is exceptionally well-suited for machining small holes and bores.

Special features:
- Suitable for use on surfaces and edges.
- Combined with high peripheral speeds, very well suited for surface use.
- High grinding performance and good tool life. High stock removal rates thanks to coarse grit size.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
20	50	30	30,500	30,500	10	32111233	SP 2050 6 ARN 30 K5V CAST	-



CAST, tapered type

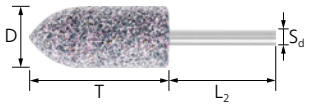
These mounted points are exceptionally well suited for cleaning workpieces and for grinding out shrinkage holes. The conical shape KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



Special features:
- Suitable for use on surfaces and edges.
- Combined with high peripheral speeds, very well suited for surface use.
- High grinding performance and good tool life. High stock removal rates thanks to coarse grit size.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
10	25	46	85,000	95,400	10	32209034	KE 1025 6 ARN 46 K5V CAST	-
16	45	46	52,000	52,000	10	32210034	KE 1645 6 ARN 46 K5V CAST	-
20	40	24	43,000	47,700	10	32212032	KE 2040 6 ARN 24 K5V CAST	-
Shank diameter 8 x 40 mm [S_d x L_2]								
32	50	24	27,000	29,800	5	32216232	KE 3250 8 ARN 24 K5V CAST	-

A 11



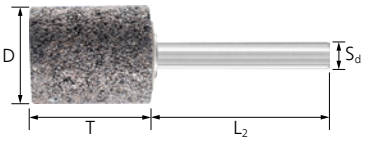
Series A CAST

These mounted points are exceptionally well suited for cleaning workpieces and for grinding out shrinkage holes in a wide range of contours.

Special features:
- Suitable for use on surfaces and edges.
- Combined with high peripheral speeds, very well suited for surface use.
- High grinding performance and good tool life. High stock removal rates thanks to coarse grit size.

USA type	D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]									
A 11	22	50	30	27,600	27,600	10	35511033	A 11 6 ARN 30 K5V CAST	-

For edge grinding on grey and nodular cast iron



CAST EDGE cylindrical type

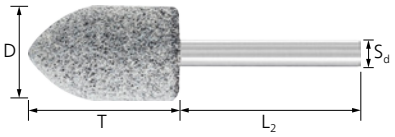
These mounted points are particularly good for edge grinding, for deburring and grinding out sand inclusions and metal contamination on grey and nodular cast iron. The cylindrical shape ZY is ideal for grinding bores, radii and contours.



Special features:
- Highly dimensionally stable due to the high bond content.
- Economical to use due to the high edge stability even on low-speed tool drives.

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]									
16	32	30	-	47,000	51,200	10	31127503	ZY 1632 6 CU 30 R5V CAST EDGE	-
20	25	30	W 205	38,000	47,700	10	31131503	ZY 2025 6 CU 30 R5V CAST EDGE	-
	40	30	-	32,400	32,400	10	31133503	ZY 2040 6 CU 30 R5V CAST EDGE	-
	50	30	W 208	25,100	25,100	10	31148503	ZY 2050 6 CU 30 R5V CAST EDGE	-
32	32	24	W 230	23,000	25,700	5	31136502	ZY 3232 6 CU 24 R5V CAST EDGE	-
40	20	24	-	19,000	23,800	5	31330502	ZY 4020 6 CU 24 R5V CAST EDGE	-
Shank diameter 8 x 40 mm [S_d x L_2]									
32	40	24	W 231	24,000	29,800	5	31187502	ZY 3240 8 CU 24 R5V CAST EDGE	-
40	40	24	W 238	19,000	23,800	5	31188502	ZY 4040 8 CU 24 R5V CAST EDGE	-

Mounted points
For edge grinding on grey and nodular cast iron



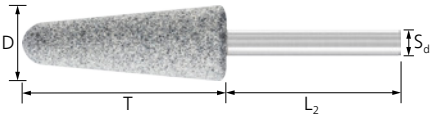
CAST EDGE, tree type

These mounted points are particularly good for edge grinding, for deburring and grinding out sand inclusions and metal contamination on grey and nodular cast iron. The pointed tree shape SP is exceptionally well-suited for machining small holes and bores.



Special features:
- Highly dimensionally stable due to the high bond content.
- Economical to use due to the high edge stability even on low-speed tool drives.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
20	32	30	38,000	47,700	10	32109503	SP 2032 6 CU 30 R5V CAST EDGE	-
	50	30	30,500	30,500	10	32111503	SP 2050 6 CU 30 R5V CAST EDGE	-

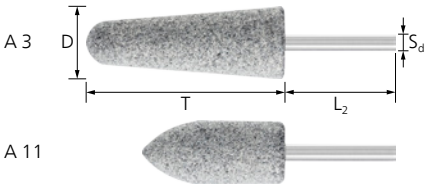


CAST EDGE, tapered type

These mounted points are particularly good for edge grinding, for deburring and grinding out sand inclusions and metal contamination on grey and nodular cast iron. The conical shape KE is designed for a comfortable working position during surface grinding and grinding of chamfers.

Special features:
- Highly dimensionally stable due to the high bond content.
- Economical to use due to the high edge stability even on low-speed tool drives.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
16	45	46	47,000	52,000	10	32210504	KE 1645 6 CU 46 R5V CAST EDGE	-
20	32	30	38,000	47,700	10	32208503	KE 2032 6 CU 30 R5V CAST EDGE	-
25	45	30	30,000	34,000	10	32211503	KE 2545 6 CU 30 R5V CAST EDGE	-



Series A CAST EDGE

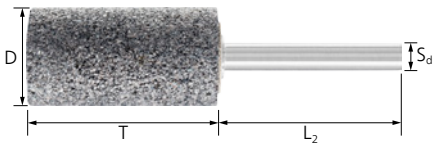
These mounted points are particularly good for edge grinding, for deburring and grinding out sand inclusions and metal contamination on a wide range of different contours on grey and nodular cast iron.



Special features:
- Highly dimensionally stable due to the high bond content.
- Economical to use due to the high edge stability even on low-speed tool drives.

USA type	D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]									
A 3	25	70	30	18,600	18,600	10	35503503	A 3 6 CU 30 R5V CAST EDGE	-
A 11	22	50	30	27,600	27,600	10	35511503	A 11 6 CU 30 R5V CAST EDGE	-

For edge grinding on grey and nodular cast iron (foundries)

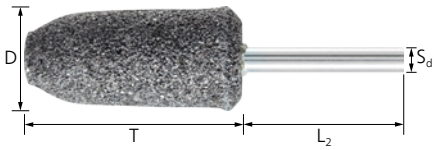


CAST EDGE cylindrical type for foundries

These mounted points are particularly good for edge grinding, for deburring and grinding out sand inclusions and metal contamination on grey and nodular cast iron. The cylindrical shape ZY is ideal for grinding bores, radii and contours.

Special features:
- Very high grinding performance and aggressiveness from the start.
- High stock removal rate in combination with a long tool life.
- Delivered in practical and environmentally friendly industrial packaging.

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]									
20	40	30	W 205	32,400	32,400	50	31133531	ZY 2040 6 CU 30 R5V CAST EDGE N	-
25	32	30	-	30,000	32,900	50	31135531	ZY 2532 6 CU 30 R5V CAST EDGE N	-



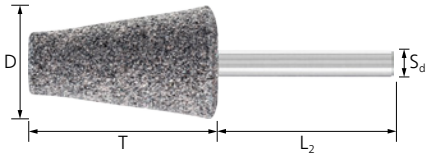
CAST EDGE, tree type for foundries

These mounted points are particularly good for edge grinding, for deburring and grinding out sand inclusions and metal contamination on grey and nodular cast iron. The pointed tree shape SP is exceptionally well-suited for machining small holes and bores.

Special features:
- Very high grinding performance and aggressiveness from the start.
- High stock removal rate in combination with a long tool life.
- Delivered in practical and environmentally friendly industrial packaging.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
20	50	30	14,100	14,100	50	32109531	SP 2050 6 CU 30 R5V CAST EDGE N	-

Mounted points
For edge grinding on grey and nodular cast iron (foundries)



CAST EDGE tapered type for foundries

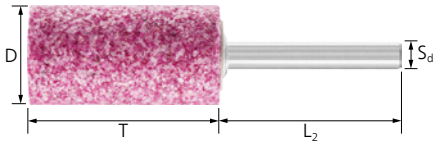
These mounted points are particularly good for edge grinding, for deburring and grinding out sand inclusions and metal contamination on grey and nodular cast iron. The conical shape KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



Special features:
- Very high grinding performance and aggressiveness from the start.
- High stock removal rate in combination with a long tool life.
- Delivered in practical and environmentally friendly industrial packaging.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
16	45	46	24,000	24,000	50	32210531	KE 1645 6 CU 46 R5V CAST EDGE N	-
20	40	30	20,900	20,900	50	32212531	KE 2040 6 CU 30 R5V CAST EDGE N	-
Shank diameter 8 x 40 mm [S_d x L_2]								
35	50	24	15,600	15,600	50	32216512	KE 3550 8 CU 24 R5V CAST EDGE N	-

For universal use on cast steel (foundries)

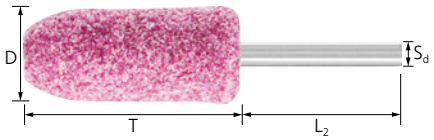


CAST STEEL cylindrical type for foundries

These mounted points are ideal for universal use in harsh conditions and for removing burrs on cast steel parts and for weld dressing of intersections after separating risers. The cylindrical shape ZY is ideal for grinding bores, radii and contours.

Special features:
- Very high grinding performance and aggressiveness from the start.
- High stock removal rate in combination with a long tool life.
- Delivered in practical and environmentally friendly industrial packaging.

D [mm]	T [mm]	Grit size	USA type	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]									
20	40	30	W 207	32,400	32,400	50	31133231	ZY 2040 6 ADR 30 O5V CAST STEEL	-
25	32	30	-	25,000	32,900	50	31135231	ZY 2532 6 ADR 30 O5V CAST STEEL	-

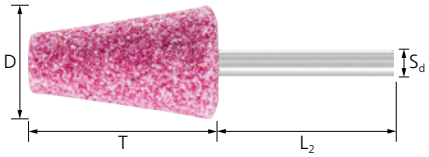


CAST STEEL, tree type for foundries

These mounted points are ideal for universal use in harsh conditions and for removing burrs on cast steel parts and for weld dressing of intersections after separating risers. The pointed tree shape SP is exceptionally well-suited for machining small holes and bores.

Special features:
- Very high grinding performance and aggressiveness from the start.
- High stock removal rate in combination with a long tool life.
- Delivered in practical and environmentally friendly industrial packaging.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
20	50	30	14,100	14,100	50	32111231	SP 2050 6 ADR 30 O5V CAST STEEL	-



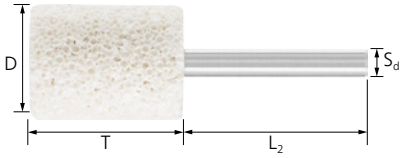
CAST STEEL tapered type for foundries

These mounted points are ideal for universal use in harsh conditions and for removing burrs on cast steel parts and for weld dressing of intersections after separating risers. The conical shape KE is designed for a comfortable working position during surface grinding and grinding of chamfers.

Special features:
- Very high grinding performance and aggressiveness from the start.
- High stock removal rate in combination with a long tool life.
- Delivered in practical and environmentally friendly industrial packaging.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
16	45	46	24,000	24,000	50	32210231	KE 1645 6 ADR 46 O5V CAST STEEL	-
20	40	30	20,900	20,900	50	32212231	KE 2040 6 ADR 30 O5V CAST STEEL	-
Shank diameter 8 x 40 mm [S_d x L_2]								
35	50	24	15,600	15,600	50	32216262	KE 3550 8 ADR 24 O5V CAST STEEL	-

For universal use on plastic



RUBBER, cylindrical type

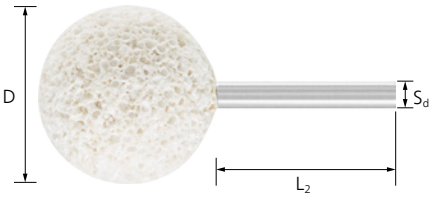
These mounted points are exceptionally well suited to removing burrs, trimming, weld dressing and roughening of soft plastics and rubber. The cylindrical shape ZY is ideal for grinding radii and contours, and for deburring work.



Special features:
- Open structure and large chip spaces due to bubble grain aluminium oxide.
- Machining of temperature-sensitive materials without the addition of cooling lubricant thanks to large chip spaces.
- High grinding performance.

D [mm]	T [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 6 x 40 mm [S_d x L_2]								
16	32	1	12,000	51,200	10	31127901	ZY 1632 6 AH 1 D12V RUBBER	-
25	32	1	8,000	32,900	10	31135901	ZY 2532 6 AH 1 D12V RUBBER	-
40	20	2	5,000	23,800	5	31330901	ZY 4020 6 AH 2 D12V RUBBER	-

Mounted points
For universal use on plastic



RUBBER, ball type

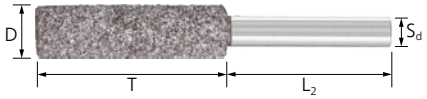
These mounted points are exceptionally well suited to removing burrs, trimming, weld dressing and roughening of soft plastics and rubber. The ball shape KU is often used for roughening rubber surfaces in tyre repair.



Special features:
- Open structure and large chip spaces due to bubble grain aluminium oxide.
- Machining of temperature-sensitive materials without the addition of cooling lubricant thanks to large chip spaces.
- High grinding performance.

D [mm]	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
40	2	5,000	19,700	5	31710520	KU 40 6 AH 2 D12V RUBBER	-

Grinding points for saw chains



Cylindrical mounted points for saw chains

These mounted points are exceptionally well suited to mechanical sharpening of saw chains using a PFERD chain saw sharpener (CHAIN SHARP HHG). The cylindrical shape ZY is ideal for sharpening saw chains.



Special features:
- High grinding performance and stock removal rate.
- Saves time and money thanks to shorter grinding times.
- Precise sharpening of saw chain teeth thanks to high dimensional stability.

D [mm]	T [mm]	Grit size	Suitable for chain pitch	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 3 x 25 mm [S_d x L_2]									
3.8	16	80	1/4	25,000	62,800	3	31105123	CS-G ZY 3,816 3 AWN 80 M5V	-
4.3	16	80	1/4, 3/8 LP	25,000	55,400	3	31105124	CS-G ZY 4,316 3 AWN 80 M5V	-
5	20	80	.325	25,000	56,100	3	31105125	CS-G ZY 5,020 3 AWN 80 M5V	-
5.5	20	80	3/8	25,000	50,900	3	31105126	CS-G ZY 5,520 3 AWN 80 M5V	-
5.7	20	80	3/8, .404	25,000	49,100	3	31105127	CS-G ZY 5,720 3 AWN 80 M5V	-
6.9	20	80	For depth gauge	25,000	40,500	3	31105128	CS-G ZY 6,920 3 AWN 80 M5V	-

Safety notes

- The maximum permitted peripheral speed is 35 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.
- Before clamping, the grinding tool must be ring tested to make sure that it does not have any cracks (undamaged grinding tools give a clear tone).


Wear eye protection!


Wear hearing protection!


Wear a dust mask!


Wear gloves!


Observe the safety notes!


Do not use if damaged!



The quick way to find the perfect tool

Material group ▼		Design ▶	UNIVERSAL	CARBIDE	HSS
					
Steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels	●		○
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels	○	●	●
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	●		
Tungsten carbide	–	–		●	
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Aluminium alloys, brass, copper, zinc	●	○	
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, hard aluminium alloys	○	○	
Other materials	Glass			●	

● = highly suitable ○ = suitable

Grinding discs
Bench grinding wheels

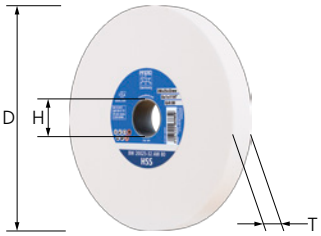


UNIVERSAL version

These bench grinding wheels are ideal for universal use in the workshop. They are suitable for working on steel, cast steel, stainless steel (INOX) and cast iron.

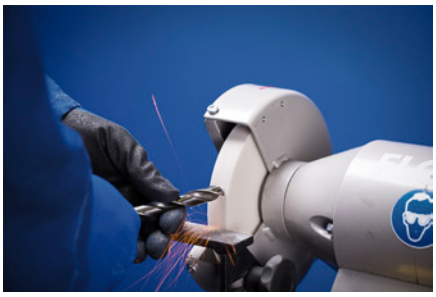
Special features:
- Long tool life, high dimensional stability and high abrasive performance.
- Integrated adapter sleeves for mounting on almost any bench grinder spindle.

D [mm]	T [mm]	H [mm]	Grit size	Reductions [mm]	Max. RPM		Item no.	Designation	Price/ unit EUR
Regular aluminium oxide (AN)									
125	20	32	36	25/20/16	5,350	1	39009707	BW 12520-32 AN 36 UNIVERSAL	-
			60	25/20/16	5,350	1	39009716	BW 12520-32 AN 60 UNIVERSAL	-
150	16	32	24	25/20/16	4,500	1	39008418	BW 15016-32 AN 24 UNIVERSAL	-
			60	25/20/16	4,500	1	39008419	BW 15016-32 AN 60 UNIVERSAL	-
	20	32	24	25/20/16	4,500	1	39008422	BW 15020-32 AN 24 UNIVERSAL	-
			36	25/20/16	4,500	1	39009708	BW 15020-32 AN 36 UNIVERSAL	-
			60	25/20/16	4,500	1	39008423	BW 15020-32 AN 60 UNIVERSAL	-
	25	32	24	25/20/16	4,500	1	39008426	BW 15025-32 AN 24 UNIVERSAL	-
			60	25/20/16	4,500	1	39008427	BW 15025-32 AN 60 UNIVERSAL	-
175	25	32	36	25/20/16	3,750	1	39009709	BW 17525-32 AN 36 UNIVERSAL	-
			60	25/20/16	3,750	1	39009717	BW 17525-32 AN 60 UNIVERSAL	-
		51	36	32	3,750	1	39009710	BW 17525-51 AN 36 UNIVERSAL	-
			60	32	3,750	1	39009718	BW 17525-51 AN 60 UNIVERSAL	-
200	20	32	24	25/20/16	3,350	1	39008435	BW 20020-32 AN 24 UNIVERSAL	-
			60	25/20/16	3,350	1	39008436	BW 20020-32 AN 60 UNIVERSAL	-
	25	32	24	25/20/16	3,350	1	39008440	BW 20025-32 AN 24 UNIVERSAL	-
			36	25/20/16	3,350	1	39009711	BW 20025-32 AN 36 UNIVERSAL	-
			60	25/20/16	3,350	1	39008441	BW 20025-32 AN 60 UNIVERSAL	-
		51	36	32	3,350	1	39009712	BW 20025-51 AN 36 UNIVERSAL	-
			60	32	3,350	1	39009719	BW 20025-51 AN 60 UNIVERSAL	-
	30	32	24	25/20/16	3,350	1	39008456	BW 20030-32 AN 24 UNIVERSAL	-
			60	25/20/16	3,350	1	39008444	BW 20030-32 AN 60 UNIVERSAL	-
	32	51	36	32	3,350	1	39009713	BW 20032-51 AN 36 UNIVERSAL	-
			60	32	3,350	1	39009720	BW 20032-51 AN 60 UNIVERSAL	-
250	32	51	36	32	2,700	1	39009714	BW 25032-51 AN 36 UNIVERSAL	-
			60	32	2,700	1	39009721	BW 25032-51 AN 60 UNIVERSAL	-
300	40	76.2	36	-	2,250	1	39009715	BW 30040-76,2 AN 36 UNIVERSAL	-
			60	-	2,250	1	39009722	BW 30040-76,2 AN 60 UNIVERSAL	-



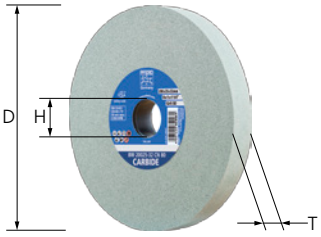
HSS design

These bench grinding wheels are exceptionally well suited for sharpening HSS pilot drills or for working on other high-alloy steels. They are suitable for working on tool steels, case-hardened steels, hardened and coated steels.



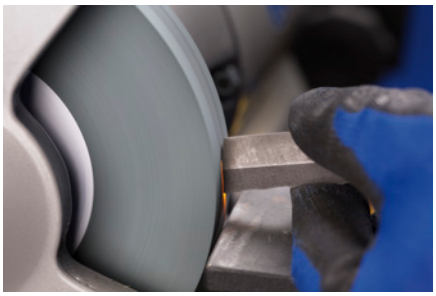
Special features:
- Long tool life, high dimensional stability and high abrasive performance.
- Integrated adapter sleeves for mounting on almost any bench grinder spindle.

D [mm]	T [mm]	H [mm]	Grit size	Reductions [mm]	Max. RPM		Item no.	Designation	Price/ unit EUR
White aluminium oxide (AW)									
125	20	32	80	25/20/16	5,350	1	39009698	BW 12520-32 AW 80 HSS	-
150	16	32	60	25/20/16	4,500	1	39008420	BW 15016-32 AW 60 HSS	-
	20	32	60	25/20/16	4,500	1	39008424	BW 15020-32 AW 60 HSS	-
			80	25/20/16	4,500	1	39009699	BW 15020-32 AW 80 HSS	-
	25	32	60	25/20/16	4,500	1	39008428	BW 15025-32 AW 60 HSS	-
175	25	32	80	25/20/16	3,750	1	39009700	BW 17525-32 AW 80 HSS	-
		51	80	32	3,750	1	39009701	BW 17525-51 AW 80 HSS	-
200	20	32	60	25/20/16	3,350	1	39008437	BW 20020-32 AW 60 HSS	-
	25	32	60	25/20/16	3,350	1	39008442	BW 20025-32 AW 60 HSS	-
			80	25/20/16	3,350	1	39009702	BW 20025-32 AW 80 HSS	-
		51	80	32	3,350	1	39009703	BW 20025-51 AW 80 HSS	-
	30	32	60	25/20/16	3,350	1	39008457	BW 20030-32 AW 60 HSS	-
	32	51	80	32	3,350	1	39009704	BW 20032-51 AW 80 HSS	-
250	32	51	80	32	2,700	1	39009705	BW 25032-51 AW 80 HSS	-
300	40	76.2	80	-	2,250	1	39009706	BW 30040-76,2 AW 80 HSS	-



CARBIDE design

These bench grinding wheels are used on hard materials, e.g. for sharpening tungsten carbide tools and hardened steels.



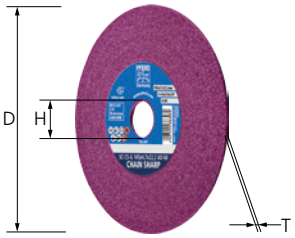
Special features:
- Long tool life, high dimensional stability and high abrasive performance.
- Integrated adapter sleeves for mounting on almost any bench grinder spindle.

D [mm]	T [mm]	H [mm]	Grit size	Reductions [mm]	Max. RPM		Item no.	Designation	Price/ unit EUR
Silicon carbide (CN)									
125	20	32	80	25/20/16	5,350	1	39009723	BW 12520-32 CN 80 CARBIDE	-
150	16	32	120	25/20/16	4,500	1	39008421	BW 15016-32 CN 120 CARBIDE	-
	20	32	60	25/20/16	4,500	1	39008570	BW 15020-32 CN 60 CARBIDE	-
			80	25/20/16	4,500	1	39009724	BW 15020-32 CN 80 CARBIDE	-
			120	25/20/16	4,500	1	39008425	BW 15020-32 CN 120 CARBIDE	-

Continued on next page

D [mm]	T [mm]	H [mm]	Grit size	Reductions [mm]	Max. RPM		Item no.	Designation	Price/ unit EUR
150	25	32	120	25/20/16	4,500	1	39008429	BW 15025-32 CN 120 CARBIDE	-
175	25	32	80	25/20/16	3,750	1	39009725	BW 17525-32 CN 80 CARBIDE	-
		51	80	32	3,750	1	39009726	BW 17525-51 CN 80 CARBIDE	-
200	20	32	80	25/20/16	3,350	1	39008438	BW 20020-32 CN 80 CARBIDE	-
			120	25/20/16	3,350	1	39008439	BW 20020-32 CN 120 CARBIDE	-
	25	32	80	25/20/16	3,350	1	39008490	BW 20025-32 CN 80 CARBIDE	-
			120	25/20/16	3,350	1	39008443	BW 20025-32 CN 120 CARBIDE	-
		51	80	32	3,350	1	39009727	BW 20025-51 CN 80 CARBIDE	-
	30	32	120	25/20/16	3,350	1	39008458	BW 20030-32 CN 120 CARBIDE	-
	32	51	80	32	3,350	1	39009728	BW 20032-51 CN 80 CARBIDE	-
250	32	51	80	32	2,700	1	39009729	BW 25032-51 CN 80 CARBIDE	-
300	40	76.2	80	-	2,250	1	39009730	BW 30040-76,2 CN 80 CARBIDE	-

Grinding discs for saw chains



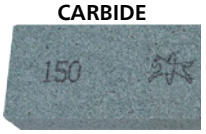
Grinding discs for saw chains

The grinding discs for saw chains are exceptionally well-suited for mechanical sharpening of saw chains using chain sharpeners.



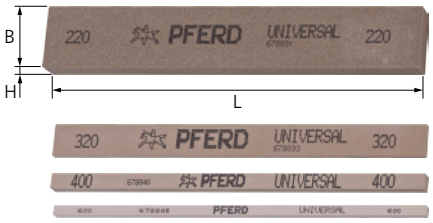
Special features:
- High grinding performance and stock removal rate with long tool life.
- Careful grinding of the saw chain teeth.
- Precise sharpening of saw chain teeth thanks to high dimensional stability.

D [mm]	T [mm]	H [mm]	Grit size	Suitable for chain pitch	Max. RPM		Item no.	Designation	Price/ unit EUR
Aluminium oxide dark red (AD)									
145	3.2	22.2	60	1/4, 3/8 LP, .325	4,600	1	33100001	SC CS-G 145x3.2x22.2 AD 60J7V	-
	4.7	22.2	60	3/8, .404	4,600	1	33100002	SC CS-G 145x4.7x22.2 AD 60J7V	-
	6	22.2	60	For depth gauge	4,600	1	33100003	SC CS-G 145x6.0x22.2 AD 60J7V	-

Material group ▼		Design ►	UNIVERSAL 	CARBIDE 
Steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels	●	○
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels	○	●
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	●	
Tungsten carbide	–	–		●
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Aluminium alloys, brass, copper, zinc	●	
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, hard aluminium alloys	●	

● = highly suitable ○ = suitable

Grinding and polishing stones



UNIVERSAL version

The UNIVERSAL grinding and polishing stones are the all-rounders for step-by-step fine grinding in tool and mould construction.

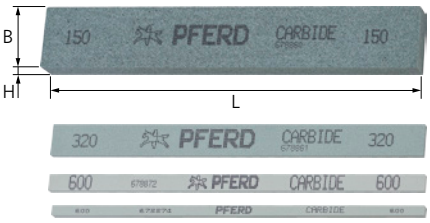


Special features:
- Long tool life, high dimensional stability. high abrasive performance, uniform stock removal and fine surface finish.
- Materials: Hardened, heat-treated steels, stainless steel (INOX), aluminium, other non-ferrous metals.

Width [mm]	Height [mm]	Length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Square							
4	4	150	220	12	33400001	SPS 4x4x150 AN 220 UNIVERSAL	-
			320	12	33400007	SPS 4x4x150 AN 320 UNIVERSAL	-
			400	12	33400013	SPS 4x4x150 AN 400 UNIVERSAL	-
			600	12	33400019	SPS 4x4x150 AN 600 UNIVERSAL	-
6	3	150	220	12	33400002	SPS 6x3x150 AN 220 UNIVERSAL	-
			320	12	33400008	SPS 6x3x150 AN 320 UNIVERSAL	-
			400	12	33400014	SPS 6x3x150 AN 400 UNIVERSAL	-
			600	12	33400020	SPS 6x3x150 AN 600 UNIVERSAL	-
	6	150	220	12	33400003	SPS 6x6x150 AN 220 UNIVERSAL	-
			320	12	33400009	SPS 6x6x150 AN 320 UNIVERSAL	-
			400	12	33400015	SPS 6x6x150 AN 400 UNIVERSAL	-
			600	12	33400021	SPS 6x6x150 AN 600 UNIVERSAL	-
13	3	150	220	12	33400004	SPS 13x3x150 AN 220 UNIVERSAL	-
			320	12	33400010	SPS 13x3x150 AN 320 UNIVERSAL	-

Continued on next page

Width [mm]	Height [mm]	Length [mm]	Grit size		Item no.	Designation	Price/unit EUR
13	3	150	400	12	33400016	SPS 13x3x150 AN 400 UNIVERSAL	-
			600	12	33400022	SPS 13x3x150 AN 600 UNIVERSAL	-
	6	150	220	12	33400005	SPS 13x6x150 AN 220 UNIVERSAL	-
			320	12	33400011	SPS 13x6x150 AN 320 UNIVERSAL	-
			400	12	33400017	SPS 13x6x150 AN 400 UNIVERSAL	-
			600	12	33400023	SPS 13x6x150 AN 600 UNIVERSAL	-
25	13	150	220	6	33400006	SPS 25x13x150 AN 220 UNIVERSAL	-
			320	6	33400012	SPS 25x13x150 AN 320 UNIVERSAL	-
			400	6	33400018	SPS 25x13x150 AN 400 UNIVERSAL	-
			600	6	33400024	SPS 25x13x150 AN 600 UNIVERSAL	-



CARBIDE design

The CARBIDE soft grinding and polishing stones enable high removal rates without clogging on hard materials in tool and mould construction.



Special features:
- Long tool life, high dimensional stability. high abrasive performance, uniform stock removal and fine surface finish.

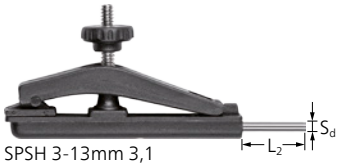
Width [mm]	Height [mm]	Length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Square							
4	4	150	150	12	33400025	SPS 4x4x150 CN 150 CARBIDE	-
			220	12	33400031	SPS 4x4x150 CN 220 CARBIDE	-
			320	12	33400037	SPS 4x4x150 CN 320 CARBIDE	-
			400	12	33400043	SPS 4x4x150 CN 400 CARBIDE	-
			600	12	33400049	SPS 4x4x150 CN 600 CARBIDE	-
6	3	150	150	12	33400026	SPS 6x3x150 CN 150 CARBIDE	-
			220	12	33400032	SPS 6x3x150 CN 220 CARBIDE	-
			320	12	33400038	SPS 6x3x150 CN 320 CARBIDE	-
			400	12	33400044	SPS 6x3x150 CN 400 CARBIDE	-
			600	12	33400050	SPS 6x3x150 CN 600 CARBIDE	-
	6	150	150	12	33400027	SPS 6x6x150 CN 150 CARBIDE	-
			220	12	33400033	SPS 6x6x150 CN 220 CARBIDE	-
			320	12	33400039	SPS 6x6x150 CN 320 CARBIDE	-
			400	12	33400045	SPS 6x6x150 CN 400 CARBIDE	-
			600	12	33400051	SPS 6x6x150 CN 600 CARBIDE	-
13	3	150	150	12	33400028	SPS 13x3x150 CN 150 CARBIDE	-
			220	12	33400034	SPS 13x3x150 CN 220 CARBIDE	-
			320	12	33400040	SPS 13x3x150 CN 320 CARBIDE	-
			400	12	33400046	SPS 13x3x150 CN 400 CARBIDE	-
			600	12	33400052	SPS 13x3x150 CN 600 CARBIDE	-
	6	150	150	12	33400029	SPS 13x6x150 CN 150 CARBIDE	-
			220	12	33400035	SPS 13x6x150 CN 220 CARBIDE	-
			320	12	33400041	SPS 13x6x150 CN 320 CARBIDE	-
			400	12	33400047	SPS 13x6x150 CN 400 CARBIDE	-
			600	12	33400053	SPS 13x6x150 CU 600 CARBIDE	-
25	13	150	150	6	33400030	SPS 25x13x150 CN 150 CARBIDE	-

Continued on next page

Width [mm]	Height [mm]	Length [mm]	Grit size		Item no.	Designation	Price/unit EUR
25	13	150	220	6	33400036	SPS 25x13x150 CN 220 CARBIDE	-
			320	6	33400042	SPS 25x13x150 CN 320 CARBIDE	-
			400	6	33400048	SPS 25x13x150 CN 400 CARBIDE	-
			600	6	33400054	SPS 25x13x150 CN 600 CARBIDE	-



SPSH 6x6/6x13
SPSH 6x3/6x6/13x1,5/13x3



SPSH 3-13mm 3,1

Arbor for grinding and polishing stones

These arbors are ideally suited for clamping grinding and polishing stones for manual applications.

Special features:
- SPSH 6x3/6x6/13x1.5/13x3: Used for clamping four different cross sections.
- SPSH 6x6/6x13: Offers space to clamp two different cross sections.
- SPSH 3-13 mm 3.1: The arbor for the manual filing tool is variably adjustable.

Suitable cross sections		Item no.	Designation	Price/unit EUR
Manual application				
6 x 3 mm, 13 x 1.5 mm / 6 x 6 mm, 13 x 3 mm	1	33509020	SPSH 6x3/6x6/13x1,5/13x3	-
6 x 6 mm, 13 x 6 mm	1	33509010	SPSH 6x6/6x13	-
Manual filing tool shank diameter of 3.17 x 20 mm [S_d x L_2]				
all grinding and polishing stones	1	33509030	SPSH 3-13 3,1	-

Accessories for mounted points and grinding discs

Hand dressers



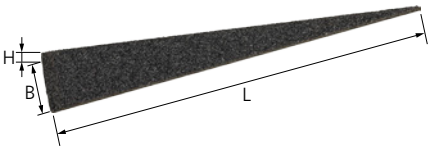
Dressing stones

The dressing stones are suitable for profiling grinding points and Poliflex mounted points.

Special features:

- SE 1203050 CU 30 R 5 V: For major dressing work with anti-slip rubber backing.
- SE 1203050 CU 30/60 R 5 V: Two different grit sizes for dressing mounted points with different grit sizes and bonds.
- SE 702212 CU 46 M 5 V: For profiling and dressing smaller mounted points.

L [mm]	H [mm]	B [mm]		Item no.	Designation	Price/unit EUR
120	30	50	5	33401001	SE 1203050 CU 30 R 5 V	-
				33401010	SE 1203050 CU 30/60 R 5 V	-
70	22	12	5	33899045	SE 702212 CU 46 M 5 V	-



Abrasive segments

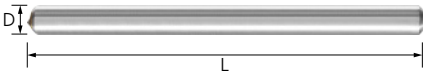
Wedge-shaped abrasive segments are exceptionally well suited for work on sand moulds and cores in foundries. Using the abrasive segments, the intersections and separators on sand moulds and cores can be re-finished and removed.



Special features:

- The wedge-shaped design allows effortless work in both very narrow areas and on large surfaces.

L [mm]	H [mm]	B [mm]		Item no.	Designation	Price/unit EUR
235	4	42	10	33401100	SE 235-42-4 AN 46 N 5 B	-
246	5	32	10	33401110	SE 246-32-5 AN 46 N 5 B	-



Diamond dresser

Using this diamond dresser, blunt abrasive grain and metal particles can be removed from the grinding tool, and the required grinding wheel shapes can be produced.

Special features:

- Long-life diamond dresser with large single grit diamond.
- For profiling and dressing mounted points, grinding discs and Poliflex mounted points (see Catalogue section 4).

L [mm]	D [mm]	Carats [ct]		Item no.	Designation	Price/unit EUR
81	6	0.2	1	33301000	400 B	-



Roller dresser for bench grinding wheels

Ideal accessory for PFERD bench grinding wheels if the grinding disc has become clogged or the shape of the grinding disc has changed.



Special features:
- The dressing roller is made from steel discs with U-shaped teeth.
- The curved washers between the tooth discs gives the tooth roller strength and stability.
- Axis with integrated grease fitting to guarantee a long tool life even at high peripheral speeds.

Total length [mm]	Roll width [mm]	Roll dia. [mm]	Max. wheel dia. [mm]	Max. wheel thickness [mm]	Diameter [mm]		Item no.	Designation	Price/unit EUR
435	39	25	500	63	55	1	33300001	AR 55x39x12	-



Replacement roller for roller dresser for bench grinding wheels

The interchangeable roller for the grinding wheel dresser AR 55x39x12 can be used until the teeth are worn.

Roll width [mm]	Roll dia. [mm]	Diameter [mm]		Item no.	Designation	Price/unit EUR
39	55	55	1	33300002	ER 55x39x12	-



Replacement spindle for roller dresser for bench grinding wheels

The lubricatable axle for the grinding wheel dresser AR 55x39x12 is a spare part if the axle does become worn.

Roll width [mm]	Diameter [mm]		Item no.	Designation	Price/unit EUR
39	12	1	33300003	EA 12x39	-



Rod dresser for roller dresser for bench grinding wheels

The SiC rod dresser is an affordable alternative for dressing bench grinding wheels. A stainless steel tube protects the SiC rod against breakage and makes the tool more robust.



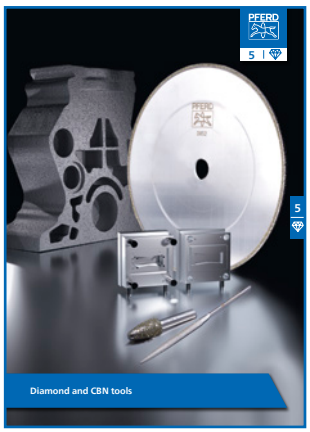
Total length [mm]	Diameter [mm]		Item no.	Designation	Price/unit EUR
250	22	1	33300004	AR 22x250	-



















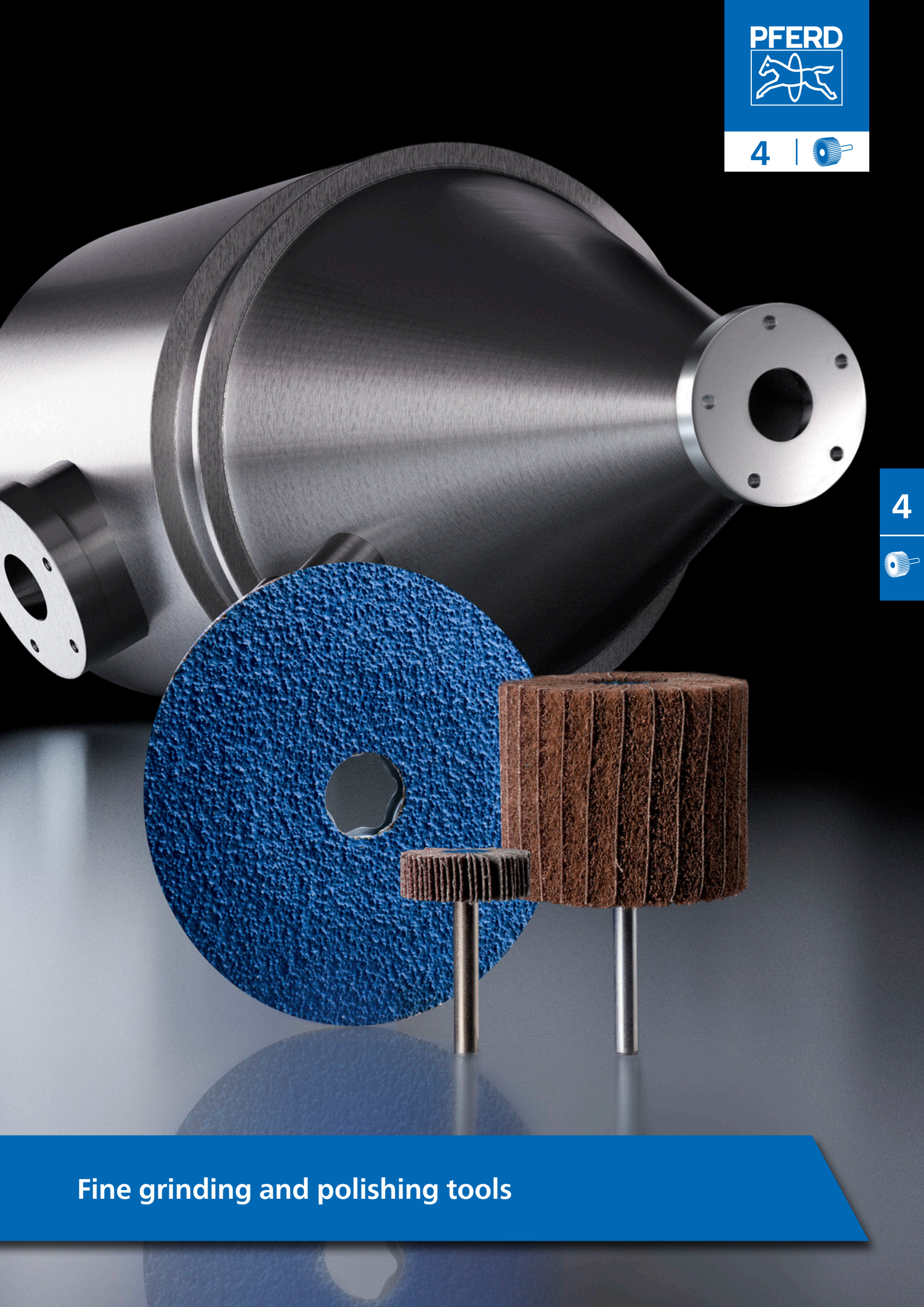


New additions to the PFERD product range

Stay up to date and discover our new products digitally and online. Our new products have **blue** item numbers in the Tool Manual.

PFERD

4



4

Fine grinding and polishing tools

Fine grinding and polishing tools
Table of contents

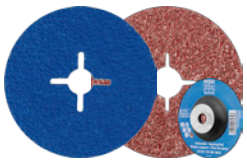
Fine grinding and polishing tools

- Highlights from the PFERD range 4
- General information 5
- The quick way to find the perfect tool 7
- Coated abrasives 9



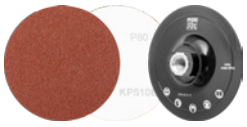
COMBICLICK

- Fibre discs CC-FS 13
- Non-woven discs 18
- Felt discs CC-FR 20
- Backing pad 21
- COMBICLICK set 22



Fibre discs

- Fibre discs FS 24
- Backing pad 30
- Stand 31



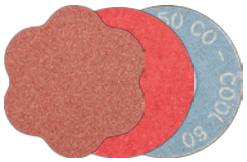
Self-adhesive discs

- Self-adhesive discs KR 32
- Self-adhesive disc holders KRH 33



Self-adhesive abrasive discs

- Self-adhesive abrasive discs PSA 34
- Abrasive disc holder PSA-H 35



COMBIDISC

- Mini-POLIFAN CD, CDR 37
- Mini-POLIFAN arbor 38
- Abrasive discs CD, CDR 39
- POLICLEAN discs CD, CDR 51
- Non-woven discs CD, CDR 52
- TX discs CD 54
- Felt discs CD, CDR 55
- Abrasive disc holder 55
- COMBIDISC set 56
- DUST REMOVER 57



Flexible abrasives

- Short belts BA 59
- Short belts VB 65
- Short belts P-BA 67
- Belts for pneumatic drums 67
- Pneumatic drum 69
- Long belts BA 69
- Cloth-backed abrasive sheets BG 74
- Paper-backed abrasive sheets BP 75
- Hand pads 76
- Shop rolls SBR 77
- Shop rolls SBR-P 78
- Shop roll holder SRH 79
- POLINOX non-woven shop rolls VBR 79
- Abrasive cord 80
- Velcro-backed abrasive discs KSS 80
- Velcro-backed abrasive discs KSS-NET 81
- Velcro-backed abrasive disc holder 82



Abrasive spiral bands

- Small pack KSB 84
- Bulk pack GSB 85
- Rubber drum holder GK 91



POLIROLL, POLICO

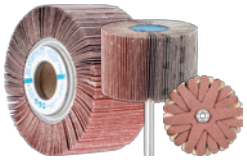
- POLIROLL cartridge rolls PR and PRK, POLICO abrasive cones PCO 93
- Arbor and set 95



POLICAP

- POLICAP (PC), shape ZYA 97
- POLICAP abrasive cap holder (PCT), shape ZYA 97
- POLICAP set (PCS), shape ZYA 98
- POLICAP (PC), shape WRC 98
- POLICAP abrasive cap holder (PCT), shape WRC 99
- POLICAP set (PCS), shape WRC 100
- POLICAP (PC), shape WKG 100
- POLICAP abrasive cap holder (PCT), shape WKG 101
- POLICAP set (PCS), shape WKG 101
- POLICAP (PC), shape KEL 102
- POLICAP abrasive cap holder (PCT), shape KEL 103
- POLICAP set (PCS) 103
- POLICAP abrasive spiral bands (PCH), conical shape 104
- POLICAP rubber drum holder (PCT), shape KEL 104
- Rubber drum holder GK, conical shape 104

Fine grinding and polishing tools
Table of contents



Flap tools

- Mounted flap wheels F 106
- Mounted flap wheel set 113
- Unmounted flap wheels FR 114
- Arbor FR/VR 115
- Unmounted flap wheels for angle grinders 116
- Flap drums 118
- Drums, set FR-W 118
- POLIFLAP tools 119
- Overlap slotted discs KS 120
- Arbor for overlap slotted discs BO KS 120
- POLISTAR 121
- POLISTAR-TUBE 123
- Arbor for POLISTAR and POLISTAR-TUBE 124



Sanding sticks

- Flexible sanding sticks 125
- Ceramic fibre files 126



Non-woven tools

- POLINOX unitized wheels PNER 131
- Arbor for POLINOX unitized/ convolute wheels 132
- POLINOX unitized discs PNER 133
- POLINOX convolute wheels PNK 135
- Clamping flanges for POLINOX convolute wheels PNK 136
- POLINOX mounted grinding wheels 136
- POLINOX cross buffs 140
- POLINOX unmounted grinding wheels 141
- Arbor for POLINOX grinding wheels 143
- Reducing flanges for POLINOX grinding wheels RF 143
- Threaded POLINOX grinding wheels 144
- POLINOX grinding discs 145
- POLINOX grinding drums 146
- POLINOX discs 148
- Arbor for POLINOX discs 148
- Accessories 149
- POLINOX marbling tools 149
- POLIVLIES grinding discs 150
- Self-adhesive disc holders PVKRH 152
- POLICLEAN tools 152



Poliflex tools

- PUR bond 157
- PU-STRUC bond 160
- GR bond 161
- GHR bond 162
- Arbor BO 163
- LR bond 164
- LHR bond 165
- TX bond 166



Polishing tools

- Felt points FK 169
- Mounted felt flap wheels 173
- Felt wheels and lenses FK SC/LI 173
- Felt flap discs FFS 174
- Felt sheets FK P 175
- Cloth rings 175
- Arbor 176



Grinding oils and polishing pastes

- Grinding and polishing pastes 177
- Diamond polishing pastes 178
- Grinding oils 179
- Cleaner 179

Fine grinding and polishing tools
Highlights from the PFERD range

COMBICLICK



The COMBICLICK system consists of a specially developed backing pad and a rugged mounting system at the back of the tool.

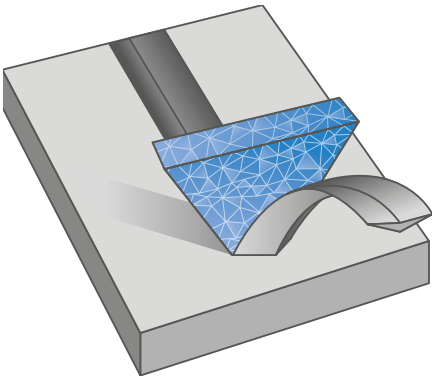
The backing pad enables COMBICLICK tools to be used on conventional angle grinders for the use of fibre discs and non-woven and felt tools.

The unique geometry of the cooling slots in the backing pad ensures high air throughput, which in turn considerably reduces the thermal load on the abrasive material and the workpiece.

Compared with conventional tools, the quick-mounting system, robust holder, secure tool-locking feature and integrated cooling system together achieve a workpiece temperature that is up to 30% lower, a 25% higher stock removal rate, a 30% longer tool life and better utilization of the abrasive material.

Scan the QR code to find out more about the COMBICLICK range.

VICTOGRAIN



VICTOGRAIN products are some of the most effective grinding tools in the world. The triangular, precision-formed abrasive grain from PFERD helps provide a uniquely high level of abrasive performance. The **VICTO**GRAIN abrasive grit triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grit needs very little energy to penetrate the workpiece. The user thus benefits from an efficient machining process with fast work progress, a long tool life, a reduced influx of heat into the workpiece and a lower power output required for the tool drive.

By combining all these properties together, users benefit from the ultimate, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.

Scan the QR code to find out more about the **VICTO**GRAIN products.

Non-woven tools



Non-woven abrasives come into their own where other grinding tools reach their limits and are unable to produce the desired results. The elastic properties of the polyamide fibres and the positive effect of the non-woven abrasive give rise to outstanding, gentle finishing tools.

Non-woven abrasives consist of polyamide fibres, synthetic resins and abrasive grain. The even distribution of the abrasive grain within the non-woven mixture guarantees a continuous supply of fresh, sharp abrasive grain during the entire grinding operation. Non-woven abrasives do not clog up, do not leave rust on surfaces and are not conductive.

Non-woven abrasive material is excellent when used for deburring, cleaning or working on the surface of many metals, including aluminium, brass, copper, nickel, stainless steel (INOX) and titanium. It is also suitable for working on other hard-to-grind materials, such as ceramic, glass and plastic.

Scan the QR code to find out more about PFERD's wide range of non-woven tools.

Custom-made products

If you cannot find the solution for your particular application in our extensive catalogue range, we can produce fine grinding and polishing tools in premium PFERD quality specifically for your application on request.
We can take into account your specifications and needs, drawings, information on dimensions and shapes, grit sizes and grain types, grain mixtures, shank diameters and shank lengths. Please speak to our sales representatives. We will be happy to advise you.



Factors that influence the surface roughness:

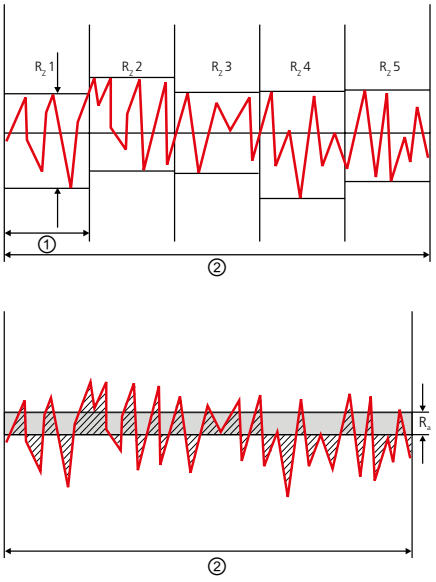
The abrasive material, the material you will be working on and the machining parameters all affect the surface roughness. As a general rule:

- The larger the grain, the rougher the surface produced.
- The softer the material that is being machined, the coarser the surface produced when using the same grit size.
- The increase in cutting speed leads to a slightly better surface quality.
- Reducing the feed rate produces a slightly finer surface quality.



A distinction is made between the following roughness depths:

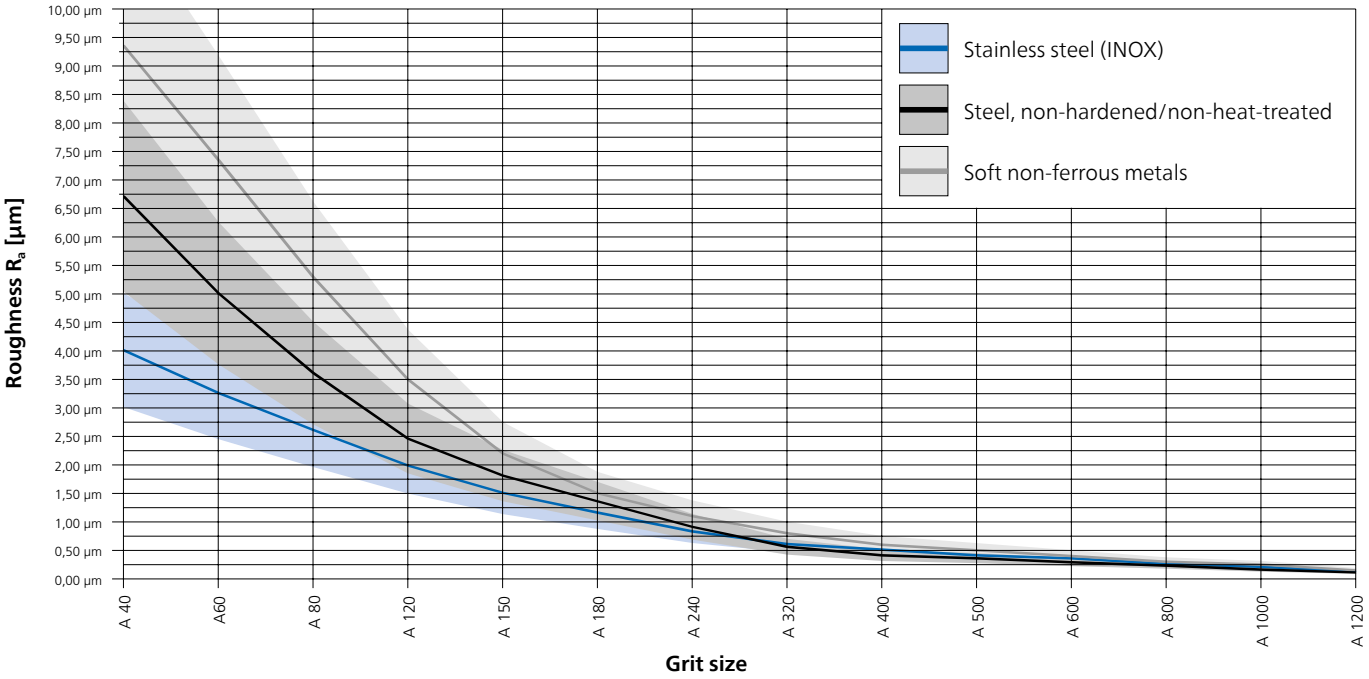
- **Individual roughness depth R_{zi}**
  The sum of the height of the largest profile peak and the depth of the largest profile trough within an individual measuring section.
- **Roughness depth R_z**
  The mean value of the individual roughness depths (R_{zi}) of consecutive individual measuring sections.
- **Roughness depth R_{max}**
  The largest individual roughness depth within the overall measuring section.
- **Average roughness value R_a**
  The arithmetic average of the amounts of all values of the roughness profile.



① Individual measuring section
② Overall measuring section

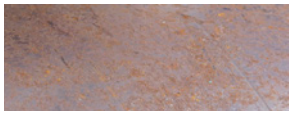
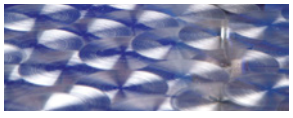
Application	Roughness depth
Coarse grinding: grit sizes 24 to 150	R_a = 0.70 to 12 µm
Fine grinding: grit sizes 180 to 400	R_a = 0.20 to 0.70 µm
Very fine grinding: grit sizes 500 to 1200	R_a = 0.05 to 0.20 µm
Structuring: surfaces ground	R_a = 0.20 to 0.70 µm
Satin finishing/ matt finishing: with non-woven abrasive	R_a = 0.10 to 0.70 µm
Polishing: Step 1: Step 2: Step 3:	 R_a = 0.10 to 0.20 µm R_a = 0.04 to 0.10 µm R_a = < 0.01 µm

Reference values for roughness depths in the case of different applications.



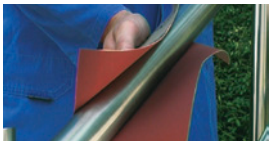
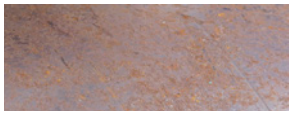
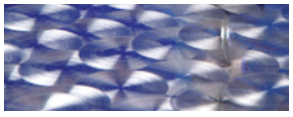
Surface roughness of different materials after machining with tools using coated abrasives.

Fine grinding and polishing tools
The quick way to find the perfect tool

Work type ▸ / Work steps ▾	Face-down grinding Tools with backing pad		Belt grinding Tools for belt sanders
Changing geometrical profiles 	COMBIDISC ■ Abrasive discs ■ Diamond abrasive discs	Self-adhesive discs	Short belts
	COMBIDISC midget fibre discs	Fibre discs	Long belts
	COMBIDISC Mini-POLIFAN	COMBICLICK fibre discs	
Step-by-step fine grinding Reducing roughness depths 	COMBIDISC ■ Abrasive discs ■ Non-woven discs	Self-adhesive discs	Short belts
	Poliflex discs	PSA discs	Long belts
	COMBICLICK non-woven discs	Velcro-backed abrasive discs	
	POLINOX unitized discs	Fibre discs	
	POLINOX discs ■ PNL ■ PNZ	COMBICLICK fibre discs	
Fine grinding Very fine grinding 	Grinding oils	Fibre discs	Grinding oils
	COMBIDISC ■ Abrasive discs ■ Non-woven discs	PSA discs	Short belts
	Poliflex discs	COMBICLICK fibre discs	Long belts
	POLINOX unitized discs		Short belts, non-woven
Cleaning 	COMBIDISC non-woven discs	POLIVLIES self-adhesive discs	Short belts, non-woven
	COMBIDISC POLICLEAN discs	POLICLEAN discs	
	COMBICLICK non-woven discs		
Creating visual effects 	COMBIDISC non-woven discs	POLIVLIES self-adhesive discs	Short belts, non-woven
	COMBIDISC TX discs	Marbling tools	
	POLIVLIES flap discs	Poliflex structuring tools	
	POLINOX discs ■ PNL ■ PNZ	COMBICLICK non-woven discs	
Polishing 	COMBIDISC felt discs	Felt flap discs	Short belts, felt
	COMBICLICK felt discs		

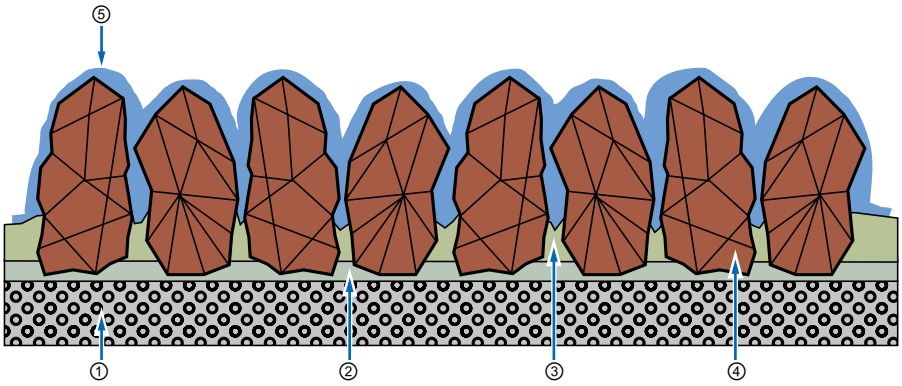
Fine grinding and polishing tools

The quick way to find the perfect tool

Work type ▸ / Work steps ▾	Peripheral grinding Mounted tools, tools with arbor holes 		Manual grinding 
Changing geometrical profiles 	Abrasive spiral bands	POLICAP	
	POLIROLL, POLICO	Overlap slotted discs	
Step-by-step fine grinding Reducing roughness depths 	Abrasive spiral bands	Unmounted flap wheels for angle grinders	Poliflex blocks
	POLIROLL	Flap drums	Ceramic fibre files
	POLICAP	POLISTAR	Abrasive sheets Cloth/paper
	Mounted flap wheels	Overlap slotted discs	Shop rolls Cloth/paper
	Unmounted flap wheels		Flexible sanding sticks
Fine grinding Very fine grinding 	POLIROLL, POLICO	Poliflex fine grinding points	Poliflex blocks
	Grinding oils	POLINOX unitized/convolute wheels	Abrasive sheets Cloth/paper
	Poliflex fine grinding discs		Shop rolls Cloth/paper
			Diamond hand pads
Cleaning 	POLINOX mounted grinding wheels	POLINOX grinding drums	Abrasive sheets Cloth/paper
	POLINOX unmounted grinding wheels	POLICLEAN wheels	POLINOX hand pads
	POLINOX cross buffs	POLICLEAN mounted tools	Shop rolls Cloth/paper
			Non-woven shop rolls
Creating visual effects 	POLINOX mounted grinding wheels	POLIFLAP grinding wheel	POLINOX hand pads
	POLINOX unmounted grinding wheels	Poliflex structuring tools	Non-woven shop rolls
	POLINOX discs	Flap drums	Masking tape
	POLINOX grinding drums		
Polishing 	Felt points	Mounted felt flap wheels	Diamond polishing pastes
	Felt wheels and lenses	Cloth rings	Polishing paste bars
			Grinding pastes

Structure of coated abrasives

PFERD offers a wide selection of coated abrasive tools for working on different workpiece geometries and materials.
① Backing material
② Base bond
③ Coating bond
④ Abrasive grain
⑤ Active grinding layer



① Backing material

Paper

The main areas of application for coated abrasives with a paper base are in the woodworking industry and in trade, e.g. among carpenters, painters and decorators.

Cloth

Coated abrasives with a cloth base are predominantly used for metalworking.

Vulcanized fibre

When adapted to the corresponding applications, vulcanized fibre in various thicknesses is predominantly used for making fibre grinding discs. Vulcanized fibre is a very sturdy, robust backing material, and also very wear-resistant.

② + ③ bond

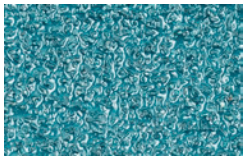
When manufacturing coated abrasives, different resin bonds are used to fix the abrasive grain to the backing material. First, the backing material is coated with the base bond ②. After this, the abrasive grain is evenly scattered over the surface and aligned to achieve higher aggressiveness with the help of special procedures. The coating bond ③ ensures that the abrasive grain is fixed in place and protects the grain against the forces and loads resulting from the grinding process.

④ Abrasive grain

Selecting the right abrasive grain has a great influence on the surface quality and efficiency. The most common abrasive grain materials are:



Aluminium oxide A
Numerous types of aluminium oxide are used as abrasives. These may be present in molten or sintered form. The hardness and toughness can be influenced by special manufacturing procedures or additives. Standard types of aluminium oxide and a "sharp-edged" grain shape are predominantly used for coated abrasives.



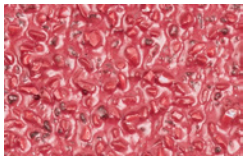
Zirconia alumina Z
Zirconia alumina is a fused mixture of aluminium oxide and zirconium oxide. In comparison to aluminium oxides, zirconia alumina exhibits lower hardness but greater toughness. The high proportion of zirconium oxide results in an extremely powerful self-sharpening effect and contributes to outstanding stock removal rates with cool grinding and a long tool life.



Silicon carbide SiC
Silicon carbide is synthetically manufactured abrasive grain which is very sharp-edged, with low toughness and very high hardness. It is particularly suitable for work on titanium, aluminium, bronze, stone and plastics.
Ideally suited for use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.



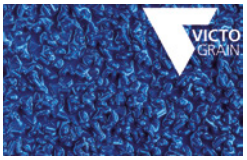
Diamond grain D
Diamond grain is the hardest abrasive. It consists of pure carbon in a crystalline structure. For grinding tools, the diamonds used are generally produced synthetically at very high temperatures and under high pressure. The properties of diamond grain can be adapted for use in grinding tools through various synthesis conditions.



Ceramic oxide grain CO
For sintered aluminium oxides, a differentiation is made between sintered bauxite aluminium oxides and sol-gel aluminium oxides. Sol-gel aluminium oxides are predominantly used for coated abrasives in the form of abrasive ceramic grain. This state-of-the-art abrasive is used for numerous applications thanks to its high toughness and good self-sharpening qualities.



Compact grain CK
In the case of compact grain, individual grains are built up as granulate with a bond system. Each individual grain of granulate is one solid unit, in which numerous abrasive grains made from aluminium oxide or silicon carbide (SiC) are joined together. Used abrasive grains are torn out of this compound structure by the forces resulting from the grinding, and expose sharp abrasive points in doing so. This guarantees a long tool life with a constant surface quality.



VICTOGRAIN
The triangular, precision-formed **VICTO**GRAIN abrasive grain achieves uniquely high abrasive performance. The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides. This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency. The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off.
By combining all these properties together, users benefit from the ultimate, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.

Grit sizes

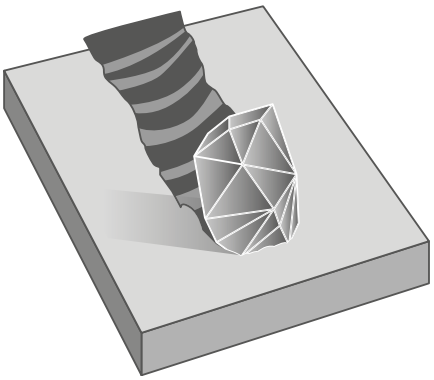
The various grit sizes for coated abrasives are set out in ISO 6344 and have been adopted in FEPA standards.

Coarse
P 12 – 16 – 20 – 24 – 36 – 40 – 50 – 60 – 80

Medium
P 100 – 120 – 150 – 180 – 220 – 240 – 280

Fine
P 320 – 360 – 400 – 500 – 600

Ultra-fine
P 800 – 1,000 – 1,200 – 1,500



⑤ Active grinding layer

The use of an active grinding layer significantly increases the stock removal rate and reduces the workpiece temperature. This is particularly advantageous for materials which conduct heat poorly, such as stainless steel (INOX). PFERD tools with an active grinding layer have the suffix "COOL" in the item designation.





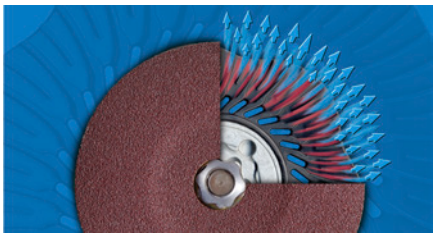
System

Very easy and convenient to use.



Clamping

Extremely quick and easy tool changes, which reduces process costs.



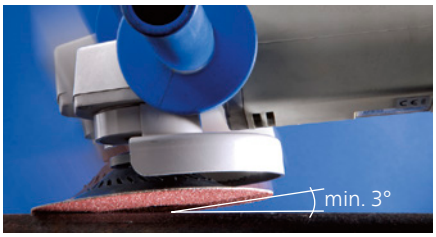
Cooling effect

Excellent cooling of the tool and workpiece.



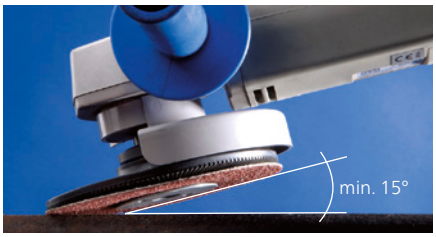
Flexible grinding

Particularly soft and flexible grinding performance during face-down grinding with fibre disc dia. 125 mm.



COMBICLICK can be used at extremely low angles

Using COMBICLICK helps to avoid scratches caused by protruding clamping pieces, and exploits the abrasive material that is available.



By way of comparison, the contact angle for fibre discs is much steeper.

The quick way to find the perfect tool

Material group ▼			Abrasive ▶ Aluminium oxide A	Zircon Z	Ceramic oxide grain CO	VICTOGRAIN	Silicon carbide SiC	Aluminium oxide A-COOL	Ceramic oxide grain CO-COOL	Ceramic oxide grain CO-ALU	VICTOGRAIN-COOL
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●	○	●	●					○
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	○	●	●	●					○
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels		○		○		●	●		●
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	○					●	○	○	
		Brass, copper, zinc	●	○	○					○	
	Hard non-ferrous metals	Hard aluminium alloys	●	○	○		○			○	
		Bronze, titanium		○	○	○	●		●		●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys		○	○	○			●	○	●
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	●	○	●						
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint	●				●				

● = highly suitable ○ = suitable

Safety notes

- The maximum permitted peripheral speed is 80 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.


Wear eye protection!


Wear hearing protection!


Wear gloves!

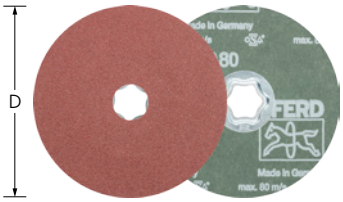

Wear a dust mask!


Use backing pad!


Follow the safety instructions!


Not permitted for wet grinding!



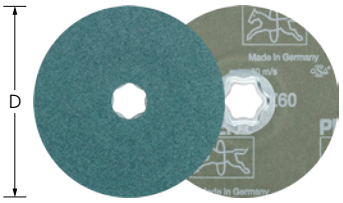


Aluminium oxide A version

For general grinding work from coarse to fine grinding in industry and professional trades.

Special features:
- The innovative quick-mounting system ensures convenient handling and cool grinding.
- High economic efficiency thanks to long tool life and very high stock removal rate. Consistent surface finish thanks to high-quality abrasives.
- Please order necessary backing pad separately.

D [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
100	A	36	15,300	25	64189001	CC-FS 100 A 36	-
		50	15,300	25	64189002	CC-FS 100 A 50	-
		60	15,300	25	64189003	CC-FS 100 A 60	-
		80	15,300	25	64189004	CC-FS 100 A 80	-
		120	15,300	25	64189005	CC-FS 100 A 120	-
115	A	24	13,300	25	64190002	CC-FS 115 A 24	-
		36	13,300	25	64190003	CC-FS 115 A 36	-
		50	13,300	25	64190005	CC-FS 115 A 50	-
		60	13,300	25	64190006	CC-FS 115 A 60	-
		80	13,300	25	64190008	CC-FS 115 A 80	-
		120	13,300	25	64190012	CC-FS 115 A 120	-
125	A	24	12,200	25	64190102	CC-FS 125 A 24	-
		36	12,200	25	64190103	CC-FS 125 A 36	-
		50	12,200	25	64190105	CC-FS 125 A 50	-
		60	12,200	25	64190106	CC-FS 125 A 60	-
		80	12,200	25	64190108	CC-FS 125 A 80	-
		120	12,200	25	64190112	CC-FS 125 A 120	-

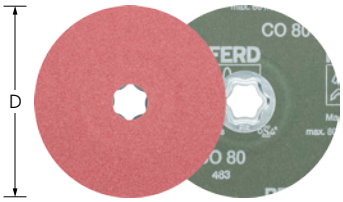


Zirconia alumina Z version

For coarse grinding work with a high stock removal rate and a long tool life.

Special features:
- The innovative quick-mounting system ensures convenient handling and cool grinding.
- High economic efficiency thanks to long tool life and very high stock removal rate. Consistent surface finish thanks to high-quality abrasives.
- Please order necessary backing pad separately.

D [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
115	Z	36	13,300	25	64290003	CC-FS 115 Z 36	-
		50	13,300	25	64290005	CC-FS 115 Z 50	-
		60	13,300	25	64290006	CC-FS 115 Z 60	-
		80	13,300	25	64290008	CC-FS 115 Z 80	-
		120	13,300	25	64290012	CC-FS 115 Z 120	-
125	Z	24	12,200	25	64290102	CC-FS 125 Z 24	-
		36	12,200	25	64290103	CC-FS 125 Z 36	-
		50	12,200	25	64290105	CC-FS 125 Z 50	-
		60	12,200	25	64290106	CC-FS 125 Z 60	-
		80	12,200	25	64290108	CC-FS 125 Z 80	-
		120	12,200	25	64290112	CC-FS 125 Z 120	-



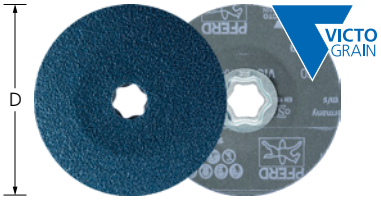
Ceramic oxide grain CO version

For aggressive grinding with maximum stock removal rate and very long tool life. Consistently high performance due to self-sharpening ceramic oxide grain. The ceramic oxide grain is specifically designed for work on hard materials and layers.



Special features:
- The innovative quick-mounting system ensures convenient handling and cool grinding.
- High economic efficiency thanks to long tool life and very high stock removal rate. Consistent surface finish thanks to high-quality abrasives.
- Please order necessary backing pad separately.

D [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
115	CO	24	13,300	25	64192002	CC-FS 115 CO 24	-
		36	13,300	25	64192003	CC-FS 115 CO 36	-
		50	13,300	25	64192005	CC-FS 115 CO 50	-
		60	13,300	25	64192006	CC-FS 115 CO 60	-
		80	13,300	25	64192008	CC-FS 115 CO 80	-
		120	13,300	25	64192012	CC-FS 115 CO 120	-
125	CO	24	12,200	25	64192102	CC-FS 125 CO 24	-
		36	12,200	25	64192103	CC-FS 125 CO 36	-
		50	12,200	25	64192105	CC-FS 125 CO 50	-
		60	12,200	25	64192106	CC-FS 125 CO 60	-
		80	12,200	25	64192108	CC-FS 125 CO 80	-
		120	12,200	25	64192112	CC-FS 125 CO 120	-



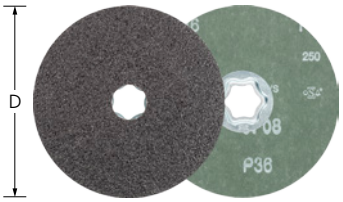
VICTOGRAIN version

For maximum aggressive grinding with an extremely long tool life and the ultimate stock removal rate on steel and hard materials. The ultimate, consistently high performance.



Special features:
- The innovative quick-mounting system ensures convenient handling and cool grinding.
- High economic efficiency thanks to long tool life and very high stock removal rate. Consistent surface finish thanks to high-quality abrasives.
- Please order necessary backing pad separately.

D [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
100	VICTOGRAIN	36	15,300	25	64110136	CC-FS 100 VICTOGRAIN 36	-
		60	15,300	25	64110160	CC-FS 100 VICTOGRAIN 60	-
		80	15,300	25	64110180	CC-FS 100 VICTOGRAIN 80	-
115	VICTOGRAIN	36	13,300	25	64111636	CC-FS 115 VICTOGRAIN 36	-
		60	13,300	25	64111660	CC-FS 115 VICTOGRAIN 60	-
		80	13,300	25	64111680	CC-FS 115 VICTOGRAIN 80	-
125	VICTOGRAIN	36	12,200	25	64112636	CC-FS 125 VICTOGRAIN 36	-
		60	12,200	25	64112660	CC-FS 125 VICTOGRAIN 60	-
		80	12,200	25	64112680	CC-FS 125 VICTOGRAIN 80	-
180	VICTOGRAIN	36	8,500	25	64118136	CC-FS 180 VICTOGRAIN 36	-
		60	8,500	25	64118160	CC-FS 180 VICTOGRAIN 60	-
		80	8,500	25	64118180	CC-FS 180 VICTOGRAIN 80	-

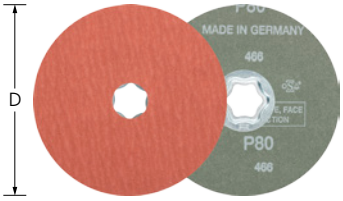


Silicon carbide SiC version

For general grinding work on components made of aluminium, copper, bronze, titanium and fibre-reinforced plastics. Particularly recommended for use on titanium alloys. Ideally suited for use in the aircraft industry, particularly when SiC is the only abrasive approved for use.

Special features:
- The innovative quick-mounting system ensures convenient handling and cool grinding.
- High economic efficiency thanks to long tool life and very high stock removal rate. Consistent surface finish thanks to high-quality abrasives.
- Please order necessary backing pad separately.

D [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
115	SiC	36	13,300	25	64294003	CC-FS 115 SiC 36	-
		60	13,300	25	64294006	CC-FS 115 SiC 60	-
		80	13,300	25	64294008	CC-FS 115 SiC 80	-
		120	13,300	25	64294012	CC-FS 115 SiC 120	-
125	SiC	36	12,200	25	64294103	CC-FS 125 SiC 36	-
		60	12,200	25	64294106	CC-FS 125 SiC 60	-
		80	12,200	25	64294108	CC-FS 125 SiC 80	-
		120	12,200	25	64294112	CC-FS 125 SiC 120	-



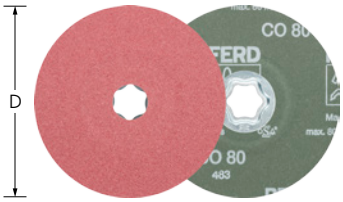
Aluminium oxide A-COOL version

For general grinding work from fine to very fine grinding on materials which do not conduct heat well, e.g. stainless steel (INOX) and aluminium. Active grinding additives substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Special features:
- The innovative quick-mounting system ensures convenient handling and cool grinding.
- High economic efficiency thanks to long tool life and very high stock removal rate. Consistent surface finish thanks to high-quality abrasives.
- Please order necessary backing pad separately.

D [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
115	A-COOL	60	13,300	25	64191006	CC-FS 115 A-COOL 60	-
		80	13,300	25	64191008	CC-FS 115 A-COOL 80	-
		120	13,300	25	64191012	CC-FS 115 A-COOL 120	-
		150	13,300	25	64191015	CC-FS 115 A-COOL 150	-
		220	13,300	25	64191022	CC-FS 115 A-COOL 220	-
125	A-COOL	50	12,200	25	64191105	CC-FS 125 A-COOL 50	-
		60	12,200	25	64191106	CC-FS 125 A-COOL 60	-
		80	12,200	25	64191108	CC-FS 125 A-COOL 80	-
		120	12,200	25	64191112	CC-FS 125 A-COOL 120	-
		150	12,200	25	64191115	CC-FS 125 A-COOL 150	-
		180	12,200	25	64191118	CC-FS 125 A-COOL 180	-
		220	12,200	25	64191122	CC-FS 125 A-COOL 220	-

COMBICLICK
Fibre discs CC-FS



Ceramic oxide grain CO-COOL version

Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding on hard materials which do not conduct heat well.



Special features:

- The innovative quick-mounting system ensures convenient handling and cool grinding.
- High economic efficiency thanks to long tool life and very high stock removal rate. Consistent surface finish thanks to high-quality abrasives.
- Please order necessary backing pad separately.

D [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
100	CO-COOL	36	15,300	25	64189101	CC-FS 100 CO-COOL 36	-
		50	15,300	25	64189102	CC-FS 100 CO-COOL 50	-
		60	15,300	25	64189103	CC-FS 100 CO-COOL 60	-
		80	15,300	25	64189104	CC-FS 100 CO-COOL 80	-
		120	15,300	25	69401582	CC-FS 100 CO-COOL 120	-
115	CO-COOL	24	13,300	25	64193002	CC-FS 115 CO-COOL 24	-
		36	13,300	25	64193003	CC-FS 115 CO-COOL 36	-
		50	13,300	25	64193005	CC-FS 115 CO-COOL 50	-
		60	13,300	25	64193006	CC-FS 115 CO-COOL 60	-
		80	13,300	25	64193008	CC-FS 115 CO-COOL 80	-
		120	13,300	25	64193012	CC-FS 115 CO-COOL 120	-
125	CO-COOL	24	12,200	25	64193102	CC-FS 125 CO-COOL 24	-
		36	12,200	25	64193103	CC-FS 125 CO-COOL 36	-
		50	12,200	25	64193105	CC-FS 125 CO-COOL 50	-
		60	12,200	25	64193106	CC-FS 125 CO-COOL 60	-
		80	12,200	25	64193108	CC-FS 125 CO-COOL 80	-
		120	12,200	25	64193112	CC-FS 125 CO-COOL 120	-
180	CO-COOL	24	8,500	25	64193302	CC-FS 180 CO-COOL 24	-
		36	8,500	25	64193303	CC-FS 180 CO-COOL 36	-
		50	8,500	25	64193305	CC-FS 180 CO-COOL 50	-
		60	8,500	25	64193306	CC-FS 180 CO-COOL 60	-
		80	8,500	25	64193308	CC-FS 180 CO-COOL 80	-



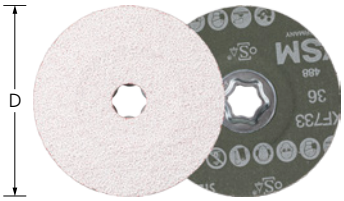
Ceramic oxide grain CO-COOL-CONTOUR version

Very flexible and adaptable outer contour that does not cut into the workpiece. Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding.



Special features:
- The innovative quick-mounting system ensures convenient handling and cool grinding.
- High economic efficiency thanks to long tool life and very high stock removal rate. Consistent surface finish thanks to high-quality abrasives.
- Use only the CC-GT 115-125 backing pad with M14 or 5/8" thread to maintain the flexibility at the edge of the fibre discs.

D [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
125	CO-COOL	60 CONTOUR	12,200	25	64112560	CC-FS 125 CO-COOL 60 CONTOUR	-
		80 CONTOUR	12,200	25	64112580	CC-FS 125 CO-COOL 80 CONTOUR	-
		120 CONTOUR	12,200	25	64112512	CC-FS 125 CO-COOL 120 CONTOUR	-

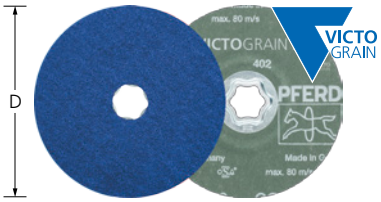


Ceramic oxide grain CO-ALU version

For aggressive grinding with maximum stock removal rate for machining non-ferrous metals. Consistently high performance due to self-sharpening ceramic oxide grain. Adhesion-reducing additives significantly reduce the chip adhesion and therefore reduce clogging of the fibre discs.

Special features:
- The innovative quick-mounting system ensures convenient handling and cool grinding.
- High economic efficiency thanks to long tool life and very high stock removal rate. Consistent surface finish thanks to high-quality abrasives.
- Please order necessary backing pad separately.

D [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
115	CO-ALU	36	13,300	25	64194003	CC-FS 115 CO-ALU 36	-
		60	13,300	25	64194006	CC-FS 115 CO-ALU 60	-
		80	13,300	25	64194008	CC-FS 115 CO-ALU 80	-
125	CO-ALU	36	12,200	25	64194103	CC-FS 125 CO-ALU 36	-
		60	12,200	25	64194106	CC-FS 125 CO-ALU 60	-
		80	12,200	25	64194108	CC-FS 125 CO-ALU 80	-



VICTOGRAIN-COOL version

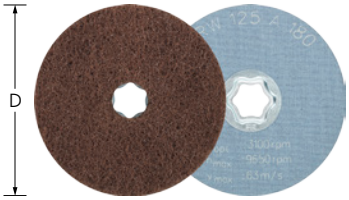
For maximum aggressive grinding with an extremely long tool life, the ultimate stock removal rate and consistently high performance on steel and hard materials which do not conduct heat well. Active grinding additives in the coating prevent clogging and result in cooler grinding.



Special features:
- The innovative quick-mounting system ensures convenient handling and cool grinding.
- High economic efficiency thanks to long tool life and very high stock removal rate. Consistent surface finish thanks to high-quality abrasives.
- Please order necessary backing pad separately.

D [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
100	VICTOGRAIN-COOL	36	15,300	25	64110036	CC-FS 100 VICTOGRAIN-COOL 36	-
		60	15,300	25	64110060	CC-FS 100 VICTOGRAIN-COOL 60	-
		80	15,300	25	64110080	CC-FS 100 VICTOGRAIN-COOL 80	-
115	VICTOGRAIN-COOL	36	13,300	25	64111536	CC-FS 115 VICTOGRAIN-COOL 36	-
		60	13,300	25	64111560	CC-FS 115 VICTOGRAIN-COOL 60	-
		80	13,300	25	64111580	CC-FS 115 VICTOGRAIN-COOL 80	-
125	VICTOGRAIN-COOL	36	12,200	25	64112536	CC-FS 125 VICTOGRAIN-COOL 36	-
		60	12,200	25	64112506	CC-FS 125 VICTOGRAIN-COOL 60	-
		80	12,200	25	64112508	CC-FS 125 VICTOGRAIN-COOL 80	-
180	VICTOGRAIN-COOL	36	8,500	25	64118036	CC-FS 180 VICTOGRAIN-COOL 36	-
		60	8,500	25	64118060	CC-FS 180 VICTOGRAIN-COOL 60	-
		80	8,500	25	64118080	CC-FS 180 VICTOGRAIN-COOL 80	-

Non-woven discs



Soft type CC-VRW

Suitable for very fine grinding on medium-sized and large surfaces and contours, and for cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces. Highly open structure.



Special features:
- Ideal for face-down grinding on medium-sized and large surfaces.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- The innovative quick-mounting system ensures convenient handling and cool grinding. Order necessary backing pad separately.

D [mm]	Abrasive	Grit size	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
100	A	100	medium	3,800	12,000	10	42001032	CC-VRW 100 A 100	-
		180	fine	3,800	12,000	10	42001031	CC-VRW 100 A 180	-
		280	very fine	3,800	12,000	10	42001030	CC-VRW 100 A 280	-
115	A	100	medium	3,300	10,500	10	42001052	CC-VRW 115 A 100	-
		180	fine	3,300	10,500	10	42001051	CC-VRW 115 A 180	-
		280	very fine	3,300	10,500	10	42001050	CC-VRW 115 A 280	-
125	A	100	medium	3,100	9,650	10	42001062	CC-VRW 125 A 100	-

Continued on next page

D [mm]	Abrasive	Grit size	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
125	A	180	fine	3,100	9,650	10	42001061	CC-VRW 125 A 180	-
		280	very fine	3,100	9,650	10	42001060	CC-VRW 125 A 280	-



Hard type CC-VRH

Suitable for general work on medium-sized and large metal surfaces, e.g. removing rough grinding traces, removing oxidation and light deburring work. Achieve matt and satin-finished surfaces.



Special features:
- Ideal for face-down grinding on medium-sized and large surfaces.
- Little wear due to high tear strength. The open structure of the non-woven material prevents tool clogging.
- The innovative quick-mounting system ensures convenient handling and cool grinding. Order necessary backing pad separately.

D [mm]	Abrasive	Grit size	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
100	A	100 G	coarse, yellow-brown	3,800	12,000	10	42000032	CC-VRH 100 A 100 G	-
		180 M	medium, red-brown	3,800	12,000	10	42000031	CC-VRH 100 A 180 M	-
		240 F	fine, blue	3,800	12,000	10	42000030	CC-VRH 100 A 240 F	-
115	A	100 G	coarse, yellow-brown	3,300	10,500	10	42000052	CC-VRH 115 A 100 G	-
		180 M	medium, red-brown	3,300	10,500	10	42000051	CC-VRH 115 A 180 M	-
		240 F	fine, blue	3,300	10,500	10	42000050	CC-VRH 115 A 240 F	-
125	A	100 G	coarse, yellow-brown	3,100	9,650	10	42000062	CC-VRH 125 A 100 G	-
		180 M	medium, red-brown	3,100	9,650	10	42000061	CC-VRH 125 A 180 M	-
		240 F	fine, blue	3,100	9,650	10	42000060	CC-VRH 125 A 240 F	-



CC-PNER type

For achieving a very fine, uniform surface finish which, depending on requirements, is a sufficient preparation for high-gloss polishing. Especially suitable for work on larger surfaces on components made of stainless steel (INOX). Available in the aluminium oxide A and silicon carbide SiC types.



Special features:
- Ideal for face-down grinding on medium-sized and large surfaces.
- High edge strength thanks to extreme durability.
- The innovative quick-mounting system ensures convenient handling and cool grinding. Order necessary backing pad separately.

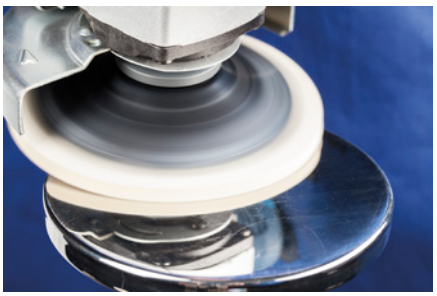
D [mm]	Abrasive	Version	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	SiC	W (soft)	fine	5,700	9,550	5	42002036	CC-PNER W 100 SiC F	-
		MW (medium-soft)	fine	5,700	9,550	5	42002076	CC-PNER MW 100 SiC F	-
		MH (medium-hard)	fine	5,700	9,550	5	42002136	CC-PNER MH 100 SiC F	-
	A	H (hard)	fine	5,700	9,550	5	42002172	CC-PNER H 100 A F	-
115	SiC	W (soft)	fine	5,000	8,350	5	42002046	CC-PNER W 115 SiC F	-
		MW (medium-soft)	fine	5,000	8,350	5	42002086	CC-PNER MW 115 SiC F	-
		MH (medium-hard)	fine	5,000	8,350	5	42002146	CC-PNER MH 115 SiC F	-
	A	H (hard)	fine	5,000	8,350	5	42002182	CC-PNER H 115 A F	-
125	SiC	W (soft)	fine	4,500	7,650	5	42002056	CC-PNER W 125 SiC F	-
		MW (medium-soft)	fine	4,500	7,650	5	42002096	CC-PNER MW 125 SiC F	-
		MH (medium-hard)	fine	4,500	7,650	5	42002156	CC-PNER MH 125 SiC F	-
	A	H (hard)	fine	4,500	7,650	5	42002192	CC-PNER H 125 A F	-

Felt discs CC-FR



CC-FR type

Suitable for polishing with polishing paste bars, grinding pastes or diamond polishing pastes in face-down grinding on medium-sized and large surfaces.



Special features:
- Ideal for face-down grinding on medium-sized and large surfaces.
- High economic efficiency due to very long tool life. Focused working over the entire lifespan thanks to high dimensional stability.
- The innovative quick-mounting system ensures convenient handling and cool grinding. Order necessary backing pad separately.

D [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
100	1,900	12,000	5	42003005	CC-FR 100	-
115	1,650	10,500	5	42003015	CC-FR 115	-
125	1,500	9,650	5	42003025	CC-FR 125	-



CC-GT (medium), CC-H-GT (hard) and CC-S-GT (soft) types

With this backing pad, COMBICLICK tools can be used on commercially available angle grinders. Various hardness levels for different applications and results.



Special features:

- The innovative quick-mounting system ensures convenient handling and rapid tool changing.
- The geometry of the cooling slots significantly reduces the thermal load. High economic efficiency due to minimal tool change times.
- The different hardnesses are colour-coded: CC-GT (medium) = black; CC-H-GT (hard) = blue; CC-S-GT (soft) = grey.

Suitable for tool diameter [mm]	Thread	Hardness	Suitable for machine types	Max. RPM		Item no.	Designation	Price/ unit EUR
100	M10	medium	Angle grinders 100, spindle M10	15,300	1	44890190	CC-GT 100 M10	-
115, 125	M14	soft	Angle grinders 115 / 125, spindle M14	13,300	1	44890153	CC-S-GT 115-125 M14	-
	5/8	soft	Angle grinders 115 / 125, spindle 5/8"	13,300	1	44890163	CC-S-GT 115-125 5/8-11	-
	M14	medium	Angle grinders 115 / 125, spindle M14	13,300	1	44890150	CC-GT 115-125 M14	-
	5/8	medium	Angle grinders 115 / 125, spindle 5/8"	13,300	1	44890160	CC-GT 115-125 5/8	-
	M14	hard	Angle grinders 115 / 125, spindle M14	13,300	1	64199002	CC-H-GT 115-125 M14	-
	5/8	hard	Angle grinders 115 / 125, spindle 5/8"	13,300	1	64199012	CC-H-GT 115-125 5/8	-
125	M14	medium	Angle grinder 125, spindle M14	12,200	1	44890151	CC-GT 125 M14	-
	5/8	medium	Angle grinders 125, spindle 5/8"	12,200	1	44890161	CC-GT 125 5/8"	-
	M14	hard	Angle grinder 125, spindle M14	12,200	1	44890152	CC-H-GT 125 M14	-
	5/8	hard	Angle grinders 125, spindle 5/8"	12,200	1	44890162	CC-H-GT 125 5/8"	-
180	M14	medium	Angle grinders 180, spindle M14	8,500	1	44890170	CC-GT 180 M14	-
	5/8	medium	Angle grinders 180, spindle 5/8"	8,500	1	44890180	CC-GT 180 5/8	-



CC-SET

Set for work on surfaces, from coarse to mirror-polished. The sets with a diameter of 125 mm are especially flexible around the edge.

Contents:
Three each of the following COMBICLICK fibre discs (CC-FS CO-COOL 36, CC-FS CO-COOL 120, CC-FS A-COOL 220), one each of the following COMBICLICK non-woven discs (CC-VRH A 240 F, CC-VRH A 180 M, CC-VRH A 100 G, CC-VRW A 280, CC-VRW A 180, CC-VRW A 100, CC-PNER W SiC F), one each of universal polishing paste, COMBICLICK felt disc CC-FR and COMBICLICK backing pad.

Special features:
- The innovative quick-mounting system ensures convenient handling and rapid tool changing.
- Getting to know and testing the comprehensive system.
- Coordinated selection of the most common versions.

D [mm]	Thread [mm]		Item no.	Designation	Price/unit EUR
115	5/8-11	1	49350073	CC-SET 115 5/8-11	-
	M14	1	49350071	CC-SET 115 M14	-
125	5/8-11	1	49350074	CC-SET 125 5/8-11	-
	M14	1	49350072	CC-SET 125 M14	-

The quick way to find the perfect tool

Material group ▼			Abrasive ▶ Aluminium oxide A	Zircon Z	Ceramic oxide grain CO	VICTOGRAIN	Aluminium oxide A-COOL	Zircon Z-COOL	Ceramic oxide grain CO-COOL	Ceramic oxide grain CO-ALU	VICTOGRAIN-COOL
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●	○	●	●					○
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	○	●	●	●					○
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels		○		○	●	●	●		●
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	○				●	○	○	○	
		Brass, copper, zinc	●	○	○					○	
	Hard non-ferrous metals	Hard aluminium alloys	●	○	○					○	
		Bronze, titanium		○	○	○		●	●		●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys		○	○	○		●	●	○	●
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	●	○	●						
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint	●								

● = highly suitable ○ = suitable

Safety notes

- The maximum permitted peripheral speed is 80 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.


Wear eye protection!


Wear hearing protection!


Wear gloves!

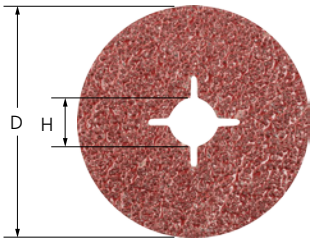

Wear a dust mask!


Use backing pad!


Follow the safety instructions!


Not permitted for wet grinding!





Aluminium oxide A version

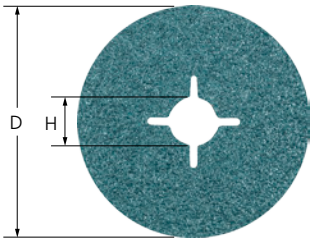
For general grinding work from coarse to fine grinding in industry and professional trades.



Special features:

- High economic efficiency thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives. Highly flexible, enabling optimal adjustment to the contour.
- Please order necessary backing pad separately.

D [mm]	H [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
100	16	A	16	15,300	25	69401127	FS 100-16 A 16	-
			24	15,300	25	69401016	FS 100-16 A 24	-
			36	15,300	25	69401015	FS 100-16 A 36	-
			50	15,300	25	69401065	FS 100-16 A 50	-
			60	15,300	25	69401023	FS 100-16 A 60	-
			80	15,300	25	69401024	FS 100-16 A 80	-
			100	15,300	25	69401019	FS 100-16 A 100	-
			120	15,300	25	69401067	FS 100-16 A 120	-
115	22	A	16	13,300	25	64101111	FS 115-22 A 16	-
			24	13,300	25	64102111	FS 115-22 A 24	-
			36	13,300	25	64103111	FS 115-22 A 36	-
			50	13,300	25	64105111	FS 115-22 A 50	-
			60	13,300	25	64106111	FS 115-22 A 60	-
			80	13,300	25	64108111	FS 115-22 A 80	-
			100	13,300	25	64110111	FS 115-22 A 100	-
			120	13,300	25	64112111	FS 115-22 A 120	-
125	22	A	16	12,200	25	64101125	FS 125-22 A 16	-
			24	12,200	25	64102125	FS 125-22 A 24	-
			36	12,200	25	64103125	FS 125-22 A 36	-
			50	12,200	25	64105125	FS 125-22 A 50	-
			60	12,200	25	64106125	FS 125-22 A 60	-
			80	12,200	25	64108125	FS 125-22 A 80	-
			100	12,200	25	64110125	FS 125-22 A 100	-
			120	12,200	25	64112125	FS 125-22 A 120	-
150	22	A	36	10,200	25	64103155	FS 150-22 A 36	-
			60	10,200	25	64106155	FS 150-22 A 60	-
			80	10,200	25	64108155	FS 150-22 A 80	-
180	22	A	16	8,500	25	64101175	FS 180-22 A 16	-
			24	8,500	25	64102175	FS 180-22 A 24	-
			36	8,500	25	64103175	FS 180-22 A 36	-
			50	8,500	25	64105175	FS 180-22 A 50	-
			60	8,500	25	64106175	FS 180-22 A 60	-
			80	8,500	25	64108175	FS 180-22 A 80	-
			100	8,500	25	64110175	FS 180-22 A 100	-
			120	8,500	25	64112175	FS 180-22 A 120	-

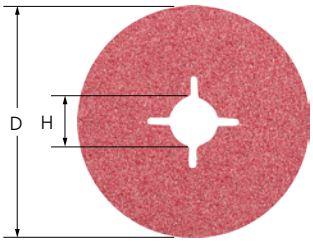


Zirconia alumina Z version

For coarse grinding work with a high stock removal rate and a long tool life.

Special features:
- High economic efficiency thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives. Highly flexible, enabling optimal adjustment to the contour.
- Please order necessary backing pad separately.

D [mm]	H [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
100	16	Z	24	15,300	25	69401548	FS 100-16 Z 24	-
			36	15,300	25	69401549	FS 100-16 Z 36	-
			50	15,300	25	69401550	FS 100-16 Z 50	-
			60	15,300	25	69401495	FS 100-16 Z 60	-
			80	15,300	25	69401551	FS 100-16 Z 80	-
			100	15,300	25	69401496	FS 100-16 Z 100	-
			120	15,300	25	69401552	FS 100-16 Z 120	-
115	22	Z	24	13,300	25	64202111	FS 115-22 Z 24	-
			36	13,300	25	64203111	FS 115-22 Z 36	-
			50	13,300	25	64205111	FS 115-22 Z 50	-
			60	13,300	25	64206111	FS 115-22 Z 60	-
			80	13,300	25	64208111	FS 115-22 Z 80	-
			100	13,300	25	*64210111*	FS 115-22 Z 100	-
			120	13,300	25	64212111	FS 115-22 Z 120	-
125	22	Z	24	12,200	25	64202125	FS 125-22 Z 24	-
			36	12,200	25	64203125	FS 125-22 Z 36	-
			50	12,200	25	64205125	FS 125-22 Z 50	-
			60	12,200	25	64206125	FS 125-22 Z 60	-
			80	12,200	25	64208125	FS 125-22 Z 80	-
			100	12,200	25	*64210125*	FS 125-22 Z 100	-
			120	12,200	25	64212125	FS 125-22 Z 120	-
180	22	Z	24	8,500	25	64202175	FS 180-22 Z 24	-
			36	8,500	25	64203175	FS 180-22 Z 36	-
			50	8,500	25	64205175	FS 180-22 Z 50	-
			60	8,500	25	64206175	FS 180-22 Z 60	-
			80	8,500	25	64208175	FS 180-22 Z 80	-
			100	8,500	25	*64210175*	FS 180-22 Z 100	-
			120	8,500	25	64212175	FS 180-22 Z 120	-



Ceramic oxide grain CO version

For aggressive grinding with maximum stock removal rate and very long tool life. Consistently high performance due to self-sharpening ceramic oxide grain. The ceramic oxide grain is specifically designed for work on hard materials and layers.

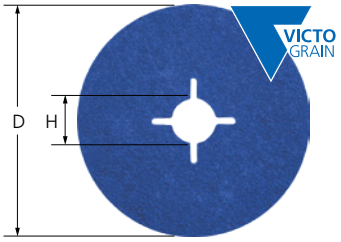
Special features:
- High economic efficiency thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives. Highly flexible, enabling optimal adjustment to the contour.
- Please order necessary backing pad separately.

D [mm]	H [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
115	22	CO	24	13,300	25	64152111	FS 115-22 CO 24	-
			36	13,300	25	64153111	FS 115-22 CO 36	-
			50	13,300	25	*64155111*	FS 115-22 CO 50	-
			60	13,300	25	64156111	FS 115-22 CO 60	-
			80	13,300	25	64158111	FS 115-22 CO 80	-
			120	13,300	25	*64162111*	FS 115-22 CO 120	-

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Fibre discs
Fibre discs FS

D [mm]	H [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
125	22	CO	24	12,200	25	64152125	FS 125-22 CO 24	-
			36	12,200	25	64153125	FS 125-22 CO 36	-
			50	12,200	25	64155125	FS 125-22 CO 50	-
			60	12,200	25	64156125	FS 125-22 CO 60	-
			80	12,200	25	64158125	FS 125-22 CO 80	-
			120	12,200	25	64162125	FS 125-22 CO 120	-
180	22	CO	24	8,500	25	64152175	FS 180-22 CO 24	-
			36	8,500	25	64153175	FS 180-22 CO 36	-
			60	8,500	25	64156175	FS 180-22 CO 60	-
			80	8,500	25	64158175	FS 180-22 CO 80	-
			120	8,500	25	*64162175*	FS 180-22 CO 120	-



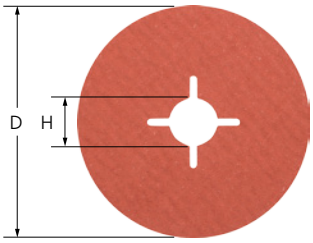
VICTOGRAIN version

For maximum aggressive grinding with an extremely long tool life and the ultimate stock removal rate on steel and hard materials. The ultimate, consistently high performance.



Special features:
- High economic efficiency thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives. Highly flexible, enabling optimal adjustment to the contour.
- Please order necessary backing pad separately.

D [mm]	H [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
100	16	VICTOGRAIN	36	15,300	25	64279011	FS 100-16 VICTOGRAIN 36	-
			60	15,300	25	64279019	FS 100-16 VICTOGRAIN 60	-
			80	15,300	25	64279020	FS 100-16 VICTOGRAIN 80	-
115	22	VICTOGRAIN	36	13,300	25	64279012	FS 115-22 VICTOGRAIN 36	-
			60	13,300	25	64279021	FS 115-22 VICTOGRAIN 60	-
						64279022	FS 115-22 VICTOGRAIN 80	-
125	22	VICTOGRAIN	36	12,200	25	64279013	FS 125-22 VICTOGRAIN 36	-
			60	12,200	25	64279023	FS 125-22 VICTOGRAIN 60	-
			80	12,200	25	64279024	FS 125-22 VICTOGRAIN 80	-
150	22	VICTOGRAIN	36	10,200	25	64279018	FS 150-22 VICTOGRAIN 36	-
			60	10,200	25	64279025	FS 150-22 VICTOGRAIN 60	-
			80	10,200	25	64279026	FS 150-22 VICTOGRAIN 80	-
180	22	VICTOGRAIN	36	8,500	25	64279014	FS 180-22 VICTOGRAIN 36	-
			60	8,500	25	64279027	FS 180-22 VICTOGRAIN 60	-
			80	8,500	25	64279028	FS 180-22 VICTOGRAIN 80	-



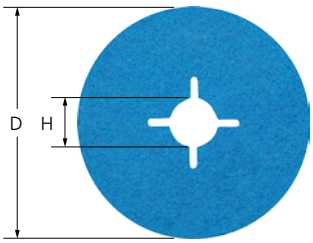
Aluminium oxide A-COOL version

For general grinding work from fine to very fine grinding on materials which do not conduct heat well, e.g. stainless steel (INOX). Active grinding additives substantially improve the stock removal rate, prevent clogging and result in cooler grinding.



Special features:
- High economic efficiency thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives. Highly flexible, enabling optimal adjustment to the contour.
- Please order necessary backing pad separately.

D [mm]	H [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
115	22	A-COOL	50	13,300	25	64125111	FS 115-22 A-COOL 50	-
			60	13,300	25	64126111	FS 115-22 A-COOL 60	-
			80	13,300	25	64128111	FS 115-22 A-COOL 80	-
			100	13,300	25	*64130111*	FS 115-22 A-COOL 100	-
			120	13,300	25	64132111	FS 115-22 A-COOL 120	-
			150	13,300	25	64135111	FS 115-22 A-COOL 150	-
			180	13,300	25	64138111	FS 115-22 A-COOL 180	-
			220	13,300	25	64142111	FS 115-22 A-COOL 220	-
125	22	A-COOL	60	12,200	25	64126125	FS 125-22 A-COOL 60	-
			80	12,200	25	64128125	FS 125-22 A-COOL 80	-
			100	12,200	25	*64130125*	FS 125-22 A-COOL 100	-
			120	12,200	25	64132125	FS 125-22 A-COOL 120	-
			150	12,200	25	64135125	FS 125-22 A-COOL 150	-
			180	12,200	25	64138125	FS 125-22 A-COOL 180	-
			220	12,200	25	64142125	FS 125-22 A-COOL 220	-
180	22	A-COOL	50	8,500	25	*64125175*	FS 180-22 A-COOL 50	-
			60	8,500	25	*64126175*	FS 180-22 A-COOL 60	-
			80	8,500	25	64128175	FS 180-22 A-COOL 80	-
			100	8,500	25	*64130175*	FS 180-22 A-COOL 100	-
			120	8,500	25	64132175	FS 180-22 A-COOL 120	-
			150	8,500	25	64135175	FS 180-22 A-COOL 150	-
			180	8,500	25	64138175	FS 180-22 A-COOL 180	-
			220	8,500	25	64142175	FS 180-22 A-COOL 220	-

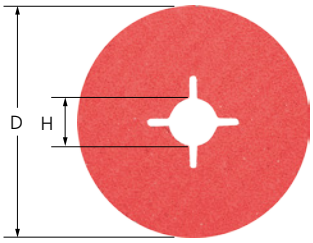


Zirconia alumina Z-COOL version

For coarse grinding work with a high stock removal rate and cool grinding. Active grinding additives substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Special features:
- High economic efficiency thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives. Highly flexible, enabling optimal adjustment to the contour.
- Please order necessary backing pad separately.

D [mm]	H [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
115	22	Z-COOL	36	13,300	25	*64273111*	FS 115-22 Z-COOL 36	-
			60	13,300	25	*64276111*	FS 115-22 Z-COOL 60	-
125	22	Z-COOL	36	12,200	25	64273125	FS 125-22 Z-COOL 36	-
			60	12,200	25	64276125	FS 125-22 Z-COOL 60	-
			80	12,200	25	64278125	FS 125-22 Z-COOL 80	-



Ceramic oxide grain CO-COOL version

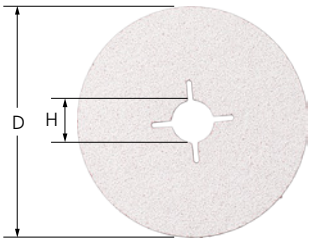
Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding on hard materials which do not conduct heat well.



Special features:

- High economic efficiency thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives. Highly flexible, enabling optimal adjustment to the contour.
- Please order necessary backing pad separately.

D [mm]	H [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
100	16	CO-COOL	24	15,300	25	69401583	FS 100-16 CO-COOL 24	-
			36	15,300	25	69401553	FS 100-16 CO-COOL 36	-
			50	15,300	25	69401554	FS 100-16 CO-COOL 50	-
			60	15,300	25	69401555	FS 100-16 CO-COOL 60	-
			80	15,300	25	69401556	FS 100-16 CO-COOL 80	-
			120	15,300	25	69401584	FS 100-16 CO-COOL 120	-
115	22	CO-COOL	24	13,300	25	64172111	FS 115-22 CO-COOL 24	-
			36	13,300	25	64173111	FS 115-22 CO-COOL 36	-
			50	13,300	25	64175111	FS 115-22 CO-COOL 50	-
			60	13,300	25	64176111	FS 115-22 CO-COOL 60	-
			80	13,300	25	64178111	FS 115-22 CO-COOL 80	-
			100	13,300	25	64180111	FS 115-22 CO-COOL 100	-
			120	13,300	25	64182111	FS 115-22 CO-COOL 120	-
125	22	CO-COOL	24	12,200	25	64172125	FS 125-22 CO-COOL 24	-
			36	12,200	25	64173125	FS 125-22 CO-COOL 36	-
			50	12,200	25	64175125	FS 125-22 CO-COOL 50	-
			60	12,200	25	64176125	FS 125-22 CO-COOL 60	-
			80	12,200	25	64178125	FS 125-22 CO-COOL 80	-
			100	12,200	25	64180125	FS 125-22 CO-COOL 100	-
			120	12,200	25	64182125	FS 125-22 CO-COOL 120	-
180	22	CO-COOL	24	8,500	25	64172175	FS 180-22 CO-COOL 24	-
			36	8,500	25	64173175	FS 180-22 CO-COOL 36	-
			50	8,500	25	64175175	FS 180-22 CO-COOL 50	-
			60	8,500	25	64176175	FS 180-22 CO-COOL 60	-
			80	8,500	25	64178175	FS 180-22 CO-COOL 80	-
			100	8,500	25	64180175	FS 180-22 CO-COOL 100	-
			120	8,500	25	64182175	FS 180-22 CO-COOL 120	-



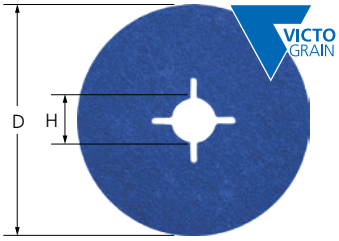
Ceramic oxide grain CO-ALU version

For aggressive grinding with maximum stock removal rate for machining non-ferrous metals. Consistently high performance due to self-sharpening ceramic oxide grain. Adhesion-reducing additives in the coating significantly reduce the chip adhesion and therefore reduce clogging of the fibre discs.



Special features:
- High economic efficiency thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives. Highly flexible, enabling optimal adjustment to the contour.
- Please order necessary backing pad separately.

D [mm]	H [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
100	16	CO-ALU	36	15,300	25	64281036	FS 100-16 CO-ALU 36	-
			60	15,300	25	64281060	FS 100-16 CO-ALU 60	-
			80	15,300	25	64281080	FS 100-16 CO-ALU 80	-
115	22	CO-ALU	36	13,300	25	64281136	FS 115-22 CO-ALU 36	-
			60	13,300	25	64281160	FS 115-22 CO-ALU 60	-
			80	13,300	25	64281180	FS 115-22 CO-ALU 80	-
125	22	CO-ALU	36	12,200	25	64281236	FS 125-22 CO-ALU 36	-
			60	12,200	25	64281260	FS 125-22 CO-ALU 60	-
			80	12,200	25	64281280	FS 125-22 CO-ALU 80	-
180	22	CO-ALU	36	8,500	25	64281836	FS 180-22 CO-ALU 36	-
			60	8,500	25	64281860	FS 180-22 CO-ALU 60	-
			80	8,500	25	64281880	FS 180-22 CO-ALU 80	-



VICTOGRAIN-COOL version

For maximum aggressive grinding with an extremely long tool life, the ultimate stock removal rate and consistently high performance on steel and hard materials which do not conduct heat well. Active grinding additives in the coating prevent clogging and result in cooler grinding.

Special features:
- High economic efficiency thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives. Highly flexible, enabling optimal adjustment to the contour.
- Please order necessary backing pad separately.

D [mm]	H [mm]	Abrasive	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
100	16	VICTOGRAIN-COOL	36	15,300	25	64279001	FS 100-16 VICTOGRAIN-COOL 36	-
			60	15,300	25	64279029	FS 100-16 VICTOGRAIN-COOL 60	-
			80	15,300	25	64279030	FS 100-16 VICTOGRAIN-COOL 80	-
115	22	VICTOGRAIN-COOL	36	13,300	25	64279002	FS 115-22 VICTOGRAIN-COOL 36	-
			60	13,300	25	64279031	FS 115-22 VICTOGRAIN-COOL 60	-
			80	13,300	25	64279032	FS 115-22 VICTOGRAIN-COOL 80	-
125	22	VICTOGRAIN-COOL	36	12,200	25	64279003	FS 125-22 VICTOGRAIN-COOL 36	-
			60	12,200	25	64279033	FS 125-22 VICTOGRAIN-COOL 60	-
			80	12,200	25	64279034	FS 125-22 VICTOGRAIN-COOL 80	-
150	22	VICTOGRAIN-COOL	36	10,200	25	69401655	FS 150-22 VICTOGRAIN-COOL 36	-
			60	10,200	25	64279035	FS 150-22 VICTOGRAIN-COOL 60	-
			80	10,200	25	64279036	FS 150-22 VICTOGRAIN-COOL 80	-
180	22	VICTOGRAIN-COOL	36	8,500	25	64279004	FS 180-22 VICTOGRAIN-COOL 36	-
			60	8,500	25	64279037	FS 180-22 VICTOGRAIN-COOL 60	-
			80	8,500	25	64279038	FS 180-22 VICTOGRAIN-COOL 80	-



GT type

Backing pad for fibre discs for optimum adaptation to contours thanks to high flexibility. Complies with ISO 15636.

Special features:
- For use with fibre discs on commercially available angle grinders.
- Contains clamping nuts.

Suitable for tool diameter [mm]	Thread	Suitable for machine types	Max. RPM		Item no.	Designation	Price/unit EUR
100	M10	Angle grinders 100, spindle M10	15,300	1	44890015	GT 100 MF M10	-
115	M10	Angle grinders 115, spindle M10	13,300	1	44890020	GT 115 MF M10	-
	M14	Angle grinders 115, spindle M14	13,300	1	44890030	GT 115 MF M14	-
125	M14	Angle grinder 125, spindle M14	12,200	1	44890040	GT 125 MF M14	-
150	M14	Angle grinders 150, spindle M14	10,200	1	44890050	GT 150 MF M14	-
180	M14	Angle grinders 180, spindle M14	8,500	1	44890060	GT 180 MF M14	-



H-GT type

High-performance backing pad for fibre discs with a long tool life thanks to abrasion-resistant, glass-fibre-reinforced plastic. Impresses with particularly cool grinding due to radially arranged cooling fins, and high fibre-disc stock removal rate due to sturdy, rigid design.

Special features:
- For use with fibre discs on commercially available angle grinders.
- Contains clamping nuts.

Suitable for tool diameter [mm]	Thread	Suitable for machine types	Max. RPM		Item no.	Designation	Price/unit EUR
115	M14	Angle grinders 115, spindle M14	13,300	1	44890080	H-GT 115 MF M14	-
125	M14	Angle grinder 125, spindle M14	12,200	1	44890090	H-GT 125 MF M14	-
180	M14	Angle grinders 180, spindle M14	8,500	1	44890100	H-GT 180 MF M14	-

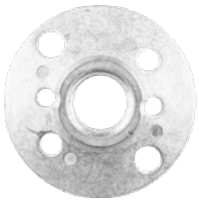


HT-GT type

Flexible and extremely temperature-resistant backing pad for fibre discs with a long tool life due to the highly temperature-resistant material. Enables high-precision work thanks to high flexibility. Complies with ISO 15636.

Special features:
- For use with fibre discs on commercially available angle grinders.
- Contains clamping nuts.

Suitable for tool diameter [mm]	Thread	Suitable for machine types	Max. RPM		Item no.	Designation	Price/unit EUR
115	M14	Angle grinders 115, spindle M14	13,300	1	44890200	HT-GT 115 MF M14	-
125	M14	Angle grinder 125, spindle M14	12,200	1	44890210	HT-GT 125 MF M14	-
180	M14	Angle grinders 180, spindle M14	8,500	1	44890220	HT-GT 180 MF M14	-



FL-GT, clamping nuts for backing pads GT

Accessories for GT-variant backing pads.

Special features:
- Matching centre hole distances for standard commercial face pin spanners.

Thread	Suitable for machine types [mm]		Item no.	Designation	Price/unit EUR
M10	Angle grinders 100, spindle M10	1	44890110	FL-GT 100 M10	-
M14	Angle grinder 80-115, spindle M14	1	44890120	FL-GT 80-115 M14	-
	Angle grinder 125, spindle M14	1	44890130	FL-GT 125 M14	-
	Angle grinder 150-230, v M14	1	44890140	FL-GT 150-230 M14	-



Stand for fibre discs

Stand made from impact-resistant plastic for the secure storage of fibre discs exactly in line with their shape. The holder can be stood upright, as well as bolted to walls.

Special features:
- Perfect storage of fibre grinding discs.
- With quick adjustment device and attachment holes on the base.
- Suitable for fibre disc diameters 100 mm to 230 mm.

	Item no.	Designation	Price/unit EUR
1	44858015	STORAGE FS-S 100-230	-

Self-adhesive discs
General information

Safety notes

- The maximum permitted peripheral speed is 32 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.
- Place the self-adhesive discs centrally on the holder.

Wear eye protection!

Wear hearing protection!

Wear gloves!

Wear a dust mask!

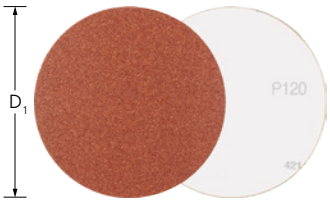
Use backing pad!

Follow the safety instructions!

Not permitted for wet grinding!

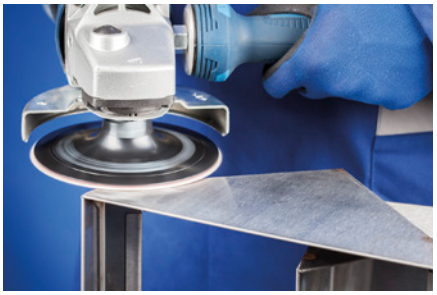


Self-adhesive discs KR



Aluminium oxide A version

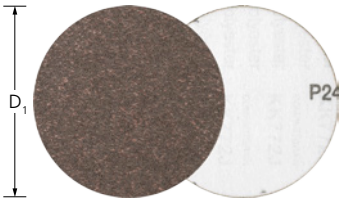
These self-adhesive discs are suitable for general coarse to fine grinding work on larger surfaces in industry and professional trades.



Special features:

- Quick tool changes thanks to self-adhesive system.
- Highly flexible, enabling optimal adjustment to the contour.
- With the self-adhesive disc holder, can be used on commercially available speed-adjustable or slow-running angle grinders with M14 mounting.

D_1 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
115	A	40	5,000	5,300	50	42871104	KR 115 A 40	-
		60	5,000	5,300	50	42871106	KR 115 A 60	-
		80	5,000	5,300	50	42871108	KR 115 A 80	-
		120	5,000	5,300	50	42871112	KR 115 A 120	-
		150	5,000	5,300	50	42871115	KR 115 A 150	-
		180	5,000	5,300	50	42871118	KR 115 A 180	-
125	A	40	4,600	4,850	50	42871204	KR 125 A 40	-
		60	4,600	4,850	50	42871206	KR 125 A 60	-
		80	4,600	4,850	50	42871208	KR 125 A 80	-
		120	4,600	4,850	50	42871212	KR 125 A 120	-
		150	4,600	4,850	50	42871215	KR 125 A 150	-
		180	4,600	4,850	50	42871218	KR 125 A 180	-



Aluminium oxide A compact grain version

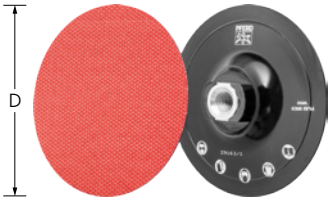
The wide range of different grains makes this range exceptionally well-suited to fine and very fine grinding, and for step-by-step preparations for polishing larger surfaces.



Special features:
- Quick tool changes thanks to self-adhesive system. Highly flexible, enabling optimal adjustment to the contour.
- Very long tool life and consistent surface roughness over the entire lifespan thanks to self-sharpening compact grain.

D_1 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
115	A-CK	120	5,000	5,300	50	42870004	KR 115 A 120 CK	-
		180	5,000	5,300	50	42870006	KR 115 A 180 CK	-
		240	5,000	5,300	50	42870008	KR 115 A 240 CK	-
		320	5,000	5,300	50	42870010	KR 115 A 320 CK	-
		400	5,000	5,300	50	42870012	KR 115 A 400 CK	-
		600	5,000	5,300	50	42870014	KR 115 A 600 CK	-
		800	5,000	5,300	50	42870016	KR 115 A 800 CK	-
		1000	5,000	5,300	50	42870018	KR 115 A 1000 CK	-
		1200	5,000	5,300	50	42870020	KR 115 A 1200 CK	-
125	A-CK	120	4,600	4,850	50	42870104	KR 125 A 120 CK	-
		180	4,600	4,850	50	42870106	KR 125 A 180 CK	-
		240	4,600	4,850	50	42870108	KR 125 A 240 CK	-
		320	4,600	4,850	50	42870110	KR 125 A 320 CK	-
		400	4,600	4,850	50	42870112	KR 125 A 400 CK	-
		600	4,600	4,850	50	42870114	KR 125 A 600 CK	-
		800	4,600	4,850	50	42870116	KR 125 A 800 CK	-
		1000	4,600	4,850	50	42870118	KR 125 A 1000 CK	-
		1200	4,600	4,850	50	42870120	KR 125 A 1200 CK	-

Self-adhesive disc holders KRH



KRH type

Flexible arbor for using self-adhesive discs on speed-adjustable or slow-running angle grinders with M14 mounting.

Special features:
- Quick tool changes thanks to self-adhesive system.

D [mm]	Thread	Hardness	Max. RPM		Item no.	Designation	Price/unit EUR
115	M14	soft	5,300	1	42710155	KRH-S 115 M14	-
125	M14	soft	4,850	1	42710255	KRH-S 125 M14	-
115	M14	medium	5,300	1	42710154	KRH 115 M14	-
125	M14	medium	4,850	1	42710254	KRH 125 M14	-

Self-adhesive abrasive discs
General information

Safety notes

- The maximum permitted peripheral speed is 20 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.

Wear eye protection!

Wear hearing protection!

Wear gloves!

Wear a dust mask!

Follow the safety instructions!



Self-adhesive abrasive discs PSA



Aluminium oxide A version

Self-adhesive abrasive discs specifically for tool and mould-making. For heavily contoured, delicate components. Different surface quality levels from coarse to very fine can be successively achieved.



Special features:

- Highly flexible, enabling optimal adjustment to the contour.
- Quick and easy tool change. Disc securely held on the holder thanks to high-quality adhesive connections.
- Please order abrasive disc holder separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM	📦	Item no.	Designation	Price/unit EUR
12	A	60	16,000	31,800	100	42832006	PSA 12 A 60	-
		80	16,000	31,800	100	42832008	PSA 12 A 80	-
		120	16,000	31,800	100	42832012	PSA 12 A 120	-
		180	16,000	31,800	100	42832018	PSA 12 A 180	-
		240	16,000	31,800	100	42832024	PSA 12 A 240	-
		320	16,000	31,800	100	42832032	PSA 12 A 320	-
		400	16,000	31,800	100	42832040	PSA 12 A 400	-
		600	16,000	31,800	100	42832060	PSA 12 A 600	-
20	A	60	10,000	19,100	100	42832106	PSA 20 A 60	-
		80	10,000	19,100	100	42832108	PSA 20 A 80	-
		120	10,000	19,100	100	42832112	PSA 20 A 120	-
		180	10,000	19,100	100	42832118	PSA 20 A 180	-
		240	10,000	19,100	100	42832124	PSA 20 A 240	-
		320	10,000	19,100	100	42832132	PSA 20 A 320	-
		400	10,000	19,100	100	42832140	PSA 20 A 400	-
		600	10,000	19,100	100	42832160	PSA 20 A 600	-
30	A	60	6,500	12,700	100	42832206	PSA 30 A 60	-
		80	6,500	12,700	100	42832208	PSA 30 A 80	-
		120	6,500	12,700	100	42832212	PSA 30 A 120	-
		180	6,500	12,700	100	42832218	PSA 30 A 180	-
		240	6,500	12,700	100	42832224	PSA 30 A 240	-
		320	6,500	12,700	100	42832232	PSA 30 A 320	-
		400	6,500	12,700	100	42832240	PSA 30 A 400	-

Continued on next page

D_1 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
30	A	600	6,500	12,700	100	42832260	PSA 30 A 600	-
50	A	60	4,000	7,650	100	42832306	PSA 50 A 60	-
		80	4,000	7,650	100	42832308	PSA 50 A 80	-
		120	4,000	7,650	100	42832312	PSA 50 A 120	-
		180	4,000	7,650	100	42832318	PSA 50 A 180	-
		240	4,000	7,650	100	42832324	PSA 50 A 240	-
		320	4,000	7,650	100	42832332	PSA 50 A 320	-
		400	4,000	7,650	100	42832340	PSA 50 A 400	-
		600	4,000	7,650	100	42832360	PSA 50 A 600	-

Abrasive disc holder PSA-H



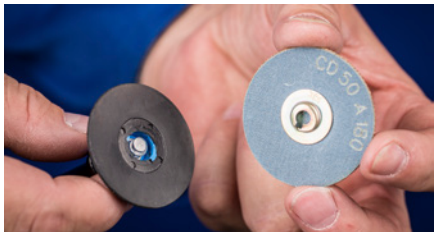
PSA-H version

Flexible abrasive disc holder for using self-adhesive abrasive discs, specifically for tool and mould construction.

Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Quick and easy tool change.
- Secure hold of the disc on the holder thanks to high-quality adhesive connections.

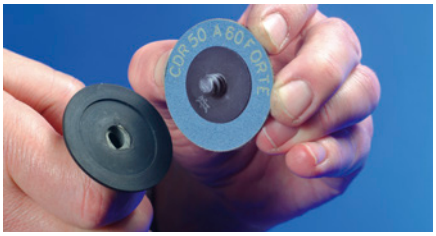
D [mm]	S [mm]	L [mm]	Max. RPM	Suitable for		Item no.	Designation	Price/unit EUR
Shank diameter of 2.35 mm								
10	2.35	35	31,800	PSA 12	5	42160000	PSA-H 12-2,35	-
18	2.35	35	19,100	PSA 20	5	42160002	PSA-H 20-2,35	-
25	2.35	35	12,700	PSA 30	5	42160004	PSA-H 30-2,35	-
Shank diameter 3 mm								
10	3	35	31,800	PSA 12	5	42160001	PSA-H 12-3	-
18	3	35	19,100	PSA 20	5	42160003	PSA-H 20-3	-
25	3	35	12,700	PSA 30	5	42160005	PSA-H 30-3	-
50	3	35	7,650	PSA 50	5	42160007	PSA-H 50-3	-
Shank diameter 6 mm								
50	6	35	7,650	PSA 50	5	42160006	PSA-H 50-6	-

COMBIDISC clamping system CD and CDR



CD system

Tool side: threaded connection with female thread (metal/plastic).



CDR system

Tool side: threaded connection with male thread (plastic).



The quick way to find the perfect tool

Material group ▼			Abrasive ▶	Aluminium oxide A, A-PLUS, A-FLEX, A-CONTOUR, A-FORTE	Aluminium oxide A, compact grain	Zirconia alumina Z	Silicon carbide SiC	Aluminium oxide A-COOL	Ceramic oxide grain CO-COOL	VICTOGRAIN-COOL	Abrasive discs Diamond	POLICLEAN discs	Non-woven discs PNER, VRH, VRW
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel		●		○			●	●		●	●
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel		○	●	●			●	●		○	○
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels			●	○		●	●	●		●	●
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys		○				●	○			●	●
		Brass, copper, zinc		●		○						●	●
	Hard non-ferrous metals	Hard aluminium alloys		●		○	○					●	●
		Bronze, titanium				○	●		●	●	●	○	●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys				○			●	●	●	○	●
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)		●		○						●	●
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint		●			●				●	●	●

● = highly suitable ○ = suitable

Safety notes

- The maximum permitted peripheral speed is 50 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.

Wear eye protection!

Wear hearing protection!

Wear gloves!

Wear a dust mask!

Follow the safety instructions!



Mini-POLIFAN CD, CDR



Aluminium oxide A version

For general coarse grinding work with high stock removal rates. Ideal for dressing weld seams in hard-to-reach places. Longer tool life and higher stock removal rate when compared to abrasive discs.



Special features:

- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order backing pad or arbor BO PFF separately.

D_1 [mm]	Abrasive	Grit size	Suitable arbors	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system								
50	A	40	SBH 20–50, BO PFF 50	12,000 – 14,000	10	42719104	CD PFF 50 A 40	-
		60	SBH 20–50, BO PFF 50	12,000 – 14,000	10	42719106	CD PFF 50 A 60	-
		80	SBH 20–50, BO PFF 50	12,000 – 14,000	10	42719108	CD PFF 50 A 80	-
		120	SBH 20–50, BO PFF 50	12,000 – 14,000	10	42719112	CD PFF 50 A 120	-
75	A	40	SBH 75, BO PFF 75	8,000 – 10,000	10	42719204	CD PFF 75 A 40	-
		60	SBH 75, BO PFF 75	8,000 – 10,000	10	42719206	CD PFF 75 A 60	-
		80	SBH 75, BO PFF 75	8,000 – 10,000	10	42719208	CD PFF 75 A 80	-
		120	SBH 75, BO PFF 75	8,000 – 10,000	10	42719212	CD PFF 75 A 120	-
CDR system								
50	A	40	SBHR 20–75	12,000 – 14,000	10	47202527	CDR PFF 50 A 40	-
		60	SBHR 20–75	12,000 – 14,000	10	47202528	CDR PFF 50 A 60	-
		80	SBHR 20–75	12,000 – 14,000	10	47202090	CDR PFF 50 A 80	-
		120	SBHR 20–75	12,000 – 14,000	10	47202529	CDR PFF 50 A 120	-
75	A	40	SBHR 20–75	8,000 – 10,000	10	47202530	CDR PFF 75 A 40	-
		60	SBHR 20–75	8,000 – 10,000	10	47202531	CDR PFF 75 A 60	-
		80	SBHR 20–75	8,000 – 10,000	10	47202091	CDR PFF 75 A 80	-
		120	SBHR 20–75	8,000 – 10,000	10	47202532	CDR PFF 75 A 120	-

COMBIDISC
Mini-POLIFAN CD, CDR



Zirconia alumina Z version

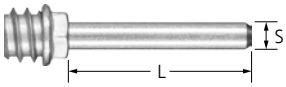
For coarse grinding work with a high stock removal rate and a long tool life.



Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order backing pad or arbor BO PFF separately.

D_1 [mm]	Abrasive	Grit size	Suitable arbors	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system								
50	Z	40	SBH 20–50, BO PFF 50	12,000 – 14,000	10	42719504	CD PFF 50 Z 40	-
		60	SBH 20–50, BO PFF 50	12,000 – 14,000	10	42719506	CD PFF 50 Z 60	-
		80	SBH 20–50, BO PFF 50	12,000 – 14,000	10	42719508	CD PFF 50 Z 80	-
		120	SBH 20–50, BO PFF 50	12,000 – 14,000	10	42719512	CD PFF 50 Z 120	-
75	Z	40	SBH 75, BO PFF 75	8,000 – 10,000	10	42719704	CD PFF 75 Z 40	-
		60	SBH 75, BO PFF 75	8,000 – 10,000	10	42719706	CD PFF 75 Z 60	-
		80	SBH 75, BO PFF 75	8,000 – 10,000	10	42719708	CD PFF 75 Z 80	-
		120	SBH 75, BO PFF 75	8,000 – 10,000	10	42719712	CD PFF 75 Z 120	-
CDR system								
50	Z	40	SBHR 20–75	12,000 – 14,000	10	47202125	CDR PFF 50 Z 40	-
		60	SBHR 20–75	12,000 – 14,000	10	47202126	CDR PFF 50 Z 60	-
		80	SBHR 20–75	12,000 – 14,000	10	47202533	CDR PFF 50 Z 80	-
		120	SBHR 20–75	12,000 – 14,000	10	47202534	CDR PFF 50 Z 120	-
75	Z	40	SBHR 20–75	8,000 – 10,000	10	47202101	CDR PFF 75 Z 40	-
		60	SBHR 20–75	8,000 – 10,000	10	47202535	CDR PFF 75 Z 60	-
		80	SBHR 20–75	8,000 – 10,000	10	47202536	CDR PFF 75 Z 80	-
		120	SBHR 20–75	8,000 – 10,000	10	47202092	CDR PFF 75 Z 120	-

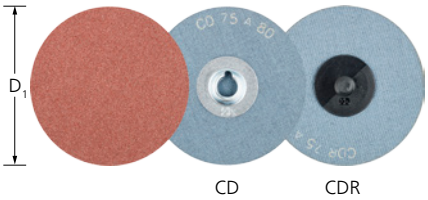
Mini-POLIFAN arbor



BO PFF

Matching arbors for COMBIDISC Mini-POLIFAN.

S [mm]	L [mm]	Matching tool		Item no.	Designation	Price/unit EUR
6	40	CD PFF 50	1	42700050	BO PFF 50	-
		CD PFF 75	1	42700075	BO PFF 75	-



Aluminium oxide A version

For general coarse to fine grinding applications in industry and professional trades.



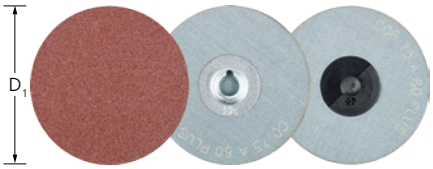
Special features:

- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
20	A	60	20,000 – 35,000	100	42750206	CD 20 A 60	-
		80	20,000 – 35,000	100	42750208	CD 20 A 80	-
		120	20,000 – 35,000	100	42750212	CD 20 A 120	-
		180	20,000 – 35,000	100	42750218	CD 20 A 180	-
		320	20,000 – 35,000	100	42750232	CD 20 A 320	-
25	A	60	15,000 – 26,000	100	42750306	CD 25 A 60	-
		80	15,000 – 26,000	100	42750308	CD 25 A 80	-
		120	15,000 – 26,000	100	42750312	CD 25 A 120	-
		180	15,000 – 26,000	100	42750318	CD 25 A 180	-
		320	15,000 – 26,000	100	42750332	CD 25 A 320	-
38	A	36	10,000 – 16,000	100	42750403	CD 38 A 36	-
		60	10,000 – 16,000	100	42750406	CD 38 A 60	-
		80	10,000 – 16,000	100	42750408	CD 38 A 80	-
		120	10,000 – 16,000	100	42750412	CD 38 A 120	-
		180	10,000 – 16,000	100	42750418	CD 38 A 180	-
		320	10,000 – 16,000	100	42750432	CD 38 A 320	-
50	A	36	8,000 – 13,000	100	42750503	CD 50 A 36	-
		60	8,000 – 13,000	100	42750506	CD 50 A 60	-
		80	8,000 – 13,000	100	42750508	CD 50 A 80	-
		120	8,000 – 13,000	100	42750512	CD 50 A 120	-
		180	8,000 – 13,000	100	42750518	CD 50 A 180	-
		320	8,000 – 13,000	100	42750532	CD 50 A 320	-
75	A	36	5,000 – 9,000	50	42750703	CD 75 A 36	-
		60	5,000 – 9,000	50	42750706	CD 75 A 60	-
		80	5,000 – 9,000	50	42750708	CD 75 A 80	-
		120	5,000 – 9,000	50	42750712	CD 75 A 120	-
		180	5,000 – 9,000	50	42750718	CD 75 A 180	-
		320	5,000 – 9,000	50	42750732	CD 75 A 320	-
CDR system							
20	A	60	20,000 – 35,000	100	42770206	CDR 20 A 60	-
		80	20,000 – 35,000	100	42770208	CDR 20 A 80	-
		120	20,000 – 35,000	100	42770212	CDR 20 A 120	-
		180	20,000 – 35,000	100	*42770218*	CDR 20 A 180	-
		320	20,000 – 35,000	100	*42770232*	CDR 20 A 320	-
25	A	60	15,000 – 26,000	100	42770306	CDR 25 A 60	-
		80	15,000 – 26,000	100	42770308	CDR 25 A 80	-
		120	15,000 – 26,000	100	42770312	CDR 25 A 120	-
		180	15,000 – 26,000	100	42770318	CDR 25 A 180	-
		320	15,000 – 26,000	100	42770332	CDR 25 A 320	-
38	A	36	10,000 – 16,000	100	42770403	CDR 38 A 36	-

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D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
38	A	60	10,000 – 16,000	100	42770406	CDR 38 A 60	-
		80	10,000 – 16,000	100	42770408	CDR 38 A 80	-
		120	10,000 – 16,000	100	42770412	CDR 38 A 120	-
		180	10,000 – 16,000	100	42770418	CDR 38 A 180	-
		320	10,000 – 16,000	100	42770432	CDR 38 A 320	-
50	A	36	8,000 – 13,000	100	42770503	CDR 50 A 36	-
		60	8,000 – 13,000	100	42770506	CDR 50 A 60	-
		80	8,000 – 13,000	100	42770508	CDR 50 A 80	-
		120	8,000 – 13,000	100	42770512	CDR 50 A 120	-
		180	8,000 – 13,000	100	42770518	CDR 50 A 180	-
		320	8,000 – 13,000	100	42770532	CDR 50 A 320	-
75	A	36	5,000 – 9,000	50	42770703	CDR 75 A 36	-
		60	5,000 – 9,000	50	42770706	CDR 75 A 60	-
		80	5,000 – 9,000	50	42770708	CDR 75 A 80	-
		120	5,000 – 9,000	50	42770712	CDR 75 A 120	-
		180	5,000 – 9,000	50	42770718	CDR 75 A 180	-
		320	5,000 – 9,000	50	42770732	CDR 75 A 320	-

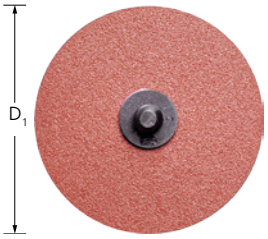


Aluminium oxide A-PLUS version

For general applications from coarse to fine grinding. Higher stock removal rate due to sturdy backing material. Particularly for use in edge grinding due to high tear strength.

Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
50	A-PLUS	36 PLUS	8,000 – 13,000	100	42755503	CD 50 A 36 PLUS	-
		60 PLUS	8,000 – 13,000	100	42755506	CD 50 A 60 PLUS	-
		80 PLUS	8,000 – 13,000	100	42755508	CD 50 A 80 PLUS	-
		120 PLUS	8,000 – 13,000	100	42755512	CD 50 A 120 PLUS	-
75	A-PLUS	36 PLUS	5,000 – 9,000	50	42755703	CD 75 A 36 PLUS	-
		60 PLUS	5,000 – 9,000	50	42755706	CD 75 A 60 PLUS	-
		80 PLUS	5,000 – 9,000	50	42755708	CD 75 A 80 PLUS	-
		120 PLUS	5,000 – 9,000	50	42755712	CD 75 A 120 PLUS	-
CDR system							
50	A-PLUS	36 PLUS	8,000 – 13,000	100	42775503	CDR 50 A 36 PLUS	-
		60 PLUS	8,000 – 13,000	100	42775506	CDR 50 A 60 PLUS	-
		80 PLUS	8,000 – 13,000	100	42775508	CDR 50 A 80 PLUS	-
		120 PLUS	8,000 – 13,000	100	42775512	CDR 50 A 120 PLUS	-
75	A-PLUS	36 PLUS	5,000 – 9,000	50	42775703	CDR 75 A 36 PLUS	-
		60 PLUS	5,000 – 9,000	50	42775706	CDR 75 A 60 PLUS	-
		80 PLUS	5,000 – 9,000	50	42775708	CDR 75 A 80 PLUS	-
		120 PLUS	5,000 – 9,000	50	42775712	CDR 75 A 120 PLUS	-



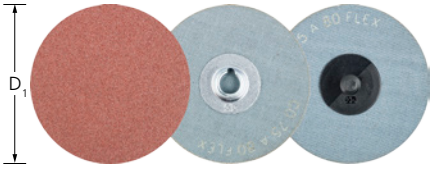
RS aluminium oxide A-PLUS version

Ideal for general applications from coarse to fine grinding on areas that are extremely difficult to access, with a high stock removal rate and long tool life.



Special features:
- Excellent for weld dressing of backwards repair welds, e.g. in cases, slots and grooves on engines.
- The abrasive coating is located on the underside of the tool. This enables convenient and safe backwards working in hard-to-reach areas.
- Ideal for work on welded-on combustor plates. Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CDR system							
38	A-PLUS	60 PLUS	10,000 – 16,000	100	42799025	CDR 38 A 60 PLUS RS	-
		80 PLUS	10,000 – 16,000	100	42799026	CDR 38 A 80 PLUS RS	-
		120 PLUS	10,000 – 16,000	100	42799027	CDR 38 A 120 PLUS RS	-
50	A-PLUS	60 PLUS	8,000 – 13,000	100	42799028	CDR 50 A 60 PLUS RS	-
		80 PLUS	8,000 – 13,000	100	42799029	CDR 50 A 80 PLUS RS	-
		120 PLUS	8,000 – 13,000	100	42799030	CDR 50 A 120 PLUS RS	-
75	A-PLUS	60 PLUS	5,000 – 9,000	50	42799031	CDR 75 A 60 PLUS RS	-
		80 PLUS	5,000 – 9,000	50	42799032	CDR 75 A 80 PLUS RS	-
		120 PLUS	5,000 – 9,000	50	42799033	CDR 75 A 120 PLUS RS	-



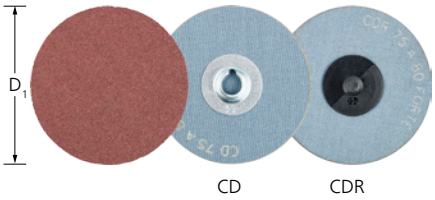
Aluminium oxide A-FLEX version

Particularly flexible abrasive discs, which are especially suitable for work on contours and concave surfaces, e.g. in tool and mould-making. For achieving seamless transitions in the surface finish.

Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
38	A-FLEX	60 FLEX	10,000 – 16,000	100	42757406	CD 38 A 60 FLEX	-
		80 FLEX	10,000 – 16,000	100	42757408	CD 38 A 80 FLEX	-
		120 FLEX	10,000 – 16,000	100	42757412	CD 38 A 120 FLEX	-
50	A-FLEX	60 FLEX	8,000 – 13,000	100	42757506	CD 50 A 60 FLEX	-
		80 FLEX	8,000 – 13,000	100	42757508	CD 50 A 80 FLEX	-
		120 FLEX	8,000 – 13,000	100	42757512	CD 50 A 120 FLEX	-
75	A-FLEX	60 FLEX	5,000 – 9,000	50	42757706	CD 75 A 60 FLEX	-
		80 FLEX	5,000 – 9,000	50	42757708	CD 75 A 80 FLEX	-
		120 FLEX	5,000 – 9,000	50	42757712	CD 75 A 120 FLEX	-
CDR system							
38	A-FLEX	60 FLEX	10,000 – 16,000	100	*42777406*	CDR 38 A 60 FLEX	-
		120 FLEX	10,000 – 16,000	100	*42777412*	CDR 38 A 120 FLEX	-
75	A-FLEX	60 FLEX	5,000 – 9,000	50	*42777706*	CDR 75 A 60 FLEX	-
		80 FLEX	5,000 – 9,000	50	*42777708*	CDR 75 A 80 FLEX	-
		120 FLEX	5,000 – 9,000	50	*42777712*	CDR 75 A 120 FLEX	-

COMBIDISC
Abrasive discs CD, CDR



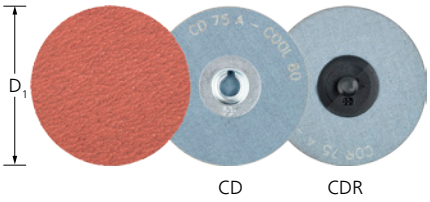
Aluminium oxide A-FORTE version

For general applications from coarse to fine grinding, with a high stock removal rate and long tool life.



Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
25	A-FORTE	60 FORTE	15,000 – 26,000	100	42751306	CD 25 A 60 FORTE	-
		80 FORTE	15,000 – 26,000	100	42751308	CD 25 A 80 FORTE	-
		120 FORTE	15,000 – 26,000	100	42751312	CD 25 A 120 FORTE	-
38	A-FORTE	36 FORTE	10,000 – 16,000	100	42751403	CD 38 A 36 FORTE	-
		60 FORTE	10,000 – 16,000	100	42751406	CD 38 A 60 FORTE	-
		80 FORTE	10,000 – 16,000	100	42751408	CD 38 A 80 FORTE	-
		120 FORTE	10,000 – 16,000	100	42751412	CD 38 A 120 FORTE	-
50	A-FORTE	36 FORTE	8,000 – 13,000	100	42751503	CD 50 A 36 FORTE	-
		60 FORTE	8,000 – 13,000	100	42751506	CD 50 A 60 FORTE	-
		80 FORTE	8,000 – 13,000	100	42751508	CD 50 A 80 FORTE	-
		120 FORTE	8,000 – 13,000	100	42751512	CD 50 A 120 FORTE	-
75	A-FORTE	36 FORTE	5,000 – 9,000	50	42751703	CD 75 A 36 FORTE	-
		60 FORTE	5,000 – 9,000	50	42751706	CD 75 A 60 FORTE	-
		80 FORTE	5,000 – 9,000	50	42751708	CD 75 A 80 FORTE	-
		120 FORTE	5,000 – 9,000	50	42751712	CD 75 A 120 FORTE	-
CDR system							
25	A-FORTE	60 FORTE	15,000 – 26,000	100	42771306	CDR 25 A 60 FORTE	-
		80 FORTE	15,000 – 26,000	100	42771308	CDR 25 A 80 FORTE	-
		120 FORTE	15,000 – 26,000	100	42771312	CDR 25 A 120 FORTE	-
38	A-FORTE	36 FORTE	10,000 – 16,000	100	42771403	CDR 38 A 36 FORTE	-
		60 FORTE	10,000 – 16,000	100	42771406	CDR 38 A 60 FORTE	-
		80 FORTE	10,000 – 16,000	100	42771408	CDR 38 A 80 FORTE	-
		120 FORTE	10,000 – 16,000	100	42771412	CDR 38 A 120 FORTE	-
50	A-FORTE	36 FORTE	8,000 – 13,000	100	42771503	CDR 50 A 36 FORTE	-
		60 FORTE	8,000 – 13,000	100	42771506	CDR 50 A 60 FORTE	-
		80 FORTE	8,000 – 13,000	100	42771508	CDR 50 A 80 FORTE	-
		120 FORTE	8,000 – 13,000	100	42771512	CDR 50 A 120 FORTE	-
75	A-FORTE	36 FORTE	5,000 – 9,000	50	42771703	CDR 75 A 36 FORTE	-
		60 FORTE	5,000 – 9,000	50	42771706	CDR 75 A 60 FORTE	-
		80 FORTE	5,000 – 9,000	50	42771708	CDR 75 A 80 FORTE	-
		120 FORTE	5,000 – 9,000	50	42771712	CDR 75 A 120 FORTE	-



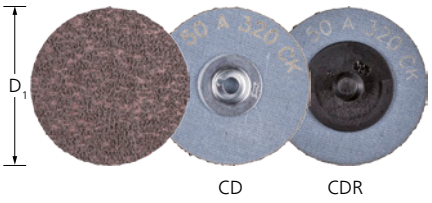
Aluminium oxide A-COOL version

For general applications from coarse to fine grinding on materials with challenging stock removal properties, e.g. stainless steel (INOX). Active grinding additives substantially improve the stock removal rate, prevent clogging and result in cooler grinding.



Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
50	A-COOL	36	8,000 – 13,000	100	42752503	CD 50 A-COOL 36	-
		60	8,000 – 13,000	100	42752506	CD 50 A-COOL 60	-
		80	8,000 – 13,000	100	42752508	CD 50 A-COOL 80	-
75	A-COOL	36	5,000 – 9,000	50	42752703	CD 75 A-COOL 36	-
		60	5,000 – 9,000	50	42752706	CD 75 A-COOL 60	-
		80	5,000 – 9,000	50	42752708	CD 75 A-COOL 80	-
CDR system							
50	A-COOL	36	8,000 – 13,000	100	42772503	CDR 50 A-COOL 36	-
		60	8,000 – 13,000	100	42772506	CDR 50 A-COOL 60	-
		80	8,000 – 13,000	100	42772508	CDR 50 A-COOL 80	-
75	A-COOL	36	5,000 – 9,000	50	*42772703*	CDR 75 A-COOL 36	-
		60	5,000 – 9,000	50	*42772706*	CDR 75 A-COOL 60	-
		80	5,000 – 9,000	50	*42772708*	CDR 75 A-COOL 80	-



Aluminium oxide A compact grain version

Outstandingly suited to fine and very fine grinding, and for step-by-step preparations for polishing. The self-sharpening compact grain facilitates a very long tool life and achieves consistent surface quality levels throughout the entire tool life.

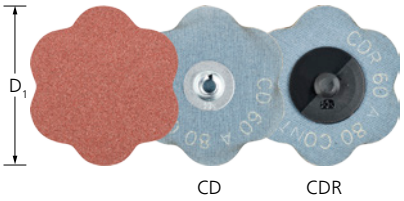
Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately. Only use backing pad with dia. 20–50 mm.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
50	A-CK	120	3,800 – 13,000	100	42755012	CD 50 A 120 CK	-
		180	3,800 – 13,000	100	42755018	CD 50 A 180 CK	-
		240	3,800 – 13,000	100	42755024	CD 50 A 240 CK	-
		320	3,800 – 13,000	100	42755032	CD 50 A 320 CK	-
		400	3,800 – 13,000	100	42755040	CD 50 A 400 CK	-
		600	3,800 – 13,000	100	42755060	CD 50 A 600 CK	-
		800	3,800 – 13,000	100	42755080	CD 50 A 800 CK	-
		1000	3,800 – 13,000	100	42755100	CD 50 A 1000 CK	-
		1200	3,800 – 13,000	100	42755120	CD 50 A 1200 CK	-
75	A-CK	120	2,500 – 9,000	50	*42757012*	CD 75 A 120 CK	-
		180	2,500 – 9,000	50	*42757018*	CD 75 A 180 CK	-
		400	2,500 – 9,000	50	*42757040*	CD 75 A 400 CK	-

Continued on next page

COMBIDISC
Abrasive discs CD, CDR

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
75	A-CK	600	2,500 – 9,000	50	*42757060*	CD 75 A 600 CK	-
		800	2,500 – 9,000	50	*42757080*	CD 75 A 800 CK	-
		1000	2,500 – 9,000	50	*42757100*	CD 75 A 1000 CK	-
		1200	2,500 – 9,000	50	*42757120*	CD 75 A 1200 CK	-
CDR system							
50	A-CK	120	3,800 – 13,000	100	42795012	CDR 50 A 120 CK	-
		180	3,800 – 13,000	100	42795018	CDR 50 A 180 CK	-
		240	3,800 – 13,000	100	42795024	CDR 50 A 240 CK	-
		320	3,800 – 13,000	100	42795032	CDR 50 A 320 CK	-
		400	3,800 – 13,000	100	42795040	CDR 50 A 400 CK	-
		600	3,800 – 13,000	100	42795060	CDR 50 A 600 CK	-
		800	3,800 – 13,000	100	42795080	CDR 50 A 800 CK	-
		1000	3,800 – 13,000	100	42795100	CDR 50 A 1000 CK	-
		1200	3,800 – 13,000	100	42795120	CDR 50 A 1200 CK	-
75	A-CK	120	2,500 – 9,000	50	*42797012*	CDR 75 A 120 CK	-
		180	2,500 – 9,000	50	*42797018*	CDR 75 A 180 CK	-
		240	2,500 – 9,000	50	*42797024*	CDR 75 A 240 CK	-
		320	2,500 – 9,000	50	*42797032*	CDR 75 A 320 CK	-
		400	2,500 – 9,000	50	*42797040*	CDR 75 A 400 CK	-
		600	2,500 – 9,000	50	*42797060*	CDR 75 A 600 CK	-
		800	2,500 – 9,000	50	*42797080*	CDR 75 A 800 CK	-
		1000	2,500 – 9,000	50	*42797100*	CDR 75 A 1000 CK	-
		1200	2,500 – 9,000	50	*42797120*	CDR 75 A 1200 CK	-



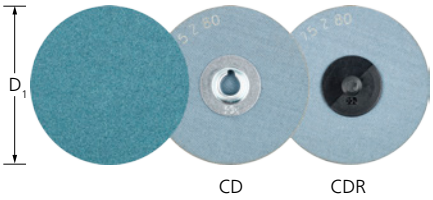
Aluminium oxide A-CONTOUR version

Very flexible and adaptable on account of the outer contour. Cutting into the workpiece is avoided.



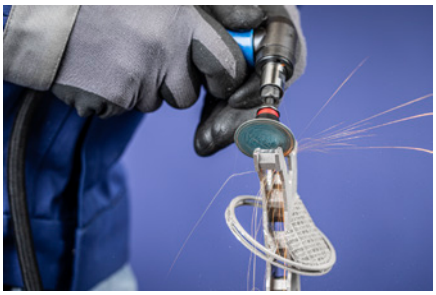
Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
60	A	60 CONTOUR	7,500 – 11,000	50	42759001	CD 60 A 60 CONTOUR	-
		80 CONTOUR	7,500 – 11,000	50	42759002	CD 60 A 80 CONTOUR	-
		120 CONTOUR	7,500 – 11,000	50	42759003	CD 60 A 120 CONTOUR	-
		180 CONTOUR	7,500 – 11,000	50	42759004	CD 60 A 180 CONTOUR	-
CDR system							
60	A	60 CONTOUR	7,500 – 11,000	50	42759005	CDR 60 A 60 CONTOUR	-
		80 CONTOUR	7,500 – 11,000	50	42759006	CDR 60 A 80 CONTOUR	-
		120 CONTOUR	7,500 – 11,000	50	42759007	CDR 60 A 120 CONTOUR	-
		180 CONTOUR	7,500 – 11,000	50	42759008	CDR 60 A 180 CONTOUR	-



Zirconia alumina Z version

For coarse grinding work with a high stock removal rate and a long tool life. Particularly high stock removal rate in coarse grinding applications using grit sizes 36 and 60.

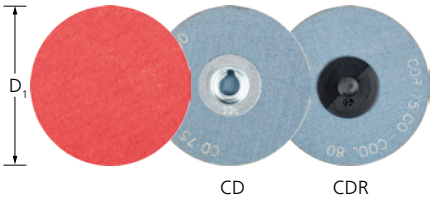


Special features:

- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
38	Z	36	5,000 – 16,000	100	42753403	CD 38 Z 36	-
		60	5,000 – 16,000	100	42753406	CD 38 Z 60	-
		80	5,000 – 16,000	100	42753408	CD 38 Z 80	-
50	Z	36	3,800 – 13,000	100	42753503	CD 50 Z 36	-
		60	3,800 – 13,000	100	42753506	CD 50 Z 60	-
		80	3,800 – 13,000	100	42753508	CD 50 Z 80	-
75	Z	36	2,500 – 9,000	50	42753703	CD 75 Z 36	-
		60	2,500 – 9,000	50	42753706	CD 75 Z 60	-
		80	2,500 – 9,000	50	42753708	CD 75 Z 80	-
CDR system							
38	Z	36	5,000 – 16,000	100	42773403	CDR 38 Z 36	-
		60	5,000 – 16,000	100	42773406	CDR 38 Z 60	-
		80	5,000 – 16,000	100	42773408	CDR 38 Z 80	-
50	Z	36	3,800 – 13,000	100	42773503	CDR 50 Z 36	-
		60	3,800 – 13,000	100	42773506	CDR 50 Z 60	-
		80	3,800 – 13,000	100	42773508	CDR 50 Z 80	-
75	Z	36	2,500 – 9,000	50	42773703	CDR 75 Z 36	-
		60	2,500 – 9,000	50	42773706	CDR 75 Z 60	-
		80	2,500 – 9,000	50	42773708	CDR 75 Z 80	-

COMBIDISC
Abrasive discs CD, CDR



Ceramic oxide grain CO-COOL version

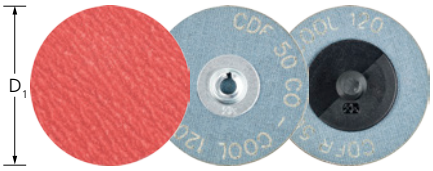
Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding on hard materials which do not conduct heat well.



Special features:

- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
38	CO-COOL	24	5,000 – 16,000	100	42756402	CD 38 CO-COOL 24	-
		36	5,000 – 16,000	100	42756403	CD 38 CO-COOL 36	-
		60	5,000 – 16,000	100	42756406	CD 38 CO-COOL 60	-
		80	5,000 – 16,000	100	42756408	CD 38 CO-COOL 80	-
		120	5,000 – 16,000	100	42756412	CD 38 CO-COOL 120	-
50	CO-COOL	24	3,800 – 13,000	100	42756502	CD 50 CO-COOL 24	-
		36	3,800 – 13,000	100	42756503	CD 50 CO-COOL 36	-
		60	3,800 – 13,000	100	42756506	CD 50 CO-COOL 60	-
		80	3,800 – 13,000	100	42756508	CD 50 CO-COOL 80	-
		120	3,800 – 13,000	100	42756512	CD 50 CO-COOL 120	-
75	CO-COOL	24	2,500 – 9,000	50	42756702	CD 75 CO-COOL 24	-
		36	2,500 – 9,000	50	42756703	CD 75 CO-COOL 36	-
		60	2,500 – 9,000	50	42756706	CD 75 CO-COOL 60	-
		80	2,500 – 9,000	50	42756708	CD 75 CO-COOL 80	-
		120	2,500 – 9,000	50	42756712	CD 75 CO-COOL 120	-
CDR system							
38	CO-COOL	36	5,000 – 16,000	100	42776403	CDR 38 CO-COOL 36	-
		60	5,000 – 16,000	100	42776406	CDR 38 CO-COOL 60	-
		80	5,000 – 16,000	100	42776408	CDR 38 CO-COOL 80	-
		120	5,000 – 16,000	100	42776412	CDR 38 CO-COOL 120	-
50	CO-COOL	24	3,800 – 13,000	100	42776502	CDR 50 CO-COOL 24	-
		36	3,800 – 13,000	100	42776503	CDR 50 CO-COOL 36	-
		60	3,800 – 13,000	100	42776506	CDR 50 CO-COOL 60	-
		80	3,800 – 13,000	100	42776508	CDR 50 CO-COOL 80	-
		120	3,800 – 13,000	100	42776512	CDR 50 CO-COOL 120	-
75	CO-COOL	24	2,500 – 9,000	50	42776702	CDR 75 CO-COOL 24	-
		36	2,500 – 9,000	50	42776703	CDR 75 CO-COOL 36	-
		60	2,500 – 9,000	50	42776706	CDR 75 CO-COOL 60	-
		80	2,500 – 9,000	50	42776708	CDR 75 CO-COOL 80	-
		120	2,500 – 9,000	50	42776712	CDR 75 CO-COOL 120	-

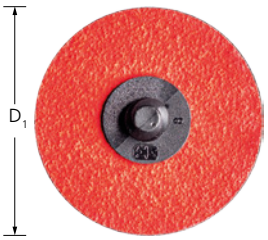


Ceramic oxide grain CO-COOL midget fibre discs type

Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding on hard materials which do not conduct heat well.

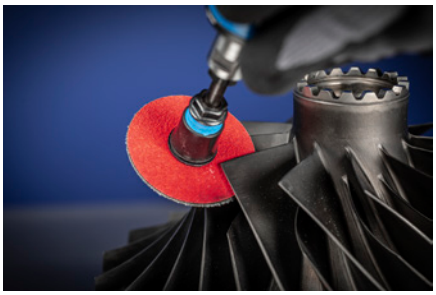
Special features:
- Excellent for surface and edge grinding. The fibre backing strengthens the abrasive disc and improves stock removal.
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- Please order necessary backing pad separately. No disruptions in use due to adhesion, slipping or coming loose.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
50	CO-COOL	36	3,800 – 13,000	100	42749503	CDF 50 CO-COOL 36	-
		50	3,800 – 13,000	100	42749505	CDF 50 CO-COOL 50	-
		80	3,800 – 13,000	100	42749508	CDF 50 CO-COOL 80	-
		120	3,800 – 13,000	100	42749512	CDF 50 CO-COOL 120	-
75	CO-COOL	36	2,500 – 9,000	50	42749703	CDF 75 CO-COOL 36	-
		50	2,500 – 9,000	50	42749705	CDF 75 CO-COOL 50	-
		80	2,500 – 9,000	50	42749708	CDF 75 CO-COOL 80	-
		120	2,500 – 9,000	50	42749712	CDF 75 CO-COOL 120	-
CDR system							
50	CO-COOL	36	3,800 – 13,000	100	42778503	CDFR 50 CO-COOL 36	-
		50	3,800 – 13,000	100	42778505	CDFR 50 CO-COOL 50	-
		80	3,800 – 13,000	100	42778508	CDFR 50 CO-COOL 80	-
		120	3,800 – 13,000	100	42778512	CDFR 50 CO-COOL 120	-
75	CO-COOL	36	2,500 – 9,000	50	42778703	CDFR 75 CO-COOL 36	-
		50	2,500 – 9,000	50	42778705	CDFR 75 CO-COOL 50	-
		80	2,500 – 9,000	50	42778708	CDFR 75 CO-COOL 80	-
		120	2,500 – 9,000	50	42778712	CDFR 75 CO-COOL 120	-



RS ceramic oxide grain CO-COOL midget fibre disc version

Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding on hard materials which do not conduct heat well.

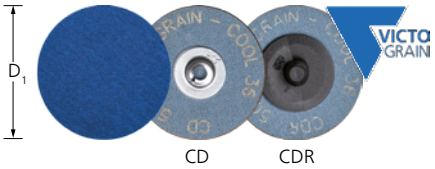


Special features:
- Excellent for weld dressing of backwards repair welds, e.g. in cases, slots and grooves on engines.
- The abrasive coating is located on the underside of the tool. This enables convenient and safe backwards working in hard-to-reach areas.
- Ideal for work on welded-on combustor plates. Order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CDR system							
38	CO-COOL	50	10,000 – 16,000	100	42799010	CDFR 38 CO-COOL 50 RS	-
		80	10,000 – 16,000	100	47201013	CDFR 38 CO-COOL 80 RS	-
		120	10,000 – 16,000	100	42799011	CDFR 38 CO-COOL 120 RS	-
50	CO-COOL	50	3,800 – 13,000	100	42799012	CDFR 50 CO-COOL 50 RS	-
		80	3,800 – 13,000	100	47201007	CDFR 50 CO-COOL 80 RS	-
		120	3,800 – 13,000	100	42799013	CDFR 50 CO-COOL 120 RS	-
75	CO-COOL	50	2,500 – 9,000	50	42799014	CDFR 75 CO-COOL 50 RS	-

Continued on next page

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
75	CO-COOL	80	2,500 – 9,000	50	47201014	CDFR 75 CO-COOL 80 RS	-
		120	2,500 – 9,000	50	42799015	CDFR 75 CO-COOL 120 RS	-

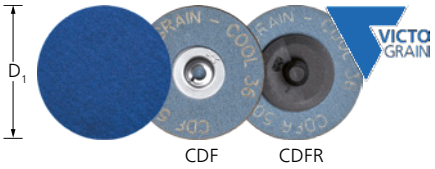


VICTOGRAIN-COOL version

For maximum aggressive grinding with an extremely long tool life, the ultimate stock removal rate and consistently high performance on steel and hard materials which do not conduct heat well. Active grinding additives in the coating prevent clogging and result in cooler grinding.

Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
38	VICTOGRAIN-COOL	36	5,000 – 16,000	100	42798001	CD 38 VICTOGRAIN-COOL 36	-
50	VICTOGRAIN-COOL	36	3,800 – 13,000	100	42798002	CD 50 VICTOGRAIN-COOL 36	-
75	VICTOGRAIN-COOL	36	2,500 – 9,000	50	42798003	CD 75 VICTOGRAIN-COOL 36	-
CDR system							
38	VICTOGRAIN-COOL	36	5,000 – 16,000	100	42799001	CDR 38 VICTOGRAIN-COOL 36	-
50	VICTOGRAIN-COOL	36	3,800 – 13,000	100	42799002	CDR 50 VICTOGRAIN-COOL 36	-
75	VICTOGRAIN-COOL	36	2,500 – 9,000	50	42799003	CDR 75 VICTOGRAIN-COOL 36	-

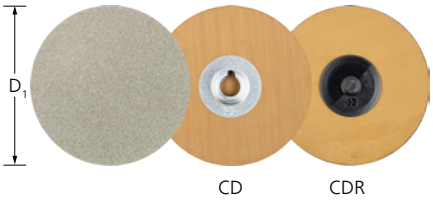


VICTOGRAIN-COOL midget fibre discs type

For maximum aggressive grinding with an extremely long tool life, the ultimate stock removal rate and consistently high performance on steel and hard materials which do not conduct heat well. Active grinding additives in the coating prevent clogging and result in cooler grinding.

Special features:
- Excellent for surface and edge grinding. The fibre backing strengthens the abrasive disc and improves stock removal.
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- Please order necessary backing pad separately. No disruptions in use due to adhesion, slipping or coming loose.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
38	VICTOGRAIN-COOL	36	5,000 – 16,000	100	42703836	CDF 38 VICTOGRAIN-COOL 36	-
50	VICTOGRAIN-COOL	36	3,800 – 13,000	100	42705036	CDF 50 VICTOGRAIN-COOL 36	-
75	VICTOGRAIN-COOL	36	2,500 – 9,000	50	42707536	CDF 75 VICTOGRAIN-COOL 36	-
CDR system							
38	VICTOGRAIN-COOL	36	5,000 – 16,000	100	42713836	CDFR 38 VICTOGRAIN-COOL 36	-
50	VICTOGRAIN-COOL	36	3,800 – 13,000	100	42715036	CDFR 50 VICTOGRAIN-COOL 36	-
75	VICTOGRAIN-COOL	36	2,500 – 9,000	50	42717536	CDFR 75 VICTOGRAIN-COOL 36	-



Diamond version

Excellent for work on extremely hard materials, wear-resistant coatings and for hard facings. Particularly recommended for work on materials used for aircraft engine construction.

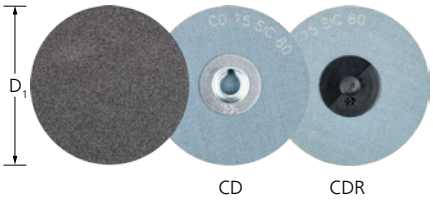


Special features:

- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- Please order necessary backing pad separately. No disruptions in use due to adhesion, slipping or coming loose.
- The diamond grit sizes correspond to the following grit sizes according to ISO 6344: D 251 = P 60; D 126 = P 120; D 76 = P 220.

D_1 [mm]	Abrasive	Grit size [µm]	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
25	DIA	251	7,500 – 15,000	10	42740001	CD DIA 25 D 251 - P 60	-
		126	7,500 – 15,000	10	42740002	CD DIA 25 D 126 - P 120	-
		76	7,500 – 15,000	10	42740003	CD DIA 25 D 76 - P 220	-
38	DIA	251	5,000 – 10,000	10	42740004	CD DIA 38 D 251 - P 60	-
		126	5,000 – 10,000	10	42740005	CD DIA 38 D 126 - P 120	-
		76	5,000 – 10,000	10	42740006	CD DIA 38 D 76 - P 220	-
50	DIA	251	3,800 – 7,500	10	42740007	CD DIA 50 D 251 - P 60	-
		126	3,800 – 7,500	10	42740008	CD DIA 50 D 126 - P 120	-
		76	3,800 – 7,500	10	42740009	CD DIA 50 D 76 - P 220	-
75	DIA	251	2,500 – 5,000	10	42740010	CD DIA 75 D 251 - P 60	-
		126	2,500 – 5,000	10	42740011	CD DIA 75 D 126 - P 120	-
		76	2,500 – 5,000	10	42740012	CD DIA 75 D 76 - P 220	-
CDR system							
25	DIA	251	7,500 – 15,000	10	*42758001*	CDR DIA 25 D 251 - P 60	-
		126	7,500 – 15,000	10	*42758002*	CDR DIA 25 D 126 - P 120	-
38	DIA	251	5,000 – 10,000	10	*42758004*	CDR DIA 38 D 251 - P 60	-
		126	5,000 – 10,000	10	*42758005*	CDR DIA 38 D 126 - P 120	-
50	DIA	251	3,800 – 7,500	10	42758007	CDR DIA 50 D 251 - P 60	-
		126	3,800 – 7,500	10	42758008	CDR DIA 50 D 126 - P 120	-
		76	3,800 – 7,500	10	42758009	CDR DIA 50 D 76 - P 220	-

COMBIDISC
Abrasive discs CD, CDR



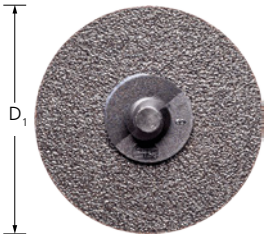
Silicon carbide SiC version

For general grinding work on components made of aluminium, copper, bronze, titanium and fibre-reinforced plastics. Particularly recommended for use on titanium alloys. Ideally suited for use in the aircraft industry, particularly when SiC is the only abrasive approved for use.



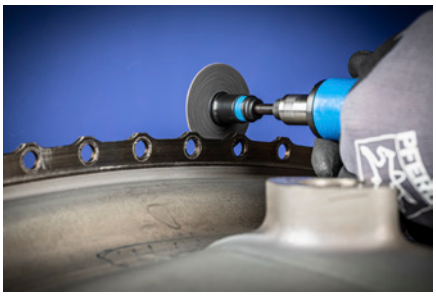
Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
50	SiC	36	3,800 – 13,000	100	42754503	CD 50 SiC 36	-
		60	3,800 – 13,000	100	42754506	CD 50 SiC 60	-
		80	3,800 – 13,000	100	42754508	CD 50 SiC 80	-
		120	3,800 – 13,000	100	42754512	CD 50 SiC 120	-
		240	3,800 – 13,000	100	42754524	CD 50 SiC 240	-
75	SiC	36	2,500 – 9,000	50	42754703	CD 75 SiC 36	-
		60	2,500 – 9,000	50	42754706	CD 75 SiC 60	-
		80	2,500 – 9,000	50	42754708	CD 75 SiC 80	-
		120	2,500 – 9,000	50	42754712	CD 75 SiC 120	-
		240	2,500 – 9,000	50	42754724	CD 75 SiC 240	-
CDR system							
50	SiC	36	3,800 – 13,000	100	42774503	CDR 50 SiC 36	-
		60	3,800 – 13,000	100	42774506	CDR 50 SiC 60	-
		80	3,800 – 13,000	100	42774508	CDR 50 SiC 80	-
		120	3,800 – 13,000	100	42774512	CDR 50 SiC 120	-
		240	3,800 – 13,000	100	42774524	CDR 50 SiC 240	-
75	SiC	36	2,500 – 9,000	50	42774703	CDR 75 SiC 36	-
		60	2,500 – 9,000	50	42774706	CDR 75 SiC 60	-
		80	2,500 – 9,000	50	42774708	CDR 75 SiC 80	-
		120	2,500 – 9,000	50	42774712	CDR 75 SiC 120	-
		240	2,500 – 9,000	50	42774724	CDR 75 SiC 240	-



RS silicon carbide SiC version

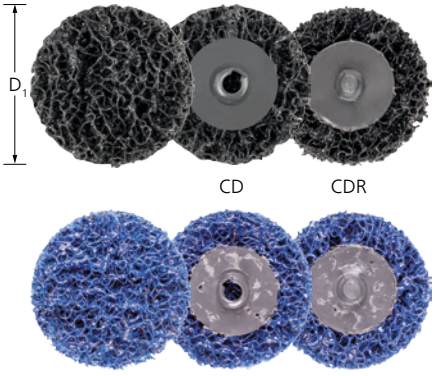
For general grinding work on components made of aluminium, copper, bronze, titanium and fibre-reinforced plastics. Particularly recommended for use on titanium alloys. Ideally suited for use in the aircraft industry, particularly when SiC is the only abrasive approved for use.



Special features:
- Excellent for weld dressing of backwards repair welds, e.g. in cases, slots and grooves on engines.
- The abrasive coating is located on the underside of the tool. This enables convenient and safe backwards working in hard-to-reach areas.
- Ideal for work on welded-on combustor plates. Order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CDR system							
38	SiC	60	10,000 – 16,000	100	42799016	CDR 38 SiC 60 RS	-
		80	10,000 – 16,000	100	42799017	CDR 38 SiC 80 RS	-
		120	10,000 – 16,000	100	42799018	CDR 38 SiC 120 RS	-
50	SiC	60	3,800 – 13,000	100	42799019	CDR 50 SiC 60 RS	-
		80	3,800 – 13,000	100	42799020	CDR 50 SiC 80 RS	-
		120	3,800 – 13,000	100	42799021	CDR 50 SiC 120 RS	-
75	SiC	60	2,500 – 9,000	50	42799022	CDR 75 SiC 60 RS	-
		80	2,500 – 9,000	50	42799023	CDR 75 SiC 80 RS	-
		120	2,500 – 9,000	50	42799024	CDR 75 SiC 120 RS	-

POLICLEAN discs CD, CDR



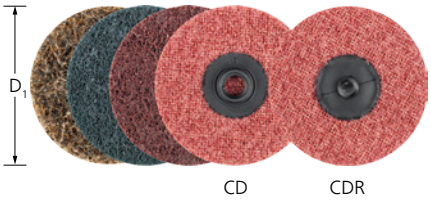
PCLR and PCLR PLUS types

For coarse cleaning work, such as removing paint, scale, heat discolouration, rust and adhesive residues in face-down grinding. POLICLEAN-PLUS discs (blue) exhibit a higher stock removal rate with a very long tool life. Available in the aluminium oxide A and silicon carbide SiC types.

Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Version	Abrasive	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
50	PCLR	SiC	5,500 – 8,000	10	42780050	CD 50 PCLR	-
	PCLR PLUS	A	5,500 – 8,000	10	42780051	CD 50 PCLR PLUS	-
75	PCLR	SiC	3,800 – 5,000	10	42780075	CD 75 PCLR	-
	PCLR PLUS	A	3,800 – 5,000	10	42780076	CD 75 PCLR PLUS	-
CDR system							
50	PCLR	SiC	5,500 – 8,000	10	47201632	CDR 50 PCLR	-
	PCLR PLUS	A	5,500 – 8,000	10	42780052	CDR 50 PCLR PLUS	-
75	PCLR	SiC	3,800 – 5,000	10	47201633	CDR 75 PCLR	-
	PCLR PLUS	A	3,800 – 5,000	10	42780077	CDR 75 PCLR PLUS	-

COMBIDISC
Non-woven discs CD, CDR



Hard type VRH

Suitable for general work on small and medium-sized metal surfaces, e.g. removing rough grinding traces, removing oxidation and light deburring work. Achieve matt and satin-finished surfaces.



Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Version	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system								
20	A	100 G	coarse, yellow-brown	14,000 – 19,000	50	47201114	CD VRH 20 A 100 G	-
		180 M	medium, red-brown	14,000 – 19,000	50	47201102	CD VRH 20 A 180 M	-
		240 F	fine, blue	14,000 – 19,000	50	42761204	CD VRH 20 A 240 F	-
25	A	100 G	coarse, yellow-brown	11,000 – 15,000	50	42761251	CD VRH 25 A 100 G	-
		180 M	medium, red-brown	11,000 – 15,000	50	42761252	CD VRH 25 A 180 M	-
		240 F	fine, blue	11,000 – 15,000	50	42761254	CD VRH 25 A 240 F	-
38	A	100 G	coarse, yellow-brown	7,000 – 10,000	50	42761381	CD VRH 38 A 100 G	-
		180 M	medium, red-brown	7,000 – 10,000	50	42761382	CD VRH 38 A 180 M	-
		240 F	fine, blue	7,000 – 10,000	50	42761384	CD VRH 38 A 240 F	-
50	A	100 G	coarse, yellow-brown	5,500 – 7,500	50	42761501	CD VRH 50 A 100 G	-
		180 M	medium, red-brown	5,500 – 7,500	50	42761502	CD VRH 50 A 180 M	-
		240 F	fine, blue	5,500 – 7,500	50	42761504	CD VRH 50 A 240 F	-
75	A	100 G	coarse, yellow-brown	3,800 – 5,000	25	42761751	CD VRH 75 A 100 G	-
		180 M	medium, red-brown	3,800 – 5,000	25	42761752	CD VRH 75 A 180 M	-
		240 F	fine, blue	3,800 – 5,000	25	42761754	CD VRH 75 A 240 F	-
CDR system								
38	A	100 G	coarse, yellow-brown	7,000 – 10,000	50	42781381	CDR VRH 38 A 100 G	-
		180 M	medium, red-brown	7,000 – 10,000	50	42781382	CDR VRH 38 A 180 M	-
		240 F	fine, blue	7,000 – 10,000	50	42781384	CDR VRH 38 A 240 F	-
50	A	100 G	coarse, yellow-brown	5,500 – 7,500	50	42781501	CDR VRH 50 A 100 G	-
		180 M	medium, red-brown	5,500 – 7,500	50	42781502	CDR VRH 50 A 180 M	-
		240 F	fine, blue	5,500 – 7,500	50	42781504	CDR VRH 50 A 240 F	-
75	A	100 G	coarse, yellow-brown	3,800 – 5,000	25	42781751	CDR VRH 75 A 100 G	-
		180 M	medium, red-brown	3,800 – 5,000	25	42781752	CDR VRH 75 A 180 M	-
		240 F	fine, blue	3,800 – 5,000	25	42781754	CDR VRH 75 A 240 F	-



Soft type VRW

Suitable for very fine grinding on small and medium-sized surfaces and contours, and for cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces. Highly open structure.



Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Version	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system								
38	A	100	medium	7,000 – 10,000	50	47201079	CD VRW 38 A 100	-
		180	fine	7,000 – 10,000	50	47201070	CD VRW 38 A 180	-
		280	very fine	7,000 – 10,000	50	47201071	CD VRW 38 A 280	-
50	A	100	medium	5,500 – 7,500	50	42760502	CD VRW 50 A 100	-
		180	fine	5,500 – 7,500	50	42760503	CD VRW 50 A 180	-
		280	very fine	5,500 – 7,500	50	42760504	CD VRW 50 A 280	-
75	A	100	medium	3,800 – 5,000	25	42760752	CD VRW 75 A 100	-
		180	fine	3,800 – 5,000	25	42760753	CD VRW 75 A 180	-
		280	very fine	3,800 – 5,000	25	42760754	CD VRW 75 A 280	-
CDR system								
50	A	100	medium	5,500 – 7,500	50	42780502	CDR VRW 50 A 100	-
		180	fine	5,500 – 7,500	50	42780503	CDR VRW 50 A 180	-
		280	very fine	5,500 – 7,500	50	42780504	CDR VRW 50 A 280	-
75	A	100	medium	3,800 – 5,000	25	42780752	CDR VRW 75 A 100	-
		180	fine	3,800 – 5,000	25	42780753	CDR VRW 75 A 180	-
		280	very fine	3,800 – 5,000	25	42780754	CDR VRW 75 A 280	-



PNER type

For achieving a very fine, uniform surface finish which, depending on requirements, is a sufficient preparation for high-gloss polishing. Particularly suitable for work on small and medium-sized surfaces on stainless steel (INOX) components.



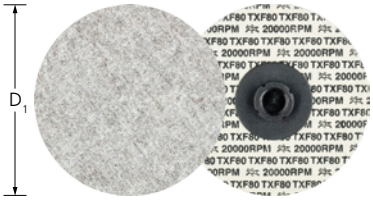
Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Version	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
CD system									
50	W (soft)	A	G (coarse)	9,500	19,100	25	42759021	CD PNER-W 5006 A G	-
		SiC	F (fine)	9,500	19,100	25	42759024	CD PNER-W 5006 SiC F	-
	MH (medium-hard)	A	F (fine)	9,500	19,100	25	42759102	CD PNER-MH 5006 A F	-
		SiC	F (fine)	9,500	19,100	25	42759104	CD PNER-MH 5006 SiC F	-

Continued on next page

D_1 [mm]	Version	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
50	H (hard)	A	G (coarse)	9,500	19,100	25	42759141	CD PNER-H 5006 A G	-
			F (fine)	9,500	19,100	25	42759142	CD PNER-H 5006 A F	-
75	W (soft)	A	G (coarse)	6,400	12,500	25	42759031	CD PNER-W 7506 A G	-
		SiC	F (fine)	6,400	12,500	25	42759034	CD PNER-W 7506 SiC F	-
	MH (medium-hard)	A	F (fine)	6,400	12,500	25	42759112	CD PNER-MH 7506 A F	-
		SiC	F (fine)	6,400	12,500	25	42759114	CD PNER-MH 7506 SiC F	-
	H (hard)	A	G (coarse)	6,400	12,500	25	42759151	CD PNER-H 7506 A G	-
			F (fine)	6,400	12,500	25	42759152	CD PNER-H 7506 A F	-
CDR system									
50	W (soft)	A	G (coarse)	9,500	19,100	25	42779021	CDR PNER-W 5006 A G	-
		SiC	F (fine)	9,500	19,100	25	42779024	CDR PNER-W 5006 SiC F	-
	MH (medium-hard)	A	F (fine)	9,500	19,100	25	42779102	CDR PNER-MH 5006 A F	-
		SiC	F (fine)	9,500	19,100	25	42779104	CDR PNER-MH 5006 SiC F	-
	H (hard)	A	G (coarse)	9,500	19,100	25	42779141	CDR PNER-H 5006 A G	-
			F (fine)	9,500	19,100	25	42779142	CDR PNER-H 5006 A F	-
75	W (soft)	A	G (coarse)	6,400	12,500	25	42779031	CDR PNER-W 7506 A G	-
		SiC	F (fine)	6,400	12,500	25	42779034	CDR PNER-W 7506 SiC F	-
	MH (medium-hard)	A	F (fine)	6,400	12,500	25	42779112	CDR PNER-MH 7506 A F	-
		SiC	F (fine)	6,400	12,500	25	42779114	CDR PNER-MH 7506 SiC F	-
	H (hard)	A	G (coarse)	6,400	12,500	25	42779151	CDR PNER-H 7506 A G	-
			F (fine)	6,400	12,500	25	42779152	CDR PNER-H 7506 A F	-

TX discs CD



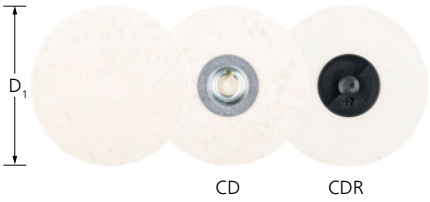
Aluminium oxide A version

For achieving fine, matt surface finishes in one process. The very sturdy granular bond facilitates very aggressive abrasive performance. Particularly suitable for work on stainless steel (INOX) and aluminium.



Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system							
50	A	80 TX	7,500 – 9,500	25	*42762508*	CD 50 A 80 TX	-
75	A	320 TX	5,000 – 6,500	25	*42762732*	CD 75 A 320 TX	-



FR version

Suitable for polishing with polishing paste bars, grinding pastes or diamond polishing pastes in face-down grinding on small and medium-sized surfaces.

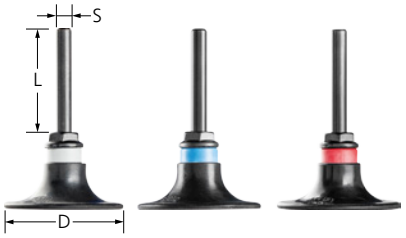


Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- Please order necessary backing pad separately.

D_1 [mm]	Opt. RPM		Item no.	Designation	Price/unit EUR
CD system					
50	2,000 – 4,000	10	42770050	CD FR 50	-
75	1,200 – 2,500	10	42770075	CD FR 75	-
CDR system					
50	2,000 – 4,000	10	42003050	CDR FR 50	-
75	1,200 – 2,500	10	42003075	CDR FR 75	-

4

Abrasive disc holder



SBH, SBHR types

Matching arbors for COMBIDISC grinding tools. Available in three different hardness grades.

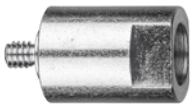
Special features:
- High economic efficiency as tool can be changed quickly. Very comfortable due to ease of use and low-vibration working.
- No disruptions in use due to adhesion, slipping or coming loose.
- The different hardness grades are colour-coded: W (soft) = grey; M (medium) = blue; H (hard) = red.

D [mm]	S [mm]	L [mm]	Hardness	Max. RPM		Item no.	Designation	Price/unit EUR
CD system								
20	6	40	M (medium)	47,500	1	42721202	SBH 20 M	-
25	6	40	M (medium)	38,000	1	42721252	SBH 25 M	-
38	6	40	W (soft)	25,000	1	42721383	SBH 38 W	-
			M (medium)	25,000	1	42721382	SBH 38 M	-
			H (hard)	25,000	1	42721381	SBH 38 H	-
50	6	40	W (soft)	19,000	1	42721503	SBH 50 W	-
			M (medium)	19,000	1	42721502	SBH 50 M	-
			H (hard)	19,000	1	42721501	SBH 50 H	-
75	6	40	W (soft)	12,500	1	42721753	SBH 75 W	-
			M (medium)	12,500	1	42721752	SBH 75 M	-
			H (hard)	12,500	1	42721751	SBH 75 H	-
CDR system								
20	6	40	M (medium)	47,500	1	42721212	SBHR 20 M	-
25	6	40	M (medium)	38,000	1	42721262	SBHR 25 M	-
38	6	40	W (soft)	25,000	1	42721393	SBHR 38 W	-
			M (medium)	25,000	1	42721392	SBHR 38 M	-
			H (hard)	25,000	1	42721391	SBHR 38 H	-
50	6	40	W (soft)	19,000	1	42721513	SBHR 50 W	-

Continued on next page

COMBIDISC
Abrasive disc holder

D [mm]	S [mm]	L [mm]	Hardness	Max. RPM		Item no.	Designation	Price/unit EUR
50	6	40	M (medium)	19,000	1	42721512	SBHR 50 M	-
			H (hard)	19,000	1	42721511	SBHR 50 H	-
75	6	40	W (soft)	12,500	1	42721763	SBHR 75 W	-
			M (medium)	12,500	1	42721762	SBHR 75 M	-
			H (hard)	12,500	1	42721761	SBHR 75 H	-



AF 14-1/4 CD



SPV-20 CD 1/4-20 UNC



AF M5 CD 1/4-20 UNC

Flexible shaft adapter

The shank of the abrasive disc holders can be replaced by suitable adapters. This enables the abrasive disc holder to be mounted directly to the drive spindle of the tool drive.

Special features:
- AF 14-1/4 CD, female thread M14, male thread 1/4-20 UNC. Suitable for drives with M14 spindle.
- SPV-20 CD 1/4-20 UNC, female thread 1/4-20 UNC, male thread 1/4-20 UNC. Suitable for drives with spindle 1/4-20 UNC, e.g. for PW 3/120 DH.
- AF M5 CD 1/4-20 UNC, male thread M5, male thread 1/4-20 UNC. Suitable for cordless angle grinder dia. 75 mm with M5 spindle (female thread).

	Item no.	Designation	Price/unit EUR
1	84205010	AF 14-1/4 CD	-
	87100727	SPV20 CD 1/4-20 UNC	-
	84205030	AF M5 CD 1/4-20 UNC	-

COMBIDISC set



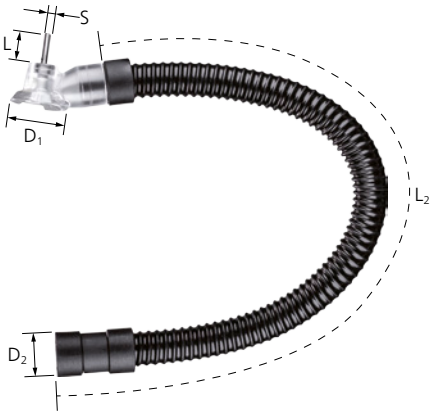
COMBIDISC set

Set of various COMBIDISC tools.

Contents:
Three each of the following COMBIDISC abrasive discs: CD A 60 FORTE, CD A 120 FORTE, CD A-COOL 60, CD CO-COOL 36, CD Z 60, three each of the following COMBIDISC non-woven discs: CD VRH A 180 M, CD VRW A 100 and one abrasive disc holder SBH M.

Special features:
- Getting to know and testing the comprehensive system.
- Coordinated selection of the most common versions.

D [mm]		Item no.	Designation	Price/unit EUR
50	1	42790050	COMBIDISC SET 50	-
75	1	42790075	COMBIDISC SET 75	-



DUST REMOVER

The COMBIDISC DUST REMOVER removes grinding dust very effectively from the place that is being worked on. It can be used with all dust extraction systems (mobile or stationary). The DUST REMOVER is used with CD and CDR type backing pads.



Special features:

- Clean, low-dust working environment.
- Compatible with all drive systems.
- Flexible hose for good accessibility.

D_1 [mm]	S [mm]	L [mm]	Thread	D_2 [mm]	L_2 [mm]	Suitable arbors		Item no.	Designation	Price/ unit EUR
50	6	27	1/4-20 UNC	37	600	CD/CDR 50	1	*42791050*	CD DUST REMOVER CD-DR 50	-
75	6	27	1/4-20 UNC	37	600	CD/CDR 75	1	*42791075*	CD DUST REMOVER CD-DR 75	-

Flexible abrasives
General information

The quick way to find the perfect tool

Material group ▾			Abrasive ▸ Rec. cutting speeds for short and long belts [m/s]	Aluminium oxide A	Aluminium oxide A compact grain	Zirconia alumina Z	Aluminium oxide A-COOL	Ceramic oxide grain CO	Ceramic oxide grain CO-COOL	VICTOGRAIN-COOL	Non-woven material	Felt
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	25–35	●		○		●		●	●	●
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	20–30	○	●	●		●		●	○	●
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	15–25		●	○	●		●	●	●	●
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	30–40	○			●		○		●	●
		Brass, copper, zinc		●		○		○			●	●
	Hard non-ferrous metals	Hard aluminium alloys	20–30	●		○		○			●	●
		Bronze, titanium				○		○	●	●	●	●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys	5–15			○		○	●	●	●	●
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	25–35	●		○		●			●	
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint	10–25	●							●	●

● = highly suitable ○ = suitable

Safety notes

- Follow the safety notes from FEPA (Federation of European Producers of Abrasives) "Safety notes for correct use of abrasive belts". This information can be found in the download area on www.pferd.com.


Wear eye protection!

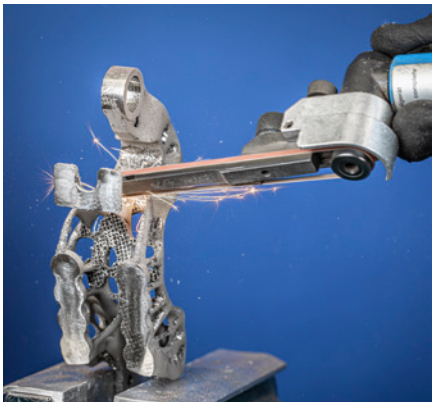

Wear hearing protection!


Wear gloves!

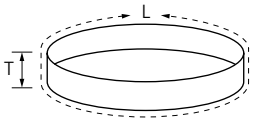

Wear a dust mask!


Follow the safety instructions!


Not permitted for wet grinding!







Aluminium oxide A version

For general applications from coarse to fine grinding.



Special features:

- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
305	3	A	60	-	100	45001953	BA 3/305 T A 60	-
			120	-	100	45001955	BA 3/305 T A 120	-
	6	A	60	-	100	45001983	BA 6/305 T A 60	-
			80	-	100	45001984	BA 6/305 T A 80	-
			180	-	100	45001987	BA 6/305 T A 180	-
	9	A	60	-	100	45002223	BA 9/305 T A 60	-
			80	-	100	45002224	BA 9/305 T A 80	-
			120	-	100	45002225	BA 9/305 T A 120	-
			180	-	100	45002227	BA 9/305 T A 180	-
	12	A	40	-	100	45002331	BA 12/305 X A 40	-
			60	-	100	45002333	BA 12/305 T A 60	-
			80	-	100	45002334	BA 12/305 T A 80	-
			120	-	100	45002335	BA 12/305 T A 120	-
			180	-	100	45002337	BA 12/305 T A 180	-
330	10	A	60	ISO 2976	100	45002236	BA 10/330 T A 60	-
			80	ISO 2976	100	45002238	BA 10/330 T A 80	-
			120	ISO 2976	100	45002242	BA 10/330 T A 120	-
			180	ISO 2976	100	45002248	BA 10/330 T A 180	-
450	35	A	60	-	20	45005206	BA 35/450 X A 60	-
			100	-	20	45005210	BA 35/450 X A 100	-
			240	-	20	45005224	BA 35/450 X A 240	-
	50	A	40	ISO 2976	20	45005404	BA 50/450 X A 40	-
			60	ISO 2976	20	45005406	BA 50/450 X A 60	-
			100	ISO 2976	20	45005410	BA 50/450 X A 100	-
			240	ISO 2976	20	45005424	BA 50/450 X A 240	-
	35	A	320	-	20	45005232	BA 35/450 X A 320	-
457	13	A	40	ISO 2976	100	45002624	BA 13/457 X A 40	-
			60	ISO 2976	100	45002626	BA 13/457 T A 60	-
			80	ISO 2976	100	45002628	BA 13/457 T A 80	-
			120	ISO 2976	100	45002632	BA 13/457 T A 120	-
480	16	A	60	-	50	*45002706*	BA 16/480 T A 60	-
			120	-	50	*45002712*	BA 16/480 T A 120	-
	20	A	40	ISO 2976	10	45004904	BA 20/480 X A 40	-
			50	ISO 2976	10	45002905	BA 20/480 T A 50	-
			60	ISO 2976	10	45002906	BA 20/480 T A 60	-
			80	ISO 2976	10	45002908	BA 20/480 T A 80	-
			120	ISO 2976	10	45002912	BA 20/480 T A 120	-
			180	ISO 2976	10	45002918	BA 20/480 T A 180	-
			240	ISO 2976	10	45002924	BA 20/480 T A 240	-
	25	A	40	ISO 2976	20	*45005104*	BA 25/480 X A 40	-
			120	ISO 2976	20	*45005112*	BA 25/480 T A 120	-

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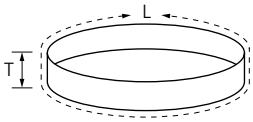
Flexible abrasives
Short belts BA

L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
520	3	A	40	-	100	*45001971*	BA 3/520 X A 40	-
			60	-	100	45001973	BA 3/520 T A 60	-
			80	-	100	45001974	BA 3/520 T A 80	-
			120	-	100	45001975	BA 3/520 T A 120	-
			180	-	100	45001977	BA 3/520 T A 180	-
			240	-	100	45001978	BA 3/520 T A 240	-
	6	A	40	ISO 2976	100	45004104	BA 6/520 X A 40	-
			60	ISO 2976	100	45002106	BA 6/520 J A 60	-
			80	ISO 2976	100	45002108	BA 6/520 J A 80	-
			120	ISO 2976	100	45002112	BA 6/520 J A 120	-
			180	ISO 2976	100	45002118	BA 6/520 T A 180	-
			240	ISO 2976	100	45002124	BA 6/520 T A 240	-
			400	ISO 2976	100	45002140	BA 6/520 T A 400	-
	12	A	40	-	100	45004504	BA 12/520 X A 40	-
			60	-	100	45002506	BA 12/520 J A 60	-
			80	-	100	45002508	BA 12/520 J A 80	-
			120	-	100	45002512	BA 12/520 J A 120	-
			180	-	100	45002518	BA 12/520 T A 180	-
			240	-	100	45002524	BA 12/520 T A 240	-
			320	-	100	45002532	BA 12/520 T A 320	-
			400	-	100	45002540	BA 12/520 T A 400	-
	16	A	40	-	50	45004804	BA 16/520 X A 40	-
			60	-	50	45002806	BA 16/520 T A 60	-
			80	-	50	45002808	BA 16/520 T A 80	-
			120	-	50	45002812	BA 16/520 T A 120	-
			180	-	50	45002818	BA 16/520 T A 180	-
	20	A	40	ISO 2976	20	45005004	BA 20/520 X A 40	-
			60	ISO 2976	20	45003006	BA 20/520 T A 60	-
			80	ISO 2976	20	45003008	BA 20/520 T A 80	-
			120	ISO 2976	20	45003012	BA 20/520 T A 120	-
			180	ISO 2976	20	45003018	BA 20/520 T A 180	-
			240	ISO 2976	20	45003024	BA 20/520 T A 240	-
533	30	A	40	ISO 2976	20	45005142	BA 30/533 X A 40	-
			60	ISO 2976	20	45005146	BA 30/533 X A 60	-
			80	ISO 2976	20	45005148	BA 30/533 X A 80	-
			120	ISO 2976	20	45005152	BA 30/533 X A 120	-
			180	ISO 2976	20	45005118	BA 30/533 T A 180	-
			240	ISO 2976	20	45005124	BA 30/533 T A 240	-
			320	ISO 2976	20	45005132	BA 30/533 T A 320	-
	75	A	40	ISO 2976	10	45001104	BA 75/533 X A 40	-
			60	ISO 2976	10	45001106	BA 75/533 X A 60	-
			80	ISO 2976	10	45001108	BA 75/533 X A 80	-
			100	ISO 2976	10	45001110	BA 75/533 X A 100	-
			120	ISO 2976	10	45001112	BA 75/533 X A 120	-
610	12	A	40	-	100	45004604	BA 12/610 X A 40	-
			60	-	100	45002606	BA 12/610 J A 60	-
			80	-	100	45002608	BA 12/610 J A 80	-
			120	-	100	45002612	BA 12/610 J A 120	-
	30	A	40	-	10	45005153	BA 30/610 X A 40	-
			60	-	10	45005154	BA 30/610 X A 60	-
			80	-	10	45005155	BA 30/610 X A 80	-
			120	-	10	45005156	BA 30/610 X A 120	-
			180	-	10	45005157	BA 30/610 T A 180	-
			240	-	10	45005158	BA 30/610 T A 240	-

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L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
610	100	A	40	ISO 2976	10	45001304	BA 100/610 X A 40	-
			60	ISO 2976	10	45001306	BA 100/610 X A 60	-
			80	ISO 2976	10	45001308	BA 100/610 X A 80	-
			100	ISO 2976	10	45001310	BA 100/610 X A 100	-
			120	ISO 2976	10	45001312	BA 100/610 X A 120	-
760	40	A	40	-	10	45000205	BA 40/760 A 40	-
			60	-	10	45000206	BA 40/760 A 60	-
			80	-	10	45000207	BA 40/760 A 80	-
			120	-	10	45000208	BA 40/760 A 120	-
820	40	A	40	-	10	45000220	BA 40/820 A 40	-
			60	-	10	45000221	BA 40/820 A 60	-
			80	-	10	45000222	BA 40/820 A 80	-
			120	-	10	45000223	BA 40/820 A 120	-
920	100	A	40	-	10	45005864	BA 100/920 X A 40	-
			60	-	10	45005866	BA 100/920 X A 60	-
			80	-	10	45005868	BA 100/920 X A 80	-
			120	-	10	45005872	BA 100/920 X A 120	-





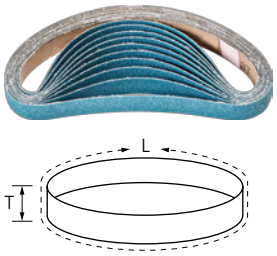
Aluminium oxide A compact grain version

Outstandingly suited to fine and very fine grinding, and for step-by-step preparations for polishing. The self-sharpening compact grain facilitates a very long tool life and achieves consistent surface quality levels throughout the entire tool life.

Special features:

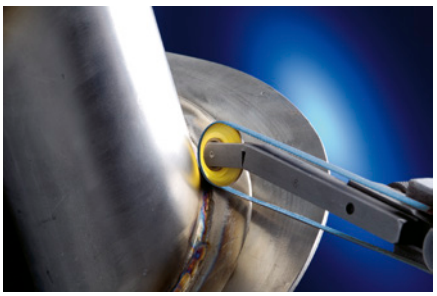
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
533	30	A-CK	320	10	*45020314*	BA 30/533 J A 320 CK	-
610	30	A-CK	800	10	*45020420*	BA 30/610 J A 800 CK	-
			1000	10	*45020422*	BA 30/610 J A 1000 CK	-
760	40	A-CK	120	10	45000209	BA 40/760 A 120 CK	-
			180	10	45000210	BA 40/760 A 180 CK	-
			240	10	45000211	BA 40/760 A 240 CK	-
			320	10	45000212	BA 40/760 A 320 CK	-
			400	10	45000213	BA 40/760 A 400 CK	-
			600	10	45000214	BA 40/760 A 600 CK	-
820	40	A-CK	120	10	45000224	BA 40/820 A 120 CK	-
			180	10	45000225	BA 40/820 A 180 CK	-
			240	10	45000226	BA 40/820 A 240 CK	-
			320	10	45000227	BA 40/820 A 320 CK	-
			400	10	45000228	BA 40/820 A 400 CK	-
			600	10	45000229	BA 40/820 A 600 CK	-



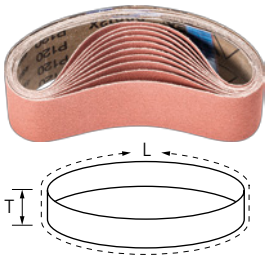
Zirconia alumina Z version

For coarse grinding work with a high stock removal rate and a long tool life.



Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
330	10	Z	40	ISO 2976	100	45007904	BA 10/330 T Z 40	-
			60	ISO 2976	100	45007906	BA 10/330 T Z 60	-
	12	Z	60	-	100	45007926	BA 12/330 T Z 60	-
			80	-	100	45007928	BA 12/330 T Z 80	-
520	12	Z	40	-	100	45009104	BA 12/520 X Z 40	-
			60	-	100	45008106	BA 12/520 T Z 60	-
			80	-	100	45008108	BA 12/520 T Z 80	-
	20	Z	36	ISO 2976	20	45009402	BA 20/520 X Z 36	-
			40	ISO 2976	20	45009404	BA 20/520 X Z 40	-
			60	ISO 2976	20	45008406	BA 20/520 T Z 60	-
			80	ISO 2976	20	45009408	BA 20/520 T Z 80	-
610	12	Z	40	-	100	45009204	BA 12/610 X Z 40	-
			60	-	100	45008206	BA 12/610 T Z 60	-
			80	-	100	45008208	BA 12/610 T Z 80	-

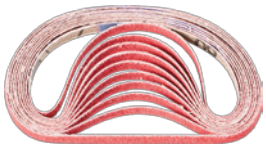


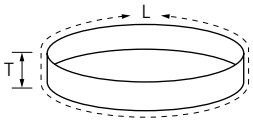
Aluminium oxide A-COOL version

For general grinding work from fine to very fine grinding on materials which do not conduct heat well, e.g. stainless steel (INOX). Active grinding additives substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
450	50	A-COOL	40	ISO 2976	20	*45007204*	BA 50/450 A COOL 40	-
			80	ISO 2976	20	45007208	BA 50/450 A-COOL 80	-
			120	ISO 2976	20	45007212	BA 50/450 A-COOL 120	-
			180	ISO 2976	20	45007218	BA 50/450 A-COOL 180	-





Ceramic oxide grain CO-COOL version

Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding on hard materials which do not conduct heat well.



Special features:

- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

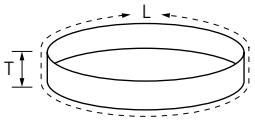
L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
305	6	CO-COOL	40	-	100	45020001	BA 6/305 CO-COOL 40	-
			60	-	100	45020003	BA 6/305 CO-COOL 60	-
			80	-	100	45020004	BA 6/305 CO-COOL 80	-
			120	-	100	45020005	BA 6/305 CO-COOL 120	-
	9	CO-COOL	40	-	100	45020031	BA 9/305 CO-COOL 40	-
			60	-	100	45020033	BA 9/305 CO-COOL 60	-
			80	-	100	45020034	BA 9/305 CO-COOL 80	-
			120	-	100	45020035	BA 9/305 CO-COOL 120	-
	12	CO-COOL	40	-	100	45020051	BA 12/305 CO-COOL 40	-
			60	-	100	45020053	BA 12/305 CO-COOL 60	-
			80	-	100	45020054	BA 12/305 CO-COOL 80	-
			120	-	100	45020055	BA 12/305 CO-COOL 120	-
330	10	CO-COOL	40	ISO 2976	100	45020041	BA 10/330 CO-COOL 40	-
			60	ISO 2976	100	45020043	BA 10/330 CO-COOL 60	-
			80	ISO 2976	100	45020044	BA 10/330 CO-COOL 80	-
			120	ISO 2976	100	45020045	BA 10/330 CO-COOL 120	-
	12	CO-COOL	40	-	100	45020061	BA 12/330 CO-COOL 40	-
			60	-	100	45020063	BA 12/330 CO-COOL 60	-
			80	-	100	45020064	BA 12/330 CO-COOL 80	-
			120	-	100	45020065	BA 12/330 CO-COOL 120	-
450	35	CO-COOL	40	ISO 2976	20	45020171	BA 35/450 CO-COOL 40	-
			60	ISO 2976	20	45020173	BA 35/450 CO-COOL 60	-
			80	ISO 2976	20	45020174	BA 35/450 CO-COOL 80	-
			120	ISO 2976	20	45020175	BA 35/450 CO-COOL 120	-
	50	CO-COOL	40	ISO 2976	20	45020181	BA 50/450 CO-COOL 40	-
			60	ISO 2976	20	45020183	BA 50/450 CO-COOL 60	-
			80	ISO 2976	20	45020184	BA 50/450 CO-COOL 80	-
			120	ISO 2976	20	45020185	BA 50/450 CO-COOL 120	-
457	13	CO-COOL	40	ISO 2976	100	45020091	BA 13/457 CO-COOL 40	-
			60	ISO 2976	100	45020093	BA 13/457 CO-COOL 60	-
			80	ISO 2976	100	45020094	BA 13/457 CO-COOL 80	-
			120	ISO 2976	100	45020095	BA 13/457 CO-COOL 120	-
480	16	CO-COOL	40	-	50	45020101	BA 16/480 CO-COOL 40	-
			60	-	50	45020103	BA 16/480 CO-COOL 60	-
			80	-	50	45020104	BA 16/480 CO-COOL 80	-
			120	-	50	45020105	BA 16/480 CO-COOL 120	-
	20	CO-COOL	40	ISO 2976	20	45020121	BA 20/480 CO-COOL 40	-
			60	ISO 2976	20	45020123	BA 20/480 CO-COOL 60	-
			80	ISO 2976	20	45020124	BA 20/480 CO-COOL 80	-
			120	ISO 2976	20	45020125	BA 20/480 CO-COOL 120	-

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Flexible abrasives
Short belts BA

L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
480	25	CO-COOL	40	ISO 2976	20	45020141	BA 25/480 CO-COOL 40	-
			60	ISO 2976	20	45020143	BA 25/480 CO-COOL 60	-
			80	ISO 2976	20	45020144	BA 25/480 CO-COOL 80	-
			120	ISO 2976	20	45020145	BA 25/480 CO-COOL 120	-
520	6	CO-COOL	40	ISO 2976	100	45020011	BA 6/520 CO-COOL 40	-
			60	ISO 2976	100	45020013	BA 6/520 CO-COOL 60	-
			80	ISO 2976	100	45020014	BA 6/520 CO-COOL 80	-
			120	ISO 2976	100	45020015	BA 6/520 CO-COOL 120	-
	12	CO-COOL	40	-	100	45020071	BA 12/520 CO-COOL 40	-
			60	-	100	45020073	BA 12/520 CO-COOL 60	-
			80	-	100	45020074	BA 12/520 CO-COOL 80	-
			120	-	100	45020075	BA 12/520 CO-COOL 120	-
	16	CO-COOL	40	-	50	45020111	BA 16/520 CO-COOL 40	-
			60	-	50	45020113	BA 16/520 CO-COOL 60	-
			80	-	50	45020114	BA 16/520 CO-COOL 80	-
			120	-	50	45020115	BA 16/520 CO-COOL 120	-
	20	CO-COOL	40	ISO 2976	20	45020131	BA 20/520 CO-COOL 40	-
			60	ISO 2976	20	45020133	BA 20/520 CO-COOL 60	-
			80	ISO 2976	20	45020134	BA 20/520 CO-COOL 80	-
			120	ISO 2976	20	45020135	BA 20/520 CO-COOL 120	-
533	30	CO-COOL	40	-	20	45020151	BA 30/533 CO-COOL 40	-
			60	-	20	45020153	BA 30/533 CO-COOL 60	-
			80	-	20	45020154	BA 30/533 CO-COOL 80	-
			120	-	20	45020155	BA 30/533 CO-COOL 120	-
610	6	CO-COOL	40	ISO 2976	100	45020021	BA 6/610 CO-COOL 40	-
			60	ISO 2976	100	45020023	BA 6/610 CO-COOL 60	-
			80	ISO 2976	100	45020024	BA 6/610 CO-COOL 80	-
			120	ISO 2976	100	45020025	BA 6/610 CO-COOL 120	-
	12	CO-COOL	40	-	100	45020081	BA 12/610 CO-COOL 40	-
			60	-	100	45020083	BA 12/610 CO-COOL 60	-
			80	-	100	45020084	BA 12/610 CO-COOL 80	-
			120	-	100	45020085	BA 12/610 CO-COOL 120	-
	30	CO-COOL	40	-	10	45020161	BA 30/610 CO-COOL 40	-
			60	-	10	45020163	BA 30/610 CO-COOL 60	-
			80	-	10	45020164	BA 30/610 CO-COOL 80	-
			120	-	10	45020165	BA 30/610 CO-COOL 120	-
760	40	CO-COOL	40	-	10	45000201	BA 40/760 CO-COOL 40	-
			60	-	10	45000202	BA 40/760 CO-COOL 60	-
			80	-	10	45000203	BA 40/760 CO-COOL 80	-
			120	-	10	45000204	BA 40/760 CO-COOL 120	-
820	40	CO-COOL	40	-	10	45000216	BA 40/820 CO-COOL 40	-
			60	-	10	45000217	BA 40/820 CO-COOL 60	-
			80	-	10	45000218	BA 40/820 CO-COOL 80	-
			120	-	10	45000219	BA 40/820 CO-COOL 120	-





VICTOGRAIN-COOL version

For maximum aggressive grinding with an extremely long tool life, the ultimate stock removal rate and consistently high performance on steel and hard materials which do not conduct heat well. Active grinding additives in the coating prevent clogging and result in cooler grinding.

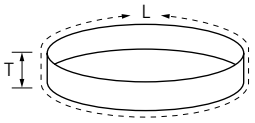


Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
450	50	VICTOGRAIN-COOL	36	10	45001175	BA 50/450 VICTOGRAIN-COOL 36	-
760	40	VICTOGRAIN-COOL	36	10	45000200	BA 40/760 VICTOGRAIN-COOL 36	-
820	40	VICTOGRAIN-COOL	36	10	45000215	BA 40/820 VICTOGRAIN-COOL 36	-

Short belts VB





Non-woven version

Suitable for general work on surfaces such as metal tubular structures, e.g. removing rough grinding traces, removing oxidation and light deburring work. Achieve matt and satin-finished surfaces.



Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size	Version	Acc. to ISO		Item no.	Designation	Price/unit EUR
305	6	A	100 G	coarse, yellow-brown	-	10	45010610	VB 6/305 A 100 G	-
			180 M	medium, red-brown	-	10	45010618	VB 6/305 A 180 M	-
			240 F	fine, blue	-	10	45010624	VB 6/305 A 240 F	-
	9	A	100 G	coarse, yellow-brown	-	10	45010710	VB 9/305 A 100 G	-
			180 M	medium, red-brown	-	10	45010718	VB 9/305 A 180 M	-
			240 F	fine, blue	-	10	45010724	VB 9/305 A 240 F	-
	12	A	100 G	coarse, yellow-brown	-	10	45010810	VB 12/305 A 100 G	-
			180 M	medium, red-brown	-	10	45010818	VB 12/305 A 180 M	-
			240 F	fine, blue	-	10	45010824	VB 12/305 A 240 F	-

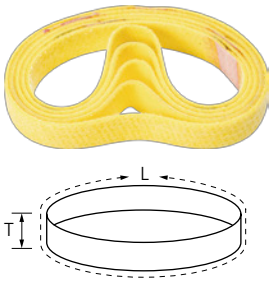
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L [mm]	T [mm]	Abrasive	Grit size	Version	Acc. to ISO		Item no.	Designation	Price/ unit EUR
450	35	A	100 G	coarse, yellow-brown	-	10	45011410	VB 35/450 A 100 G	-
			180 M	medium, red-brown	-	10	45011418	VB 35/450 A 180 M	-
			240 F	fine, blue	-	10	45011424	VB 35/450 A 240 F	-
	50	A	100 G	coarse, yellow-brown	ISO 2976	10	45011510	VB 50/450 A 100 G	-
			180 M	medium, red-brown	ISO 2976	10	45011518	VB 50/450 A 180 M	-
			240 F	fine, blue	ISO 2976	10	45011524	VB 50/450 A 240 F	-
520	6	A	100 G	coarse, yellow-brown	-	10	45011010	VB 6/520 A 100 G	-
			180 M	medium, red-brown	-	10	45011018	VB 6/520 A 180 M	-
			240 F	fine, blue	-	10	45011024	VB 6/520 A 240 F	-
	12	A	100 G	coarse, yellow-brown	-	10	45011110	VB 12/520 A 100 G	-
			180 M	medium, red-brown	-	10	45011118	VB 12/520 A 180 M	-
			240 F	fine, blue	-	10	45011124	VB 12/520 A 240 F	-
	16	A	100 G	coarse, yellow-brown	-	10	45011210	VB 16/520 A 100 G	-
			180 M	medium, red-brown	-	10	45011218	VB 16/520 A 180 M	-
			240 F	fine, blue	-	10	45011224	VB 16/520 A 240 F	-
	20	A	100 G	coarse, yellow-brown	ISO 2976	5	45011310	VB 20/520 A 100 G	-
			180 M	medium, red-brown	ISO 2976	5	45011318	VB 20/520 A 180 M	-
			240 F	fine, blue	ISO 2976	5	45011324	VB 20/520 A 240 F	-
533	30	A	100 G	coarse, yellow-brown	ISO 2976	5	45010910	VB 30/533 A 100 G	-
			180 M	medium, red-brown	ISO 2976	5	45010918	VB 30/533 A 180 M	-
			240 F	fine, blue	ISO 2976	5	45010924	VB 30/533 A 240 F	-
610	6	A	100 G	coarse, yellow-brown	ISO 2976	10	45011810	VB 6/610 A 100 G	-
			180 M	medium, red-brown	ISO 2976	10	45011818	VB 6/610 A 180 M	-
			240 F	fine, blue	ISO 2976	10	45011824	VB 6/610 A 240 F	-
	12	A	100 G	coarse, yellow-brown	-	10	45011910	VB 12/610 A 100 G	-
			180 M	medium, red-brown	-	10	45011918	VB 12/610 A 180 M	-
			240 F	fine, blue	-	10	45011924	VB 12/610 A 240 F	-
	30	A	100 G	coarse, yellow-brown	-	5	45011350	VB 30/610 A 100 G	-
			180 M	medium, red-brown	-	5	45011351	VB 30/610 A 180 M	-
			240 F	fine, blue	-	5	45011352	VB 30/610 A 240 F	-
760	40	A	100 G	coarse, yellow-brown	-	5	45000230	VB 40/760 A 100 G	-
			180 M	medium, red-brown	-	5	45000231	VB 40/760 A 180 M	-
			240 F	fine, blue	-	5	45000232	VB 40/760 A 240 F	-
820	40	A	100 G	coarse, yellow-brown	-	5	45000234	VB 40/820 A 100 G	-

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L [mm]	T [mm]	Abrasive	Grit size	Version	Acc. to ISO		Item no.	Designation	Price/ unit EUR
820	40	A	180 M	medium, red-brown	-	5	45000235	VB 40/820 A 180 M	-
			240 F	fine, blue	-	5	45000236	VB 40/820 A 240 F	-

Short belts P-BA



Felt version

Suitable for polishing with polishing paste bars and grinding pastes on tubular constructions and railings.



Special features:
- High economic efficiency due to long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good polishing agent adhesion.

L [mm]	T [mm]	Acc. to ISO		Item no.	Designation	Price/unit EUR
533	30	ISO 2976	5	45008501	P-BA 30/533	-
610	30	-	5	45008502	P-BA 30/610	-
760	40	-	5	45000233	P-BA 40/760	-
820	40	-	5	45000237	P-BA 40/820	-

Belts for pneumatic drums

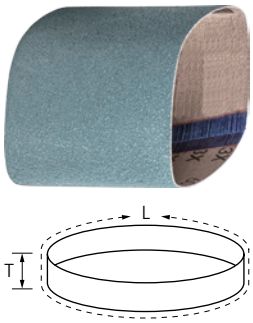


Aluminium oxide A compact grain version

Outstandingly suited to fine and very fine grinding, and for step-by-step preparations for polishing. The self-sharpening compact grain facilitates a very long tool life and achieves consistent surface quality levels throughout the entire tool life.

Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- The rubber tube of the drum yields under higher contact pressure, meaning the abrasive belt adapts very well to the surface of the workpiece.

L [mm]	T [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
282	100	A-CK	120	5	45001158	BA 100/282 A 120 CK	-
			180	5	45001160	BA 100/282 A 180 CK	-
			240	5	45001162	BA 100/282 A 240 CK	-
			320	5	45001164	BA 100/282 A 320 CK	-
			400	5	45001166	BA 100/282 A 400 CK	-
			600	5	45001168	BA 100/282 A 600 CK	-
			800	5	45001170	BA 100/282 A 800 CK	-
			1000	5	45001172	BA 100/282 A 1000 CK	-
			1200	5	45001174	BA 100/282 A 1200 CK	-

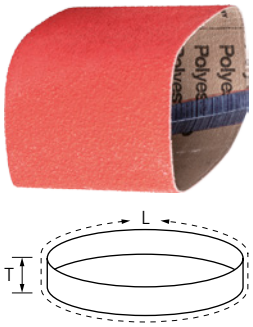


Zirconia alumina Z version

For coarse grinding work with a high stock removal rate and a long tool life.

Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- The rubber tube of the drum yields under higher contact pressure, meaning the abrasive belt adapts very well to the surface of the workpiece.

L [mm]	T [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
282	100	Z	40	5	45001152	BA 100/282 Z 40	-
			60	5	45001154	BA 100/282 Z 60	-
			80	5	45001156	BA 100/282 Z 80	-

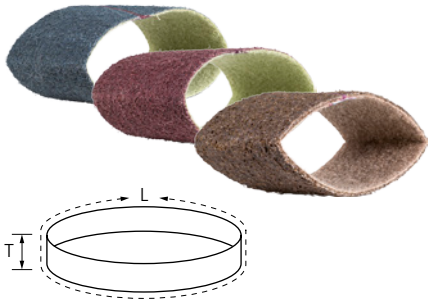


Ceramic oxide grain CO-COOL version

Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding on hard materials which do not conduct heat well.

Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- The rubber tube of the drum yields under higher contact pressure, meaning the abrasive belt adapts very well to the surface of the workpiece.

L [mm]	T [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
282	100	CO-COOL	40	5	45001150	BA 100/282 CO-COOL 40	-
			60	5	47501880	BA 100/282 CO-COOL 60	-
			80	5	47501885	BA 100/282 CO-COOL 80	-
			120	5	47501881	BA 100/282 CO-COOL 120	-

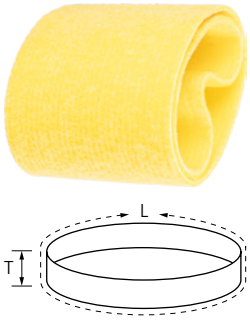


Non-woven version

Suitable for general work on surfaces such as metal structures, e.g. removing rough grinding traces, removing oxidation and light deburring work. Achieve matt and satin-finished surfaces.

Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- The rubber tube of the drum yields under higher contact pressure, meaning the non-woven belt adapts very well to the surface of the workpiece.

L [mm]	T [mm]	Abrasive	Grit size	Version		Item no.	Designation	Price/unit EUR
282	100	A	100 G	coarse, yellow-brown	2	45011707	VB 100/282 A 100 G	-
			180 M	medium, red-brown	2	45011708	VB 100/282 A 180 M	-
			240 F	fine, blue	2	45011709	VB 100/282 A 240 F	-

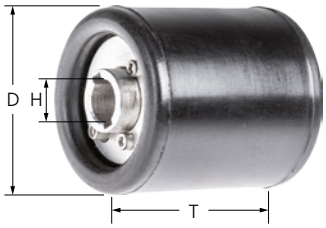


Felt version

Suitable for polishing with polishing paste bars and grinding pastes on large surfaces.

Special features:
- High economic efficiency through very good polishing agent adhesion.
- High tear strength with optimum flexibility.
- The rubber tube of the drum yields under higher contact pressure, meaning the polishing belt adapts very well to the surface of the workpiece.

L [mm]	T [mm]		Item no.	Designation	Price/unit EUR
282	100	2	45008503	P-BA 100/282	-

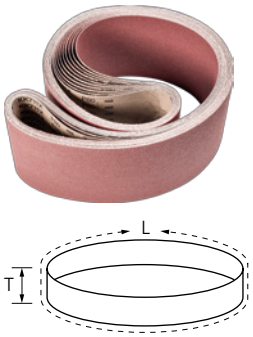


Pneumatic drum

The pneumatic grinding drum is suitable for short belts with a width of 100 mm and a length of 282 mm. The rubber tube yields with increased contact pressure, which is why the abrasive belt adapts very well to the surface to be machined and the contact area increases.

Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- The rubber tube of the drum yields under higher contact pressure, meaning the abrasive, non-woven or polishing belt adapts very well to the surface of the workpiece.

Suitable for short belts [mm]	D [mm]	T [mm]	H [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
282 x 100	90	100	19	3,800	1	42100100	PSW 90x100	-



Aluminium oxide A version

For general applications from coarse to fine grinding.

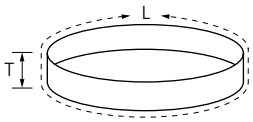
Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/unit EUR
1,000	50	A	60	ISO 2976	10	45005556	BA 50/1000 X A 60	-
			80	ISO 2976	10	45005558	BA 50/1000 X A 80	-
			120	ISO 2976	10	45005562	BA 50/1000 X A 120	-
	100	A	40	ISO 2976	10	45005904	BA 100/1000 X A 40	-
			60	ISO 2976	10	45005906	BA 100/1000 X A 60	-
			80	ISO 2976	10	45005908	BA 100/1000 X A 80	-
			120	ISO 2976	10	45005912	BA 100/1000 X A 120	-
2,000	50	A	40	ISO 2976	10	45005604	BA 50/2000 X A 40	-

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L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
2,000	50	A	60	ISO 2976	10	45005606	BA 50/2000 X A 60	-
			80	ISO 2976	10	45005608	BA 50/2000 X A 80	-
			120	ISO 2976	10	45005612	BA 50/2000 X A 120	-
	75	A	36	ISO 2976	10	45005703	BA 75/2000 X A 36	-
			40	ISO 2976	10	45005704	BA 75/2000 X A 40	-
			60	ISO 2976	10	45005706	BA 75/2000 X A 60	-
			80	ISO 2976	10	45005708	BA 75/2000 X A 80	-
			120	ISO 2976	10	45005712	BA 75/2000 X A 120	-
	150	A	36	ISO 2976	10	45006003	BA 150/2000 X A 36	-
			40	ISO 2976	10	45006004	BA 150/2000 X A 40	-
			60	ISO 2976	10	45006006	BA 150/2000 X A 60	-
			80	ISO 2976	10	45006008	BA 150/2000 X A 80	-
2,500	75	A	36	ISO 2976	10	45005803	BA 75/2500 X A 36	-
			40	ISO 2976	10	45005804	BA 75/2500 X A 40	-
			60	ISO 2976	10	45005806	BA 75/2500 X A 60	-
			80	ISO 2976	10	45005808	BA 75/2500 X A 80	-
			120	ISO 2976	10	45005812	BA 75/2500 X A 120	-





Zirconia alumina Z version

For coarse grinding work with a high stock removal rate and a long tool life.

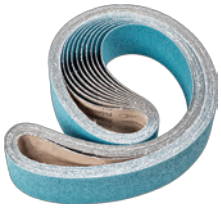


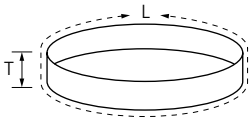
Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
1,000	100	Z	40	ISO 2976	10	45009804	BA 100/1000 X Z 40	-
			60	ISO 2976	10	45009806	BA 100/1000 X Z 60	-
			80	ISO 2976	10	45009808	BA 100/1000 X Z 80	-
			120	ISO 2976	10	45009812	BA 100/1000 X Z 120	-
2,000	50	Z	24	ISO 2976	10	45009502	BA 50/2000 X Z 24	-
			36	ISO 2976	10	45009503	BA 50/2000 X Z 36	-
			40	ISO 2976	10	45009504	BA 50/2000 X Z 40	-
			60	ISO 2976	10	45009506	BA 50/2000 X Z 60	-
			80	ISO 2976	10	45009508	BA 50/2000 X Z 80	-
			120	ISO 2976	10	45009512	BA 50/2000 X Z 120	-
	75	Z	24	ISO 2976	10	45009602	BA 75/2000 X Z 24	-
			36	ISO 2976	10	45009603	BA 75/2000 X Z 36	-
			40	ISO 2976	10	45009604	BA 75/2000 X Z 40	-
			60	ISO 2976	10	45009606	BA 75/2000 X Z 60	-
			80	ISO 2976	10	45009608	BA 75/2000 X Z 80	-
			120	ISO 2976	10	45009612	BA 75/2000 X Z 120	-
	150	Z	36	ISO 2976	10	45009903	BA 150/2000 X Z 36	-
			40	ISO 2976	10	45009904	BA 150/2000 X Z 40	-
			60	ISO 2976	10	45009906	BA 150/2000 X Z 60	-
			80	ISO 2976	10	45009908	BA 150/2000 X Z 80	-

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L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
2,000	150	Z	120	ISO 2976	10	45009912	BA 150/2000 X Z 120	-
2,250	75	Z	40	ISO 2976	10	45009734	BA 75/2250 X Z 40	-
			60	ISO 2976	10	45009736	BA 75/2250 X Z 60	-
2,500	75	Z	36	ISO 2976	10	45009703	BA 75/2500 X Z 36	-
			40	ISO 2976	10	45009704	BA 75/2500 X Z 40	-
			60	ISO 2976	10	45009706	BA 75/2500 X Z 60	-
			80	ISO 2976	10	45009708	BA 75/2500 X Z 80	-
	150	Z	36	ISO 2976	10	45009936	BA 150/2500 X Z 36	-



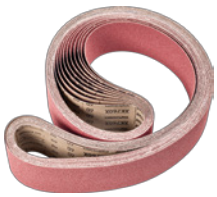


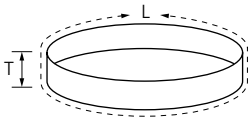
Zirconia alumina Z-FORTE version

For coarse grinding work with a high stock removal rate and long tool life and very cool grinding. Particularly suitable for work on thin-walled stainless steel (INOX) components and on steels or nickel-based alloys that do not conduct heat well.

Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
2,000	75	Z-FORTE	36 FORTE	ISO 2976	10	45010063	BA 75/2000 X Z 36 FORTE	-
			40 FORTE	ISO 2976	10	45010064	BA 75/2000 X Z 40 FORTE	-
			60 FORTE	ISO 2976	10	45010066	BA 75/2000 X Z 60 FORTE	-
			80 FORTE	ISO 2976	10	45010068	BA 75/2000 X Z 80 FORTE	-
2,500	75	Z-FORTE	36 FORTE	ISO 2976	10	45010073	BA 75/2500 X Z 36 FORTE	-





Ceramic oxide grain CO version

For aggressive grinding with maximum stock removal rate and very long tool life. Consistently high performance due to self-sharpening ceramic oxide grain. The ceramic oxide grain is specifically designed for work on hard materials and layers.



Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
2,000	50	CO	24	ISO 2976	10	45005620	BA 50/2000 X CO 24	-
			36	ISO 2976	10	45005621	BA 50/2000 X CO 36	-
			40	ISO 2976	10	45005622	BA 50/2000 X CO 40	-
			50	ISO 2976	10	45005623	BA 50/2000 X CO 50	-
			60	ISO 2976	10	45005624	BA 50/2000 X CO 60	-
			80	ISO 2976	10	45005625	BA 50/2000 X CO 80	-
			120	ISO 2976	10	45005626	BA 50/2000 X CO 120	-
	75	CO	24	ISO 2976	10	45005720	BA 75/2000 X CO 24	-

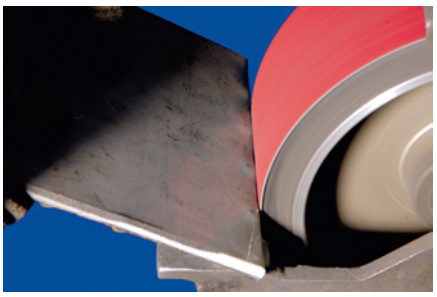
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L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
2,000	75	CO	36	ISO 2976	10	45005721	BA 75/2000 X CO 36	-
			40	ISO 2976	10	45005722	BA 75/2000 X CO 40	-
			50	ISO 2976	10	45005723	BA 75/2000 X CO 50	-
			60	ISO 2976	10	45005724	BA 75/2000 X CO 60	-
			80	ISO 2976	10	45005725	BA 75/2000 X CO 80	-
			120	ISO 2976	10	*45005726*	BA 75/2000 X CO 120	-
2,500	75	CO	24	ISO 2976	10	*45005815*	BA 75/2500 X CO 24	-
			36	ISO 2976	10	*45005816*	BA 75/2500 X CO 36	-
			40	ISO 2976	10	*45005817*	BA 75/2500 X CO 40	-
			50	ISO 2976	10	*45005818*	BA 75/2500 X CO 50	-
			60	ISO 2976	10	*45005819*	BA 75/2500 X CO 60	-
			80	ISO 2976	10	*45005820*	BA 75/2500 X CO 80	-
			120	ISO 2976	10	*45005821*	BA 75/2500 X CO 120	-



Ceramic oxide grain CO-COOL version

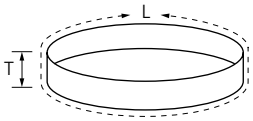
Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding on hard materials which do not conduct heat well.



Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
2,000	50	CO-COOL	36	ISO 2976	10	45005631	BA 50/2000 X CO-COOL 36	-
			40	ISO 2976	10	45005632	BA 50/2000 X CO-COOL 40	-
			50	ISO 2976	10	*45005633*	BA 50/2000 X CO-COOL 50	-
			60	ISO 2976	10	45005634	BA 50/2000 X CO-COOL 60	-
			80	ISO 2976	10	45005635	BA 50/2000 X CO-COOL 80	-
			120	ISO 2976	10	45005636	BA 50/2000 X CO-COOL 120	-
	75	CO-COOL	36	ISO 2976	10	45005731	BA 75/2000 X CO-COOL 36	-
			40	ISO 2976	10	45005732	BA 75/2000 X CO-COOL 40	-
			50	ISO 2976	10	*45005733*	BA 75/2000 X CO-COOL 50	-
			60	ISO 2976	10	45005734	BA 75/2000 X CO-COOL 60	-
			80	ISO 2976	10	45005735	BA 75/2000 X CO-COOL 80	-
			120	ISO 2976	10	45005736	BA 75/2000 X CO-COOL 120	-
2,500	75	CO-COOL	36	ISO 2976	10	45005825	BA 75/2500 X CO-COOL 36	-
			40	ISO 2976	10	45005826	BA 75/2500 X CO-COOL 40	-
			50	ISO 2976	10	*45005827*	BA 75/2500 X CO-COOL 50	-
			60	ISO 2976	10	45005828	BA 75/2500 X CO-COOL 60	-
			80	ISO 2976	10	45005829	BA 75/2500 X CO-COOL 80	-
			120	ISO 2976	10	45005830	BA 75/2500 X CO-COOL 120	-





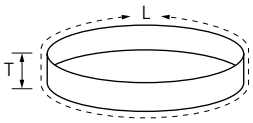
VICTOGRAIN-COOL version

For maximum aggressive grinding with an extremely long tool life, the ultimate stock removal rate and consistently high performance on steel and hard materials which do not conduct heat well. Active grinding additives in the coating prevent clogging and result in cooler grinding.

Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size	Acc. to ISO		Item no.	Designation	Price/ unit EUR
2,000	50	VICTOGRAIN-COOL	36	ISO 2976	10	45005637	BA 50/2000 VICTOGRAIN-COOL 36	-
	75	VICTOGRAIN-COOL	36	ISO 2976	10	45005638	BA 75/2000 VICTOGRAIN-COOL 36	-
2,500	75	VICTOGRAIN-COOL	36	ISO 2976	10	45005639	BA 75/2500 VICTOGRAIN-COOL 36	-



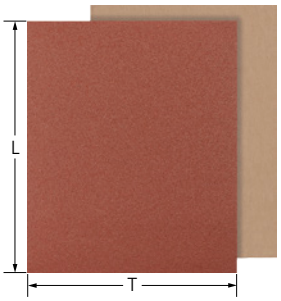


Non-woven version

Suitable for general work on metal surfaces in stationary applications, e.g. removing rough grinding traces, removing oxidation and light deburring work. Achieve matt and satin-finished surfaces.

Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent results through very good grain adhesion.

L [mm]	T [mm]	Abrasive	Grit size	Version		Item no.	Designation	Price/unit EUR
2,000	75	A	100 G	coarse, yellow-brown	2	45011701	VB 75/2000 A 100 G	-
			180 M	medium, red-brown	2	45011702	VB 75/2000 A 180 M	-
			240 F	fine, blue	2	45011703	VB 75/2000 A 240 F	-
2,500	75	A	100 G	coarse, yellow-brown	2	*45011704*	VB 75/2500 A 100 G	-
			180 M	medium, red-brown	2	*45011705*	VB 75/2500 A 180 M	-
			240 F	fine, blue	2	*45011706*	VB 75/2500 A 240 F	-



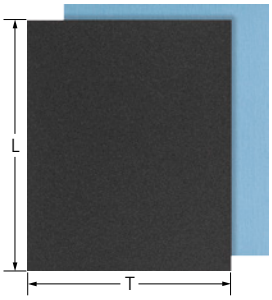
Aluminium oxide A, brown BR type

The brown cloth-backed variant is suitable for general, heavy-duty use on alloyed and non-alloyed steels, as well as non-ferrous metals.



Special features:
- Very good grain adhesion on very flexible cloth.
- High abrasive performance.
- Oil and kerosene-resistant.

L [mm]	T [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
280	230	A	40	50	45013004	BG BR 230x280 A 40	-
			60	50	45013006	BG BR 230x280 A 60	-
			80	50	45013008	BG BR 230x280 A 80	-
			100	50	45013010	BG BR 230x280 A 100	-
			120	50	45013012	BG BR 230x280 A 120	-
			150	50	45013015	BG BR 230x280 A 150	-
			180	50	45013018	BG BR 230x280 A 180	-
			220	50	45013022	BG BR 230x280 A 220	-
			240	50	45013024	BG BR 230x280 A 240	-
			280	50	45013028	BG BR 230x280 A 280	-
			320	50	45013032	BG BR 230x280 A 320	-
			400	50	45013040	BG BR 230x280 A 400	-
			444	50	45013044	BG BR 230x280 A 444	-
			999	50	45013099	BG BR 230x280 A 999	-



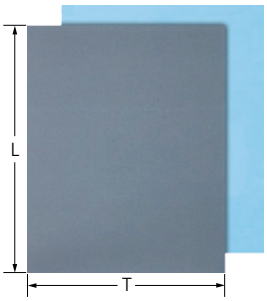
Aluminium oxide A, blue BL type

The blue cloth-backed variant is the low-cost alternative for normal workloads when working on painted wooden and metal surfaces.



Special features:
- Good grain adhesion on sturdy cloth.
- Good abrasive performance.

L [mm]	T [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
280	230	A	40	50	45012004	BG BL 230x280 A 40	-
			60	50	45012006	BG BL 230x280 A 60	-
			80	50	45012008	BG BL 230x280 A 80	-
			100	100	45012010	BG BL 230x280 A 100	-
			120	100	45012012	BG BL 230x280 A 120	-
			150	100	45012015	BG BL 230x280 A 150	-
			180	100	45012018	BG BL 230x280 A 180	-
			220	100	45012022	BG BL 230x280 A 220	-
			240	100	45012024	BG BL 230x280 A 240	-

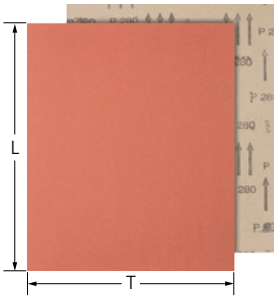


SiC version, waterproof W

The abrasive material SiC is suitable for use on paint and glass. Particularly suitable for all wet grinding work on conventional painted constructions.

Special features:
- Very good grain adhesion on very flexible and light paper.
- Maximum abrasive performance.
- Can be used for wet and dry grinding.

L [mm]	T [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
280	230	SiC	100	50	45014010	BP W 230x280 SiC 100	-
			120	50	45014012	BP W 230x280 SiC 120	-
			150	50	45014015	BP W 230x280 SiC 150	-
			180	50	45014018	BP W 230x280 SiC 180	-
			220	50	45015022	BP W 230x280 SiC 220	-
			240	50	45015024	BP W 230x280 SiC 240	-
			280	50	45015028	BP W 230x280 SiC 280	-
			320	50	45015032	BP W 230x280 SiC 320	-
			360	50	45015036	BP W 230x280 SiC 360	-
			400	50	45015040	BP W 230x280 SiC 400	-
			500	50	45015050	BP W 230x280 SiC 500	-
			600	50	45015060	BP W 230x280 SiC 600	-
			800	50	45015080	BP W 230x280 SiC 800	-
			1000	50	45015100	BP W 230x280 SiC 1000	-
			1200	50	45015120	BP W 230x280 SiC 1200	-

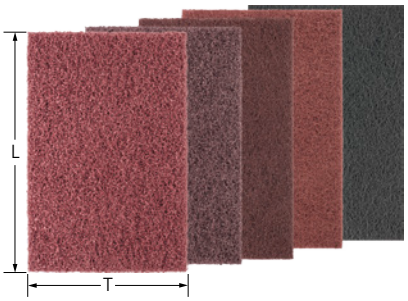


Aluminium oxide A version

The abrasive material aluminium oxide A is the low-cost alternative for normal workloads when working on painted wooden and metal surfaces.

Special features:
- Good grain adhesion on sturdy paper.
- Good abrasive performance.

L [mm]	T [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
280	230	A	40	50	45015204	BP 230x280 A 40	-
			60	50	45015206	BP 230x280 A 60	-
			80	50	45015208	BP 230x280 A 80	-
			100	100	45015210	BP 230x280 A 100	-
			120	100	45015212	BP 230x280 A 120	-
			150	100	45015215	BP 230x280 A 150	-
			180	100	45015218	BP 230x280 A 180	-
			220	100	45015222	BP 230x280 A 220	-
			240	100	45015224	BP 230x280 A 240	-
			280	100	45015228	BP 230x280 A 280	-
			400	100	45015240	BP 230x280 A 400	-



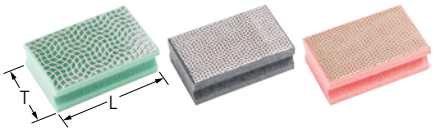
POLINOX hand pads PVSK

Suitable for very fine grinding on small to large surfaces and contours, and for manually cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces. Highly open structure. Available in the aluminium oxide A and silicon carbide SiC types.



Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Hard-to-reach areas can be accessed.

L [mm]	T [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
225	150	A	80	10	44697108	PVSK 150 A 80	-
			100	10	44697110	PVSK 150 A 100	-
			180	10	44697118	PVSK 150 A 180	-
			280	10	44697128	PVSK 150 A 280	-
		SiC	400	10	44697640	PVSK 150 SiC 400	-

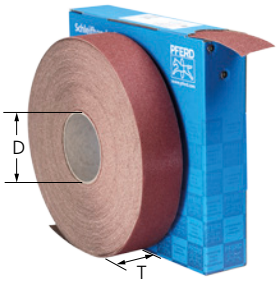


HP diamond type

Excellent for work on wear-resistant coatings and for hard facings. Particularly recommended for work on materials used for aircraft engine construction. Also ideal for work on extremely hard materials.

Special features:
- Highly flexible, enabling optimal adjustment to the contour. Hard-to-reach areas can be accessed.
- Can be used for wet and dry grinding.
- Colour code: D 251 (green) = P 60; D 126 (black) = P 120; D 76 (red) = P 200.

L [m]	T [mm]	Abrasive	Grit size [µm]		Item no.	Designation	Price/unit EUR
90	55	DIA	251	1	44696011	HP 5590 DIA 251	-
			126	1	44696012	HP 5590 DIA 126	-
			76	1	44696013	HP 5590 DIA 76	-



Cloth, aluminium oxide A type

The cloth-backed variant is suitable for general, heavy-duty use on alloyed and non-alloyed steels, as well as non-ferrous metals. The carton has a tear-off edge for separating the sections of abrasive belt at the workplace.



Special features:

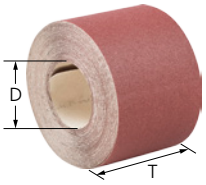
- Highly flexible, enabling optimal adjustment to the contour.
- Little wear due to high tear strength and very good grain adhesion.
- Please order matching shop roll holder separately.

T [mm]	Length [m]	D [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
25	50	75	A	60	1	45016006	SBR 25 A 60	-
				80	1	45016008	SBR 25 A 80	-
				100	1	45016010	SBR 25 A 100	-
				120	1	45016012	SBR 25 A 120	-
				150	1	45016015	SBR 25 A 150	-
				180	1	45016018	SBR 25 A 180	-
				240	1	45016024	SBR 25 A 240	-
				320	1	45016032	SBR 25 A 320	-
				400	1	45016040	SBR 25 A 400	-
				600	1	45016060	SBR 25 A 600	-
				800	1	45016080	SBR 25 A 800	-
38	25	75	A	40	1	45016404	SBR 38 A 40	-
				50	1	45016405	SBR 38 A 50	-
				60	1	45016406	SBR 38 A 60	-
				80	1	45016408	SBR 38 A 80	-
				100	1	45016410	SBR 38 A 100	-
				120	1	45016412	SBR 38 A 120	-
				150	1	45016415	SBR 38 A 150	-
				180	1	45016418	SBR 38 A 180	-
				220	1	45016422	SBR 38 A 220	-
				240	1	45016424	SBR 38 A 240	-
				320	1	45016432	SBR 38 A 320	-
				400	1	45016440	SBR 38 A 400	-
40	50	75	A	40	1	45016104	SBR 40 A 40	-
				60	1	45016106	SBR 40 A 60	-
				80	1	45016108	SBR 40 A 80	-
				100	1	45016110	SBR 40 A 100	-
				120	1	45016112	SBR 40 A 120	-
				150	1	45016115	SBR 40 A 150	-
				180	1	45016118	SBR 40 A 180	-
				220	1	45016122	SBR 40 A 220	-
				240	1	45016124	SBR 40 A 240	-
				320	1	45016132	SBR 40 A 320	-
				400	1	45016140	SBR 40 A 400	-
50	50	75	A	40	1	45016204	SBR 50 A 40	-
				60	1	45016206	SBR 50 A 60	-
				80	1	45016208	SBR 50 A 80	-
				100	1	45016210	SBR 50 A 100	-
				120	1	45016212	SBR 50 A 120	-
				150	1	45016215	SBR 50 A 150	-

Continued on next page

T [mm]	Length [m]	D [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
50	50	75	A	180	1	45016218	SBR 50 A 180	-
				220	1	45016220	SBR 50 A 220	-
				240	1	45016224	SBR 50 A 240	-
				320	1	45016232	SBR 50 A 320	-
				400	1	45016240	SBR 50 A 400	-
				600	1	45016260	SBR 50 A 600	-
100	50	75	A	40	1	45016304	SBR 100 A 40	-
				60	1	45016306	SBR 100 A 60	-
				80	1	45016308	SBR 100 A 80	-
				100	1	45016310	SBR 100 A 100	-
				120	1	45016312	SBR 100 A 120	-
				150	1	45016315	SBR 100 A 150	-
				180	1	45016318	SBR 100 A 180	-
				240	1	45016324	SBR 100 A 240	-
				320	1	45016332	SBR 100 A 320	-
				400	1	45016340	SBR 100 A 400	-

Shop rolls SBR-P



Paper, aluminium oxide A type

The abrasive material aluminium oxide A is the low-cost alternative for normal workloads when working on painted wooden and metal surfaces.



Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Little wear due to high tear strength and very good grain adhesion.

T [mm]	Length [m]	D [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
115	25	75	A	40	1	45016534	SBR-P 115 A 40	-
				60	1	45016536	SBR-P 115 A 60	-
				80	1	45016538	SBR-P 115 A 80	-
				100	1	45016540	SBR-P 115 A 100	-
				120	1	45016542	SBR-P 115 A 120	-
				150	1	45016545	SBR-P 115 A 150	-

SRH 1

SRH 5



SRH 1 and SRH 5 types

Holder for wall mounting: for storing and tearing off to the required length as necessary. With the variant SRH 5, various roll sizes can be combined with each other as desired.

Special features:
- Enable shop rolls to be stored correctly.

Number of rolls	Suitable for roll width [mm]	Suitable for roll diameter [mm]		Item no.	Designation	Price/unit EUR
1	25, 38, 40, 50	380	1	42990001	SRH 1	-
5	25, 38, 40, 50	260	1	42990007	SRH 5	-

POLINOX non-woven shop rolls VBR



Aluminium oxide A and silicon carbide SiC types

Suitable for very fine grinding on small to large surfaces and contours, and for manually cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces. Highly open structure.



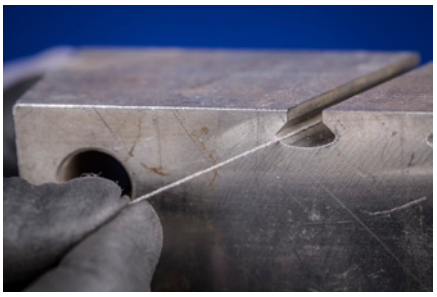
Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Hard-to-reach areas can be accessed.

T [mm]	Length [m]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
100	10	A	80	1	45018308	VBR 100 A 80	-
			100	1	45018310	VBR 100 A 100	-
			180	1	45018318	VBR 100 A 180	-
			280	1	45018328	VBR 100 A 280	-
		SiC	400	1	45018440	VBR 100 SiC 400	-



SS type

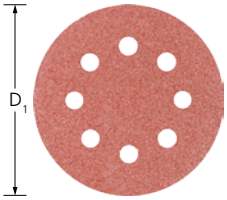
High flexibility, therefore ideal for very fine deburring and finishing work in hard-to-reach places. Especially recommended for work on very small holes, grooves and cut-outs in tool and mould-making. Available in aluminium oxide A and silicon carbide SiC.



Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Little wear due to high tear strength and very good grain adhesion.
- The abrasive cord can be shortened to the required length.

D [mm]	Length [m]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
0.8	15	A	200	1	45019002	SS 0.8 mm x 15 m A 200	-
1	15	A	180	1	45019003	SS 1,0mm x 15m A 180	-
1.4	15	A	150	1	45019004	SS 1.4 mm x 15 m A 150	-
1.8	15	A	180	1	45019005	SS 1.8 mm x 15 m A 180	-
2.1	15	A	120	1	45019006	SS 2.1 mm x 15 m A 120	-
0.5	15	SiC	200	1	45019001	SS 0.5 mm x 15 m SiC 200	-

Velcro-backed abrasive discs KSS



Aluminium oxide A version

Velcro-backed abrasive discs are suitable for fine grinding large surfaces with eccentric orbital sanders and for general use on metal, wood, plastic and paint. For general grinding work from coarse to fine grinding in industry and professional trades.

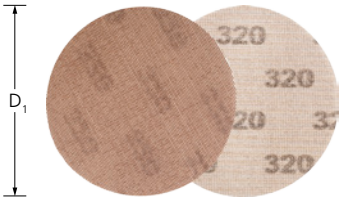
Special features:
- High economic efficiency thanks to quick tool-changing and high grinding performance.
- Maximum tool life through reduced clogging.

D_1 [mm]	Holes	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
125	-	A	40	25	45017760	KSS 125 O L A 40	-
			60	25	45017761	KSS 125 O L A 60	-
			80	25	45017762	KSS 125 O L A 80	-
			100	25	45017763	KSS 125 O L A 100	-
			120	25	45017764	KSS 125 O L A 120	-
			150	25	45017765	KSS 125 O L A 150	-
	8	A	40	25	45017004	KSS 125 8 L A 40	-
			60	25	45017006	KSS 125 8 L A 60	-
			80	25	45017008	KSS 125 8 L A 80	-
			100	25	45017010	KSS 125 8 L A 100	-
			120	25	45017012	KSS 125 8 L A 120	-
			150	25	45017015	KSS 125 8 L A 150	-
			180	25	45017018	KSS 125 8 L A 180	-
			240	25	45017024	KSS 125 8 L A 240	-
			320	25	45017032	KSS 125 8 L A 320	-
			400	25	45017040	KSS 125 8 L A 400	-
150	-	A	40	25	45017770	KSS 150 O L A 40	-
			60	25	45017771	KSS 150 O L A 60	-
			80	25	45017772	KSS 150 O L A 80	-

Continued on next page

D_1 [mm]	Holes	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
150	-	A	100	25	45017773	KSS 150 O L A 100	-
			120	25	45017774	KSS 150 O L A 120	-
			150	25	45017775	KSS 150 O L A 150	-
			180	25	45017776	KSS 150 O L A 180	-
			240	25	45017777	KSS 150 O L A 240	-
	6	A	40	25	45017104	KSS 150 6 L A 40	-
			60	25	45017106	KSS 150 6 L A 60	-
			80	25	45017108	KSS 150 6 L A 80	-
			100	25	45017110	KSS 150 6 L A 100	-
			120	25	45017112	KSS 150 6 L A 120	-
			150	25	45017115	KSS 150 6 L A 150	-
			180	25	45017118	KSS 150 6 L A 180	-
			240	25	45017124	KSS 150 6 L A 240	-
			320	25	45017132	KSS 150 6 L A 320	-
			400	25	45017140	KSS 150 6 L A 400	-
	8	A	40	25	45017144	KSS 150 8 L A 40	-
			60	25	45017146	KSS 150 8 L A 60	-
			80	25	45017148	KSS 150 8 L A 80	-
			100	25	45017150	KSS 150 8 L A 100	-
			120	25	45017152	KSS 150 8 L A 120	-
			150	25	45017155	KSS 150 8 L A 150	-

Velcro-backed abrasive discs KSS-NET



Aluminium oxide A version

NET Velcro-backed abrasive discs consist of a netting fabric to which the abrasive grit is stuck using a powerful binding technique, which makes it very robust. For dust-free, general grinding work on medium-sized and large surfaces.



Special features:

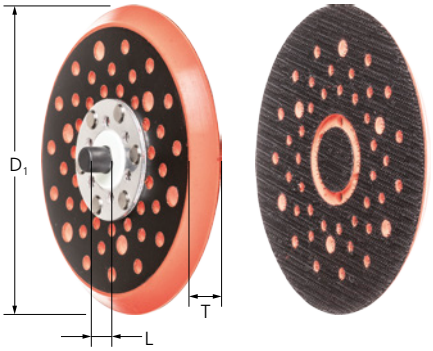
- Very long tool life and high stock removal rate.
- Achieves very fine, even surfaces. Dust-free work thanks to good extraction capability.
- Durable netting structure with high tear strength and edge stability.

D_1 [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
125	A	80	25	45018001	KSS NET 125 A 80	-
		100	25	45018002	KSS NET 125 A 100	-
		120	25	45018003	KSS NET 125 A 120	-
		150	25	45018004	KSS NET 125 A 150	-
		180	25	45018005	KSS NET 125 A 180	-
		240	25	45018006	KSS NET 125 A 240	-
		320	25	45018007	KSS NET 125 A 320	-
		400	25	45018008	KSS NET 125 A 400	-
		600	25	45018009	KSS NET 125 A 600	-
		800	25	45018010	KSS NET 125 A 800	-
		1000	25	45018011	KSS NET 125 A 1000	-
150	A	80	25	45018012	KSS NET 150 A 80	-

Continued on next page

D_1 [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
150	A	100	25	45018013	KSS NET 150 A 100	-
		120	25	45018014	KSS NET 150 A 120	-
		150	25	45018015	KSS NET 150 A 150	-
		180	25	45018016	KSS NET 150 A 180	-
		240	25	45018017	KSS NET 150 A 240	-
		320	25	45018018	KSS NET 150 A 320	-
		400	25	45018019	KSS NET 150 A 400	-
		600	25	45018020	KSS NET 150 A 600	-
		800	25	45018021	KSS NET 150 A 800	-
		1000	25	45018022	KSS NET 150 A 1000	-

Velcro-backed abrasive disc holder

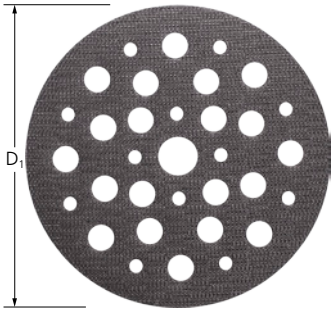


Velcro-backed abrasive disc holder

The holder is suitable for general use with various different eccentric orbital sanders with 5/16" thread. When used with NET Velcro-backed abrasive discs, this backing pad has particular advantages.

Special features:
- Clean, low-dust working environment. Suitable for general use due to multiple holes.
- Compatible with a lot of eccentric orbital sanders and self-adhesive discs.
- Extremely strong, durable self-adhesive system.

D_1 [mm]	T [mm]	L [mm]	Thread	Suitable for Velcro-backed abrasive disc diameter [mm]		Item no.	Designation	Price/unit EUR
125	10	9	5/16-24 UNF	125	1	45017778	KSS-H 125-5/16	-
150	10	9	5/16-24 UNF	150	1	45017779	KSS-H 150-5/16	-



Protective pad for Velcro-backed abrasive disc holders

The protective pad protects the backing pad against premature wear and can be used with any type of Velcro-backed abrasive disc pad. The series of holes in the protective pads for Velcro-backed abrasive disc holders enables the grinding dust to be extracted very effectively.

Special features:
- Clean, low-dust working environment. Suitable for general use due to multiple holes.
- Compatible with a lot of eccentric orbital sanders, Velcro-backed abrasive disc holders and self-adhesive discs.
- Extremely strong, durable self-adhesive system.

D_1 [mm]	Suitable for Velcro-backed abrasive disc diameter [mm]		Item no.	Designation	Price/unit EUR
125	125	5	45017780	KSS-PP 125	-
150	150	5	45017781	KSS-PP 150	-

The quick way to find the perfect tool

Material group ▾			Abrasive ▸ Aluminium oxide A	Zirconia alumina Z	Zirconia alumina Z-COOL	Ceramic oxide grain CO-COOL	Silicon carbide SiC
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●	○		●	
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	○	●		●	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels		○	●	●	
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	○		○	○	
		Brass, copper, zinc	●	○	○		
	Hard non-ferrous metals	Hard aluminium alloys	●	○	○		○
		Bronze, titanium		○	●	●	●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys		○	●	●	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	●	○			
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint	●				●

● = highly suitable ○ = suitable

Safety notes

- The maximum permitted peripheral speed is 30 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.
- Do not allow abrasive spiral bands to protrude beyond the rubber drum holder.

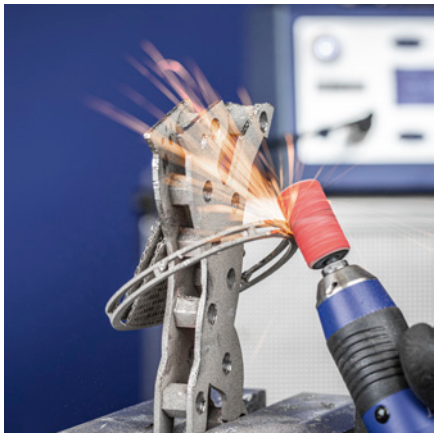

Wear eye protection!


Wear hearing protection!

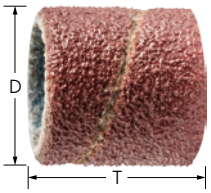

Wear gloves!


Wear a dust mask!


Follow the safety instructions!



Abrasive spiral bands
Small pack KSB



Aluminium oxide A version

For general applications from coarse to fine grinding.



Special features:

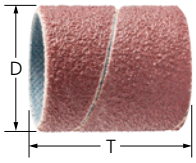
- The abrasive spiral band is firmly held in place on the rubber drum holder as the holder expands during use. The rubber drum holder must be ordered separately.
- Outstanding tool life due to special manufacturing process – even under the most demanding operating conditions.
- Maximum economic efficiency thanks to particularly high stock removal rate and aggressive abrasive quality.

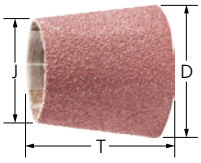
D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
Cylindrical shape								
10	10	A	80	30,000 – 44,000	25	42231108	KSB 1010 A 80	-
			150	30,000 – 44,000	25	42231115	KSB 1010 A 150	-
	20	A	80	30,000 – 44,000	25	42232108	KSB 1020 A 80	-
			150	30,000 – 44,000	25	42232115	KSB 1020 A 150	-
			240	30,000 – 44,000	25	42232124	KSB 1020 A 240	-
13	10	A	80	30,000 – 44,000	25	42233108	KSB 1310 A 80	-
			150	30,000 – 44,000	25	42233115	KSB 1310 A 150	-
	25	A	80	30,000 – 44,000	25	42234108	KSB 1325 A 80	-
			150	30,000 – 44,000	25	42234115	KSB 1325 A 150	-
15	10	A	60	26,000 – 36,000	25	42235105	KSB 1510 A 60	-
			80	26,000 – 36,000	25	42235108	KSB 1510 A 80	-
			150	26,000 – 36,000	25	42235115	KSB 1510 A 150	-
	30	A	50	26,000 – 36,000	25	42236103	KSB 1530 A 50	-
			60	26,000 – 36,000	25	42236105	KSB 1530 A 60	-
			80	26,000 – 36,000	25	42236108	KSB 1530 A 80	-
			150	26,000 – 36,000	25	42236115	KSB 1530 A 150	-
			240	26,000 – 36,000	25	42236124	KSB 1530 A 240	-
19	25	A	60	20,000 – 30,000	25	42236505	KSB 1925 A 60	-
			80	20,000 – 30,000	25	42236508	KSB 1925 A 80	-
			150	20,000 – 30,000	25	42236515	KSB 1925 A 150	-
			240	20,000 – 30,000	25	42236524	KSB 1925 A 240	-
22	20	A	50	18,000 – 26,000	25	42237104	KSB 2220 A 50	-
			60	18,000 – 26,000	25	42237105	KSB 2220 A 60	-
			80	18,000 – 26,000	25	42237108	KSB 2220 A 80	-
			150	18,000 – 26,000	25	42237115	KSB 2220 A 150	-
25	25	A	60	16,000 – 22,900	25	42237505	KSB 2525 A 60	-
			80	16,000 – 22,900	25	42237508	KSB 2525 A 80	-
			150	16,000 – 22,900	25	42237515	KSB 2525 A 150	-
30	20	A	40	13,000 – 19,100	25	42238104	KSB 3020 A 40	-
			60	13,000 – 19,100	25	42238105	KSB 3020 A 60	-
			80	13,000 – 19,100	25	42238108	KSB 3020 A 80	-
			150	13,000 – 19,100	25	42238115	KSB 3020 A 150	-
	30	A	40	13,000 – 19,100	25	42239104	KSB 3030 A 40	-
			50	13,000 – 19,100	25	42239103	KSB 3030 A 50	-
			60	13,000 – 19,100	25	42239105	KSB 3030 A 60	-
			80	13,000 – 19,100	25	42239108	KSB 3030 A 80	-
			150	13,000 – 19,100	25	42239115	KSB 3030 A 150	-
38	25	A	40	10,000 – 15,900	25	42239504	KSB 3825 A 40	-
			60	10,000 – 15,900	25	42239505	KSB 3825 A 60	-
			80	10,000 – 15,900	25	42239508	KSB 3825 A 80	-
			150	10,000 – 15,900	25	42239515	KSB 3825 A 150	-

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D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
45	30	A	40	8,500 – 12,700	10	42240104	KSB 4530 A 40	-
			50	8,500 – 12,700	10	42240103	KSB 4530 A 50	-
			60	8,500 – 12,700	10	42240105	KSB 4530 A 60	-
			80	8,500 – 12,700	10	42240108	KSB 4530 A 80	-
			150	8,500 – 12,700	10	42240115	KSB 4530 A 150	-
51	25	A	40	7,500 – 11,200	10	42240504	KSB 5125 A 40	-
			60	7,500 – 11,200	10	42240505	KSB 5125 A 60	-
			80	7,500 – 11,200	10	42240508	KSB 5125 A 80	-
			150	7,500 – 11,200	10	42240515	KSB 5125 A 150	-
60	30	A	40	6,500 – 9,500	10	42241104	KSB 6030 A 40	-
			50	6,500 – 9,500	10	42241103	KSB 6030 A 50	-
			60	6,500 – 9,500	10	42241105	KSB 6030 A 60	-
			80	6,500 – 9,500	10	42241108	KSB 6030 A 80	-
			150	6,500 – 9,500	10	42241115	KSB 6030 A 150	-
75	30	A	40	5,000 – 7,600	10	42242104	KSB 7530 A 40	-
			60	5,000 – 7,600	10	42242105	KSB 7530 A 60	-
			80	5,000 – 7,600	10	42242108	KSB 7530 A 80	-
			150	5,000 – 7,600	10	42242115	KSB 7530 A 150	-

Bulk pack GSB





Aluminium oxide A version

For general applications from coarse to fine grinding. The packaging size is ideally suited to industrial requirements.



Special features:
- The abrasive spiral band is firmly held in place on the rubber drum holder as the holder expands during use. The rubber drum holder must be ordered separately.
- Outstanding tool life due to special manufacturing process – even under the most demanding operating conditions.
- Maximum economic efficiency thanks to particularly high stock removal rate and aggressive abrasive quality.

D [mm]	J [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
Cylindrical shape									
4	-	10	A	150	30,000 – 55,000	100	42200415	GSB 0410 A 150	-
6	-	10	A	150	30,000 – 55,000	100	42200615	GSB 0610 A 150	-
8	-	10	A	150	30,000 – 55,000	100	42200815	GSB 0810 A 150	-
10	-	10	A	80	30,000 – 44,000	100	42201108	GSB 1010 A 80	-
				150	30,000 – 44,000	100	42201115	GSB 1010 A 150	-
		20	A	60	30,000 – 44,000	100	42202106	GSB 1020 A 60	-
				80	30,000 – 44,000	100	42202108	GSB 1020 A 80	-
				150	30,000 – 44,000	100	42202115	GSB 1020 A 150	-
				240	30,000 – 44,000	100	42202124	GSB 1020 A 240	-
13	-	10	A	80	30,000 – 44,000	100	42203108	GSB 1310 A 80	-
				150	30,000 – 44,000	100	42203115	GSB 1310 A 150	-
		25	A	80	30,000 – 44,000	100	42204108	GSB 1325 A 80	-
				150	30,000 – 44,000	100	42204115	GSB 1325 A 150	-
15	-	10	A	60	26,000 – 36,000	100	42205105	GSB 1510 A 60	-
				80	26,000 – 36,000	100	42205108	GSB 1510 A 80	-

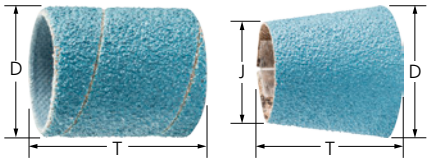
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Abrasive spiral bands
Bulk pack GSB

D [mm]	J [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/ unit EUR
15	-	10	A	150	26,000 – 36,000	100	42205115	GSB 1510 A 150	-
		30	A	50	26,000 – 36,000	100	42206103	GSB 1530 A 50	-
				60	26,000 – 36,000	100	42206105	GSB 1530 A 60	-
				80	26,000 – 36,000	100	42206108	GSB 1530 A 80	-
				150	26,000 – 36,000	100	42206115	GSB 1530 A 150	-
				240	26,000 – 36,000	100	42206124	GSB 1530 A 240	-
19	-	25	A	60	20,000 – 30,000	100	42206505	GSB 1925 A 60	-
				80	20,000 – 30,000	100	42206508	GSB 1925 A 80	-
				150	20,000 – 30,000	100	42206515	GSB 1925 A 150	-
22	-	20	A	50	18,000 – 26,000	100	42207104	GSB 2220 A 50	-
				60	18,000 – 26,000	100	42207105	GSB 2220 A 60	-
				80	18,000 – 26,000	100	42207108	GSB 2220 A 80	-
				150	18,000 – 26,000	100	42207115	GSB 2220 A 150	-
				240	18,000 – 26,000	100	42207124	GSB 2220 A 240	-
25	-	25	A	60	16,000 – 22,900	100	42207505	GSB 2525 A 60	-
				80	16,000 – 22,900	100	42207508	GSB 2525 A 80	-
				150	16,000 – 22,900	100	42207515	GSB 2525 A 150	-
30	-	20	A	40	13,000 – 19,100	100	42208104	GSB 3020 A 40	-
				60	13,000 – 19,100	100	42208105	GSB 3020 A 60	-
				80	13,000 – 19,100	100	42208108	GSB 3020 A 80	-
				150	13,000 – 19,100	100	42208115	GSB 3020 A 150	-
		30	A	40	13,000 – 19,100	100	42209104	GSB 3030 A 40	-
				50	13,000 – 19,100	100	42209103	GSB 3030 A 50	-
				60	13,000 – 19,100	100	42209105	GSB 3030 A 60	-
				80	13,000 – 19,100	100	42209108	GSB 3030 A 80	-
				150	13,000 – 19,100	100	42209115	GSB 3030 A 150	-
				240	13,000 – 19,100	100	42209124	GSB 3030 A 240	-
38	-	25	A	40	10,000 – 15,900	100	42209504	GSB 3825 A 40	-
				60	10,000 – 15,900	100	42209505	GSB 3825 A 60	-
				80	10,000 – 15,900	100	42209508	GSB 3825 A 80	-
				150	10,000 – 15,900	100	42209515	GSB 3825 A 150	-
45	-	30	A	40	8,500 – 12,700	100	42210104	GSB 4530 A 40	-
				50	8,500 – 12,700	100	42210103	GSB 4530 A 50	-
				60	8,500 – 12,700	100	42210105	GSB 4530 A 60	-
				80	8,500 – 12,700	100	42210108	GSB 4530 A 80	-
				150	8,500 – 12,700	100	42210115	GSB 4530 A 150	-
				240	8,500 – 12,700	100	42210124	GSB 4530 A 240	-
51	-	25	A	40	7,500 – 11,200	100	42210504	GSB 5125 A 40	-
				60	7,500 – 11,200	100	42210505	GSB 5125 A 60	-
				80	7,500 – 11,200	100	42210508	GSB 5125 A 80	-
				150	7,500 – 11,200	100	42210515	GSB 5125 A 150	-
60	-	30	A	40	6,500 – 9,500	100	42211104	GSB 6030 A 40	-
				50	6,500 – 9,500	100	42211103	GSB 6030 A 50	-
				60	6,500 – 9,500	100	42211105	GSB 6030 A 60	-
				80	6,500 – 9,500	100	42211108	GSB 6030 A 80	-
				150	6,500 – 9,500	100	42211115	GSB 6030 A 150	-
75	-	30	A	40	5,000 – 7,600	100	42212104	GSB 7530 A 40	-
				60	5,000 – 7,600	100	42212105	GSB 7530 A 60	-
				80	5,000 – 7,600	100	42212108	GSB 7530 A 80	-
				150	5,000 – 7,600	100	42212115	GSB 7530 A 150	-
100	-	40	A	40	4,000 – 5,700	50	42213104	GSB 10040 A 40	-
				60	4,000 – 5,700	50	42213105	GSB 10040 A 60	-
				80	4,000 – 5,700	50	42213108	GSB 10040 A 80	-
				150	4,000 – 5,700	50	42213115	GSB 10040 A 150	-

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D [mm]	J [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/ unit EUR
Conical shape									
20	14	63	A	40	19,000 – 26,000	100	42214104	GSB 201463 A 40	-
				60	19,000 – 26,000	100	42214105	GSB 201463 A 60	-
				80	19,000 – 26,000	100	42214108	GSB 201463 A 80	-
				150	19,000 – 26,000	100	42214115	GSB 201463 A 150	-
				240	19,000 – 26,000	100	42214124	GSB 201463 A 240	-
29	22	30	A	40	13,000 – 19,100	100	42215104	GSB 292230 A 40	-
				60	13,000 – 19,100	100	42215105	GSB 292230 A 60	-
				80	13,000 – 19,100	100	42215108	GSB 292230 A 80	-
				150	13,000 – 19,100	100	42215115	GSB 292230 A 150	-
36	22	60	A	40	10,000 – 15,900	100	42216104	GSB 362260 A 40	-
				60	10,000 – 15,900	100	42216105	GSB 362260 A 60	-
				80	10,000 – 15,900	100	42216108	GSB 362260 A 80	-
				150	10,000 – 15,900	100	42216115	GSB 362260 A 150	-



Zirconia alumina Z version

For coarse grinding work with a high stock removal rate and a long tool life. The packaging size is ideally suited to industrial requirements.



Special features:

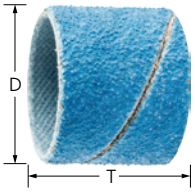
- The abrasive spiral band is firmly held in place on the rubber drum holder as the holder expands during use. The rubber drum holder must be ordered separately.
- Outstanding tool life due to special manufacturing process – even under the most demanding operating conditions.
- Maximum economic efficiency thanks to particularly high stock removal rate and aggressive abrasive quality.

D [mm]	J [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/ unit EUR
Cylindrical shape									
13	-	25	Z	50	30,000 – 44,000	100	42217063	GSB 1325 Z 50	-
				60	30,000 – 44,000	100	42217064	GSB 1325 Z 60	-
				80	30,000 – 44,000	100	42217065	GSB 1325 Z 80	-
				120	30,000 – 44,000	100	42217066	GSB 1325 Z 120	-
19	-	25	Z	40	20,000 – 30,000	100	42217092	GSB 1925 Z 40	-
				50	20,000 – 30,000	100	42217093	GSB 1925 Z 50	-
				60	20,000 – 30,000	100	42217094	GSB 1925 Z 60	-
				80	20,000 – 30,000	100	42217095	GSB 1925 Z 80	-
				120	20,000 – 30,000	100	42217096	GSB 1925 Z 120	-
25	-	25	Z	36	16,000 – 22,900	100	42217111	GSB 2525 Z 36	-
				40	16,000 – 22,900	100	42217112	GSB 2525 Z 40	-
				50	16,000 – 22,900	100	42217113	GSB 2525 Z 50	-
				60	16,000 – 22,900	100	42217114	GSB 2525 Z 60	-
				80	16,000 – 22,900	100	42217115	GSB 2525 Z 80	-
				120	16,000 – 22,900	100	42217116	GSB 2525 Z 120	-
30	-	30	Z	36	13,000 – 19,100	100	42217131	GSB 3030 Z 36	-
				40	13,000 – 19,100	100	42217132	GSB 3030 Z 40	-
				50	13,000 – 19,100	100	42217133	GSB 3030 Z 50	-
				60	13,000 – 19,100	100	42217134	GSB 3030 Z 60	-
				80	13,000 – 19,100	100	42217135	GSB 3030 Z 80	-
38	-	25	Z	36	10,000 – 15,900	100	42217141	GSB 3825 Z 36	-

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Abrasive spiral bands
Bulk pack GSB

D [mm]	J [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/ unit EUR
38	-	25	Z	40	10,000 – 15,900	100	42217142	GSB 3825 Z 40	-
				50	10,000 – 15,900	100	42217143	GSB 3825 Z 50	-
				60	10,000 – 15,900	100	42217144	GSB 3825 Z 60	-
				80	10,000 – 15,900	100	42217145	GSB 3825 Z 80	-
				120	10,000 – 15,900	100	42217146	GSB 3825 Z 120	-
45	-	30	Z	40	8,500 – 12,700	100	42217152	GSB 4530 Z 40	-
				50	8,500 – 12,700	100	42217153	GSB 4530 Z 50	-
				60	8,500 – 12,700	100	42217154	GSB 4530 Z 60	-
				80	8,500 – 12,700	100	42217155	GSB 4530 Z 80	-
51	-	25	Z	36	7,500 – 11,200	100	42217161	GSB 5125 Z 36	-
				40	7,500 – 11,200	100	42217162	GSB 5125 Z 40	-
				50	7,500 – 11,200	100	42217163	GSB 5125 Z 50	-
				60	7,500 – 11,200	100	42217164	GSB 5125 Z 60	-
				80	7,500 – 11,200	100	42217165	GSB 5125 Z 80	-
				120	7,500 – 11,200	100	42217166	GSB 5125 Z 120	-
Conical shape									
20	14	63	Z	36	19,000 – 26,000	100	42217167	GSB 201463 Z 36	-
				50	19,000 – 26,000	100	42217168	GSB 201463 Z 50	-
				60	19,000 – 26,000	100	42217169	GSB 201463 Z 60	-
				80	19,000 – 26,000	100	42217170	GSB 201463 Z 80	-
				120	19,000 – 26,000	100	42217171	GSB 201463 Z 120	-
29	22	30	Z	36	13,000 – 19,100	100	42217172	GSB 292230 Z 36	-
				50	13,000 – 19,100	100	42217173	GSB 292230 Z 50	-
				60	13,000 – 19,100	100	42217174	GSB 292230 Z 60	-
				80	13,000 – 19,100	100	42217175	GSB 292230 Z 80	-
				120	13,000 – 19,100	100	42217176	GSB 292230 Z 120	-
36	22	60	Z	36	10,000 – 15,900	100	42217177	GSB 362260 Z 36	-
				50	10,000 – 15,900	100	42217178	GSB 362260 Z 50	-
				60	10,000 – 15,900	100	42217179	GSB 362260 Z 60	-
				80	10,000 – 15,900	100	42217180	GSB 362260 Z 80	-
				120	10,000 – 15,900	100	42217181	GSB 362260 Z120	-



Zirconia alumina Z-COOL version

For coarse grinding work with a high stock removal rate and cool grinding. Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding. The packaging size is ideally suited to industrial requirements.



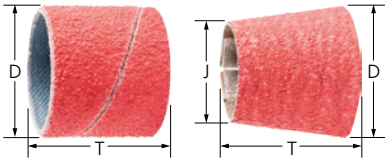
Special features:

- The abrasive spiral band is firmly held in place on the rubber drum holder as the holder expands during use. The rubber drum holder must be ordered separately.
- Outstanding tool life due to special manufacturing process – even under the most demanding operating conditions.
- Maximum economic efficiency thanks to particularly high stock removal rate and aggressive abrasive quality.

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
Cylindrical shape								
15	30	Z-COOL	50	26,000 – 36,000	100	42206183	GSB 1530 Z-COOL 50	-
			80	26,000 – 36,000	100	42206188	GSB 1530 Z-COOL 80	-
			150	26,000 – 36,000	100	42206285	GSB 1530 Z-COOL 150	-
22	20	Z-COOL	50	18,000 – 26,000	100	42207184	GSB 2220 Z-COOL 50	-

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D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
22	20	Z-COOL	80	18,000 – 26,000	100	42207188	GSB 2220 Z-COOL 80	-
			150	18,000 – 26,000	100	42207285	GSB 2220 Z-COOL 150	-
30	30	Z-COOL	36	13,000 – 19,100	100	42209182	GSB 3030 Z-COOL 36	-
			50	13,000 – 19,100	100	42209183	GSB 3030 Z-COOL 50	-
			80	13,000 – 19,100	100	42209188	GSB 3030 Z-COOL 80	-
			150	13,000 – 19,100	100	42209285	GSB 3030 Z-COOL 150	-
45	30	Z-COOL	36	8,500 – 12,700	100	42210182	GSB 4530 Z-COOL 36	-
			50	8,500 – 12,700	100	42210183	GSB 4530 Z-COOL 50	-
			80	8,500 – 12,700	100	42210188	GSB 4530 Z-COOL 80	-
			150	8,500 – 12,700	100	42210285	GSB 4530 Z-COOL 150	-
60	30	Z-COOL	36	6,500 – 9,500	100	42211182	GSB 6030 Z-COOL 36	-
			50	6,500 – 9,500	100	42211183	GSB 6030 Z-COOL 50	-
			80	6,500 – 9,500	100	42211188	GSB 6030 Z-COOL 80	-
			150	6,500 – 9,500	100	42211285	GSB 6030 Z-COOL 150	-



Ceramic oxide grain CO-COOL version

Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding. The packaging size is ideally suited to industrial requirements.



Special features:

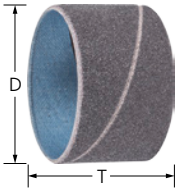
- The abrasive spiral band is firmly held in place on the rubber drum holder as the holder expands during use. The rubber drum holder must be ordered separately.
- Outstanding tool life due to special manufacturing process – even under the most demanding operating conditions.
- Maximum economic efficiency thanks to particularly high stock removal rate and aggressive abrasive quality.

D [mm]	J [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
Cylindrical shape									
13	-	25	CO-COOL	60	30,000 – 44,000	100	42204205	GSB 1325 CO-COOL 60	-
				80	30,000 – 44,000	100	42204208	GSB 1325 CO-COOL 80	-
				120	30,000 – 44,000	100	42204212	GSB 1325 CO-COOL 120	-
15	-	30	CO-COOL	60	26,000 – 36,000	100	42206305	GSB 1530 CO-COOL 60	-
				80	26,000 – 36,000	100	42206308	GSB 1530 CO-COOL 80	-
				120	26,000 – 36,000	100	42206312	GSB 1530 CO-COOL 120	-
19	-	25	CO-COOL	36	20,000 – 30,000	100	42206702	GSB 1925 CO-COOL 36	-
				60	20,000 – 30,000	100	42206705	GSB 1925 CO-COOL 60	-
				80	20,000 – 30,000	100	42206708	GSB 1925 CO-COOL 80	-
				120	20,000 – 30,000	100	42206712	GSB 1925 CO-COOL 120	-
22	-	20	CO-COOL	60	18,000 – 26,000	100	42207305	GSB 2220 CO-COOL 60	-
				80	18,000 – 26,000	100	42207308	GSB 2220 CO-COOL 80	-
				120	18,000 – 26,000	100	42207312	GSB 2220 CO-COOL 120	-
25	-	25	CO-COOL	36	16,000 – 22,900	100	42207702	GSB 2525 CO-COOL 36	-
				60	16,000 – 22,900	100	42207705	GSB 2525 CO-COOL 60	-
				80	16,000 – 22,900	100	42207708	GSB 2525 CO-COOL 80	-
				120	16,000 – 22,900	100	42207712	GSB 2525 CO-COOL 120	-
30	-	30	CO-COOL	36	13,000 – 19,100	100	42209302	GSB 3030 CO-COOL 36	-
				60	13,000 – 19,100	100	42209305	GSB 3030 CO-COOL 60	-
				80	13,000 – 19,100	100	42209308	GSB 3030 CO-COOL 80	-
				120	13,000 – 19,100	100	42209312	GSB 3030 CO-COOL 120	-

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Abrasive spiral bands
Bulk pack GSB

D [mm]	J [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/ unit EUR
38	-	25	CO-COOL	36	10,000 – 15,900	100	42209702	GSB 3825 CO-COOL 36	-
				60	10,000 – 15,900	100	42209705	GSB 3825 CO-COOL 60	-
				80	10,000 – 15,900	100	42209708	GSB 3825 CO-COOL 80	-
				120	10,000 – 15,900	100	*42209712*	GSB 3825 CO-COOL 120	-
45	-	30	CO-COOL	36	8,500 – 12,700	100	42210302	GSB 4530 CO-COOL 36	-
				60	8,500 – 12,700	100	42210305	GSB 4530 CO-COOL 60	-
				80	8,500 – 12,700	100	42210308	GSB 4530 CO-COOL 80	-
				120	8,500 – 12,700	100	42210312	GSB 4530 CO-COOL 120	-
51	-	25	CO-COOL	36	7,500 – 11,200	100	42210602	GSB 5125 CO-COOL 36	-
				60	7,500 – 11,200	100	42210605	GSB 5125 CO-COOL 60	-
				120	7,500 – 11,200	100	*42210612*	GSB 5125 CO-COOL 120	-
60	-	30	CO-COOL	36	6,500 – 9,500	100	42211302	GSB 6030 CO-COOL 36	-
				60	6,500 – 9,500	100	42211305	GSB 6030 CO-COOL 60	-
				80	6,500 – 9,500	100	42211308	GSB 6030 CO-COOL 80	-
				120	6,500 – 9,500	100	42211312	GSB 6030 CO-COOL 120	-
Conical shape									
20	14	63	CO-COOL	36	19,000 – 26,000	100	42217182	GSB 201463 CO-COOL 36	-
				60	19,000 – 26,000	100	42217183	GSB 201463 CO-COOL 60	-
				80	19,000 – 26,000	100	42217184	GSB 201463 CO-COOL 80	-
				120	19,000 – 26,000	100	42217185	GSB 201463 CO-COOL 120	-
29	22	30	CO-COOL	36	13,000 – 19,100	100	42217186	GSB 292230 CO-COOL 36	-
				60	13,000 – 19,100	100	42217187	GSB 292230 CO-COOL 60	-
				80	13,000 – 19,100	100	42217188	GSB 292230 CO-COOL 80	-
				120	13,000 – 19,100	100	42217189	GSB 292230 CO-COOL 120	-
36	22	60	CO-COOL	36	10,000 – 15,900	100	42217190	GSB 362260 CO-COOL 36	-
				60	10,000 – 15,900	100	42217191	GSB 362260 CO-COOL 60	-
				80	10,000 – 15,900	100	42217192	GSB 362260 CO-COOL 80	-
				120	10,000 – 15,900	100	42217193	GSB 362260 CO-COOL 120	-



Silicon carbide SiC version

For general grinding work. Particularly recommended for use on titanium alloys. Ideally suited for use in the aircraft industry, particularly when SiC is the only abrasive approved for use. The packaging size is ideally suited to industrial requirements.



Special features:

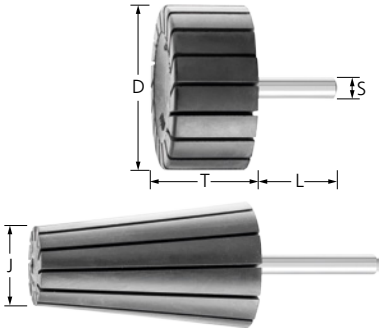
- The abrasive spiral band is firmly held in place on the rubber drum holder as the holder expands during use. The rubber drum holder must be ordered separately.
- Outstanding tool life due to special manufacturing process – even under the most demanding operating conditions.
- Maximum economic efficiency thanks to particularly high stock removal rate and aggressive abrasive quality.

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
Cylindrical shape								
10	20	SiC	60	30,000 – 44,000	100	*42210060*	GSB 1020 SiC 60	-
			80	30,000 – 44,000	100	*42210080*	GSB 1020 SiC 80	-
			100	30,000 – 44,000	100	*42210100*	GSB 1020 SiC 100	-
			150	30,000 – 44,000	100	*42210150*	GSB 1020 SiC 150	-
13	25	SiC	60	30,000 – 44,000	100	*42213060*	GSB 1325 SiC 60	-
			80	30,000 – 44,000	100	*42213080*	GSB 1325 SiC 80	-
			100	30,000 – 44,000	100	*42213100*	GSB 1325 SiC 100	-

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D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
13	25	SiC	150	30,000 – 44,000	100	*42213150*	GSB 1325 SiC 150	-
15	30	SiC	60	26,000 – 36,000	100	*42215060*	GSB 1530 SiC 60	-
			80	26,000 – 36,000	100	*42215080*	GSB 1530 SiC 80	-
			100	26,000 – 36,000	100	*42215100*	GSB 1530 SiC 100	-
			150	26,000 – 36,000	100	*42215150*	GSB 1530 SiC 150	-
22	20	SiC	60	18,000 – 26,000	100	*42222060*	GSB 2220 SiC 60	-
			80	18,000 – 26,000	100	*42222080*	GSB 2220 SiC 80	-
			100	18,000 – 26,000	100	42222100	GSB 2220 SiC 100	-
			150	18,000 – 26,000	100	*42222150*	GSB 2220 SiC 150	-
30	30	SiC	60	13,000 – 19,100	100	*42230060*	GSB 3030 SiC 60	-
			80	13,000 – 19,100	100	*42230080*	GSB 3030 SiC 80	-
			150	13,000 – 19,100	100	*42230150*	GSB 3030 SiC 150	-
45	30	SiC	60	8,500 – 12,700	100	*42245060*	GSB 4530 SiC 60	-
			80	8,500 – 12,700	100	*42245080*	GSB 4530 SiC 80	-
			100	8,500 – 12,700	100	*42245100*	GSB 4530 SiC 100	-
			150	8,500 – 12,700	100	*42245150*	GSB 4530 SiC 150	-

Rubber drum holder GK



Conical and cylindrical types

Matching holder for conical and cylindrical abrasive spiral bands. Rubber drum holders marked "H" are the harder type and permit grinding at higher contact pressure. They are exceptionally well-suited to work on weld seams.

Special features:
- The abrasive spiral band is firmly held in place on the rubber drum holder as the holder expands during use.
- Outstanding tool life due to special manufacturing process – even under the most demanding operating conditions.

D [mm]	J [mm]	T [mm]	S [mm]	L [mm]	Hardness [Shore A]	Acc. to ISO	Max. RPM	Min. RPM		Item no.	Designation	Price/unit EUR
Cylindrical shape												
4	-	10	3	40	65–70	-	55,000	30,000	5	42100413	GK 0410/3	-
			6	40	65–70	-	55,000	30,000	5	42100410	GK 0410/6	-
6	-	10	3	40	65–70	-	55,000	30,000	5	42100613	GK 0610/3	-
			6	40	65–70	-	55,000	30,000	5	42100610	GK 0610/6	-
8	-	10	3	40	65–70	-	55,000	30,000	5	42100813	GK 0810/3	-
			6	40	65–70	-	55,000	30,000	5	42100810	GK 0810/6	-
10	-	10	6	35	65–70	ISO 15637-1	44,000	30,000	5	42101000	GK 1010/6	-
		20	6	35	65–70	ISO 15637-1	44,000	30,000	5	42102000	GK 1020/6	-
13	-	10	6	35	65–70	-	44,000	30,000	5	42103000	GK 1310/6	-
		25	6	35	65–70	-	44,000	30,000	5	42104000	GK 1325/6	-
15	-	10	6	35	65–70	ISO 15637-1	36,000	26,000	5	42105000	GK 1510/6	-
		30	6	35	65–70	ISO 15637-1	36,000	26,000	5	42106000	GK 1530/6	-
19	-	25	6	35	65–70	-	30,000	20,000	5	42106500	GK 1925/6	-
22	-	20	6	35	65–70	ISO 15637-1	26,000	18,000	5	42107000	GK 2220/6	-
					80	ISO 15637-1	26,000	18,000	5	42107080	GK 2220/6 H	-
25	-	25	6	35	65–70	-	22,900	16,000	5	42107500	GK 2525/6	-
30	-	20	6	35	65–70	ISO 15637-1	19,100	13,000	5	42108000	GK 3020/6	-

Continued on next page

Abrasive spiral bands
Rubber drum holder GK

D [mm]	J [mm]	T [mm]	S [mm]	L [mm]	Hard-ness [Shore A]	Acc. to ISO	Max. RPM	Min. RPM		Item no.	Designation	Price/ unit EUR
30	-	30	6	35	65–70	ISO 15637-1	19,100	13,000	5	42109000	GK 3030/6	-
					80	ISO 15637-1	19,100	13,000	5	42109080	GK 3030/6 H	-
38	-	25	6	35	65–70	-	15,900	10,000	5	42109500	GK 3825/6	-
45	-	30	6	35	65–70	ISO 15637-1	12,700	8,500	5	42110000	GK 4530/6	-
					80	ISO 15637-1	12,700	8,500	5	42110080	GK 4530/6 H	-
51	-	25	6	35	65–70	-	11,200	7,500	5	42110500	GK 5125/6	-
60	-	30	6	35	65–70	ISO 15637-1	9,500	6,500	5	42111006	GK 6030/6	-
			8	35	65–70	ISO 15637-1	9,500	6,500	5	42111008	GK 6030/8	-
75	-	30	8	35	65–70	ISO 15637-1	7,600	5,000	5	42112000	GK 7530/8	-
100	-	40	8	35	65–70	ISO 15637-1	5,700	4,000	5	42113000	GK 10040/8	-
Conical shape												
20	14	63	6	40	65–70	-	26,000	19,000	5	42119500	GK 201463/6	-
29	22	30	6	40	65–70	-	19,100	13,000	5	42121000	GK 292230/6	-
36	22	60	6	40	65–70	-	15,900	10,000	5	42122000	GK 362260/6	-

Safety notes

- The maximum permitted peripheral speed is 11 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.


Wear eye protection!

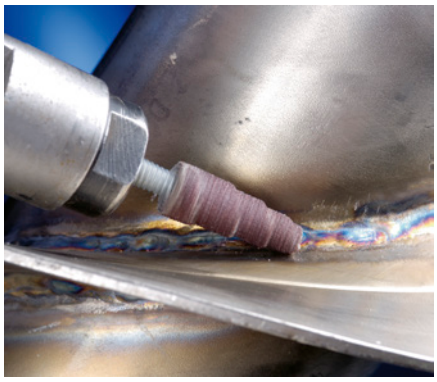

Wear hearing protection!


Wear gloves!

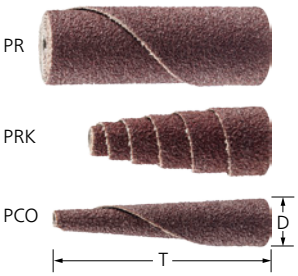

Wear a dust mask!


Follow the safety instructions!


Not permitted for wet grinding!



POLIROLL cartridge rolls PR and PRK, POLICO abrasive cones PCO



Aluminium oxide A version

Cartridge rolls and abrasive cones consisting of spirally wound, coated abrasives. For general grinding work in hard-to-reach areas on metals and other materials.



Special features:

- Consistently high grinding performance throughout its entire tool life thanks to ongoing exposure of fresh abrasive grain during application.
- POLIROLL/POLICO is securely fitted when in use due to self-tensioning provided by grooved, conical arbor, plus easy tool changes.
- Please order compatible arbor separately.

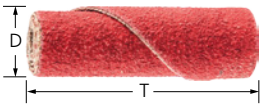
D [mm]	T [mm]	Abra-sive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
Cylindrical shape (PR)										
6	25	A	80	20,000	25,000	BO 3-18-3, BO 6-18-3	50	42810608	PR 0625 A 80	-
			150	20,000	25,000	BO 3-18-3, BO 6-18-3	50	42810615	PR 0625 A 150	-
	35	A	80	20,000	25,000	BO 6-24-3	50	42810708	PR 0635 A 80	-
			150	20,000	25,000	BO 6-24-3	50	42810715	PR 0635 A 150	-
9	25	A	80	15,000	23,000	BO 6-18-3	50	42810808	PR 0925 A 80	-
			150	15,000	23,000	BO 6-18-3	50	42810815	PR 0925 A 150	-
	35	A	80	15,000	23,000	BO 6-24-3	50	42810908	PR 0935 A 80	-
			150	15,000	23,000	BO 6-24-3	50	42810915	PR 0935 A 150	-
12	25	A	50	12,000	17,000	BO 6-18-3	50	42811205	PR 1225 A 50	-
			80	12,000	17,000	BO 6-18-3	50	42811208	PR 1225 A 80	-
			150	12,000	17,000	BO 6-18-3	50	42811215	PR 1225 A 150	-
	35	A	50	12,000	17,000	BO 6-24-3	50	42811305	PR 1235 A 50	-
			80	12,000	17,000	BO 6-24-3	50	42811308	PR 1235 A 80	-
			150	12,000	17,000	BO 6-24-3	50	42811315	PR 1235 A 150	-
18	35	A	50	8,000	12,000	BO 6-25-5	50	42811805	PR 1835 A 50	-
			80	8,000	12,000	BO 6-25-5	50	42811808	PR 1835 A 80	-
			150	8,000	12,000	BO 6-25-5	50	42811815	PR 1835 A 150	-
18	50	A	50	8,000	12,000	BO 6-30-5	50	42811905	PR 1850 A 50	-
			80	8,000	12,000	BO 6-30-5	50	42811908	PR 1850 A 80	-
			150	8,000	12,000	BO 6-30-5	50	42811915	PR 1850 A 150	-

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POLIROLL, POLICO

POLIROLL cartridge rolls PR and PRK, POLICO abrasive cones PCO

D [mm]	T [mm]	Abra-sive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
Conical shape (PRK)										
10	25	A	80	15,000	23,000	BO 3-18-3, BO 6-18-3	50	42821008	PRK 1025 A 80	-
			150	15,000	23,000	BO 3-18-3, BO 6-18-3	50	42821015	PRK 1025 A 150	-
12	25	A	50	12,000	17,000	BO 6-18-3	50	42821205	PRK 1225 A 50	-
			80	12,000	17,000	BO 6-18-3	50	42821208	PRK 1225 A 80	-
			150	12,000	17,000	BO 6-18-3	50	42821215	PRK 1225 A 150	-
	35	A	50	12,000	17,000	BO 6-24-3	50	42821305	PRK 1235 A 50	-
			80	12,000	17,000	BO 6-24-3	50	42821308	PRK 1235 A 80	-
			150	12,000	17,000	BO 6-24-3	50	42821315	PRK 1235 A 150	-
15	35	A	50	10,000	15,000	BO 6-24-3	50	42821505	PRK 1535 A 50	-
			80	10,000	15,000	BO 6-24-3	50	42821508	PRK 1535 A 80	-
			150	10,000	15,000	BO 6-24-3	50	42821515	PRK 1535 A 150	-
POLICO abrasive cones (PCO)										
10	50	A	80	15,000	23,000	BO 6-50-8	50	42831008	PCO 1050 A 80	-
			150	15,000	23,000	BO 6-50-8	50	42831015	PCO 1050 A 150	-



Ceramic oxide grain CO-COOL version

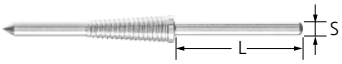
Cartridge rolls consisting of spirally wound, coated abrasives. Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding.



Special features:

- Consistently high grinding performance throughout its entire tool life thanks to ongoing exposure of fresh abrasive grain during application.
- POLIROLL/POLICO is securely fitted when in use due to self-tensioning provided by grooved, conical arbor, plus easy tool changes.
- Please order compatible arbor separately.

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
6	25	CO-COOL	60	20,000	25,000	BO 3-18-3, BO 6-18-3	50	42810646	PR 0625 CO-COOL 60	-
			80	20,000	25,000	BO 3-18-3, BO 6-18-3	50	42810648	PR 0625 CO-COOL 80	-
			120	20,000	25,000	BO 3-18-3, BO 6-18-3	50	42810650	PR 0625 CO-COOL 120	-
	35	CO-COOL	60	20,000	25,000	BO 6-24-3	50	42810746	PR 0635 CO-COOL 60	-
			80	20,000	25,000	BO 6-24-3	50	42810748	PR 0635 CO-COOL 80	-
			120	20,000	25,000	BO 6-24-3	50	42810750	PR 0635 CO-COOL 120	-
9	25	CO-COOL	60	15,000	23,000	BO 6-18-3	50	42810846	PR 0925 CO-COOL 60	-
			80	15,000	23,000	BO 6-18-3	50	42810848	PR 0925 CO-COOL 80	-
			120	15,000	23,000	BO 6-18-3	50	42810850	PR 0925 CO-COOL 120	-
	35	CO-COOL	60	15,000	23,000	BO 6-24-3	50	42810946	PR 0935 CO-COOL 60	-
			80	15,000	23,000	BO 6-24-3	50	42810948	PR 0935 CO-COOL 80	-
			120	15,000	23,000	BO 6-24-3	50	42810950	PR 0935 CO-COOL 120	-
12	25	CO-COOL	60	12,000	17,000	BO 6-18-3	50	42811246	PR 1225 CO-COOL 60	-
			80	12,000	17,000	BO 6-18-3	50	42811248	PR 1225 CO-COOL 80	-
			120	12,000	17,000	BO 6-18-3	50	42811250	PR 1225 CO-COOL 120	-
	35	CO-COOL	60	12,000	17,000	BO 6-24-3	50	42811346	PR 1235 CO-COOL 60	-
			80	12,000	17,000	BO 6-24-3	50	42811348	PR 1235 CO-COOL 80	-
			120	12,000	17,000	BO 6-24-3	50	42811350	PR 1235 CO-COOL 120	-



Arbor BO

Arbor for POLIROLL and POLICO tools.

Special features:
- Tool can be changed easily without unclamping the arbor from the tool drive collet.
- POLIROLL/POLICO is securely fitted when in use due to self-tensioning provided by grooved, conical arbor.

Suitable for	S [mm]	L [mm]		Item no.	Designation	Price/unit EUR
PR 0625, PRK 1025	3	27	1	42703183	BO 3-18-3	-
PR 0625, PR 0925, PR 1225, PRK 1025, PRK 1225	6	30	1	42706183	BO 6-18-3	-
PR 0625, PR 0925, PR 1235, PRK 1235, PRK 1535	6	30	1	42706243	BO 6-24-3	-
PR 1835	6	30	1	42706255	BO 6-25-5	-
PR 1850	6	30	1	42706305	BO 6-30-5	-
PCO 1050	6	30	1	42706508	BO 6-50-8	-



POLIROLL set

Coordinated set of various popular POLIROLL cartridge rolls with matching arbors.

Contents:
150 POLIROLL cartridge rolls with matching arbor, 20 x PR 0625, A 80 and A 150 respectively, 20 x PR 0925, A 80 and A 150 respectively, 20 x PR 1225, A 80 and A 150 respectively, 10 x PRK 1025, A 80 and A 150 respectively, 10 x PRK 1225, A 80.

Special features:
- Consistently high grinding performance throughout its entire tool life thanks to ongoing exposure of fresh abrasive grain during application.
- POLIROLL/POLICO is securely fitted when in use due to self-tensioning provided by grooved, conical arbor, plus easy tool changes.

L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
180	145	40	1	49500151	PRS 151	-

POLICAP
General information

The quick way to find the perfect tool

Material group ▾			Abrasive ▸ Aluminium oxide A	Ceramic oxide grain CO-COOL	Silicon carbide SiC-COOL
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●	○	
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	○	●	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels		●	
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	○	○	●
		Brass, copper, zinc	●		
	Hard non-ferrous metals	Hard aluminium alloys	○		●
		Bronze, titanium		○	●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys		●	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	●	○	
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint	○		●

● = highly suitable ○ = suitable

Colour code

POLICAP abrasive caps are available in different types and with different grains.
- Silicon carbide (SiC-COOL) grey
- Ceramic oxide grain (CO-COOL) red

- Colour code for the grit sizes for aluminium oxide A:
  60/80 brown
  150 black
  280 red-brown

Safety notes

- The maximum permitted peripheral speed is 25 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.


Wear eye protection!


Wear hearing protection!


Wear gloves!


Wear a dust mask!


Follow the safety instructions!





A 60/80 A 150 A 280

Abrasive caps PC ZYA

POLICAP abrasive caps in cylindrical shape ZYA with aluminium oxide A as the abrasive. They have a seamless design and the entire tool surface can be used.



Special features:
- The abrasive caps are firmly held in place on the holder as the holder expands during use, plus easy tool changes.
- Good dimensional stability and excellent fine grinding thanks to special manufacturing process.
- Optimally matched, reusable holders are available. The holder must be ordered separately.

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
5	10	A	80	40,000	50	42301051	PC ZYA 0510 A 80	-
			150	40,000	50	42301052	PC ZYA 0510 A 150	-
			280	40,000	50	42301053	PC ZYA 0510 A 280	-
7	12	A	60	30,000	50	42301071	PC ZYA 0712 A 60	-
			150	30,000	50	42301072	PC ZYA 0712 A 150	-
			280	30,000	50	42301073	PC ZYA 0712 A 280	-
10	15	A	60	20,000	50	42301101	PC ZYA 1015 A 60	-
			150	20,000	50	42301102	PC ZYA 1015 A 150	-
			280	20,000	50	42301103	PC ZYA 1015 A 280	-
13	17	A	60	16,000	50	42301131	PC ZYA 1317 A 60	-
			150	16,000	50	42301132	PC ZYA 1317 A 150	-
			280	16,000	50	42301133	PC ZYA 1317 A 280	-
16	26	A	60	12,000	50	42301161	PC ZYA 1626 A 60	-
			150	12,000	50	42301162	PC ZYA 1626 A 150	-
			280	12,000	50	42301163	PC ZYA 1626 A 280	-

POLICAP abrasive cap holder (PCT), shape ZYA



Abrasive cap holders PCT ZYA

Matching POLICAP abrasive cap holder in cylindrical shape ZYA.

Special features:
- The abrasive caps are firmly held in place on the holder as the holder expands during use.
- Easy tool change.

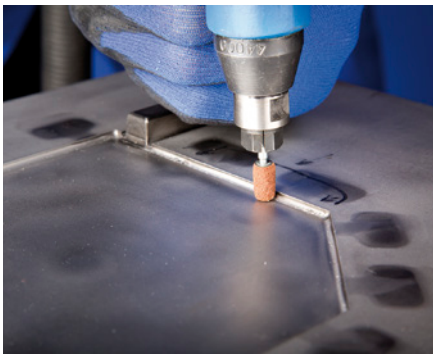
D [mm]	T [mm]	S [mm]	L [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
5	10	3	25	95,000	5	42150000	PCT ZYA 0510 A/3	-
7	12	3	25	65,000	5	42150005	PCT ZYA 0712 A/3	-
10	15	3	25	45,000	5	42150010	PCT ZYA 1015 A/3	-
13	17	6	40	35,000	5	42151015	PCT ZYA 1317 A/6	-
16	26	6	40	30,000	5	42151020	PCT ZYA 1626 A/6	-

POLICAP
POLICAP set (PCS), shape ZYA



Set PCS ZYA

Set of various POLICAP abrasive caps with matching holder in cylindrical shape ZYA in sturdy, reusable packaging.



Contents:
Five each of the following POLICAP abrasive caps: PC ZYA 1015 A, 1317 A and 1626 A (grit size 60, 150, 280), ten each of the following POLICAP abrasive caps: PC ZYA 0510 A and 0712 A (grit size 60 or 80 and 150, 280) and one each of the following POLICAP abrasive cap holders: PCT ZYA 0510/3, 0712/3, 1015/3, 1317/6 and 1626/6.

Special features:
- The abrasive caps are firmly held in place on the holder as the holder expands during use.
- Good dimensional stability and excellent fine grinding thanks to special manufacturing process.
- Easy tool change.

Shape	L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
ZYA	180	145	40	1	49601101	PCS ZYA 110	-

POLICAP (PC), shape WRC



A 60/80


A 150


A 280


SiC-COOL


CO-COOL

Abrasive caps PC WRC

POLICAP abrasive caps in cylindrical shape with radius end WRC. Available in aluminium oxide A, silicon carbide SiC COOL and ceramic oxide grain CO-COOL. They have a seamless design and the entire tool surface can be used.



Special features:
- The abrasive caps are firmly held in place on the holder as the holder expands during use, plus easy tool changes.
- Good dimensional stability and excellent fine grinding thanks to special manufacturing process.
- Optimally matched, reusable holders are available. The holder must be ordered separately.

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
Aluminium oxide A								
5	11	A	80	40,000	50	42302051	PC WRC 0511 A 80	-
			150	40,000	50	42302052	PC WRC 0511 A 150	-
			280	40,000	50	42302053	PC WRC 0511 A 280	-
7	13	A	60	30,000	50	42302071	PC WRC 0713 A 60	-
			150	30,000	50	42302072	PC WRC 0713 A 150	-
			280	30,000	50	42302073	PC WRC 0713 A 280	-
10	15	A	60	20,000	50	42302101	PC WRC 1015 A 60	-
			150	20,000	50	42302102	PC WRC 1015 A 150	-
			280	20,000	50	42302103	PC WRC 1015 A 280	-
13	17	A	60	16,000	50	42302131	PC WRC 1317 A 60	-
			150	16,000	50	42302132	PC WRC 1317 A 150	-
			280	16,000	50	42302133	PC WRC 1317 A 280	-
16	26	A	60	12,000	50	42302161	PC WRC 1626 A 60	-

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D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
16	26	A	150	12,000	50	42302162	PC WRC 1626 A 150	-
			280	12,000	50	42302163	PC WRC 1626 A 280	-
Silicon carbide SiC-COOL								
5	11	SiC-COOL	80	40,000	50	42302054	PC WRC 0511 SiC-COOL 80	-
			150	40,000	50	42302055	PC WRC 0511 SiC-COOL 150	-
7	13	SiC-COOL	80	30,000	50	42302074	PC WRC 0713 SiC-COOL 80	-
			150	30,000	50	42302075	PC WRC 0713 SiC-COOL 150	-
10	15	SiC-COOL	80	20,000	50	42302104	PC WRC 1015 SiC-COOL 80	-
			150	20,000	50	42302105	PC WRC 1015 SiC-COOL 150	-
13	17	SiC-COOL	80	16,000	50	42302134	PC WRC 1317 SiC-COOL 80	-
			150	16,000	50	42302135	PC WRC 1317 SiC-COOL 150	-
16	26	SiC-COOL	80	12,000	50	42302164	PC WRC 1626 SiC-COOL 80	-
			150	12,000	50	42302165	PC WRC 1626 SiC-COOL 150	-
CO-COOL								
5	11	CO-COOL	80	40,000	50	42302056	PC WRC 0511 CO-COOL 80	-
			120	40,000	50	42302057	PC WRC 0511 CO-COOL 120	-
7	13	CO-COOL	80	30,000	50	42302076	PC WRC 0713 CO-COOL 80	-
			120	30,000	50	42302077	PC WRC 0713 CO-COOL 120	-
10	15	CO-COOL	80	20,000	50	42302106	PC WRC 1015 CO-COOL 80	-
			120	20,000	50	42302107	PC WRC 1015 CO-COOL 120	-
13	17	CO-COOL	80	16,000	50	42302136	PC WRC 1317 CO-COOL 80	-
			120	16,000	50	42302137	PC WRC 1317 CO-COOL 120	-
16	26	CO-COOL	80	12,000	50	42302166	PC WRC 1626 CO-COOL 80	-
			120	12,000	50	42302167	PC WRC 1626 CO-COOL 120	-

POLICAP abrasive cap holder (PCT), shape WRC



Abrasive cap holder PCT WRC

Matching POLICAP abrasive cap holder in cylindrical shape with radius end WRC.

Special features:

- The abrasive caps are firmly held in place on the holder as the holder expands during use.
- Easy tool change.

D [mm]	T [mm]	S [mm]	L [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
5	11	2.35	40	30,000	5	47601046	PCT WRC 0511/2,35	-
		3	25	95,000	5	42150100	PCT WRC 0511/3	-
7	13	2.35	40	24,500	5	47601047	PCT WRC 0713/2,35	-
		3	25	65,000	5	42150105	PCT WRC 0713/3	-
10	15	2.35	40	17,500	5	47601048	PCT WRC 1015/2,35	-
		3	25	45,000	5	42150110	PCT WRC 1015/3	-
13	17	2.35	40	13,750	5	47601049	PCT WRC 1317/2,35	-
		6	40	35,000	5	42151115	PCT WRC 1317/6	-
16	26	6	40	30,000	5	42151120	PCT WRC 1626/6	-

POLICAP
POLICAP set (PCS), shape WRC



Set PCS WRC

Set of various POLICAP abrasive caps with matching holder in cylindrical shape with radius end WRC in sturdy, reusable packaging.



Contents:
Five each of the following POLICAP abrasive caps: PC WRC 1015 A, 1317 A and 1626 A (grit size 60, 150, 280), ten each of the following POLICAP abrasive caps: PC WRC 0511 A and 0713 A (grit size 60 or 80 and 150, 280) and one each of the following POLICAP abrasive cap holders: PCT WRC 0511/3, 0713/3, 1015/3, 1317/6 and 1626/6.

Special features:
- The abrasive caps are firmly held in place on the holder as the holder expands during use.
- Good dimensional stability and excellent fine grinding thanks to special manufacturing process.
- Easy tool change.

Shape	L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
WRC	180	145	40	1	49601103	PCS WRC 110	-

POLICAP (PC), shape WKG



A 60/80 A 150 A 280

Abrasive caps PC WKG

POLICAP abrasive caps in tapered conical shape with radius end WKG with aluminium oxide A as the abrasive. The taper angle of the cone is 30°. They have a seamless design and the entire tool surface can be used. Optimally matched, reusable holders are available.

Special features:
- The abrasive caps are firmly held in place on the holder as the holder expands during use, plus easy tool changes.
- Good dimensional stability and excellent fine grinding thanks to special manufacturing process.
- Optimally matched, reusable holders are available. The holder must be ordered separately.

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
5	11	A	80	40,000	50	42303051	PC WKG 0511 A 80	-
			150	40,000	50	42303052	PC WKG 0511 A 150	-
			280	40,000	50	42303053	PC WKG 0511 A 280	-
7	13	A	60	30,000	50	42303071	PC WKG 0713 A 60	-
			150	30,000	50	42303072	PC WKG 0713 A 150	-
			280	30,000	50	42303073	PC WKG 0713 A 280	-
10	15	A	60	20,000	50	42303101	PC WKG 1015 A 60	-
			150	20,000	50	42303102	PC WKG 1015 A 150	-
			280	20,000	50	42303103	PC WKG 1015 A 280	-
13	17	A	60	16,000	50	42303131	PC WKG 1317 A 60	-
			150	16,000	50	42303132	PC WKG 1317 A 150	-
			280	16,000	50	42303133	PC WKG 1317 A 280	-
16	26	A	60	12,000	50	42303161	PC WKG 1626 A 60	-
			150	12,000	50	42303162	PC WKG 1626 A 150	-
			280	12,000	50	42303163	PC WKG 1626 A 280	-



Abrasive cap holders PCT WKG

Matching POLICAP abrasive cap holder in tapered conical shape with radius end WKG.

Special features:
- The abrasive caps are firmly held in place on the holder as the holder expands during use.
- Easy tool change.

D [mm]	T [mm]	S [mm]	L [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
5	11	3	25	95,000	5	42150200	PCT WKG 0511 G/3	-
7	13	3	25	65,000	5	42150205	PCT WKG 0713 G/3	-
10	15	3	25	45,000	5	42150210	PCT WKG 1015 G/3	-
13	17	2.35	40	13,750	5	47601022	PCT WKG 1317 G/2,35	-
		6	40	35,000	5	42151215	PCT WKG 1317 G/6	-
16	26	6	40	30,000	5	42151220	PCT WKG 1626 G/6	-

POLICAP set (PCS), shape WKG



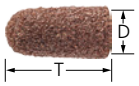
Set PCS WKG

Set of various POLICAP abrasive caps with matching holder in tapered conical shape with radius end WKG in sturdy, reusable packaging.

Contents:
Five each of the following POLICAP abrasive caps: PC WKG 1015 A, 1317 A and 1626 A (grit size 60, 150, 280), ten each of the following POLICAP abrasive caps: PC WKG 0511 A and 0713 A (grit size 60 or 80 and 150, 280) and one each of the following POLICAP abrasive cap holders: PCT WKG 0511/3, 0713/3, 1015/3, 1317/6 and 1626/6.

Special features:
- The abrasive caps are firmly held in place on the holder as the holder expands during use.
- Good dimensional stability and excellent fine grinding thanks to special manufacturing process.
- Easy tool change.

Shape	L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
WKG	180	145	40	1	49601107	PCS WKG 110	-



A 60/80


A 150


A 280


SiC-COOL


CO-COOL

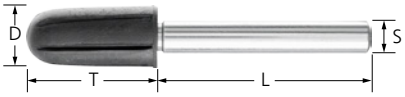
Abrasive caps PC KEL

POLICAP abrasive caps in conical shape with radius end KEL. Available in aluminium oxide A, silicon carbide SiC-COOL and ceramic oxide grain CO-COOL. They have a seamless design and the entire tool surface can be used. Optimally matched, reusable holders are available.



Special features:
- The abrasive caps are firmly held in place on the holder as the holder expands during use, plus easy tool changes.
- Good dimensional stability and excellent fine grinding thanks to special manufacturing process.
- Optimally matched, reusable holders are available. The holder must be ordered separately.

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
Aluminium oxide A								
5	15	A	80	40,000	50	42306051	PC KEL 0515 A 80	-
			150	40,000	50	42306052	PC KEL 0515 A 150	-
			280	40,000	50	42306053	PC KEL 0515 A 280	-
11	25	A	60	20,000	50	42306111	PC KEL 1125 A 60	-
			150	20,000	50	42306112	PC KEL 1125 A 150	-
			280	20,000	50	42306113	PC KEL 1125 A 280	-
16	32	A	60	12,000	50	42306161	PC KEL 1632 A 60	-
			150	12,000	50	42306162	PC KEL 1632 A 150	-
			280	12,000	50	42306163	PC KEL 1632 A 280	-
21	40	A	60	9,500	50	42306211	PC KEL 2140 A 60	-
			150	9,500	50	42306212	PC KEL 2140 A 150	-
			280	9,500	50	42306213	PC KEL 2140 A 280	-
Silicon carbide SiC-COOL								
5	15	SiC-COOL	80	40,000	50	42306054	PC KEL 0515 SiC-COOL 80	-
			150	40,000	50	42306055	PC KEL 0515 SiC-COOL 150	-
11	25	SiC-COOL	80	20,000	50	42306114	PC KEL 1125 SiC-COOL 80	-
			150	20,000	50	42306115	PC KEL 1125 SiC-COOL 150	-
16	32	SiC-COOL	80	12,000	50	42306164	PC KEL 1632 SiC-COOL 80	-
			150	12,000	50	42306165	PC KEL 1632 SiC-COOL 150	-
21	40	SiC-COOL	80	9,500	50	42306214	PC KEL 2140 SiC-COOL 80	-
			150	9,500	50	42306215	PC KEL 2140 SiC-COOL 150	-
CO-COOL								
5	15	CO-COOL	80	40,000	50	42306056	PC KEL 0515 CO-COOL 80	-
			120	40,000	50	42306057	PC KEL 0515 CO-COOL 120	-
11	25	CO-COOL	80	20,000	50	42306116	PC KEL 1125 CO-COOL 80	-
			120	20,000	50	42306117	PC KEL 1125 CO-COOL 120	-
16	32	CO-COOL	80	12,000	50	42306166	PC KEL 1632 CO-COOL 80	-
			120	12,000	50	42306167	PC KEL 1632 CO-COOL 120	-
21	40	CO-COOL	80	9,500	50	42306216	PC KEL 2140 CO-COOL 80	-
			120	9,500	50	42306217	PC KEL 2140 CO-COOL 120	-



Abrasive cap holder PCT KEL

Matching POLICAP cup holder in conical shape with radius end KEL.

Special features:
- The abrasive caps and abrasive spiral bands are firmly held in place on the holder as the rubber surface offers optimal adhesion.
- Easy tool change.

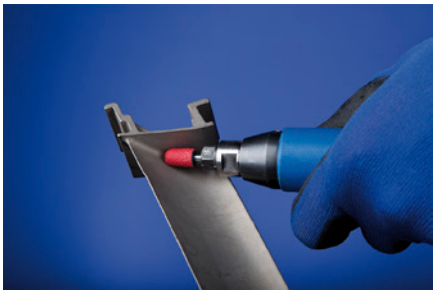
D [mm]	T [mm]	S [mm]	L [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
5	15	6	40	95,000	5	42151400	PCT KEL 0515/6	-
11	25	6	40	40,000	5	42151410	PCT KEL 1125/6	-
16	32	6	40	30,000	5	42151420	PCT KEL 1632/6	-
21	40	6	40	20,000	5	42151430	PCT KEL 2140/6	-

POLICAP set (PCS)



SET PCS 650

Set of various POLICAP abrasive caps with matching holder in sturdy, reusable packaging.



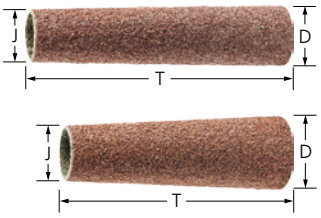
Contents:
Ten each of the following POLICAP abrasive caps: PC ZYA 1626 A and PC WKG 1626 A (grit size 150 and 280), 25 each of the following POLICAP abrasive caps: PC ZYA 1015 A, PC ZYA 1317 A, PC WKG 1015 A and PC WKG 1317 A (grit size 150 and 280), 50 each of the following POLICAP abrasive caps: PC ZYA 0510 A, PC ZYA 0712 A, PC WKG 0511 A and PC WKG 0713 A (grit size 150 and 280), one each of the following POLICAP abrasive cap holders: PCT ZYA 0510/3, PCT ZYA 0712/3, PCT ZYA 1015/3, PCT ZYA 1317/6, PCT ZYA 1626/6, PCT WKG 0511/3, PCT WKG 0713/3, PCT WKG 1015/3, PCT WKG 1317/6 and PCT WKG 1626/6.

Special features:
- The abrasive caps are firmly held in place on the holder as the holder expands during use.
- Good dimensional stability and excellent fine grinding thanks to special manufacturing process.
- Easy tool change.

Shape	L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
ZYA, WKG	332	235	50	1	49606500	SET PCS 650	-

POLICAP

POLICAP abrasive spiral bands (PCH), conical shape



Abrasive spiral bands PCH

POLICAP abrasive spiral bands in conical shape with aluminium oxide A. They have a seamless design and the entire tool surface can be used. Optimally matched, reusable holders are available.

Special features:

- The abrasive caps are firmly held in place on the holder as the holder expands during use, plus easy tool changes.
- Good dimensional stability and excellent fine grinding thanks to special manufacturing process.
- Optimally matched, reusable holders are available. The holder must be ordered separately.

D [mm]	J [mm]	T [mm]	Abrasive	Grit size	Opt. RPM		Item no.	Designation	Price/unit EUR
7	5	85	A	60	12,000	10	42330052	PCH 070585 L A 60	-
				150	12,000	10	42330054	PCH 070585 L A 150	-
				280	12,000	10	42330056	PCH 070585 L A 280	-
14	11	85	A	60	12,000	10	42330112	PCH 141185 L A 60	-
				150	12,000	10	42330114	PCH 141185 L A 150	-
20	15	65	A	60	18,500	10	42333012	PCH 201565 L A 60	-
				150	18,500	10	42333014	PCH 201565 L A 150	-
	16	85	A	60	12,000	10	42330162	PCH 201685 L A 60	-
				150	12,000	10	42330164	PCH 201685 L A 150	-
24	21	85	A	60	12,000	10	42330212	PCH 242185 L A 60	-
				150	12,000	10	42330214	PCH 242185 L A 150	-
36	22	65	A	60	13,000	10	42333212	PCH 362265 L A 60	-

POLICAP rubber drum holder (PCT), shape KEL



POLICAP rubber drum holder PCT

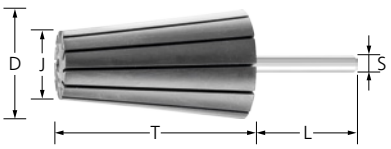
Rubber drum holder for POLICAP in conical shape with radius end KEL.

Special features:

- The abrasive spiral bands are firmly held in place on the holder as the holder expands during use.

D [mm]	T [mm]	S [mm]	L [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
8	85	6	40	20,000	5	42152100	PCT KEL 0585/6	-
13	85	6	40	15,000	5	42152110	PCT KEL 1185/6	-
18	85	6	40	13,000	5	42152120	PCT KEL 1685/6	-
23	85	6	30	12,000	5	42152130	PCT KEL 2185/6	-

Rubber drum holder GK, conical shape



Rubber drum holder GK

Rubber drum holder for POLICAP in conical shape.

Special features:

- The abrasive spiral bands are firmly held in place on the holder as the holder expands during use.
- Easy tool change.

D [mm]	J [mm]	T [mm]	S [mm]	L [mm]	Hardness [Shore A]	Max. RPM	Minimum rotational speed [RPM]		Item no.	Designation	Price/unit EUR
20	14	63	6	40	65–70	26,000	19,000	5	42119500	GK 201463/6	-
36	22	60	6	40	65–70	15,900	10,000	5	42122000	GK 362260/6	-

The quick way to find the perfect tool

Material group ▾			Abrasive ▸ Aluminium oxide A	Zirconia alumina Z-COOL	Ceramic oxide grain CO-COOL	Silicon carbide SiC-COOL
Steel, cast steel	Non-hardened, non-heat-treated steels	Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel	●	○	○	
	Hardened, heat-treated steels	Tool steels, tempering steels, alloyed steels, cast steel	○	●	●	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels		●	●	
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Soft aluminium alloys	○			●
		Brass, copper, zinc	●	○	○	
	Hard non-ferrous metals	Hard aluminium alloys	○			●
		Bronze, titanium		○	○	●
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys		○	●	
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)	●	○	●	
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint	○			●

● = highly suitable ○ = suitable

Safety notes

- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.
- The contact pressure must be significantly reduced if the specified optimum rotational speed is exceeded.
- Safety can only be guaranteed if the clamping length is at least 15 mm and the specified maximum rotational speed is not exceeded with unsupported shank lengths.

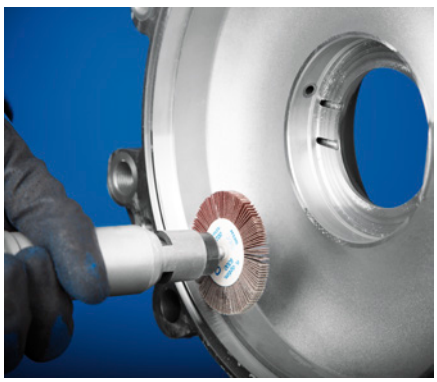

Wear eye protection!

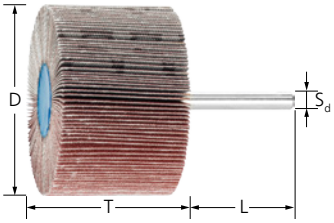

Wear hearing protection!


Wear gloves!


Wear a dust mask!


Follow the safety instructions!





Aluminium oxide A version

The flaps made of coated abrasive are arranged radially around the axis in a fan-type structure. For general applications from coarse to fine grinding.



Special features:

- Highly flexible, enabling optimal adjustment to the contour.
- Consistently high stock removal rate over the entire tool life as new, aggressive abrasive is constantly exposed.
- Can be used face-down very close to edges and in corners thanks to the flat, moulded-core design.

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter of 3 x 40 mm [S_d x L)									
10	10	A	60	38,000	75,000	10	44400002	F 1010/3 A 60	-
			80	38,000	75,000	10	44400003	F 1010/3 A 80	-
			120	38,000	75,000	10	44400004	F 1010/3 A 120	-
			150	38,000	75,000	10	44400005	F 1010/3 A 150	-
			180	38,000	75,000	10	44400006	F 1010/3 A 180	-
			320	38,000	75,000	10	44400008	F 1010/3 A 320	-
	15	A	60	38,000	75,000	10	44400012	F 1015/3 A 60	-
			80	38,000	75,000	10	44400013	F 1015/3 A 80	-
			120	38,000	75,000	10	44400014	F 1015/3 A 120	-
			150	38,000	75,000	10	44400015	F 1015/3 A 150	-
			180	38,000	75,000	10	44400016	F 1015/3 A 180	-
			320	38,000	75,000	10	44400018	F 1015/3 A 320	-
15	5	A	60	25,000	50,000	10	44400022	F 1505/3 A 60	-
			80	25,000	50,000	10	44400023	F 1505/3 A 80	-
			120	25,000	50,000	10	44400024	F 1505/3 A 120	-
			150	25,000	50,000	10	44400025	F 1505/3 A 150	-
			180	25,000	50,000	10	44400026	F 1505/3 A 180	-
			320	25,000	50,000	10	44400028	F 1505/3 A 320	-
	10	A	60	25,000	50,000	10	44400032	F 1510/3 A 60	-
			80	25,000	50,000	10	44400033	F 1510/3 A 80	-
			120	25,000	50,000	10	44400034	F 1510/3 A 120	-
			150	25,000	50,000	10	44400035	F 1510/3 A 150	-
			180	25,000	50,000	10	44400036	F 1510/3 A 180	-
			320	25,000	50,000	10	44400038	F 1510/3 A 320	-
	15	A	60	25,000	50,000	10	44400042	F 1515/3 A 60	-
			80	25,000	50,000	10	44400043	F 1515/3 A 80	-
			120	25,000	50,000	10	44400044	F 1515/3 A 120	-
			150	25,000	50,000	10	44400045	F 1515/3 A 150	-
			180	25,000	50,000	10	44400046	F 1515/3 A 180	-
			320	25,000	50,000	10	44400048	F 1515/3 A 320	-
20	10	A	80	19,000	38,100	10	47801206	F 2010/3 A 80	-
			120	19,000	38,100	10	44400123	F 2010/3 A 120	-
			150	19,000	38,100	10	44400153	F 2010/3 A 150	-
			180	19,000	38,100	10	44400183	F 2010/3 A 180	-
			240	19,000	38,100	10	47801527	F 2010/3 A 240	-
			320	19,000	38,100	10	47801528	F 2010/3 A 320	-
30	5	A	60	12,000	25,400	10	44401063	F 3005/3 A 60	-
			80	12,000	25,400	10	44401083	F 3005/3 A 80	-
			120	12,000	25,400	10	44401123	F 3005/3 A 120	-
			150	12,000	25,400	10	44401153	F 3005/3 A 150	-

Continued on next page

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
30	5	A	180	12,000	25,400	10	44401183	F 3005/3 A 180	-
			240	12,000	25,400	10	44401243	F 3005/3 A 240	-
			320	12,000	25,400	10	44401323	F 3005/3 A 320	-
	10	A	60	12,000	25,400	10	44402063	F 3010/3 A 60	-
			80	12,000	25,400	10	44402083	F 3010/3 A 80	-
			120	12,000	25,400	10	44402123	F 3010/3 A 120	-
			150	12,000	25,400	10	44402153	F 3010/3 A 150	-
			180	12,000	25,400	10	44402183	F 3010/3 A 180	-
			240	12,000	25,400	10	44402243	F 3010/3 A 240	-
			320	12,000	25,400	10	44402323	F 3010/3 A 320	-
Shank diameter of 6 x 40 mm [S_d x L]									
20	10	A	60	19,000	38,100	10	47801067	F 2010/6 A 60	-
			80	19,000	38,100	10	44400086	F 2010/6 A 80	-
			120	19,000	38,100	10	44400126	F 2010/6 A 120	-
			150	19,000	38,100	10	44400156	F 2010/6 A 150	-
			180	19,000	38,100	10	44400186	F 2010/6 A 180	-
25	10	A	80	15,000	30,500	10	44405086	F 2510/6 A 80	-
			120	15,000	30,500	10	44405126	F 2510/6 A 120	-
			180	15,000	30,500	10	44405186	F 2510/6 A 180	-
	15	A	80	15,000	30,500	10	44406086	F 2515/6 A 80	-
			120	15,000	30,500	10	44406126	F 2515/6 A 120	-
			150	15,000	30,500	10	44406156	F 2515/6 A 150	-
			180	15,000	30,500	10	44406186	F 2515/6 A 180	-
	20	A	80	15,000	30,500	10	44415086	F 2520/6 A 80	-
			120	15,000	30,500	10	44415126	F 2520/6 A 120	-
			180	15,000	30,500	10	44415186	F 2520/6 A 180	-
	25	A	60	15,000	30,500	10	47801818	F 2525/6 A 60	-
			80	15,000	30,500	10	44410086	F 2525/6 A 80	-
			120	15,000	30,500	10	44410126	F 2525/6 A 120	-
			150	15,000	30,500	10	44410156	F 2525/6 A 150	-
			180	15,000	30,500	10	44410186	F 2525/6 A 180	-
30	3	A	80	12,000	25,400	10	44416086	F 3003/6 A 80	-
			120	12,000	25,400	10	44416126	F 3003/6 A 120	-
			150	12,000	25,400	10	44416156	F 3003/6 A 150	-
			180	12,000	25,400	10	44416186	F 3003/6 A 180	-
			240	12,000	25,400	10	44416246	F 3003/6 A 240	-
			320	12,000	25,400	10	44416326	F 3003/6 A 320	-
	5	A	60	12,000	25,400	10	44401066	F 3005/6 A 60	-
			80	12,000	25,400	10	44401086	F 3005/6 A 80	-
			120	12,000	25,400	10	44401126	F 3005/6 A 120	-
			150	12,000	25,400	10	44401156	F 3005/6 A 150	-
			180	12,000	25,400	10	44401186	F 3005/6 A 180	-
			240	12,000	25,400	10	44401246	F 3005/6 A 240	-
			320	12,000	25,400	10	44401326	F 3005/6 A 320	-
	10	A	60	12,000	25,400	10	44402066	F 3010/6 A 60	-
			80	12,000	25,400	10	44402086	F 3010/6 A 80	-
			120	12,000	25,400	10	44402126	F 3010/6 A 120	-
			150	12,000	25,400	10	44402156	F 3010/6 A 150	-
			180	12,000	25,400	10	44402186	F 3010/6 A 180	-
			240	12,000	25,400	10	44402246	F 3010/6 A 240	-
			320	12,000	25,400	10	44402326	F 3010/6 A 320	-
			400	12,000	25,400	10	44402406	F 3010/6 A 400	-
	15	A	60	12,000	25,400	10	44409066	F 3015/6 A 60	-
			80	12,000	25,400	10	44409086	F 3015/6 A 80	-

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Flap tools
Mounted flap wheels F

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
30	15	A	120	12,000	25,400	10	44409126	F 3015/6 A 120	-
			150	12,000	25,400	10	44409156	F 3015/6 A 150	-
			180	12,000	25,400	10	44409186	F 3015/6 A 180	-
			240	12,000	25,400	10	44409246	F 3015/6 A 240	-
			320	12,000	25,400	10	44409326	F 3015/6 A 320	-
	20	A	40	12,000	25,400	10	47802247	F 3020/6 A 40	-
			60	12,000	25,400	10	47802248	F 3020/6 A 60	-
			150	12,000	25,400	10	47802249	F 3020/6 A 150	-
			180	12,000	25,400	10	47802250	F 3020/6 A 180	-
			240	12,000	25,400	10	47802251	F 3020/6 A 240	-
			320	12,000	25,400	10	47802252	F 3020/6 A 320	-
	30	A	60	12,000	25,400	10	44411066	F 3030/6 A 60	-
			80	12,000	25,400	10	44411086	F 3030/6 A 80	-
			120	12,000	25,400	10	44411126	F 3030/6 A 120	-
			150	12,000	25,400	10	44411156	F 3030/6 A 150	-
			180	12,000	25,400	10	44411186	F 3030/6 A 180	-
			240	12,000	25,400	10	44411246	F 3030/6 A 240	-
			320	12,000	25,400	10	44411326	F 3030/6 A 320	-
40	10	A	60	9,600	19,100	10	44403066	F 4010/6 A 60	-
			80	9,600	19,100	10	44403086	F 4010/6 A 80	-
			120	9,600	19,100	10	44403126	F 4010/6 A 120	-
			150	9,600	19,100	10	44403156	F 4010/6 A 150	-
			180	9,600	19,100	10	44403186	F 4010/6 A 180	-
			240	9,600	19,100	10	44403246	F 4010/6 A 240	-
	15	A	60	9,600	19,100	10	44404066	F 4015/6 A 60	-
			80	9,600	19,100	10	44404086	F 4015/6 A 80	-
			120	9,600	19,100	10	44404126	F 4015/6 A 120	-
			150	9,600	19,100	10	44404156	F 4015/6 A 150	-
			180	9,600	19,100	10	44404186	F 4015/6 A 180	-
			240	9,600	19,100	10	44404246	F 4015/6 A 240	-
			320	9,600	19,100	10	44404326	F 4015/6 A 320	-
	20	A	40	9,600	19,100	10	44408046	F 4020/6 A 40	-
			60	9,600	19,100	10	44408066	F 4020/6 A 60	-
			80	9,600	19,100	10	44408086	F 4020/6 A 80	-
			120	9,600	19,100	10	44408126	F 4020/6 A 120	-
			150	9,600	19,100	10	44408156	F 4020/6 A 150	-
			180	9,600	19,100	10	44408186	F 4020/6 A 180	-
			240	9,600	19,100	10	44408246	F 4020/6 A 240	-
50	5	A	60	7,000	15,200	10	44418066	F 5005/6 A 60	-
			80	7,000	15,200	10	44418086	F 5005/6 A 80	-
			120	7,000	15,200	10	44418126	F 5005/6 A 120	-
			150	7,000	15,200	10	44418156	F 5005/6 A 150	-
			180	7,000	15,200	10	44418186	F 5005/6 A 180	-
			240	7,000	15,200	10	44418246	F 5005/6 A 240	-
			320	7,000	15,200	10	44418326	F 5005/6 A 320	-
	10	A	60	7,000	15,200	10	44505066	F 5010/6 A 60	-
			80	7,000	15,200	10	44505086	F 5010/6 A 80	-
			120	7,000	15,200	10	44505126	F 5010/6 A 120	-
			150	7,000	15,200	10	44505156	F 5010/6 A 150	-
			180	7,000	15,200	10	44505186	F 5010/6 A 180	-
			240	7,000	15,200	10	44505246	F 5010/6 A 240	-
			320	7,000	15,200	10	44505326	F 5010/6 A 320	-
	15	A	60	7,000	15,200	10	44506066	F 5015/6 A 60	-
			80	7,000	15,200	10	44506086	F 5015/6 A 80	-

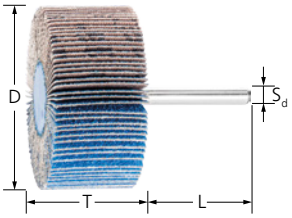
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D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
50	15	A	120	7,000	15,200	10	44506126	F 5015/6 A 120	-
			150	7,000	15,200	10	44506156	F 5015/6 A 150	-
			180	7,000	15,200	10	44506186	F 5015/6 A 180	-
			240	7,000	15,200	10	44506246	F 5015/6 A 240	-
			320	7,000	15,200	10	44506326	F 5015/6 A 320	-
	20	A	60	7,000	15,200	10	44504066	F 5020/6 A 60	-
			80	7,000	15,200	10	44504086	F 5020/6 A 80	-
			120	7,000	15,200	10	44504126	F 5020/6 A 120	-
			150	7,000	15,200	10	44504156	F 5020/6 A 150	-
			180	7,000	15,200	10	44504186	F 5020/6 A 180	-
			320	7,000	15,200	10	44504326	F 5020/6 A 320	-
	30	A	40	7,000	15,200	10	44411546	F 5030/6 A 40	-
			60	7,000	15,200	10	44503066	F 5030/6 A 60	-
			80	7,000	15,200	10	44503086	F 5030/6 A 80	-
			120	7,000	15,200	10	44503126	F 5030/6 A 120	-
			150	7,000	15,200	10	44503156	F 5030/6 A 150	-
			180	7,000	15,200	10	44503186	F 5030/6 A 180	-
			240	7,000	15,200	10	44503246	F 5030/6 A 240	-
			320	7,000	15,200	10	44503326	F 5030/6 A 320	-
60	5	A	60	6,300	12,700	10	44419066	F 6005/6 A 60	-
			80	6,300	12,700	10	44419086	F 6005/6 A 80	-
			120	6,300	12,700	10	44419126	F 6005/6 A 120	-
			150	6,300	12,700	10	44419156	F 6005/6 A 150	-
			180	6,300	12,700	10	44419186	F 6005/6 A 180	-
			240	6,300	12,700	10	*44419246*	F 6005/6 A 240	-
			320	6,300	12,700	10	*44419326*	F 6005/6 A 320	-
	15	A	60	6,300	12,700	10	44507066	F 6015/6 A 60	-
			80	6,300	12,700	10	44507086	F 6015/6 A 80	-
			120	6,300	12,700	10	44507126	F 6015/6 A 120	-
			150	6,300	12,700	10	44507156	F 6015/6 A 150	-
			240	6,300	12,700	10	44507246	F 6015/6 A 240	-
			320	6,300	12,700	10	44507326	F 6015/6 A 320	-
	20	A	60	6,300	12,700	10	44508066	F 6020/6 A 60	-
			80	6,300	12,700	10	44508086	F 6020/6 A 80	-
			120	6,300	12,700	10	44508126	F 6020/6 A 120	-
			150	6,300	12,700	10	44508156	F 6020/6 A 150	-
			240	6,300	12,700	10	44508246	F 6020/6 A 240	-
			320	6,300	12,700	10	44508326	F 6020/6 A 320	-
	30	A	40	6,300	12,700	10	44509046	F 6030/6 A 40	-
			60	6,300	12,700	10	44509066	F 6030/6 A 60	-
			80	6,300	12,700	10	44509086	F 6030/6 A 80	-
			120	6,300	12,700	10	44509126	F 6030/6 A 120	-
			150	6,300	12,700	10	44509156	F 6030/6 A 150	-
			180	6,300	12,700	10	44509186	F 6030/6 A 180	-
			240	6,300	12,700	10	44509246	F 6030/6 A 240	-
			320	6,300	12,700	10	44509326	F 6030/6 A 320	-
			400	6,300	12,700	10	44509406	F 6030/6 A 400	-
	40	A	60	6,300	12,700	10	44510066	F 6040/6 A 60	-
			80	6,300	12,700	10	44510086	F 6040/6 A 80	-
			120	6,300	12,700	10	44510126	F 6040/6 A 120	-
			150	6,300	12,700	10	44510156	F 6040/6 A 150	-
			240	6,300	12,700	10	44510246	F 6040/6 A 240	-
	50	A	40	6,300	12,700	10	44511046	F 6050/6 A 40	-
			60	6,300	12,700	10	44511066	F 6050/6 A 60	-

Continued on next page

Flap tools
Mounted flap wheels F

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
60	50	A	80	6,300	12,700	10	44511086	F 6050/6 A 80	-
			120	6,300	12,700	10	44511126	F 6050/6 A 120	-
			150	6,300	12,700	10	44511156	F 6050/6 A 150	-
			240	6,300	12,700	10	44511246	F 6050/6 A 240	-
			320	6,300	12,700	10	44511326	F 6050/6 A 320	-
80	5	A	60	4,800	9,500	10	47801807	F 8005/6 A 60	-
			80	4,800	9,500	10	47801514	F 8005/6 A 80	-
			120	4,800	9,500	10	47801624	F 8005/6 A 120	-
			150	4,800	9,500	10	47801562	F 8005/6 A 150	-
			180	4,800	9,500	10	47802769	F 8005/6 A 180	-
			240	4,800	9,500	10	44480240	F 8005/6 A 240	-
			320	4,800	9,500	10	44480320	F 8005/6 A 320	-
	10	A	60	4,800	9,500	10	47801575	F 8010/6 A 60	-
			80	4,800	9,500	10	47801110	F 8010/6 A 80	-
			120	4,800	9,500	10	47801576	F 8010/6 A 120	-
			150	4,800	9,500	10	47802867	F 8010/6 A 150	-
			180	4,800	9,500	10	47802868	F 8010/6 A 180	-
			240	4,800	9,500	10	47802869	F 8010/6 A 240	-
			320	4,800	9,500	10	47802857	F 8010/6 A 320	-
	15	A	60	4,800	9,500	10	44512066	F 8015/6 A 60	-
			80	4,800	9,500	10	44512086	F 8015/6 A 80	-
			120	4,800	9,500	10	44512126	F 8015/6 A 120	-
			150	4,800	9,500	10	44512156	F 8015/6 A 150	-
	20	A	60	4,800	9,500	10	44513066	F 8020/6 A 60	-
			80	4,800	9,500	10	44513086	F 8020/6 A 80	-
			120	4,800	9,500	10	44513126	F 8020/6 A 120	-
			150	4,800	9,500	10	44513156	F 8020/6 A 150	-
	30	A	40	4,800	9,500	10	44514046	F 8030/6 A 40	-
			60	4,800	9,500	10	44514066	F 8030/6 A 60	-
			80	4,800	9,500	10	44514086	F 8030/6 A 80	-
			120	4,800	9,500	10	44514126	F 8030/6 A 120	-
			150	4,800	9,500	10	44514156	F 8030/6 A 150	-
			240	4,800	9,500	10	44514246	F 8030/6 A 240	-
			320	4,800	9,500	10	44514326	F 8030/6 A 320	-
	40	A	60	4,800	9,500	10	44515066	F 8040/6 A 60	-
			80	4,800	9,500	10	44515086	F 8040/6 A 80	-
			120	4,800	9,500	10	44515126	F 8040/6 A 120	-
			150	4,800	9,500	10	44515156	F 8040/6 A 150	-
			240	4,800	9,500	10	44515246	F 8040/6 A 240	-
	50	A	40	4,800	9,500	10	44516046	F 8050/6 A 40	-
			60	4,800	9,500	10	44516066	F 8050/6 A 60	-
			80	4,800	9,500	10	44516086	F 8050/6 A 80	-
			120	4,800	9,500	10	44516126	F 8050/6 A 120	-
			150	4,800	9,500	10	44516156	F 8050/6 A 150	-
			240	4,800	9,500	10	44516246	F 8050/6 A 240	-
			320	4,800	9,500	10	44516326	F 8050/6 A 320	-

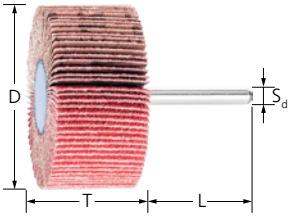


Zirconia alumina Z-COOL version

The flaps made of coated abrasive are arranged radially around the axis in a fan-type structure. For coarse grinding work with a high stock removal rate. Active grinding additives substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Consistently high stock removal rate over the entire tool life as new, aggressive abrasive is constantly exposed.
- Can be used face-down very close to edges and in corners thanks to the flat, moulded-core design.

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter of 6 x 40 mm [S_d x L]									
30	20	Z-COOL	60	12,000	25,400	10	44412066	F 3020/6 Z-COOL 60	-
			80	12,000	25,400	10	44412086	F 3020/6 Z-COOL 80	-
40	20	Z-COOL	60	9,600	19,100	10	44414066	F 4020/6 Z-COOL 60	-
			80	9,600	19,100	10	44414086	F 4020/6 Z-COOL 80	-
50	20	Z-COOL	60	7,000	15,200	10	44531066	F 5020/6 Z-COOL 60	-
			80	7,000	15,200	10	44531086	F 5020/6 Z-COOL 80	-
60	30	Z-COOL	60	6,300	12,700	10	44533066	F 6030/6 Z-COOL 60	-
			80	6,300	12,700	10	44533086	F 6030/6 Z-COOL 80	-
80	50	Z-COOL	60	4,800	9,500	10	44535066	F 8050/6 Z-COOL 60	-
			80	4,800	9,500	10	44535086	F 8050/6 Z-COOL 80	-



Ceramic oxide grain CO-COOL version

The flaps made of coated abrasive are arranged radially around the axis in a fan-type structure. Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding.

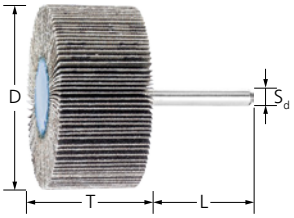
Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Consistently high stock removal rate over the entire tool life as new, aggressive abrasive is constantly exposed.
- Can be used face-down very close to edges and in corners thanks to the flat, moulded-core design.

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter of 6 x 40 mm [S_d x L]									
20	10	CO-COOL	60	19,000	38,100	10	47802871	F 2010/6 CO-COOL 60	-
			80	19,000	38,100	10	47802716	F 2010/6 CO-COOL 80	-
			120	19,000	38,100	10	47802717	F 2010/6 CO-COOL 120	-
30	10	CO-COOL	40	12,000	25,400	10	44402054	F 3010/6 CO-COOL 40	-
			60	12,000	25,400	10	44402074	F 3010/6 CO-COOL 60	-
			80	12,000	25,400	10	44402094	F 3010/6 CO-COOL 80	-
			120	12,000	25,400	10	44402134	F 3010/6 CO-COOL 120	-
	15	CO-COOL	40	12,000	25,400	10	44409054	F 3015/6 CO-COOL 40	-
			60	12,000	25,400	10	44409074	F 3015/6 CO-COOL 60	-
			80	12,000	25,400	10	44409094	F 3015/6 CO-COOL 80	-
			120	12,000	25,400	10	44409134	F 3015/6 CO-COOL 120	-
	20	CO-COOL	40	12,000	25,400	10	47802244	F 3020/6 CO-COOL 40	-
			60	12,000	25,400	10	47802245	F 3020/6 CO-COOL 60	-
			80	12,000	25,400	10	47802246	F 3020/6 CO-COOL 80	-
			120	12,000	25,400	10	47802773	F 3020/6 CO-COOL 120	-
40	20	CO-COOL	40	9,600	19,100	10	44408054	F 4020/6 CO-COOL 40	-
			60	9,600	19,100	10	44408074	F 4020/6 CO-COOL 60	-
			80	9,600	19,100	10	44408094	F 4020/6 CO-COOL 80	-

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Flap tools
Mounted flap wheels F

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
40	20	CO-COOL	120	9,600	19,100	10	44408134	F 4020/6 CO-COOL 120	-
50	30	CO-COOL	40	7,000	15,200	10	44411554	F 5030/6 CO-COOL 40	-
			60	7,000	15,200	10	44411574	F 5030/6 CO-COOL 60	-
			80	7,000	15,200	10	44411594	F 5030/6 CO-COOL 80	-
			120	7,000	15,200	10	44411634	F 5030/6 CO-COOL 120	-
60	15	CO-COOL	40	6,300	12,700	10	47802872	F 6015/6 CO-COOL 40	-
			60	6,300	12,700	10	47802873	F 6015/6 CO-COOL 60	-
			80	6,300	12,700	10	47802800	F 6015/6 CO-COOL 80	-
			120	6,300	12,700	10	47802874	F 6015/6 CO-COOL 120	-
	30	CO-COOL	40	6,300	12,700	10	44411754	F 6030/6 CO-COOL 40	-
			60	6,300	12,700	10	44411774	F 6030/6 CO-COOL 60	-
			80	6,300	12,700	10	44411794	F 6030/6 CO-COOL 80	-
			120	6,300	12,700	10	44411834	F 6030/6 CO-COOL 120	-



Silicon carbide SiC version

The flaps made of coated abrasive are arranged radially around the axis in a fan-type structure. For general grinding work. Particularly recommended for use on titanium alloys. Ideally suited for use in the aircraft industry, particularly when SiC is the only abrasive approved for use.



Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Consistently high stock removal rate over the entire tool life as new, aggressive abrasive is constantly exposed.
- Can be used face-down very close to edges and in corners thanks to the flat, moulded-core design.

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter of 6 x 40 mm [S_d x L]									
20	10	SiC	60	19,000	38,100	10	44400060	F 2010/6 SiC 60	-
			80	19,000	38,100	10	44400080	F 2010/6 SiC 80	-
			120	19,000	38,100	10	44400120	F 2010/6 SiC 120	-
			150	19,000	38,100	10	44400150	F 2010/6 SiC 150	-
30	10	SiC	60	12,000	25,400	10	44407066	F 3010/6 SiC 60	-
			80	12,000	25,400	10	44407086	F 3010/6 SiC 80	-
			120	12,000	25,400	10	44407126	F 3010/6 SiC 120	-
			150	12,000	25,400	10	44407156	F 3010/6 SiC 150	-
	15	SiC	60	12,000	25,400	10	44415060	F 3015/6 SiC 60	-
			80	12,000	25,400	10	44415080	F 3015/6 SiC 80	-
			120	12,000	25,400	10	44415120	F 3015/6 SiC 120	-
			150	12,000	25,400	10	44415150	F 3015/6 SiC 150	-
	20	SiC	60	12,000	25,400	10	44420060	F 3020/6 SiC 60	-
			80	12,000	25,400	10	44420080	F 3020/6 SiC 80	-
			120	12,000	25,400	10	44420120	F 3020/6 SiC 120	-
			150	12,000	25,400	10	44420150	F 3020/6 SiC 150	-
40	20	SiC	60	9,600	19,100	10	44440060	F 4020/6 SiC 60	-
			80	9,600	19,100	10	44440080	F 4020/6 SiC 80	-
			120	9,600	19,100	10	44440120	F 4020/6 SiC 120	-
			150	9,600	19,100	10	44440150	F 4020/6 SiC 150	-
50	30	SiC	60	7,000	15,200	10	44450060	F 5030/6 SiC 60	-
			80	7,000	15,200	10	44450080	F 5030/6 SiC 80	-
			120	7,000	15,200	10	44450120	F 5030/6 SiC 120	-

Continued on next page

D [mm]	T [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
50	30	SiC	150	7,000	15,200	10	44450150	F 5030/6 SiC 150	-
60	15	SiC	60	6,300	12,700	10	*44460060*	F 6015/6 SiC 60	-
			80	6,300	12,700	10	*44460080*	F 6015/6 SiC 80	-
			120	6,300	12,700	10	*44460120*	F 6015/6 SiC 120	-
			150	6,300	12,700	10	*44460150*	F 6015/6 SiC 150	-
	30	SiC	60	6,300	12,700	10	44521066	F 6030/6 SiC 60	-
			80	6,300	12,700	10	44521086	F 6030/6 SiC 80	-
			120	6,300	12,700	10	44521126	F 6030/6 SiC 120	-
			150	6,300	12,700	10	44521156	F 6030/6 SiC 150	-

Mounted flap wheel set



FSO

Set of different mounted flap wheels in the aluminium oxide A variant with a shank diameter of 6 mm.

Contents:
Five each of the following mounted flap wheels: F 4015/6 A 80, F 4015/6 A 120, F 5015/6 A 60, F 5015/6 A 80, F 6030/6 A 60, F 6040/6 A 80, F 6040/6 A 150 and F 8030/6 A 60.

Special features:
- For getting to know and testing the comprehensive range.
- Coordinated selection of the most common versions.
- Promotional display box.

L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
240	145	240	1	44590001	FSO 5400	-

Unmounted flap wheels FR

Safety notes

- As a rule, unmounted flap wheels should be used with the appropriate clamping flanges.
- The maximum permitted peripheral speed is determined as follows:
  Unmounted flap wheels = 50 m/s
  Unmounted flap wheels for angle grinders = 80 m/s
  Flap drums = 32 m/s.
- The contact pressure must be significantly reduced if the specified optimum rotational speed is exceeded.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.

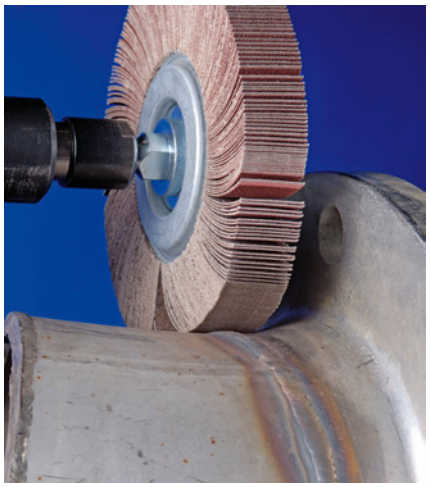

Wear eye protection!


Wear hearing protection!

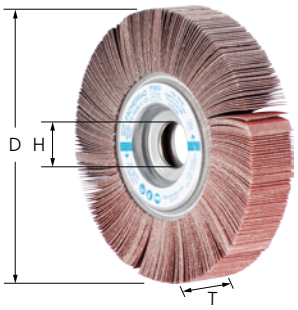

Wear gloves!


Wear a dust mask!


Follow the safety instructions!



Flap tools
Unmounted flap wheels FR



Aluminium oxide A version

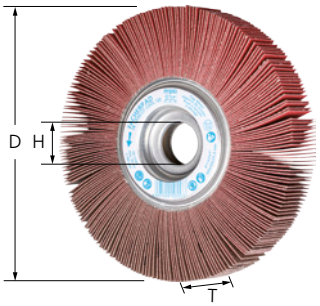
The flaps made of coated abrasive are arranged radially around the axis in a fan-type structure. For general applications from coarse to fine grinding.

Special features:
- Highly flexible, enabling optimal adjustment to the contour. Can be used face-down very close to edges and in corners thanks to special clamping system.
- Consistently high stock removal rate over the entire tool life as new, aggressive abrasive is constantly exposed.
- Please order compatible arbor separately.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	30	25.4	A	40	5,500	9,500	2	44710041	FR 10030/25,4 A 40	-
				60	5,500	9,500	2	44710061	FR 10030/25,4 A 60	-
				80	5,500	9,500	2	44710081	FR 10030/25,4 A 80	-
				120	5,500	9,500	2	44710121	FR 10030/25,4 A 120	-
	50	25.4	A	40	5,500	9,500	2	44712041	FR 10050/25,4 A 40	-
				60	5,500	9,500	2	44712061	FR 10050/25,4 A 60	-
				80	5,500	9,500	2	44712081	FR 10050/25,4 A 80	-
				120	5,500	9,500	2	44712121	FR 10050/25,4 A 120	-
150	30	25.4	A	40	3,500	6,300	2	44724040	FR 15030/25,4 A 40	-
				60	3,500	6,300	2	44724060	FR 15030/25,4 A 60	-
				80	3,500	6,300	2	44724080	FR 15030/25,4 A 80	-
				120	3,500	6,300	2	44724120	FR 15030/25,4 A 120	-
				150	3,500	6,300	2	44724150	FR 15030/25,4 A 150	-
	50	25.4	A	40	3,500	6,300	2	44726040	FR 15050/25,4 A 40	-
				60	3,500	6,300	2	44726060	FR 15050/25,4 A 60	-
				80	3,500	6,300	2	44726080	FR 15050/25,4 A 80	-
				120	3,500	6,300	2	44726120	FR 15050/25,4 A 120	-
				150	3,500	6,300	2	44726150	FR 15050/25,4 A 150	-
				240	3,500	6,300	2	44726240	FR 15050/25,4 A 240	-
165	30	25.4	A	40	3,200	5,700	2	44732041	FR 16530/25,4 A 40	-
				60	3,200	5,700	2	44732061	FR 16530/25,4 A 60	-
				80	3,200	5,700	2	44732081	FR 16530/25,4 A 80	-
				120	3,200	5,700	2	44732121	FR 16530/25,4 A 120	-
				150	3,200	5,700	2	44732151	FR 16530/25,4 A 150	-
				240	3,200	5,700	2	44732241	FR 16530/25,4 A 240	-
	50	25.4	A	40	3,200	5,700	2	44731041	FR 16550/25,4 A 40	-
				60	3,200	5,700	2	44731061	FR 16550/25,4 A 60	-
				80	3,200	5,700	2	44731081	FR 16550/25,4 A 80	-
				120	3,200	5,700	2	44731121	FR 16550/25,4 A 120	-
				150	3,200	5,700	2	44731151	FR 16550/25,4 A 150	-
				240	3,200	5,700	2	44731241	FR 16550/25,4 A 240	-
				320	3,200	5,700	2	44731321	FR 16550/25,4 A 320	-
200	30	44	A	60	2,600	4,700	2	44736061	FR 20030/44,0 A 60	-
				80	2,600	4,700	2	44736081	FR 20030/44,0 A 80	-
				120	2,600	4,700	2	44736121	FR 20030/44,0 A 120	-
				240	2,600	4,700	2	44736241	FR 20030/44,0 A 240	-
	50	44	A	60	2,600	4,700	2	44738061	FR 20050/44,0 A 60	-
				80	2,600	4,700	2	44738081	FR 20050/44,0 A 80	-
				120	2,600	4,700	2	44738121	FR 20050/44,0 A 120	-
				150	2,600	4,700	2	44738151	FR 20050/44,0 A 150	-
				240	2,600	4,700	2	44738241	FR 20050/44,0 A 240	-
250	50	44	A	60	2,100	3,800	1	44742061	FR 25050/44,0 A 60	-
				80	2,100	3,800	1	44742081	FR 25050/44,0 A 80	-

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D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
250	50	44	A	120	2,100	3,800	1	44742121	FR 25050/44,0 A 120	-
				150	2,100	3,800	1	44742151	FR 25050/44,0 A 150	-
				240	2,100	3,800	1	44742241	FR 25050/44,0 A 240	-
				320	2,100	3,800	1	44742321	FR 25050/44,0 A 320	-



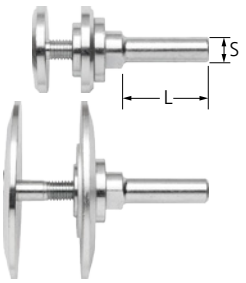
Ceramic oxide grain CO-COOL version

The flaps made of coated abrasive are arranged radially around the axis in a fan-type structure. Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding.

Special features:
- Highly flexible, enabling optimal adjustment to the contour. Can be used face-down very close to edges and in corners thanks to special clamping system.
- Consistently high stock removal rate over the entire tool life as new, aggressive abrasive is constantly exposed.
- Please order compatible arbor separately.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
150	30	25.4	CO-COOL	40	3,500	6,300	2	44725204	FR 15030/25,4 CO-COOL 40	-
				60	3,500	6,300	2	44725206	FR 15030/25,4 CO-COOL 60	-
				80	3,500	6,300	2	44725208	FR 15030/25,4 CO-COOL 80	-
				120	3,500	6,300	2	44725212	FR 15030/25,4 CO-COOL 120	-
	50	25.4	CO-COOL	40	3,500	6,300	2	44727204	FR 15050/25,4 CO-COOL 40	-
				60	3,500	6,300	2	44727206	FR 15050/25,4 CO-COOL 60	-
				80	3,500	6,300	2	44727208	FR 15050/25,4 CO-COOL 80	-
				120	3,500	6,300	2	44727212	FR 15050/25,4 CO-COOL 120	-
165	30	25.4	CO-COOL	40	3,200	5,700	2	44733204	FR 16530/25,4 CO-COOL 40	-
				60	3,200	5,700	2	44733206	FR 16530/25,4 CO-COOL 60	-
				80	3,200	5,700	2	44733208	FR 16530/25,4 CO-COOL 80	-
				120	3,200	5,700	2	44733212	FR 16530/25,4 CO-COOL 120	-
	50	25.4	CO-COOL	40	3,200	5,700	2	44730304	FR 16550/25,4 CO-COOL 40	-
				60	3,200	5,700	2	44730306	FR 16550/25,4 CO-COOL 60	-
				80	3,200	5,700	2	44730308	FR 16550/25,4 CO-COOL 80	-
				120	3,200	5,700	2	44730312	FR 16550/25,4 CO-COOL 120	-

Arbor FR/VR

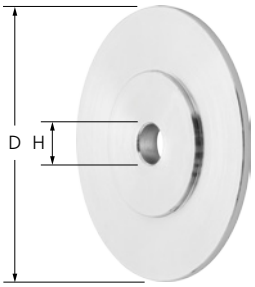


Version with clamping flange

For mounting PFERD unmounted flap wheels. The clamping flanges are designed to lie countersunk in the tool.

Special features:
- Can be used face-down very close to edges and in corners thanks to special clamping system.

Suitable for tool diameter [mm]	Suitable for hole diameter [mm]	S [mm]	L [mm]	Clamping range [mm]		Item no.	Designation	Price/ unit EUR
100, 150, 165	25,4	12	40	25 – 50	1	44601225	FR/VR 12/25,4 100-165	-
200, 250	44	12	40	25 – 50	1	44601244	FR/VR 12/44,0 200-250	-



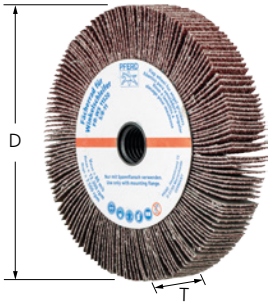
Reducing flanges for unmounted flap wheels

For mounting unmounted flap wheels and POLINOX grinding wheels on drive spindles. The clamping flanges are designed to lie countersunk in the tool.

Special features:
- Can be used face-down very close to edges and in corners thanks to special clamping system.
- Can be adapted to an existing drive spindle by drilling.

Suitable for tool diameter [mm]	D [mm]	H [mm]	Max. H [mm]		Item no.	Designation	Price/unit EUR
150, 165	40	12	22.2	1	44771225	RF FR 150-165 Bo. 12-22,2	-
200, 250	83	12	40	1	44771244	RF FR 200-250 Bo. 12-40	-

Unmounted flap wheels for angle grinders



Aluminium oxide A version

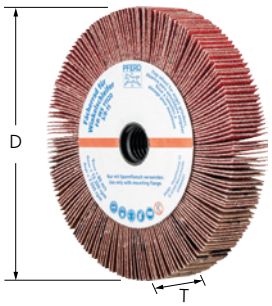
The flaps made of coated abrasive are arranged radially around the axis in a fan-type structure. For general applications from coarse to fine grinding.

Special features:
- Can be mounted directly on the angle grinder without additional clamping devices (ideal for assembly shop operations).
- Consistently high stock removal rate over the entire tool life as new, aggressive abrasive is constantly exposed.
- Can be used face-down very close to edges and in corners. Highly flexible, enabling optimal adjustment to the contour.

D [mm]	T [mm]	Thread	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
115	20	5/8-11	A	40	7,500	13,300	2	47802558	FR WS 11520 5/8-11 A 40	-
				60	7,500	13,300	2	47802559	FR WS 11520 5/8-11 A 60	-
				80	7,500	13,300	2	47802560	FR WS 11520 5/8-11 A 80	-
				120	7,500	13,300	2	47802561	FR WS 11520 5/8-11 A 120	-
				180	7,500	13,300	2	47802821	FR WS 11520 5/8-11 A 180	-
				240	7,500	13,300	2	*47802822*	FR WS 11520 5/8-11 A 240	-
				320	7,500	13,300	2	*47802823*	FR WS 11520 5/8-11 A 320	-
		M14	A	40	7,500	13,300	2	44781504	FR WS 11520 M14 A 40	-
				60	7,500	13,300	2	44781506	FR WS 11520 M14 A 60	-
				80	7,500	13,300	2	44781508	FR WS 11520 M14 A 80	-
				120	7,500	13,300	2	44781512	FR WS 11520 M14 A 120	-
				180	7,500	13,300	2	44781518	FR WS 11520 M14 A 180	-
				240	7,500	13,300	2	44781524	FR WS 11520 M14 A 240	-
				320	7,500	13,300	2	44781532	FR WS 11520 M14 A 320	-
125	20	5/8-11	A	40	6,850	12,200	2	47802663	FR WS 12520 5/8-11 A 40	-
				60	6,850	12,200	2	47802664	FR WS 12520 5/8-11 A 60	-
				80	6,850	12,200	2	47802665	FR WS 12520 5/8-11 A 80	-
				120	6,850	12,200	2	47802666	FR WS 12520 5/8-11 A 120	-
				180	6,850	12,200	2	*47802824*	FR WS 12520 5/8-11 A 180	-
				240	6,850	12,200	2	*47802825*	FR WS 12520 5/8-11 A 240	-
				320	6,850	12,200	2	*47802826*	FR WS 12520 5/8-11 A 320	-
		M14	A	40	6,850	12,200	2	44782504	FR WS 12520 M14 A 40	-
				60	6,850	12,200	2	44782506	FR WS 12520 M14 A 60	-
				80	6,850	12,200	2	44782508	FR WS 12520 M14 A 80	-

Continued on next page

D [mm]	T [mm]	Thread	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
125	20	M14	A	120	6,850	12,200	2	44782512	FR WS 12520 M14 A 120	-
				180	6,850	12,200	2	44782518	FR WS 12520 M14 A 180	-
				240	6,850	12,200	2	44782524	FR WS 12520 M14 A 240	-
				320	6,850	12,200	2	44782532	FR WS 12520 M14 A 320	-

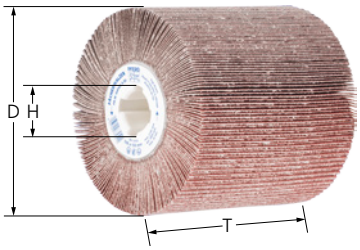


Ceramic oxide grain CO-COOL version

The flaps made of coated abrasive are arranged radially around the axis in a fan-type structure. Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding.

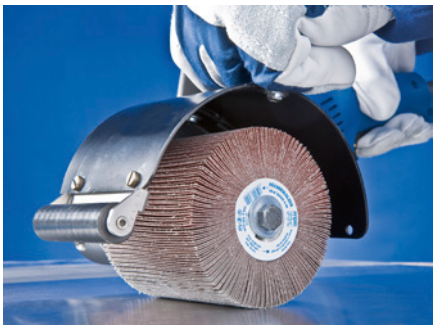
Special features:
- Can be mounted directly on the angle grinder without additional clamping devices (ideal for assembly shop operations).
- Consistently high stock removal rate over the entire tool life as new, aggressive abrasive is constantly exposed.
- Can be used face-down very close to edges and in corners. Highly flexible, enabling optimal adjustment to the contour.

D [mm]	T [mm]	Thread	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
115	20	5/8-11	CO-COOL	40	7,500	13,300	2	*44781804*	FR WS 11520 5/8-11 CO-COOL 40	-
				60	7,500	13,300	2	*44781806*	FR WS 11520 5/8-11 CO-COOL 60	-
				80	7,500	13,300	2	*44781808*	FR WS 11520 5/8-11 CO-COOL 80	-
				120	7,500	13,300	2	*44781812*	FR WS 11520 5/8-11 CO-COOL 120	-
		M14	CO-COOL	40	7,500	13,300	2	44781604	FR WS 11520 M14 CO-COOL 40	-
				60	7,500	13,300	2	44781606	FR WS 11520 M14 CO-COOL 60	-
				80	7,500	13,300	2	44781608	FR WS 11520 M14 CO-COOL 80	-
				120	7,500	13,300	2	44781612	FR WS 11520 M14 CO-COOL 120	-
125	20	5/8-11	CO-COOL	40	6,850	12,200	2	*44782804*	FR WS 12520 5/8-11 CO-COOL 40	-
				60	6,850	12,200	2	*44782806*	FR WS 12520 5/8-11 CO-COOL 60	-
				80	6,850	12,200	2	*44782808*	FR WS 12520 5/8-11 CO-COOL 80	-
				120	6,850	12,200	2	*44782812*	FR WS 12520 5/8-11 CO-COOL 120	-
		M14	CO-COOL	40	6,850	12,200	2	44782604	FR WS 12520 M14 CO-COOL 40	-
				60	6,850	12,200	2	44782606	FR WS 12520 M14 CO-COOL 60	-
				80	6,850	12,200	2	44782608	FR WS 12520 M14 CO-COOL 80	-
				120	6,850	12,200	2	44782612	FR WS 12520 M14 CO-COOL 120	-



FR-W type

The flaps made of coated abrasive are arranged radially around the axis in a fan-type structure. Can be used for general work on medium and large metal surfaces. Achievement of homogeneous finishes (grinding patterns) on larger surfaces and contours in manual applications.



Special features:
- Suitable for all conventional keyway systems. The 19 mm hole diameter with four keyways fits all conventional drum grinders.
- Consistently high stock removal rate over the entire tool life as new, aggressive abrasive is constantly exposed.
- Can be used face-down very close to edges and in corners thanks to special clamping system. Highly flexible, enabling optimal adjustment to the contour.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	100	19	A	40	3,800	6,100	1	44783040	FR-W 100100 A 40	-
				60	3,800	6,100	1	44783060	FR-W 100100 A 60	-
				80	3,800	6,100	1	44783080	FR-W 100100 A 80	-
				120	3,800	6,100	1	44783120	FR-W 100100 A 120	-
				150	3,800	6,100	1	44783150	FR-W 100100 A 150	-
				180	3,800	6,100	1	44783180	FR-W 100100 A 180	-

Drums, set FR-W



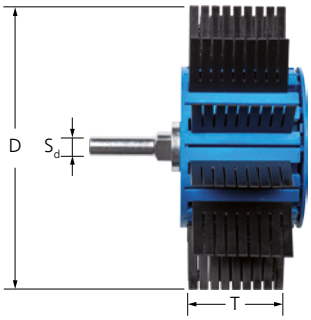
SET FR-W

Set with high-output electric grinding drum drive and PFERD tools for cleaning, brush matting and very fine grinding of large surfaces on stainless steel (INOX) components.

Contents:
One each of the following: electric grinding drum drive UWER 15/40 A-SI D19 with electronic rotational speed control (900–3,500 RPM), flap drum FR-W 100100 A 80, POLINOX grinding drum PNL-W 100100 A 180. Three empty storage compartments provide space for further drum tools from the PFERD range.

Special features:
- Optimal, stepless rotational speed regulation for the use of flap drums and POLINOX drums.
- Coordinated selection of the most common versions.

L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
594	561	161	1	*49350069*	SET FR-W 100100 UWER 15/40 230 V	-

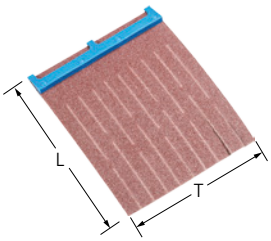


Grinding wheel PFL

The grinding wheel consists of a shank-mounted support and rubber flaps. It must be completed with appropriate abrasive flaps. The combination and arrangement of the abrasive and rubber flaps results in a highly flexible tool.

Special features:
- Ideal for blending different surface textures, fine grinding of radii, contours, curved areas or large surfaces.
- Creates a consistently high surface quality over the entire tool life, as new sharp abrasive is steadily released.
- Comfortable to use thanks to particularly lightweight design. Please order abrasive flaps separately in the required grit size.

D [mm]	T [mm]	S_d [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
170	60	12	1,500	3,500	1	42800100	PFL 17060/12	-



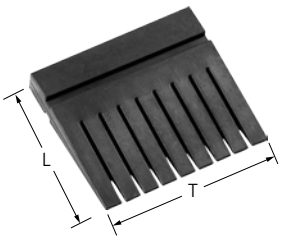
Abrasive flaps PFL-SL

Abrasive flaps with aluminium oxide A as the abrasive, suitable for POLIFLAP grinding wheels, for achieving visual effects ranging from coarse to very fine.



Special features:
- Ideal for blending different surface textures, fine grinding of radii, contours, curved areas or large surfaces.
- Comfortable to use as easy to replace once worn.

L [mm]	T [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
75	60	A	60	12	42800110	PFL-SL A 60	-
			80	12	42800111	PFL-SL A 80	-
			100	12	42800112	PFL-SL A 100	-
			120	12	42800113	PFL-SL A 120	-
			150	12	42800114	PFL-SL A 150	-
			180	12	42800115	PFL-SL A 180	-
			220	12	42800116	PFL-SL A 220	-
			320	12	42800117	PFL-SL A 320	-



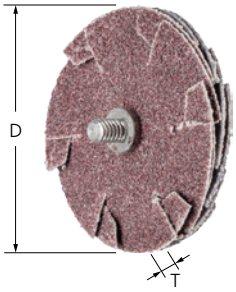
Rubber flaps PFL-GL

Rubber flaps to match the POLIFLAP grinding wheel. They lie between the abrasive flaps, and support the abrasive effect and the flexibility of the tool.

Special features:
- Comfortable to use as easy to replace once worn.
- The packaging unit corresponds to a complete POLIFLAP grinding wheel.

L [mm]	T [mm]		Item no.	Designation	Price/unit EUR
50	55	12	42800120	PFL-GL	-

Flap tools
Overlap slotted discs KS



KS type

Ideal for face grinding. Special tool with aluminium oxide A as the abrasive for face grinding in grooves, fillets and slots. They are mounted via a central threaded hub.



Special features:
- Hard-to-reach areas can be accessed as the tool provides abrasive action on its top and bottom sides.
- High economic efficiency as tool can be changed quickly.
- Please order compatible arbor separately.

D [mm]	T [mm]	Abra-sive	Grit size	Number of lay-ers	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
30	5	A	80	4	6,500	12,000	BO KS 30	20	42863408	KS 30-4 A 80	-
50	5	A	80	4	4,000	8,000	BO KS 50	20	42865408	KS 50-4 A 80	-

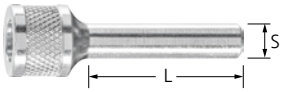
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Arbor for overlap slotted discs BO KS

BO KS 30



BO KS 50



BO KS

Matching arbor for overlap slotted discs.

Special features:
- Reduced set-up work as the overlap slotted discs can be changed without unclamping the arbor from the collet.

Suitable for	S [mm]	L [mm]	Thread [mm]		Item no.	Designation	Price/unit EUR
KS 30-4 A 80	6	40	1/8 BSW	1	42700650	BO KS 30	-
KS 50-4 A 80	6	40	1/4–28 UNF	1	42700640	BO KS 50	-

Safety notes

- The maximum permitted peripheral speed is 20 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.

Wear eye protection!

Wear hearing protection!

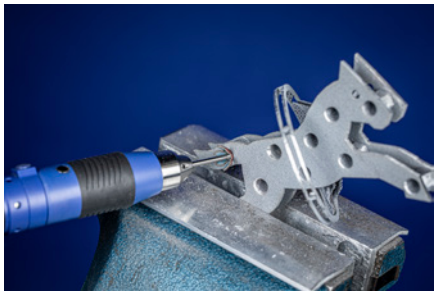
Wear gloves!

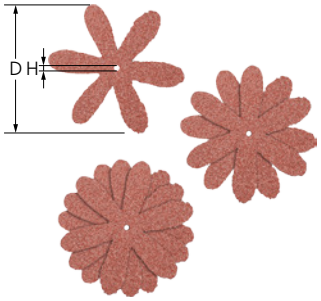
Wear a dust mask!

Follow the safety instructions!

Matching tool diameter

POLISTAR can be stacked in several layers. Should be aligned at an offset from one another, so that the abrasive has the optimal effect. Select the tool diameter based on the relevant hole diameter:
PST 20/1.6 for hole dia. 7–15 mm
PST 30/1.6 for hole dia. 10–20 mm
PST 40/3 for hole dia. 15–25 mm
PST 50/3 for hole dia. 20–40 mm





PST type

Flexible cross buffs with aluminium oxide A as the abrasive, developed especially for working on inner surfaces, e.g. holes and pipes. Can be stacked in several layers. Align at an offset from one another so that the abrasive has the optimal effect.



Special features:

- Highly flexible, enabling optimal adjustment to the contour.
- The tool dimensions ensure optimal processing of small internal diameters, in particular diameters of 7–40 mm.
- Order matching arbor separately.

D [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
20	1.6	A	60	15,000	38,000	BO 2,3/1-6, BO 3/1,6	100	42730206	PST 20/1,6 A 60	-
			80	15,000	38,000	BO 2,3/1-6, BO 3/1,6	100	42730208	PST 20/1,6 A 80	-
			120	15,000	38,000	BO 2,3/1-6, BO 3/1,6	100	42730212	PST 20/1,6 A 120	-
30	1.6	A	60	9,500	25,000	BO 2,3/1-6, BO 3/1,6	100	42730306	PST 30/1,6 A 60	-
			80	9,500	25,000	BO 2,3/1-6, BO 3/1,6	100	42730308	PST 30/1,6 A 80	-
			120	9,500	25,000	BO 2,3/1-6, BO 3/1,6	100	42730312	PST 30/1,6 A 120	-
40	3	A	60	7,200	19,000	BO 6/3 1-6	100	42730406	PST 40/3,0 A 60	-
			80	7,200	19,000	BO 6/3 1-6	100	42730408	PST 40/3,0 A 80	-
			120	7,200	19,000	BO 6/3 1-6	100	42730412	PST 40/3,0 A 120	-
50	3	A	60	5,700	15,000	BO 6/3 1-6	100	42730506	PST 50/3,0 A 60	-
			80	5,700	15,000	BO 6/3 1-6	100	42730508	PST 50/3,0 A 80	-
			120	5,700	15,000	BO 6/3 1-6	100	42730512	PST 50/3,0 A 120	-

Flap tools
POLISTAR-TUBE

Safety notes

- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.


Wear eye protection!


Wear hearing protection!


Wear gloves!


Wear a dust mask!


Follow the safety instructions!

Matching tool diameter

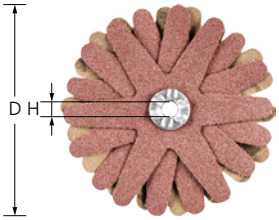
Select the tool diameter based on the respective pipe's inner diameter:
PST-T dia. of 50 mm for an inner pipe dia. of 35–40 mm
PST-T dia. of 60 mm for an inner pipe dia. of 40–45 mm
PST-T dia. of 70 mm for an inner pipe dia. of 45–50 mm
PST-T dia. of 80 mm for an inner pipe dia. of 50–55 mm
PST-T dia. of 90 mm for an inner pipe dia. of 55–60 mm
PST-T dia. of 100 mm for an inner pipe dia. of 60–65 mm

Suitable grit size

Select the correct grit size for the desired roughness:

Grit size 60	= 1.0–1.3 µm R_a
Grit size 120	= 0.6–1.0 µm R_a
Grit size 180	= 0.4–0.6 µm R_a
Grit size 240	= 0.3–0.4 µm R_a
Grit size 320	= 0.2–0.3 µm R_a





PST-T type

Multi-layered cross buffs with aluminium oxide A as the abrasive that are riveted together. They are used especially for working on the inner surfaces of pipes and pipe bends. Particularly suitable for work on inner surfaces.



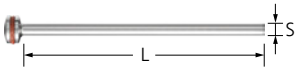
Special features:

- Highly flexible, enabling optimal adjustment to the contour.
- The tool dimensions ensure optimal processing of small internal diameters, in particular diameters of 7–40 mm.

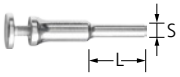
D [mm]	H [mm]	Abrasive	Grit size	Number of layers	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
50	4	A	60	6	3,000	7,650	BO 6/4 0-10	10	42732063	PST-T 50/4 4 A 60	-
			120	6	3,000	7,650	BO 6/4 0-10	10	42732066	PST-T 50/4 6 A 120	-
			180	6	3,000	7,650	BO 6/4 0-10	10	42732068	PST-T 50/4 6 A 180	-
			240	6	3,000	7,650	BO 6/4 0-10	10	42732069	PST-T 50/4 6 A 240	-
			320	6	3,000	7,650	BO 6/4 0-10	10	42732070	PST-T 50/4 6 A 320	-
60	4	A	60	6	2,500	6,350	BO 6/4 0-10	10	42732083	PST-T 60/4 4 A 60	-
			120	6	2,500	6,350	BO 6/4 0-10	10	42732086	PST-T 60/4 6 A 120	-
			180	6	2,500	6,350	BO 6/4 0-10	10	42732088	PST-T 60/4 6 A 180	-
			240	6	2,500	6,350	BO 6/4 0-10	10	42732089	PST-T 60/4 6 A 240	-
			320	6	2,500	6,350	BO 6/4 0-10	10	*42732090*	PST-T 60/4 6 A 320	-
70	4	A	60	6	2,200	5,450	BO 6/4 0-10	10	42732103	PST-T 70/4 4 A 60	-
			120	6	2,200	5,450	BO 6/4 0-10	10	42732106	PST-T 70/4 6 A 120	-
			180	6	2,200	5,450	BO 6/4 0-10	10	42732108	PST-T 70/4 6 A 180	-
			240	6	2,200	5,450	BO 6/4 0-10	10	42732109	PST-T 70/4 6 A 240	-
			320	6	2,200	5,450	BO 6/4 0-10	10	*42732110*	PST-T 70/4 6 A 320	-
80	4	A	60	6	1,900	4,750	BO 6/4 0-10	10	42732123	PST-T 80/4 4 A 60	-
			120	6	1,900	4,750	BO 6/4 0-10	10	42732126	PST-T 80/4 6 A 120	-
			180	6	1,900	4,750	BO 6/4 0-10	10	42732128	PST-T 80/4 6 A 180	-
			240	6	1,900	4,750	BO 6/4 0-10	10	42732129	PST-T 80/4 6 A 240	-
90	5	A	60	8	1,700	4,250	BO 6/5 0-10	10	42732143	PST-T 90/5 4 A 60	-
			120	8	1,700	4,250	BO 6/5 0-10	10	42732146	PST-T 90/5 8 A 120	-
			180	8	1,700	4,250	BO 6/5 0-10	10	42732148	PST-T 90/5 8 A 180	-
			240	8	1,700	4,250	BO 6/5 0-10	10	42732149	PST-T 90/5 8 A 240	-
			320	8	1,700	4,250	BO 6/5 0-10	10	*42732150*	PST-T 90/5 8 A 320	-
100	5	A	60	8	1,500	3,820	BO 6/5 0-10	10	42732163	PST-T 100/5 4 A 60	-
			120	8	1,500	3,820	BO 6/5 0-10	10	42732166	PST-T 100/5 8 A 120	-
			180	8	1,500	3,820	BO 6/5 0-10	10	42732168	PST-T 100/5 8 A 180	-
			240	8	1,500	3,820	BO 6/5 0-10	10	42732169	PST-T 100/5 8 A 240	-

Flap tools
Arbor for POLISTAR and POLISTAR-TUBE

BO 2,3/1,6 1-5
BO 3/1,6 1-5



BO 6/3 1-6
BO 6/4 0-10
BO 6/5 0-10



BO

Matching arbor for POLISTAR and POLISTAR-TUBE.

Special features:

- High economic efficiency as tool can be changed quickly.

Suitable for hole diameter [mm]	S [mm]	L [mm]	Clamping range [mm]		Item no.	Designation	Price/ unit EUR
1,6	2.34	43	1 – 5	10	42460023	BO 2,3/1,6 1-5	-
	3	43	1 – 5	10	42460030	BO 3/1,6 1-5	-
3	6	40	1 – 6	1	42400003	BO 6/3 1-6	-
4	6	25	0 – 10	1	42400004	BO 6/4 0-10	-
5	6	25	0 – 10	1	42400005	BO 6/5 0-10	-

Safety notes

Wear eye protection!

Wear a dust mask!

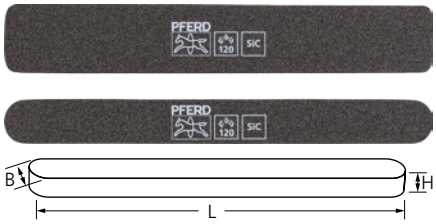
Wear hearing protection!

Follow the safety instructions!

Wear gloves!



Flexible sanding sticks



Flexible sanding sticks SF/SF-R

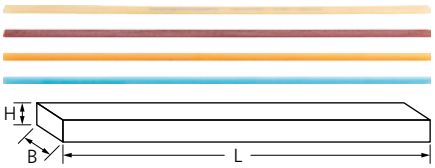
Flexible sanding sticks with silicon carbide SiC for machining components with lots of contours, hard-to-reach areas and narrow slots. They are excellently suited for use in engine construction and turbine construction as well as in tool and mould-making.



Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Different surface quality levels from coarse to very fine can be successively achieved.

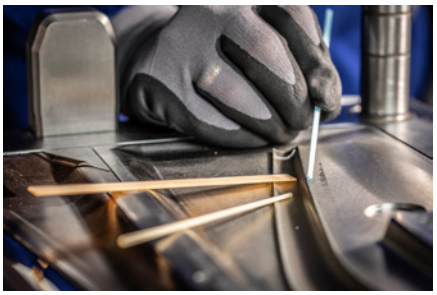
L [mm]	B [mm]	H [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
SF-R – with radius								
147	15	5	SiC	80	10	40110020	SF-R 147-15-5 SiC 80	-
				100	10	40110021	SF-R 147-15-5 SiC 100	-
				120	10	40110022	SF-R 147-15-5 SiC 120	-
				180	10	40110023	SF-R 147-15-5 SiC 180	-
				240	10	40110024	SF-R 147-15-5 SiC 240	-
				320	10	40110025	SF-R 147-15-5 SiC 320	-
				1000	10	40110026	SF-R 147-15-5 SiC 1000	-
180	19	5	SiC	80	10	40110001	SF-R 180-19-5 SiC 80	-
				100	10	40110002	SF-R 180-19-5 SiC 100	-
				120	10	40110003	SF-R 180-19-5 SiC 120	-
				180	10	40110004	SF-R 180-19-5 SiC 180	-
				240	10	40110005	SF-R 180-19-5 SiC 240	-
				320	10	40110006	SF-R 180-19-5 SiC 320	-
				1000	10	40110007	SF-R 180-19-5 SiC 1000	-
SF – without radius								
180	28	5	SiC	80	10	40110040	SF 180-28-5 SiC 80	-
				100	10	40110041	SF 180-28-5 SiC 100	-
				120	10	40110042	SF 180-28-5 SiC 120	-
				180	10	40110043	SF 180-28-5 SiC 180	-
				240	10	40110044	SF 180-28-5 SiC 240	-
				320	10	40110045	SF 180-28-5 SiC 320	-
				1000	10	40110046	SF 180-28-5 SiC 1000	-

Sanding sticks
Ceramic fibre files



KFF

Ceramic fibre files are made of high-grade ceramic fibres embedded in a special resinoid bond. For work on surfaces, hard-to-reach areas and difficult geometries in tool and mould-making.



Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- For maximum stock removal rate, use the file at a 45° angle. Can be used with manual filing tools from catalogue section 9.
- Colour code for the sizes: 180 = gold; 280 = light brown; 400 = orange; 700 = blue.

H [mm]	B [mm]	L [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
Flat								
0.5	4	150	A	180	1	40100018	KFF 0,5 x 4 x 150 A 180	-
				280	1	40100028	KFF 0,5 x 4 x 150 A 280	-
				400	1	40100040	KFF 0,5 x 4 x 150 A 400	-
				700	1	40100070	KFF 0,5 x 4 x 150 A 700	-
	6	150	A	180	1	40100318	KFF 0,5 x 6 x 150 A 180	-
				280	1	40100328	KFF 0,5 x 6 x 150 A 280	-
				400	1	40100340	KFF 0,5 x 6 x 150 A 400	-
				700	1	40100370	KFF 0,5 x 6 x 150 A 700	-
1	4	150	A	180	1	40100118	KFF 1,0 x 4 x 150 A 180	-
				280	1	40100128	KFF 1,0 x 4 x 150 A 280	-
				400	1	40100140	KFF 1,0 x 4 x 150 A 400	-
				700	1	40100170	KFF 1,0 x 4 x 150 A 700	-
	6	150	A	180	1	40100418	KFF 1,0 x 6 x 150 A 180	-
				280	1	40100428	KFF 1,0 x 6 x 150 A 280	-
				400	1	40100440	KFF 1,0 x 6 x 150 A 400	-
				700	1	40100470	KFF 1,0 x 6 x 150 A 700	-
	10	150	A	180	1	40100618	KFF 1,0 x 10 x 150 A 180	-
				280	1	40100628	KFF 1,0 x 10 x 150 A 280	-
				400	1	40100640	KFF 1,0 x 10 x 150 A 400	-
				700	1	40100670	KFF 1,0 x 10 x 150 A 700	-
2	4	150	A	180	1	40100218	KFF 2,0 x 4 x 150 A 180	-
				280	1	40100228	KFF 2,0 x 4 x 150 A 280	-
				400	1	40100240	KFF 2,0 x 4 x 150 A 400	-
				700	1	40100270	KFF 2,0 x 4 x 150 A 700	-
	6	150	A	180	1	40100518	KFF 2,0 x 6 x 150 A 180	-
				280	1	40100528	KFF 2,0 x 6 x 150 A 280	-
				400	1	40100540	KFF 2,0 x 6 x 150 A 400	-
				700	1	40100570	KFF 2,0 x 6 x 150 A 700	-
Round								
2.35	-	150	A	180	1	40100802	KFF RD 2,35 x 150 A 180	-
				280	1	40100804	KFF RD 2,35 x 150 A 280	-
				400	1	40100806	KFF RD 2,35 x 150 A 400	-
				700	1	40100808	KFF RD 2,35 x 150 A 700	-
3	-	150	A	180	1	40100822	KFF RD 3 x 150 A 180	-
				280	1	40100824	KFF RD 3 x 150 A 280	-
				400	1	40100826	KFF RD 3 x 150 A 400	-
				700	1	40100828	KFF RD 3 x 150 A 700	-

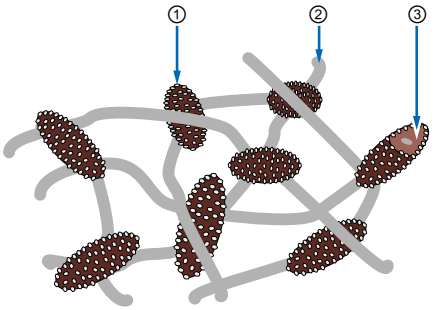
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H [mm]	B [mm]	L [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
Three square			△					
3	3	150	A	180	1	40100922	KFF DKT 3 x 3 x 3 x 150 A 180	-
				280	1	40100924	KFF DKT 3 x 3 x 3 x 150 A 280	-
				400	1	40100926	KFF DKT 3 x 3 x 3 x 150 A 400	-
				700	1	40100928	KFF DKT 3 x 3 x 3 x 150 A 700	-

Non-woven tools
General information

Non-woven abrasives

Non-woven abrasives consist of
① Abrasive grain,
② Polyamide fibres and
③ Synthetic resins.



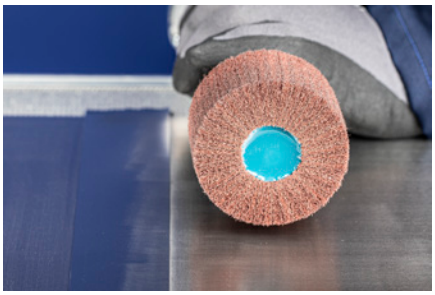
The non-woven fibre structure is impregnated/interspersed with resin and abrasive grain. The even distribution of the abrasive grain within the non-woven mixture guarantees a continuous supply of fresh, sharp abrasive grain during the entire grinding operation.

The very loose connections between the individual fibres ensures a high level of flexibility and gives a strong spring-type effect to the non-woven material. It is flexible and supple, and leaves behind a very distinctive surface structure. The satin-finished grinding result is unique and cannot be achieved with other abrasives.

Grit sizes

Non-woven abrasives are labelled according to the following scheme:

PFERD	Grit size [mesh]
very coarse	50–80
coarse	80–100
medium	100–180
fine	180–220
very fine	220–400



Abrasive

Even though non-woven abrasive has a completely different structure to coated abrasives, the same abrasive materials are used for both tool groups.

Aluminium oxide (Al_2O_3)

Aluminium oxide (Al_2O_3) is very durable, achieves a top tool life and is very aggressive on hardened steel. The surface generated is characterized by a higher level of shine. When used on aluminium, discolouration is prevented.

Silicon carbide (SiC)

Silicon carbide (SiC) is even sharper, harder and has better cutting characteristics. It quickly produces a finer, long-lasting slightly matte grinding pattern on the surfaces of many materials.

Safety notes

- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.
- Use **POLINOX unitized wheels PNER** at a recommended cutting speed of 15–35 m/s.
- Use **POLINOX convolute wheels PNK** at a recommended cutting speed of 20 m/s. The wound construction of the tool requires that the indicated running direction is strictly observed. Non-compliance with the running direction will lead to destruction of the tool and carries an increased risk of accidents.
- Use **POLINOX mounted/unmounted grinding wheels and cross buffs** at a recommended cutting speed of 10–20 m/s.
- Use **POLICLEAN tools** at a recommended cutting speed of 15–20 m/s.


Wear eye protection!


Wear hearing protection!

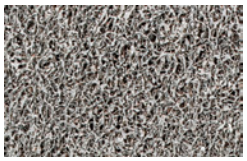

Wear gloves!


Wear a dust mask!


Follow the safety instructions!



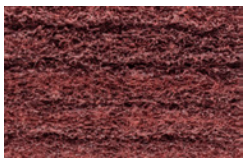
Available types and hardness grades



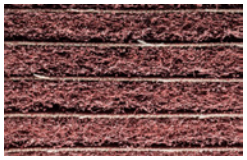
PNER
Thanks to different combinations of compaction, fibres, grit and the appropriate bond, this tool can be used for a wide range of applications for work on surfaces, from relatively coarse grinding to preparing the surface for polishing.



PNK
The non-woven abrasive is wound around a core and foamed up. The tools can be optimized for a variety of applications by implementing different foam, fibre, grain and bond combinations. Uses range from fine deburring to preparation for polishing.



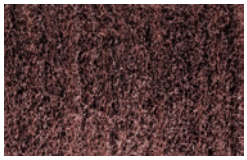
PNL
The non-woven abrasive material is arranged in multiple radial flaps. A long tool life is achieved through the very dense packing of the flaps.
The main area of application of the tool is for surface work.



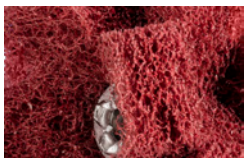
PNZ
The non-woven abrasive material is arranged in multiple radial flaps, with abrasive cloth interlayers. The flap structure facilitates improved stock removal and achieves a coarser surface finish.



PNG
The non-woven abrasive is made of several very wavily arranged strips of non-woven abrasive material, wound around a core. The wavy structure of the non-woven abrasive material permits seamless brush matting of surfaces.



PNR
The non-woven abrasive material is arranged in multiple (axial) disc layers. Since the individual non-woven discs are not interconnected, the abrasive surface adapts easily to different workpiece contours, e.g. when working on profiles or pipes.



PNST
The non-woven abrasive is star-shaped and stacked in layers which are connected in the centre. Particularly suitable for narrow application areas and hard-to-reach places such as drilled holes and indentations.

Non-woven tools

General information on POLINOX unitized wheels and discs PNER

Available types

W **Soft**
Soft version with excellent adaptability. The durability, grinding performance and very high surface quality are maintained at the same time. Very well-suited to work on contours.

MW **Medium-soft**
Medium-soft version with increased edge strength and tool life for coarse blending and polishing tasks. Well-suited to work on contours.

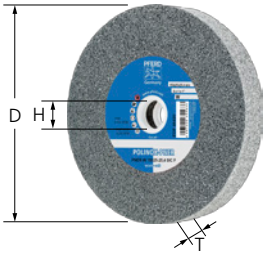
MH **Medium-hard**
Medium-hard version with increased edge strength and tool life for coarse deburring and cleaning applications.

H **Hard**
Hard version with very high stock removal rate, good edge strength and long tool life for tough deburring and polishing applications.



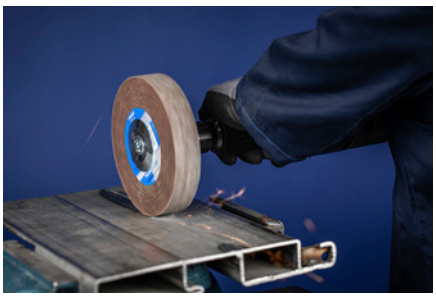
Comparison table

PFERD PNER				3M	Standard Abrasives	Norton	BIBIELLE
Type	**Colour code**	**Abrasive**	**Grit**				
Soft	W	SiC	fine	EXL 2S fine	532	UW1-2SF or Nex-2SF	BUH 2SF
		A	coarse	EXL 2A medium	521	UW1-2AM or Nex-2AM	BUH 2AM
Medium-soft	MW	SiC	fine	EXL 4S fine or SST 3S fine	632	UW1-4SF	BUH 3SF
		A	fine	EXL 4A fine or SST 3A fine	631	UW1-4AF	-
Medium-hard	MH	A	fine	Cut & polish 5A fine or SST 5A fine	731	UW1-6AF or Nex-6AF	-
Hard	H	A	fine	Cut & polish 7A medium or 9A medium	821	UW1-8AM or Nex-8AM	BUH 6AM
		A	coarse	Cut & polish 7A coarse or 9A coarse	811	UW1-8AC or Nex-8AC	BUH 8AC



PNER type for straight grinders, flexible shaft drives and bench grinders

Consist of multiple heavily compressed, non-woven layers, which are bonded together by a special grain/resin system. Particularly suitable for working on soft metals, alloyed and high-alloy steels and titanium alloy.

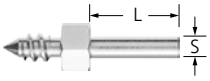


Special features:

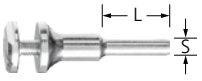
- High economic efficiency due to high abrasive performance and long tool life.
- Produces very good surface quality and can be profiled as desired, enabling optimal adjustment to the contour. Ideal for cleaning, deburring, blending and polishing.
- Type W = soft, MW = medium-soft, MH = medium-hard and H = hard.

D [mm]	T [mm]	H [mm]	Grit size	Version	Abrasive	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
Type for straight grinders, flexible shafts and bench grinders												
25	25	6	coarse	H	A	19,000	30,500	BO PNER 25 S6	10	44691001	PNER-H 2525-6 A G	-
			fine	MH	A	19,000	30,500	BO PNER 25 S6	10	44691202	PNER-MH 2525-6 A F	-
				H	A	19,000	30,500	BO PNER 25 S6	10	44691002	PNER-H 2525-6 A F	-
50	3	6	fine	H	A	9,500	15,300	BO 6/6 3-10	10	44691005	PNER-H 5003-6 A F	-
75	3	6	coarse	W	A	6,400	10,200	BO 6/6 3-10	10	47803085	PNER-W 7503-6 A G	-
			fine	W	SiC	6,400	10,200	-	10	47803086	PNER-W 7503-6 SiC F	-
				MW	SiC	6,400	10,200	-	10	47803087	PNER-MW 7503-6 SiC F	-
				MH	A	6,400	10,200	BO 6/6 3-10	10	47803088	PNER-MH 7503-6 A F	-
			coarse	H	A	6,400	10,200	BO 6/6 3-10	10	47803089	PNER-H 7503-6 A G	-
			fine	H	A	6,400	10,200	BO 6/6 3-10	10	44691010	PNER-H 7503-6 A F	-
	6	6	coarse	W	A	6,400	10,200	-	5	44691621	PNER-W 7506-6 A G	-
			fine	W	SiC	6,400	10,200	-	5	44691627	PNER-W 7506-6 SiC F	-
				MW	A	6,400	10,200	BO 6/6 3-10	5	44691422	PNER-MW 7506-6 A F	-
					SiC	6,400	10,200	-	5	44691427	PNER-MW 7506-6 SiC F	-
				MH	A	6,400	10,200	BO 6/6 3-10	5	44691222	PNER-MH 7506-6 A F	-
			coarse	H	A	6,400	10,200	BO 6/6 3-10	5	44691021	PNER-H 7506-6 A G	-
	13	6	coarse	W	A	6,400	10,200	BO 6/6 3-10	5	44691641	PNER-W 7513-6 A G	-
			fine	W	SiC	6,400	10,200	-	5	44691647	PNER-W 7513-6 SiC F	-
				MW	A	6,400	10,200	BO 6/6 3-10	5	44691442	PNER-MW 7513-6 A F	-
					SiC	6,400	10,200	-	5	44691447	PNER-MW 7513-6 SiC F	-
				MH	A	6,400	10,200	BO 6/6 3-10	5	44691242	PNER-MH 7513-6 A F	-
			coarse	H	A	6,400	10,200	BO 6/6 3-10	5	44691041	PNER-H 7513-6 A G	-
150	25	25.4	fine	W	SiC	3,200	5,100	BO 12/20	1	44691667	PNER-W 15025-25,4 SiC F	-
				MW	A	3,200	5,100	BO 12/20	1	44691462	PNER-MW 15025-25,4 A F	-
					SiC	3,200	5,100	BO 12/20	1	44691467	PNER-MW 15025-25,4 SiC F	-
				MH	A	3,200	5,100	BO 12/20	1	44691262	PNER-MH 15025-25,4 A F	-
			coarse	H	A	3,200	5,100	BO 12/20	1	44691061	PNER-H 15025-25,4 A G	-

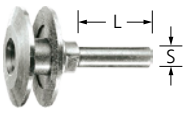
Non-woven tools
Arbor for POLINOX unitized/convolute wheels



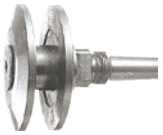
BO PNER 25 S6



BO 6/6 3-10



BO 12/20 10-50


BO MK 1/20 10-50

Arbor BO

Matching arbor for POLINOX unitized wheels.

Special features:
- High economic efficiency as tool can be changed quickly.

Suitable for hole diameter [mm]	S [mm]	L [mm]	Clamping range [mm]		Item no.	Designation	Price/ unit EUR
6	6	25	-	1	42700256	BO PNER 25 S6	-
			3 – 10	1	42400006	BO 6/6 3-10	-
20	12	35	10 – 50	1	42400012	BO 12/20 10-50	-
	-	-	10 – 50	1	42400062	BO MK 1/20 10-50	-

4

POLINOX unitized wheels PNER



PNER type for speed-adjustable angle grinders and fillet weld grinders

Consist of multiple heavily compressed, non-woven layers, which are bonded together by a special grain/resin system. Particularly suitable for work on fillet welds and hard-to-reach slots or indentations.

Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- Produces very good surface quality. Can be profiled as desired, enabling optimal adjustment to the contour.
- Ideal for cleaning, deburring, blending and polishing.

D [mm]	T [mm]	H [mm]	Grit size	Version	Abra-sive	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Type for angle grinders and fillet weld grinders											
125	6	22.23	fine	MW (medium-soft)	A	4,500	6,100	5	44691453	PNER-MW 12506-22,2 A F	-
					SiC	4,500	6,100	5	44691452	PNER-MW 12506-22,2 SiC F	-
				MH (medium-hard)	A	4,500	6,100	5	44691252	PNER-MH 12506-22,2 A F	-
			coarse	H (hard)	A	4,500	6,100	5	44691053	PNER-H 12506-22,2 A G	-
			fine	H (hard)	A	4,500	6,100	5	44691052	PNER-H 12506-22,2 A F	-
150	3	25.4	fine	MW (medium-soft)	SiC	3,800	5,100	5	44691628	PNER-MW 15003-25,4 SiC F	-
				MH (medium-hard)	SiC	3,800	5,100	5	44691629	PNER-MH 15003-25,4 SiC F	-
				H (hard)	A	3,800	5,100	5	44691630	PNER-H 15003-25,4 A F	-
	6	25.4	fine	W (soft)	SiC	3,800	5,100	5	44691631	PNER-W 15006-25,4 SiC F	-
				MW (medium-soft)	SiC	3,800	5,100	5	44691632	PNER-MW 15006-25,4 SiC F	-
				H (hard)	A	3,800	5,100	5	44691633	PNER-H 15006-25,4 A F	-
	13	12.7		W (soft)	SiC	3,800	5,100	5	47802723	PNER-W 15013-12,7 SiC F	-
			fine	MW (medium-soft)	SiC	3,800	5,100	5	47700200	PNER-MW 15013-12.7 SiC F	-
				MH (medium-hard)	SiC	3,800	5,100	5	47700201	PNER-MH 15013-12.7 SiC F	-



PNER discs for speed-adjustable angle grinders

Consist of multiple heavily compressed, non-woven layers, which are glued to a backer and bonded together by a special grain/resin system. Particularly suitable for working on soft metals, alloyed and high-alloy steels and titanium alloys.



Special features:

- High economic efficiency due to high abrasive performance and long tool life.
- Produces very good surface quality. Can be profiled as desired, enabling optimal adjustment to the contour.
- Ideal for cleaning, deburring, blending and polishing.

D [mm]	T [mm]	H [mm]	Grit size	Version	Abrasive	Opt. RPM	Max. RPM	5	Item no.	Designation	Price/ unit EUR
115	13	22.23	fine	W (soft)	SiC	6,000	10,000	5	44690732	DISC PNER-W 115-22,2 SiC F	-
				MW (medium-soft)	SiC	6,000	10,000	5	44690722	DISC PNER-MW 115-22,2 SiC F	-
				MH (medium-hard)	SiC	6,000	10,000	5	44690712	DISC PNER-MH 115-22,2 SiC F	-
125	13	22.23	fine	W (soft)	SiC	5,400	10,000	5	44690733	DISC PNER-W 125-22,2 SiC F	-
				MW (medium-soft)	SiC	5,400	10,000	5	44690723	DISC PNER-MW 125-22,2 SiC F	-
				MH (medium-hard)	SiC	5,400	10,000	5	44690713	DISC PNER-MH 125-22,2 SiC F	-

Non-woven tools
General information on POLINOX convolute wheels PNK

Available types

W **Soft**
Soft version with very good abrasive performance on contours. Very good for blending surfaces.

MW **Medium-soft**
Medium-soft version with increased flexibility and tool life for coarse blending applications and for light deburring and polishing work. Well-suited to work on contours.

MH **Medium-hard**
Medium-hard version with increased edge strength and tool life for coarse deburring applications and deburring, blending and cleaning work.

H **Hard**
Hard version with very high stock removal rate, good edge strength and long tool life for medium to heavy-duty deburring and polishing applications.

EH **Extra-hard**
Extra-hard version with excellent edge strength for demanding deburring work.



4

Comparison table

PFERD PNK				3M	Standard Abrasives	Norton	BIBIELLE
Type	**Colour code**	**Abrasive**	**Grit**				
Soft	W	A	coarse	CP-WL 5AM	MF CV 5AM	MF CF 5AM	BCW-MF 5AM
Medium-soft	MW	SiC	fine	LDW 7SF	LDW 7SF	Series 2000 7SF	BCW-DB 7SF
Medium-hard	MH	SiC	fine	EXL Deburring 8SF	Deburring 8SF	Series 1000 8SF	BCW-DB 8SF
	MH	A	coarse	EXL Deburring 8AM	GP Plus 8AM	Series 1000 8AM	BCW-DB 8AM
Hard	H	SiC	fine	Deburring 9SF	EXL Deburring 9SF	Series 1000 9SF	BCW-DB 9SF
Extra-hard	EH	SiC	fine	XP-WL 10SF	GP Plus 10SF	Series 4000 9SF	BCW-DB 9SF-R

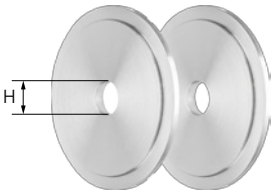


PNK type

Consist of spiral-shaped, non-woven abrasive which is wound around a core. Particularly suitable for working on soft metals, alloyed and high-alloy steels and titanium alloys, e.g. on turbine blades and for the removal of processing traces on surgical instruments.

Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- Produces very good surface quality. Can be profiled as desired, enabling optimal adjustment to the contour.
- Ideal for cleaning, deburring, blending and polishing.

D [mm]	T [mm]	H [mm]	Grit size	Version	Abrasive	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
150	13	25.4	fine	MW (medium-soft)	SiC	2,500	5,100	1	47802637	PNK-MW 15013-25,4 SiC F	-
				MH (medium-hard)	SiC	2,500	5,100	1	47802639	PNK-MH 15013-25,4 SiC F	-
			coarse	MH (medium-hard)	A	2,500	5,100	1	47802638	PNK-MH 15013-25,4 A G	-
			fine	H (hard)	SiC	2,500	5,100	1	47802640	PNK-H 15013-25,4 SiC F	-
				EH (extra-hard)	SiC	2,500	5,100	1	47803030	PNK-EH 15013-25,4 SiC F	-
	25	25.4	coarse	W (soft)	A	2,500	5,100	1	47802730	PNK W 15025-25,4 A G	-
			fine	MW (medium-soft)	SiC	2,500	5,100	1	47802641	PNK-MW 15025-25,4 SiC F	-
				MH (medium-hard)	SiC	2,500	5,100	1	47802643	PNK-MH 15025-25,4 SiC F	-
			coarse	MH (medium-hard)	A	2,500	5,100	1	47802642	PNK-MH 15025-25,4 A G	-
			fine	H (hard)	SiC	2,500	5,100	1	47802644	PNK-H 15025-25,4 SiC F	-
				EH (extra-hard)	SiC	2,500	5,100	1	47803031	PNK-EH 15025-25,4 SiC F	-
200	13	76.2	fine	MW (medium-soft)	SiC	1,900	3,850	1	47802645	PNK-MW 20013-76,2 SiC F	-
				MH (medium-hard)	SiC	1,900	3,850	1	47802647	PNK-MH 20013-76,2 SiC F	-
			coarse	MH (medium-hard)	A	1,900	3,850	1	47802646	PNK-MH 20013-76,2 A G	-
			fine	H (hard)	SiC	1,900	3,850	1	47802648	PNK-H 20013-76,2 SiC F	-
				EH (extra-hard)	SiC	1,900	3,850	1	47802882	PNK-EH 20013-76,2 SiC F	-
	25	76.2	coarse	W (soft)	A	1,900	3,850	1	47803029	PNK-W 20025-76,2 A G	-
			fine	MW (medium-soft)	SiC	1,900	3,850	1	47802649	PNK-MW 20025-76,2 SiC F	-
				MH (medium-hard)	SiC	1,900	3,850	1	47802651	PNK-MH 20025-76,2 SiC F	-
			coarse	MH (medium-hard)	A	1,900	3,850	1	47802650	PNK-MH 20025-76,2 A G	-
			fine	H (hard)	SiC	1,900	3,850	1	47802652	PNK-H 20025-76,2 SiC F	-
				EH (extra-hard)	SiC	1,900	3,850	1	47802881	PNK-EH 20025-76,2 SiC F	-
	50	76.2	coarse	W (soft)	A	1,900	3,850	1	47802732	PNK W 20050-76,2 A G	-
			fine	MW (medium-soft)	SiC	1,900	3,850	1	47802653	PNK-MW 20050-76,2 SiC F	-
				MH (medium-hard)	SiC	1,900	3,850	1	47802655	PNK-MH 20050-76,2 SiC F	-
			coarse	MH (medium-hard)	A	1,900	3,850	1	47802654	PNK-MH 20050-76,2 A G	-
			fine	H (hard)	SiC	1,900	3,850	1	47802656	PNK-H 20050-76,2 SiC F	-
				EH (extra-hard)	SiC	1,900	3,850	1	47802880	PNK-EH 20050-76,2 SiC F	-



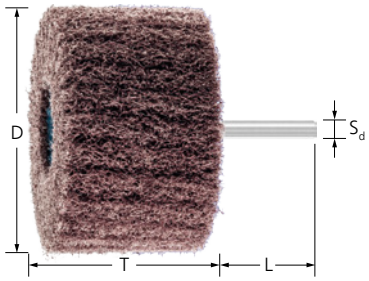
RF PNK

For mounting POLINOX convolute wheels PNK with a diameter of 200 mm on stationary machines such as double grinding machines (bench grinders).

Special features:
- High accuracy of fit.
- Hole can be expanded as desired.

Suitable for tool diameter [mm]	H [mm]		Item no.	Designation	Price/unit EUR
76,2	16.1	1	47601200	RF PNK 200 Bo. 16,1	-
	25.4	1	47601201	RF PNK 200 Bo. 25,4	-
	31.8	1	47601202	RF PNK 200 Bo. 31,8	-

POLINOX mounted grinding wheels



PNL type

The non-woven abrasive material is arranged in multiple radial flaps. A long tool life is achieved through the dense packing of the flaps. It is particularly used for surface work. Available in aluminium oxide A and silicon carbide (SiC).

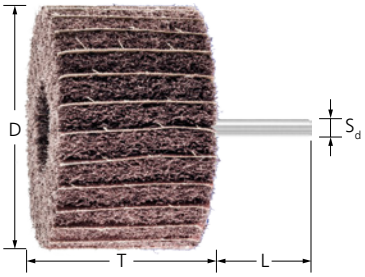


Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.

D [mm]	T [mm]	S_d [mm]	L [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Aluminium oxide A											
30	25	6	40	A	100	10,000	20,000	10	44653100	PNL 3025/6 A 100	-
					180	10,000	20,000	10	44653180	PNL 3025/6 A 180	-
					280	10,000	20,000	10	44653280	PNL 3025/6 A 280	-
40	20	6	40	A	80	7,500	15,000	10	44698505	PNL 4020/6 A 80	-
					100	7,500	15,000	10	44654100	PNL 4020/6 A 100	-
					180	7,500	15,000	10	44654180	PNL 4020/6 A 180	-
					280	7,500	15,000	10	44654280	PNL 4020/6 A 280	-
					360	7,500	15,000	10	44698506	PNL 4020/6 A 360	-
50	30	6	40	A	80	6,000	12,000	10	44698507	PNL 5030/6 A 80	-
					100	6,000	12,000	10	44655100	PNL 5030/6 A 100	-
					180	6,000	12,000	10	44655180	PNL 5030/6 A 180	-
					280	6,000	12,000	10	44655280	PNL 5030/6 A 280	-
					360	6,000	12,000	10	44698508	PNL 5030/6 A 360	-
60	25	6	40	A	100	5,000	10,000	10	44656010	PNL 6025/6 A 100	-
					180	5,000	10,000	10	44656018	PNL 6025/6 A 180	-
					280	5,000	10,000	10	44656028	PNL 6025/6 A 280	-
	50	6	40	A	80	5,000	10,000	10	47802761	PNL 6050 A 80	-
					100	5,000	10,000	10	44666100	PNL 6050/6 A 100	-
					180	5,000	10,000	10	44666180	PNL 6050/6 A 180	-
					280	5,000	10,000	10	44666280	PNL 6050/6 A 280	-
					360	5,000	10,000	10	44698509	PNL 6050/6 A 360	-

Continued on next page

D [mm]	T [mm]	S_d [mm]	L [mm]	Abra-sive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
80	25	6	40	A	100	4,000	7,500	10	44658010	PNL 8025/6 A 100	-
					180	4,000	7,500	10	44658018	PNL 8025/6 A 180	-
					280	4,000	7,500	10	44658028	PNL 8025/6 A 280	-
	50	6	40	A	80	4,000	7,500	10	44698510	PNL 8050/6 A 80	-
					100	4,000	7,500	10	44658100	PNL 8050/6 A 100	-
					180	4,000	7,500	10	44658180	PNL 8050/6 A 180	-
					280	4,000	7,500	10	44658280	PNL 8050/6 A 280	-
					360	4,000	7,500	10	44698511	PNL 8050/6 A 360	-
Silicon carbide (SiC)											
40	20	6	40	SiC	100	7,500	15,000	10	44640410	PNL 4020/6 SiC 100	-
					180	7,500	15,000	10	44640418	PNL 4020/6 SiC 180	-
					280	7,500	15,000	10	44640428	PNL 4020/6 SiC 280	-
50	30	6	40	SiC	100	6,000	12,000	10	44640510	PNL 5030/6 SiC 100	-
					180	6,000	12,000	10	44640518	PNL 5030/6 SiC 180	-
					280	6,000	12,000	10	44640528	PNL 5030/6 SiC 280	-
60	50	6	40	SiC	100	5,000	10,000	10	44640610	PNL 6050/6 SiC 100	-
					180	5,000	10,000	10	44640618	PNL 6050/6 SiC 180	-
					280	5,000	10,000	10	44640628	PNL 6050/6 SiC 280	-
80	50	6	40	SiC	100	4,000	7,500	10	44640810	PNL 8050/6 SiC 100	-
					180	4,000	7,500	10	44640818	PNL 8050/6 SiC 180	-
					280	4,000	7,500	10	44640828	PNL 8050/6 SiC 280	-



PNZ type

The non-woven abrasive material is arranged in multiple radial flaps, with abrasive cloth interlayers. This flap structure facilitates improved stock removal and achieves a coarser surface finish. Available in aluminium oxide A and silicon carbide (SiC).



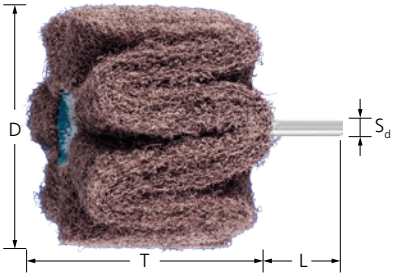
Special features:

- Highly flexible, enabling optimal adjustment to the contour.
- Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.

D [mm]	T [mm]	S_d [mm]	L [mm]	Abra-sive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Aluminium oxide A											
30	25	6	40	A	100	10,000	20,000	10	44653080	PNZ 3025/6 A 100	-
					180	10,000	20,000	10	44653088	PNZ 3025/6 A 180	-
40	20	6	40	A	80	7,500	15,000	10	44698512	PNZ 4020/6 A 80	-
					100	7,500	15,000	10	44654080	PNZ 4020/6 A 100	-
					180	7,500	15,000	10	44654088	PNZ 4020/6 A 180	-
50	30	6	40	A	80	6,000	12,000	10	44698513	PNZ 5030/6 A 80	-
					100	6,000	12,000	10	44655080	PNZ 5030/6 A 100	-
					180	6,000	12,000	10	44655088	PNZ 5030/6 A 180	-
60	25	6	40	A	100	5,000	10,000	10	44656030	PNZ 6025/6 A 100	-
					180	5,000	10,000	10	44656038	PNZ 6025/6 A 180	-
	50	6	40	A	80	5,000	10,000	10	44698514	PNZ 6050/6 A 80	-
					100	5,000	10,000	10	44656080	PNZ 6050/6 A 100	-
					180	5,000	10,000	10	44656088	PNZ 6050/6 A 180	-

Continued on next page

D [mm]	T [mm]	S_d [mm]	L [mm]	Abra-sive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
80	25	6	40	A	100	4,000	7,500	10	44658030	PNZ 8025/6 A 100	-
					180	4,000	7,500	10	44658038	PNZ 8025/6 A 180	-
	50	6	40	A	80	4,000	7,500	10	44698515	PNZ 8050/6 A 80	-
					100	4,000	7,500	10	44658080	PNZ 8050/6 A 100	-
					180	4,000	7,500	10	44658088	PNZ 8050/6 A 180	-
100	50	6	40	A	100	3,000	6,000	5	44690080	PNZ 10050/6 A 100	-
					180	3,000	6,000	5	44690088	PNZ 10050/6 A 180	-
Silicon carbide (SiC)											
80	50	6	40	SiC	100	4,000	7,500	10	44640806	PNZ 8050/6 SiC 100	-
					180	4,000	7,500	10	44640808	PNZ 8050/6 SiC 180	-



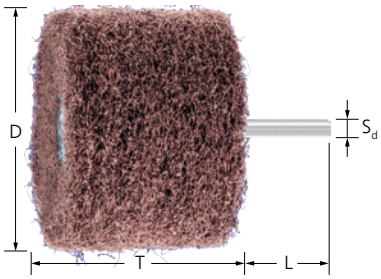
PNG type

Made of several very wavily arranged strips of non-woven abrasive material, wound around a core. The wavy structure of the non-woven abrasive material permits seamless brush matting of surfaces. Available in aluminium oxide A and silicon carbide (SiC).



Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.

D [mm]	T [mm]	S_d [mm]	L [mm]	Abra-sive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Aluminium oxide A											
80	50	6	40	A	100	4,000	7,500	10	44646010	PNG 8050/6 A 100	-
					180	4,000	7,500	10	44646018	PNG 8050/6 A 180	-
					280	4,000	7,500	10	44646028	PNG 8050/6 A 280	-
100	50	6	40	A	100	3,000	6,000	5	44669100	PNG 10050/6 A 100	-
					180	3,000	6,000	5	44669180	PNG 10050/6 A 180	-
					280	3,000	6,000	5	44669280	PNG 10050/6 A 280	-
Silicon carbide (SiC)											
100	50	6	40	SiC	100	3,000	6,000	5	44640910	PNG 10050/6 SiC 100	-
					180	3,000	6,000	5	44640918	PNG 10050/6 SiC 180	-
					280	3,000	6,000	5	44640922	PNG 10050/6 SiC 280	-
80	50	6	40	SiC	100	4,000	7,500	10	44640851	PNG 8050/6 SiC 100	-
					180	4,000	7,500	10	44640858	PNG 8050/6 SiC 180	-
					280	4,000	7,500	10	44640862	PNG 8050/6 SiC 280	-



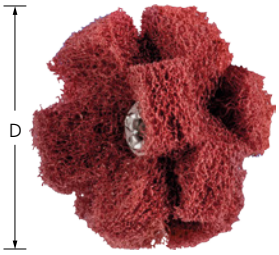
PNR type

The non-woven abrasive material is arranged in multiple (axial) disc layers. Since the individual non-woven discs are not interconnected, the abrasive surface adapts easily to different workpiece contours, e.g. when working on profiles or pipes. Available in aluminium oxide A.



Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.

D [mm]	T [mm]	S_d [mm]	L [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter of 2.35 mm											
25	15	2.35	40	A	100	7,600	12,300	10	44650131	PNR 2515/2,35 A 100	-
					180	7,600	12,300	10	44650132	PNR 2515/2,35 A 180	-
					280	7,600	12,300	10	44650133	PNR 2515/2,35 A 280	-
Shank diameter 3 mm											
25	15	3	40	A	100	7,600	12,300	10	44650231	PNR 2515/3 A 100	-
					180	7,600	12,300	10	44650232	PNR 2515/3 A 180	-
					280	7,600	12,300	10	44650233	PNR 2515/3 A 280	-
30	20	3	40	A	100	6,500	10,200	10	44650331	PNR 3020/3 A 100	-
					180	6,500	10,200	10	44650332	PNR 3020/3 A 180	-
					280	6,500	10,200	10	44650333	PNR 3020/3 A 280	-
Shank diameter 6 mm											
60	50	6	40	A	100	5,000	10,000	10	44656100	PNR 6050/6 A 100	-
					180	5,000	10,000	10	44656180	PNR 6050/6 A 180	-
					280	5,000	10,000	10	44656280	PNR 6050/6 A 280	-
80	50	6	40	A	100	4,000	7,500	10	44668100	PNR 8050/6 A 100	-
					180	4,000	7,500	10	44668180	PNR 8050/6 A 180	-
					280	4,000	7,500	10	44668280	PNR 8050/6 A 280	-



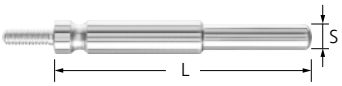
PNST type

Suitable for cleaning, deburring and fine grinding of inner surfaces and contours. Particularly suitable for hard-to-reach places such as drilled holes and indentations. Available in aluminium oxide A.



Special features:
- Highly flexible, enabling optimal adjustment to the contour. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Please order compatible arbor separately.

D [mm]	Abrasive	Grit size	Number of layers	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
19	A	100	2	15,000	25,100	20	44698192	PNST 19-2 A 100	-
		280	2	15,000	25,100	20	44698193	PNST 19-2 A 280	-
25	A	80	2	10,000	19,100	20	44698254	PNST 25-2 A 80	-
		100	2	10,000	19,100	20	44698252	PNST 25-2 A 100	-
		280	2	10,000	19,100	20	44698253	PNST 25-2 A 280	-
38	A	80	3	7,500	12,600	20	44698384	PNST 38-3 A 80	-
		100	3	7,500	12,600	20	44698382	PNST 38-3 A 100	-
		280	3	7,500	12,600	20	44698383	PNST 38-3 A 280	-
50	A	80	2	5,500	9,500	20	44698504	PNST 50-2 A 80	-
		100	2	5,500	9,500	20	44698502	PNST 50-2 A 100	-
		280	2	5,500	9,500	20	44698503	PNST 50-2 A 280	-

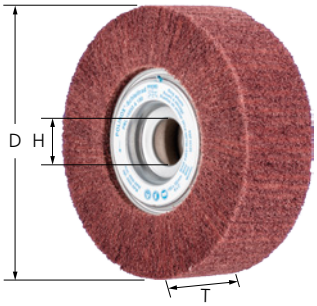


Arbor BO PNST

Arbor for POLINOX cross buffs. Both arbors are of different lengths, thus allowing holes or cut-outs of different depths to be reached.

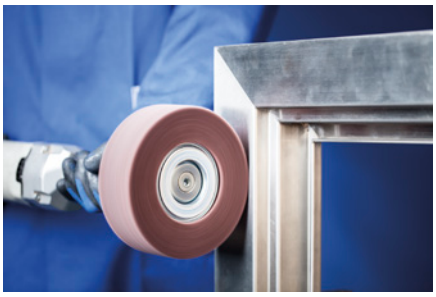
Special features:
- High economic efficiency as tool can be changed quickly.

S [mm]	L [mm]	Thread [mm]	Clamping length [mm]		Item no.	Designation	Price/unit EUR
6	75	8–32 UNC	30	1	42700675	BO PNST 6-75	-
	125	8–32 UNC	30	1	42700685	BO PNST 6-125	-



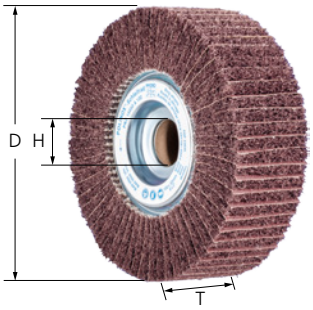
PNL type

The non-woven abrasive material with aluminium oxide A as the abrasive is arranged in multiple radial flaps. A long tool life is achieved through the dense packing of the flaps. This tool is mainly used for work on large surfaces.



Special features:
- Highly flexible, enabling optimal adjustment to the contour. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Please order compatible arbor separately.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
150	50	25.4	A	100	2,000	4,000	FR/VR 12/25.4	1	44644111	PNL 15050/25,4 A 100	-
				180	2,000	4,000	FR/VR 12/25.4	1	44644119	PNL 15050/25,4 A 180	-
				280	2,000	4,000	FR/VR 12/25.4	1	44644129	PNL 15050/25,4 A 280	-
200	50	44	A	100	1,500	3,000	FR/VR 12/44.0	1	44644211	PNL 20050/44 A 100	-
				180	1,500	3,000	FR/VR 12/44.0	1	44644219	PNL 20050/44 A 180	-
				280	1,500	3,000	FR/VR 12/44.0	1	44644229	PNL 20050/44 A 280	-

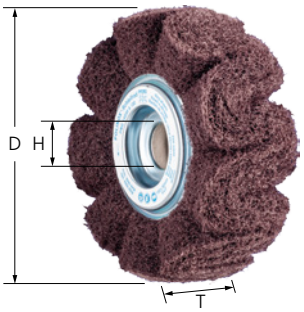


PNZ type

Grinding wheels with non-woven abrasive material with aluminium oxide A arranged in multiple radial flaps and with abrasive cloth between the flaps. This facilitates improved stock removal and achieves a coarser surface finish. The grinding wheels are mainly used for work on large surfaces.

Special features:
- Highly flexible, enabling optimal adjustment to the contour. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Please order compatible arbor separately.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
150	50	25.4	A	100	2,000	4,000	FR/VR 12/25.4	1	44645111	PNZ 15050/25,4 A 100	-
				180	2,000	4,000	FR/VR 12/25.4	1	44645119	PNZ 15050/25,4 A 180	-
200	50	44	A	100	1,500	3,000	FR/VR 12/44.0	1	44645211	PNZ 20050/44 A 100	-
				180	1,500	3,000	FR/VR 12/44.0	1	44645219	PNZ 20050/44 A 180	-

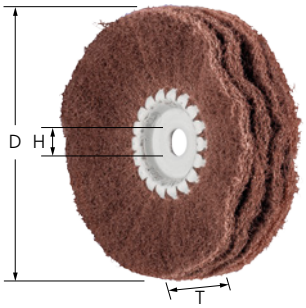


PNG type

Made of several very wavily arranged strips of non-woven abrasive material with aluminium oxide A as the abrasive, wound around a core. The wavy structure of the non-woven abrasive material permits seamless brush matting of surfaces.

Special features:
- Highly flexible, enabling optimal adjustment to the contour. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Please order compatible arbor separately.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
150	50	25.4	A	100	2,000	4,000	FR/VR 12/25.4	1	44646111	PNG 15050/25,4 A 100	-
				180	2,000	4,000	FR/VR 12/25.4	1	44646119	PNG 15050/25,4 A 180	-
				280	2,000	4,000	FR/VR 12/25.4	1	44646129	PNG 15050/25,4 A 280	-
200	50	44	A	100	1,500	3,000	FR/VR 12/44.0	1	44646211	PNG 20050/44 A 100	-
				180	1,500	3,000	FR/VR 12/44.0	1	44646219	PNG 20050/44 A 180	-
				280	1,500	3,000	FR/VR 12/44.0	1	44646229	PNG 20050/44 A 280	-

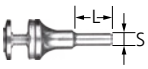


PNR type

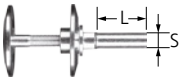
Made of slightly wavily arranged strips of non-woven abrasive material with aluminium oxide A as the abrasive, wound around a metal core. Exceptional adaptation to contours thanks to the open arrangement and high flexibility. Enables seamless brush matting of surfaces, profiles and pipes.

Special features:
- Highly flexible, enabling optimal adjustment to the contour. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Please order compatible arbor separately.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
100	35	10	A	180	2,500	5,500	BO 8/10	1	44647118	PNR 10035/10 A 180	-
				280	2,500	5,500	BO 8/10	1	44647128	PNR 10035/10 A 280	-
150	40	20	A	180	2,000	4,000	BO 12/20, BO MK 1/20	1	44647518	PNR 15040/20 A 180	-
				280	2,000	4,000	BO 12/20, BO MK 1/20	1	44647528	PNR 15040/20 A 280	-

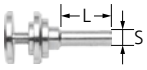


BO 8/10 6-20

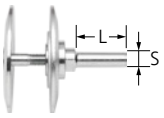


BO 12/20 10-50


BO MK 1/20 10-50



FR/VR 12/25,4 100-165



FR/VR 12/44 200-250

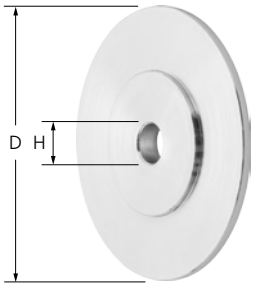
Arbor

Matching arbor for POLINOX unmounted grinding wheels.

Special features:
- High economic efficiency as tool can be changed quickly.

Suitable for hole diameter [mm]	S [mm]	L [mm]	Clamping range [mm]		Item no.	Designation	Price/unit EUR
10	8	30	6 – 20	1	42400008	BO 8/10 6-20	-
20	12	35	10 – 50	1	42400012	BO 12/20 10-50	-
	-	-	10 – 50	1	42400062	BO MK 1/20 10-50	-
25,4	12	40	25 – 50	1	44601225	FR/VR 12/25,4 100-165	-
44	12	40	25 – 50	1	44601244	FR/VR 12/44,0 200-250	-

Reducing flanges for POLINOX grinding wheels RF

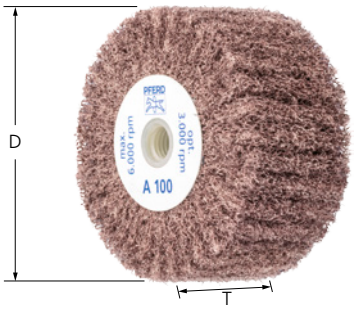


RF FR

For mounting unmounted flap wheels and POLINOX grinding wheels on drive spindles. The clamping flanges are designed to lie countersunk in the tool.

Special features:
- Can be adapted to an existing drive spindle by drilling.
- Can be used face-down very close to edges and in corners thanks to special clamping system.

Suitable for tool diameter [mm]	D [mm]	H [mm]	Max. H [mm]		Item no.	Designation	Price/unit EUR
150, 165	40	12	22.2	1	44771225	RF FR 150-165 Bo. 12-22,2	-
200, 250	83	12	40	1	44771244	RF FR 200-250 Bo. 12-40	-

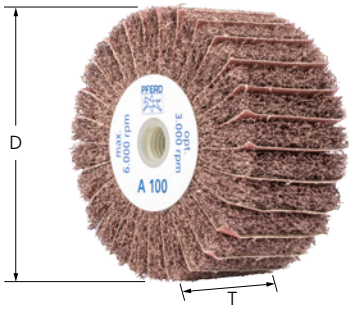


PNL type

The non-woven abrasive material with aluminium oxide A as the abrasive is arranged in multiple radial flaps. A long tool life is achieved through the dense packing of the flaps. For work on medium-sized surfaces.

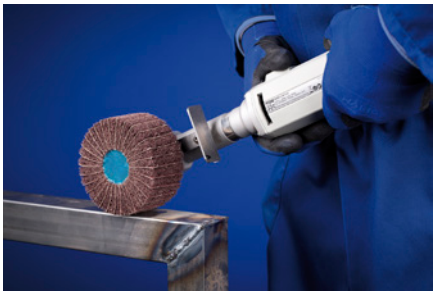
Special features:
- Highly flexible, enabling optimal adjustment to the contour. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Can be mounted directly onto speed-adjustable angle grinders and fillet weld grinders without the need for additional clamping devices.

D [mm]	T [mm]	Thread	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	50	5/8-11	A	100	3,000	6,000	5	44642021	PNL 10050 5/8-11 A 100	-
				180	3,000	6,000	5	44642022	PNL 10050 5/8-11 A 180	-
				280	3,000	6,000	5	44642023	PNL 10050 5/8-11 A 280	-
		M14	A	100	3,000	6,000	5	44642001	PNL 10050 M14 A 100	-
				180	3,000	6,000	5	44642002	PNL 10050 M14 A 180	-
				280	3,000	6,000	5	44642003	PNL 10050 M14 A 280	-



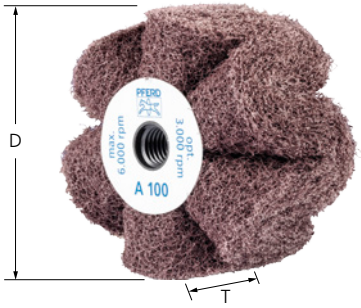
PNZ type

The non-woven abrasive material with aluminium oxide A as the abrasive is arranged in multiple radial flaps, with abrasive cloth interlayers. This facilitates improved stock removal and achieves a coarser surface finish. For work on medium-sized surfaces.



Special features:
- Highly flexible, enabling optimal adjustment to the contour. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Can be mounted directly onto speed-adjustable angle grinders and fillet weld grinders without the need for additional clamping devices.

D [mm]	T [mm]	Thread	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	50	5/8-11	A	100	3,000	6,000	5	44642121	PNZ 10050 5/8-11 A 100	-
				180	3,000	6,000	5	44642122	PNZ 10050 5/8-11 A 180	-
		M14	A	100	3,000	6,000	5	44642101	PNZ 10050 M14 A 100	-
				180	3,000	6,000	5	44642102	PNZ 10050 M14 A 180	-



PNG type

Made of several very wavily arranged strips of non-woven abrasive material with aluminium oxide A as the abrasive, wound around a core. The wavy structure of the non-woven abrasive material permits seamless brush matting of surfaces. For work on medium-sized surfaces.



Special features:
- Highly flexible, enabling optimal adjustment to the contour. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Can be mounted directly onto speed-adjustable angle grinders and fillet weld grinders without the need for additional clamping devices.

D [mm]	T [mm]	Thread	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	50	5/8-11	A	100	3,000	6,000	5	44642221	PNG 10050 5/8-11 A 100	-
				180	3,000	6,000	5	44642222	PNG 10050 5/8-11 A 180	-
				280	3,000	6,000	5	44642223	PNG 10050 5/8-11 A 280	-
		M14	A	100	3,000	6,000	5	44642201	PNG 10050 M14 A 100	-
				180	3,000	6,000	5	44642202	PNG 10050 M14 A 180	-
				280	3,000	6,000	5	44642203	PNG 10050 M14 A 280	-
125	50	5/8-11	A	100	2,300	3,800	2	44642521	PNG 12550 5/8-11 A 100	-
				180	2,300	3,800	2	44642522	PNG 12550 5/8-11 A 180	-
				280	2,300	3,800	2	44642523	PNG 12550 5/8-11 A 280	-
		M14	A	100	2,300	3,800	2	44642501	PNG 12550 M14 A 100	-
				180	2,300	3,800	2	44642502	PNG 12550 M14 A 180	-
				280	2,300	3,800	2	44642503	PNG 12550 M14 A 280	-

POLINOX grinding discs



PNL type

The non-woven abrasive flaps with aluminium oxide A as the abrasive are stuck to a glass-fabric backing pad, meaning the discs can be used face-down. A long tool life is achieved through the dense packing of the flaps.

Special features:
- Highly flexible, enabling optimal adjustment to the contour. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- For work on large surfaces using speed-adjustable angle grinders.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
115	20	22.23	A	100	2,500	5,300	5	44692258	PNL 115-22,23 A 100	-
				180	2,500	5,300	5	44692259	PNL 115-22,23 A 180	-
				280	2,500	5,300	5	44692260	PNL 115-22,23 A 280	-
125	20	22.23	A	100	2,300	3,800	5	44692261	PNL 125-22,23 A 100	-
				180	2,300	3,800	5	44692262	PNL 125-22,23 A 180	-
				280	2,300	3,800	5	44692263	PNL 125-22,23 A 280	-

Non-woven tools
POLINOX grinding discs



PNZ type

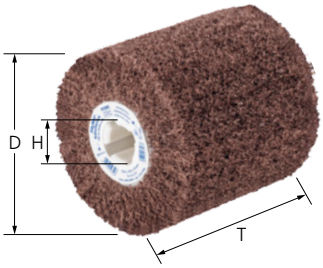
The non-woven and abrasive-cloth flaps with aluminium oxide A as the abrasive are stuck to a glass-fabric backing pad, meaning the discs can be used face-down on large surfaces. A long tool life is achieved through the dense packing of the flaps.

Special features:
- Highly flexible, enabling optimal adjustment to the contour. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- For work on large surfaces using speed-adjustable angle grinders.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
115	20	22.23	A	100	2,500	5,300	5	44692264	PNZ 115-22,23 A 100	-
				180	2,500	5,300	5	44692265	PNZ 115-22,23 A 180	-
125	20	22.23	A	100	2,300	3,800	5	44692266	PNZ 125-22,23 A 100	-
				180	2,300	3,800	5	44692267	PNZ 125-22,23 A 180	-

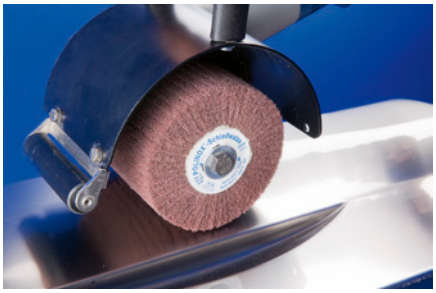
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POLINOX grinding drums



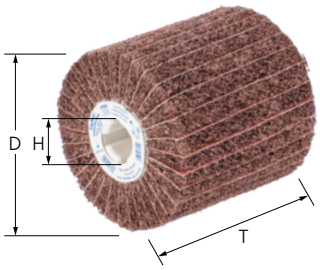
PNL-W type

For work on large surfaces. The non-woven abrasive material with aluminium oxide A as the abrasive is arranged in multiple radial flaps. A long tool life is achieved through the dense packing of the flaps.



Special features:
- Long tool life thanks to tightly packed flaps. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Suitable for all conventional keyway systems. The 19 mm hole diameter with four keyways fits all conventional drum grinders.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	100	19	A	80	2,500	4,800	1	47801097	PNL-W 100100 A 80	-
				100	2,500	4,800	1	44641010	PNL-W 100100 A 100	-
				180	2,500	4,800	1	44641018	PNL-W 100100 A 180	-
				280	2,500	4,800	1	44641028	PNL-W 100100 A 280	-



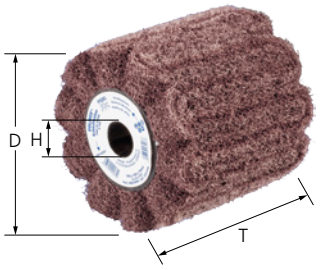
PNZ-W type

For work on large surfaces. The non-woven abrasive material with aluminium oxide A as the abrasive is arranged in multiple radial flaps. There is also abrasive cloth situated between the flaps. The flap arrangement results in a higher stock removal rate and produces a coarser surface finish.



Special features:
- Long tool life thanks to tightly packed flaps. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Suitable for all conventional keyway systems. The 19 mm hole diameter with four keyways fits all conventional drum grinders.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	100	19	A	60	2,500	4,800	1	44641106	PNZ-W 100100 A G/60	-
				80	2,500	4,800	1	44641108	PNZ-W 100100 A M/80	-
				120	2,500	4,800	1	44641112	PNZ-W 100100 A F/120	-



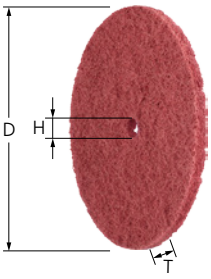
PNG-W type

For work on large surfaces. Made of several very wavily arranged strips of non-woven abrasive material with aluminium oxide A as the abrasive, wound around a core. The wavy structure of the non-woven abrasive material permits seamless brush matting of large surfaces.



Special features:
- Long tool life thanks to tight, wavy flaps. Cool grinding and low thermal load on the workpiece.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Suitable for all conventional keyway systems. The 19 mm hole diameter with four keyways fits all conventional drum grinders.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	100	19	A	100	2,500	4,800	1	44641201	PNG-W 100100 A 100	-
				180	2,500	4,800	1	44641202	PNG-W 100100 A 180	-
				280	2,500	4,800	1	44641203	PNG-W 100100 A 280	-



PVR type

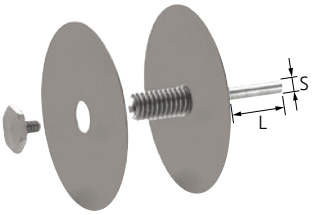
POLINOX discs with aluminium oxide A as the abrasive are suited to flexible work on complicated tool contours, and are used in peripheral grinding applications. Clamp up to three discs behind one another to increase the usage width.



Special features:
- Highly flexible, enabling optimal adjustment to the contour, with very long tool life. Hard-to-reach areas can be accessed, such as deep slots and recesses.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Please order the arbor for POLINOX discs separately.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
50	10	6	A	100	12,250	BO 6/6 3-10	10	44693050	PVR 5008-6 A 100	-
				280	12,250	BO 6/6 3-10	10	44693051	PVR 5008-6 A 280	-
75	10	6	A	100	8,150	BO 6/6 3-10	10	44693075	PVR 7508-6 A 100	-
				280	8,150	BO 6/6 3-10	10	44693076	PVR 7508-6 A 280	-
100	10	13	A	100	6,150	PVR 6/13 1-25	10	44693101	PVR 10008-13 A 100	-
				280	6,150	PVR 6/13 1-25	10	44693102	PVR 10008-13 A 280	-
125	10	13	A	100	4,900	PVR 6/13 1-25	10	44693125	PVR 12508-13 A 100	-
				280	4,900	PVR 6/13 1-25	10	44693126	PVR 12508-13 A 280	-
150	10	13	A	100	4,100	PVR 6/13 1-25	10	44693151	PVR 15008-13 A 100	-
				280	4,100	PVR 6/13 1-25	10	44693152	PVR 15008-13 A 280	-

Arbor for POLINOX discs



Arbor PVR

Arbor for POLINOX discs.

Special features:
- High economic efficiency as tool can be changed quickly.
- Use the supplied side discs with a diameter of 50 and 80 mm in order to vary the lateral flexibility.

Suitable for hole diameter [mm]	S [mm]	L [mm]	Clamping range [mm]		Item no.	Designation	Price/ unit EUR
13	6	35	1 – 25	1	23600506	PVR 6/13 1-25	-



ADB masking tape

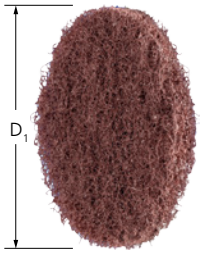
The self-adhesive masking tape is used to preserve the clear separation between different grinding patterns in adjacent areas. The masking tape protects surfaces which have already been worked on, or which are not supposed to be worked on.



Special features:
- ADB 20: High elasticity and tear strength. (Use only during finish machining with soft, flexible tools, e.g. non-woven tools.)
- ADB 50 INOX: Reusable and extremely high durability.
- High edge stability. To avoid its inadvertent removal, ensure that the masking tape is only loaded in the running direction of the tool.

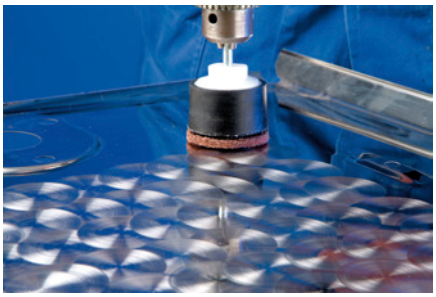
L [m]	T [mm]		Item no.	Designation	Price/unit EUR
3	50	1	44250140	ADB 50 INOX	-
25	20	1	44250130	ADB 20	-

POLINOX marbling tools



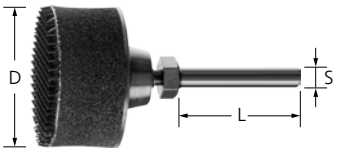
POLINOX discs for marbling tool holder MKRK

Special tool for marbling surfaces on almost any material.



Special features:
- Highly flexible, enabling optimal adjustment to the contour. High economic efficiency due to high abrasive performance and long tool life.
- The open structure and high flexibility of the non-woven material prevents tool clogging.
- Please order matching marbling tool holder separately.

D_1 [mm]	Abrasive	Grit size	Opt. RPM	Suitable arbors		Item no.	Designation	Price/unit EUR
40	A	100	600 – 1,400	MK 6/40/6	100	44637100	MKRK 40 A 100	-
		180	600 – 1,400	MK 6/40/6	100	44637180	MKRK 40 A 180	-
		280	600 – 1,400	MK 6/40/6	100	44637280	MKRK 40 A 280	-
50	A	100	600 – 1,400	MK 6/50/6	100	44638100	MKRK 50 A 100	-
		180	600 – 1,400	MK 6/50/6	100	44638180	MKRK 50 A 180	-
		280	600 – 1,400	MK 6/50/6	100	44638280	MKRK 50 A 280	-
60	A	100	600 – 1,400	MK 6/60/6	100	44639100	MKRK 60 A 100	-
		180	600 – 1,400	MK 6/60/6	100	44639180	MKRK 60 A 180	-
		280	600 – 1,400	MK 6/60/6	100	44639280	MKRK 60 A 280	-



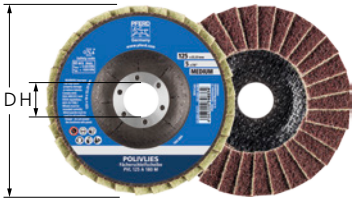
POLINOX marbling tool holders MK

POLINOX marbling tool holders for marbling discs. A highly elastic intermediate layer carries the Velcro fastening system.

Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- High economic efficiency due to long tool life.

D [mm]	S [mm]	L [mm]	Max. RPM	Matching tool		Item no.	Designation	Price/unit EUR
40	6	40	4,700	MKRK 40	1	44604060	MK 6/40/6	-
50	6	40	3,800	MKRK 50	1	44605060	MK 6/50/6	-
60	6	40	3,200	MKRK 60	1	44606060	MK 6/60/6	-

POLIVLIES grinding discs



Flap discs PVL

Flap discs with abrasive flaps made of aluminium oxide A for general coarse to fine grinding applications in industry and professional trades.



Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- Creates a consistently high surface quality over the entire tool life, as new sharp abrasive is steadily released.
- Highly flexible, enabling optimal adjustment to the contour.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Hole dia. 22.23 mm										
115	18	22.23	A	100 G	5,000 – 5,800	13,300	5	44694101	PVL 115 A 100 G	-
				180 M	5,000 – 5,800	13,300	5	44694102	PVL 115 A 180 M	-
				240 F	5,000 – 5,800	13,300	5	44694103	PVL 115 A 240 F	-
125	18	22.23	A	100 G	4,600 – 5,300	12,200	5	44694111	PVL 125 A 100 G	-
				180 M	4,600 – 5,300	12,200	5	44694112	PVL 125 A 180 M	-
				240 F	4,600 – 5,300	12,200	5	44694113	PVL 125 A 240 F	-
with X-LOCK holder										
115	18	22.23	A	100 G	5,000 – 5,800	13,300	5	44694201	PVL 115-X-LOCK A 100 G	-
				180 M	5,000 – 5,800	13,300	5	44694202	PVL 115-X-LOCK A 180 M	-
				240 F	5,000 – 5,800	13,300	5	44694203	PVL 115-X-LOCK A 240 F	-
125	18	22.23	A	100 G	4,600 – 5,300	12,200	5	44694211	PVL 125-X-LOCK A 100 G	-
				180 M	4,600 – 5,300	12,200	5	44694212	PVL 125-X-LOCK A 180 M	-
				240 F	4,600 – 5,300	12,200	5	44694213	PVL 125-X-LOCK A 240 F	-



Flap discs PVZ

Flap discs with abrasive flaps made of ceramic oxide grain CO-COOL and aluminium oxide A. Consistently high performance and aggressive grinding due to self-sharpening ceramic oxide grain. Active grinding additives improve the stock removal rate, prevent clogging and result in cooler grinding.



Special features:
- High economic efficiency due to high abrasive performance and long tool life.
- Creates a consistently high surface quality over the entire tool life, as new sharp abrasive is steadily released.
- Highly flexible, enabling optimal adjustment to the contour.

D [mm]	T [mm]	H [mm]	Abrasive/grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
115	18	22.23	CO-COOL 60 / A 100 G	5,000 – 5,800	13,300	5	44695101	PVZ 115 CO-COOL 60 / A 100 G	-
			CO-COOL 80 / A 180 M	5,000 – 5,800	13,300	5	44695102	PVZ 115 CO-COOL 80 / A 180 M	-
			CO-COOL 120 / A 240 F	5,000 – 5,800	13,300	5	44695103	PVZ 115 CO-COOL 120 / A 240 F	-
125	18	22.23	CO-COOL 60 / A 100 G	4,600 – 5,300	12,200	5	44695111	PVZ 125 CO-COOL 60 / A 100 G	-
			CO-COOL 80 / A 180 M	4,600 – 5,300	12,200	5	44695112	PVZ 125 CO-COOL 80 / A 180 M	-
			CO-COOL 120 / A 240 F	4,600 – 5,300	12,200	5	44695113	PVZ 125 CO-COOL 120 / A 240 F	-



Self-adhesive discs PVKR

These self-adhesive discs are suited to grinding larger surfaces. The flexible system, comprising a self-adhesive disc and holder, can also be used on contours. The pre-punched holes mean that they can be ideally centred on and used with various backing pads.



Special features:
- High economic efficiency due to high abrasive performance and long tool life. Highly flexible, enabling optimal adjustment to the contour.
- Creates a consistently high surface quality over the entire tool life, as new sharp abrasive is steadily released.
- Please order POLIVLIES self-adhesive disc holders separately. Break out the pre-punched centring hole if required.

D_1 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/unit EUR
115	A	100 G	3,300	5,300	PVKRH 115	10	42871306	PVKR 115 A 100 G	-
		180 M	3,300	5,300	PVKRH 115	10	42871310	PVKR 115 A 180 M	-
		240 F	3,300	5,300	PVKRH 115	10	42871318	PVKR 115 A 240 F	-
125	A	100 G	3,000	4,850	PVKRH 125	10	42871406	PVKR 125 A 100 G	-
		180 M	3,000	4,850	PVKRH 125	10	42871410	PVKR 125 A 180 M	-
		240 F	3,000	4,850	PVKRH 125	10	42871418	PVKR 125 A 240 F	-
180	A	100 G	2,200	3,500	PVKRH 180	10	42871606	PVKR 180 A 100 G	-
		180 M	2,200	3,500	PVKRH 180	10	42871610	PVKR 180 A 180 M	-
		240 F	2,200	3,500	PVKRH 180	10	42871618	PVKR 180 A 240 F	-



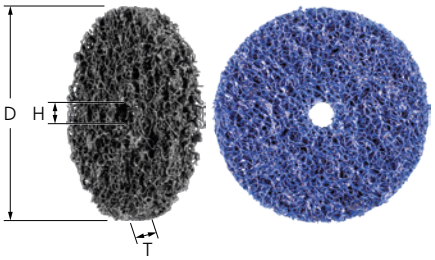
Self-adhesive disc holders PVKR

Holders for POLIVLIES self-adhesive discs.

Special features:
- High economic efficiency as tool can be changed quickly.
- Enables surface finishing without visible transitions.
- PVKRH-22 (with centring pin): enables faster central clamping.

D [mm]	Thread	Max. RPM		Item no.	Designation	Price/unit EUR
Without centring pin						
115	M14	5,300	1	42711154	PVKRH 115 M14	-
125	M14	4,850	1	42711254	PVKRH 125 M14	-
180	M14	3,500	1	42711784	PVKRH 180 M14	-
With centring pin						
115	M14	5,300	1	42712115	PVKRH 115-22 M14	-
125	M14	4,850	1	42712125	PVKRH 125-22 M14	-
180	M14	3,500	1	42712178	PVKRH 180-22 M14	-

POLICLEAN tools



POLICLEAN wheels PCLS, POLICLEAN wheels PCLS PLUS

POLICLEAN is a coarsely structured, abrasive, non-woven cleaning fabric made from a special combination of synthetic fibres, resin and abrasive grain. For coarse cleaning work, such as removing paint, scale, heat discolouration, rust and adhesive residue in peripheral grinding.

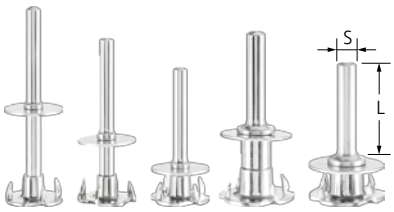


Special features:
- High flexibility and open structure mean optimal adjustment to contours and no clogging of the tool itself.
- Standard version (black): for finer surface finishes, more flexible. PLUS version (blue): considerably higher stock removal rate and a very good tool life, very aggressive.
- Please order compatible arbor separately.

D [mm]	T [mm]	H [mm]	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
PCLS (black) type									
75	13	6	4,000 – 5,100	10,000	PCLB 6/6/13, PCLB 6/6/26, PCLB 6/6/39	6	44692075	PCLS 7513/6	-
100	13	13	3,000 – 3,800	7,500	PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26	4	44692100	PCLS 10013/13	-
150	13	13	2,000 – 2,500	5,100	PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26	4	44692150	PCLS 15013/13	-

Continued on next page

D [mm]	T [mm]	H [mm]	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
PCLS PLUS (blue) type									
75	13	6	4,000 – 5,100	10,000	PCLB 6/6/13, PCLB 6/6/26, PCLB 6/6/39	6	44692076	PCLS PLUS 7513/6	-
100	13	13	3,000 – 3,800	7,500	PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26	4	44692101	PCLS PLUS 10013/13	-
150	13	13	2,000 – 2,500	5,100	PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26	4	44692151	PCLS PLUS 15013/13	-

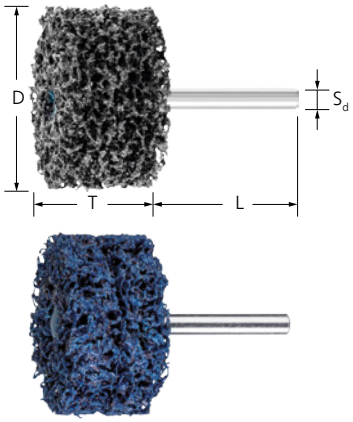


POLICLEAN arbors PCLB

Arbor for POLICLEAN wheels. The different variants provide space for one, two or three discs.

Special features:
- High economic efficiency as tool can be changed quickly. When replacing the discs, leave the arbor clamped in the tool drive.

Suitable for hole diameter [mm]	S [mm]	L [mm]	Matching tool	Version		Item no.	Designation	Price/unit EUR
6	6	40	PCLS 7513/6	Packaging, 1x	1	42706613	PCLB 6/6/13	-
				Packaging, 2x	1	42706626	PCLB 6/6/26	-
				Packaging, 3x	1	42706639	PCLB 6/6/39	-
13	6	40	PCLS 10013/13, PCLS 15013/13	Packaging, 1x	1	42706713	PCLB 6/13/13	-
				Packaging, 2x	1	42706726	PCLB 6/13/26	-
	8	40	PCLS 10013/13, PCLS 15013/13	Packaging, 1x	1	42706813	PCLB 8/13/13	-
				Packaging, 2x	1	42706826	PCLB 8/13/26	-



POLICLEAN mounted tools PCLZY, POLICLEAN mounted tools PCLZY PLUS

POLICLEAN is a coarsely structured, abrasive, non-woven cleaning fabric made from a special combination of synthetic fibres, resin and abrasive grain. For coarse cleaning work, such as removing paint, scale, heat discolouration, rust and adhesive residue in peripheral grinding.

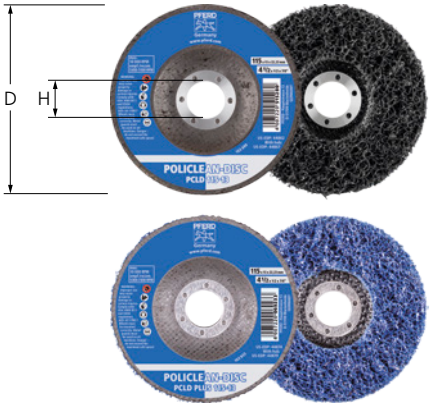


Special features:
- High flexibility and open structure mean optimal adjustment to contours and no clogging of the tool itself.
- Standard version (black): for finer surface finishes, more flexible. PLUS version (blue): considerably higher stock removal rate and a very good tool life, very aggressive.

D [mm]	T [mm]	S_d [mm]	L [mm]	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
PCLZY (black) type										
50	13	6	40	6	6,000 – 7,000	15,000	5	44692251	PCLZY 5013/6	-
	26	6	40	6	6,000 – 7,000	15,000	5	44692252	PCLZY 5026/6	-
75	13	6	40	6	4,000 – 5,100	10,000	5	44692271	PCLZY 7513/6	-
	26	6	40	6	4,000 – 5,100	10,000	5	44692272	PCLZY 7526/6	-

Continued on next page

D [mm]	T [mm]	S_d [mm]	L [mm]	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	13	6	40	6	3,000 – 3,800	7,500	5	44692291	PCLZY 10013/6	-
PCLZY PLUS (blue) type										
50	13	6	40	6	6,000 – 7,000	15,000	5	44692253	PCLZY PLUS 5013/6	-
	26	6	40	6	6,000 – 7,000	15,000	5	44692254	PCLZY PLUS 5026/6	-
75	13	6	40	6	4,000 – 5,100	10,000	5	44692255	PCLZY PLUS 7513/6	-
	26	6	40	6	4,000 – 5,100	10,000	5	44692256	PCLZY PLUS 7526/6	-
100	13	6	40	6	3,000 – 3,800	7,500	5	44692257	PCLZY PLUS 10013/6	-



POLICLEAN discs PCLD, POLICLEAN discs PCLD PLUS

POLICLEAN is a coarsely structured, abrasive, non-woven cleaning fabric made from a special combination of synthetic fibres and abrasive grain. The non-woven cleaning material is glued onto a backer. For coarse cleaning work, e.g. removing paint, scale, heat discolouration, rust and adhesive residue.

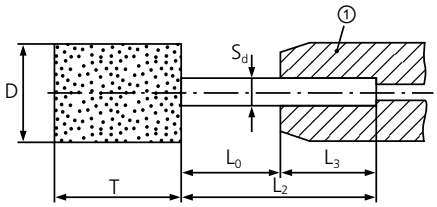


Special features:
- High flexibility and open structure mean optimal adjustment to contours and no clogging of the tool itself.
- High stock removal rate and very long tool life.
- Standard version (black): for finer surface finishes, more flexible. PLUS version (blue): considerably higher stock removal rate and a very good tool life, very aggressive.

D [mm]	T [mm]	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
PCLD (black) type								
115	13	22.23	5,000 – 7,000	10,000	5	44692715	PCLD 115-13	-
125	13	22.23	5,000 – 7,000	10,000	5	44692725	PCLD 125-13	-
PCLD PLUS (blue) type								
100	13	16	5,000 – 7,000	10,000	5	44692711	PCLD PLUS 100-13	-
115	13	22.23	5,000 – 7,000	10,000	5	44692716	PCLD PLUS 115-13	-
125	13	22.23	5,000 – 7,000	10,000	5	44692726	PCLD PLUS 125-13	-

Explanation of the code system according to EN 12413:

D = Mounted point outer dia.
T = Mounted point width
S_d = Shank dia.
L_0 = Unsupported shank length
L_2 = Shank length
L_3 = Clamping length of shank
① = collet



Safety notes

The maximum rotational speeds for the various shank lengths and shank diameters are defined in DIN 69170 based on EN 12413. These must be adhered to in order to avoid buckling of the shank during use. Regardless of the length of the shank, the clamping length (L_3) of the shank must be at least 10 mm.
Each packaging unit of PFERD fine grinding points contains the rotational speed specifications for the unsupported shank length (L_0) of that grinding point. Proper concentric accuracy and correct clamping of the tool drive must also be ensured.
Tables with the maximum permitted rotational speeds for the entire range of Poliflex fine grinding points are available on request.
The maximum permitted rotational speed calculated according to EN 12413 is determined by the following factors:

- Shape and dimensions of the mounted point
- Diameter of the steel shank S_d
- Unsupported shank length L_0


Wear eye protection!


Wear hearing protection!


Wear gloves!


Wear a dust mask!


Follow the safety instructions!



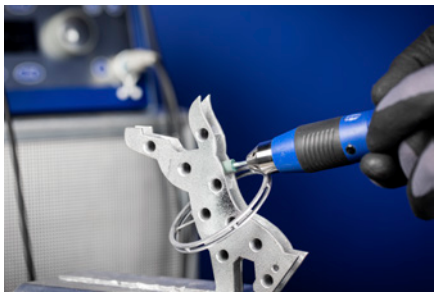
The quick way to find the perfect tool

① **Material group**
Select the material to be machined.

② **Application**
Select the application.

③ **Desired surface**
Select your desired surface.

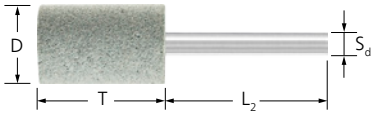
④ **Tool bond**
After determining the application (see column ②), the suitable bond is selected in the horizontal row.



Poliflex tools
The quick way to find the perfect tool

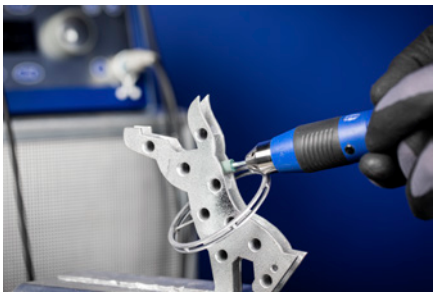
① Material group	② Application		③ Surface	Bond ▸	Polyurethane bond			Elastomer bond				Resi-noid bond
				Abrasive (grain mixtures) ▸	CN			AR	ANCN	AW	AWCN	AN
												
				④ Designation/bond ▸	PUR			GR	GHR	LR	LHR	TX
					W (soft)	MH (medium-hard)	STRUC					
				Recommended cutting speed ▸	10–12 m/s	10–15 m/s	5–10 m/s	10–12 m/s	20–25 m/s	15–20 m/s	30–40 m/s	20–25 m/s
Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels, cast steel	Surface	Matt	○	●		○				
				Shiny				●		○		
			Edge	Matt		○		○				●
				Shiny					●		○	
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, alloyed cast steel	Surface	Matt	○	●		○				
				Shiny				○		●		
			Edge	Matt		○						●
				Shiny					○		●	
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Surface	Matt	●	○						
				Shiny				●		○		
			Edge	Matt		○						●
				Shiny					●	○		
			Universal	Structured	○	○	●					
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Aluminium alloys, brass, copper, zinc	Surface	Matt	●	○						○
				Shiny				○		●		
			Edge	Matt					○			●
				Shiny				○		●		
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, hard aluminium alloys (high Si content)	Surface	Matt		○						●
				Shiny				○	●			
			Edge	Matt					○			●
				Shiny					○		●	
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	Surface	Matt		○						●
				Shiny				●	○			
			Edge	Matt		○			○			●
				Shiny					○		●	

● = highly suitable ○ = suitable



Poliflex fine grinding points PF ZY PUR

The PUR bond is manufactured with green silicon carbide (SiC). It is homogeneously interspersed with abrasive grain and very soft. Grinding point in cylindrical shape, for fine grinding of small surfaces.



Special features:

- Highly flexible, enabling optimal adjustment to the contour.
- Cool and very gentle grinding thanks to open structure and elastic bond.
- Produces a fine, matt surface finish.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter of 3 mm PUR-W											
8	12	3	30	SiC	80	24,000	35,800	10	41291008	PF ZY 0812/3 CN 80 PUR-W	-
					150	24,000	35,800	10	41291015	PF ZY 0812/3 CN 150 PUR-W	-
Shank diameter of 6 mm PUR-W											
10	25	6	40	SiC	80	19,000	28,600	10	41291208	PF ZY 1025/6 CN 80 PUR-W	-
					150	19,000	28,600	10	41291215	PF ZY 1025/6 CN 150 PUR-W	-
15	30	6	40	SiC	80	12,500	19,000	10	41291408	PF ZY 1530/6 CN 80 PUR-W	-
					150	12,500	19,000	10	41291415	PF ZY 1530/6 CN 150 PUR-W	-
20	30	6	40	SiC	80	9,500	14,300	10	41293108	PF ZY 2030/6 CN 80 PUR-W	-
					150	9,500	14,300	10	41293115	PF ZY 2030/6 CN 150 PUR-W	-
25	30	6	40	SiC	80	7,500	11,400	10	41293008	PF ZY 2530/6 CN 80 PUR-W	-
					150	7,500	11,400	10	41293015	PF ZY 2530/6 CN 150 PUR-W	-
Shank diameter of 3 mm PUR-MH											
8	12	3	30	SiC	150	24,000	35,800	10	41291115	PF ZY 0812/3 CN 150 PUR-MH	-
					220	24,000	35,800	10	41291122	PF ZY 0812/3 CN 220 PUR-MH	-
Shank diameter of 6 mm PUR-MH											
10	25	6	40	SiC	150	19,000	28,600	10	41291315	PF ZY 1025/6 CN 150 PUR-MH	-
					220	19,000	28,600	10	41291322	PF ZY 1025/6 CN 220 PUR-MH	-
15	30	6	40	SiC	80	12,500	19,000	10	41291508	PF ZY 1530/6 CN 80 PUR-MH	-
					150	12,500	19,000	10	41291515	PF ZY 1530/6 CN 150 PUR-MH	-
					220	12,500	19,000	10	41291522	PF ZY 1530/6 CN 220 PUR-MH	-
20	30	6	40	SiC	80	9,500	14,300	10	41293208	PF ZY 2030/6 CN 80 PUR-MH	-
					150	9,500	14,300	10	41293215	PF ZY 2030/6 CN 150 PUR-MH	-
32	32	6	40	SiC	80	6,000	8,900	5	41293408	PF ZY 3232/6 CN 80 PUR-MH	-
					150	6,000	8,900	5	41293415	PF ZY 3232/6 CN 150 PUR-MH	-



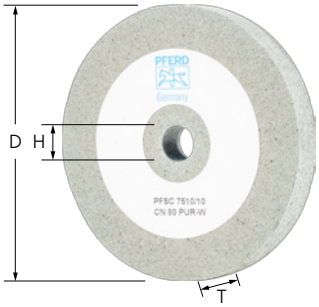
Poliflex discs PFD PUR for speed-adjustable angle grinders

The PUR bond is manufactured with green silicon carbide (SiC). It is homogeneously interspersed with abrasive grain and very soft. For fine face-down grinding on large surfaces.



Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Cool and very gentle grinding thanks to open structure and elastic bond.
- Produces a fine, matt surface finish.

D [mm]	T [mm]	H [mm]	Version	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
115	14	22.23	medium-hard	SiC	60	2,400	5,300	5	41130106	PFD 115-22 CN 60 PUR-MH	-
			soft	SiC	60	2,400	5,300	5	41130006	PFD 115-22 CN 60 PUR-W	-
			medium-hard	SiC	150	2,400	5,300	5	41130115	PFD 115-22 CN 150 PUR-MH	-
			soft	SiC	150	2,400	5,300	5	41130015	PFD 115-22 CN 150 PUR-W	-

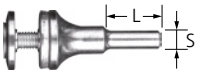


Poliflex fine grinding discs PF SC PUR

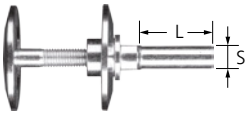
The PUR bond is manufactured with green silicon carbide (SiC). It is homogeneously interspersed with abrasive grain and very soft. For fine peripheral grinding on medium-sized to large surfaces.

Special features:
- Highly flexible, enabling optimal adjustment to the contour. Produces a fine, matt surface finish.
- Cool and very gentle grinding thanks to open structure and elastic bond.
- Please order compatible arbor separately.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
75	10	10	SiC	80	2,500	3,800	BO 8/10	5	41105408	PF SC 7510/10 CN 80 PUR-W	-
125	20	20	SiC	80	1,500	2,300	BO 12/20, BO MK 1/20	1	41110408	PF SC 12520/20 CN 80 PUR-W	-
150	25	20	SiC	80	1,200	1,900	BO 12/20, BO MK 1/20	1	41112408	PF SC 15025/20 CN 80 PUR-W	-
				150	1,200	1,900	BO 12/20, BO MK 1/20	1	41112415	PF SC 15025/20 CN 150 PUR-W	-



BO 8/10 6-20



BO 12/20 10-50



BO MK 1/20 10-50

Arbor BO

Matching arbor for Poliflex fine grinding discs PF SC.

Special features:
- High economic efficiency as tool can be changed quickly.

Suitable for hole diameter [mm]	S [mm]	L [mm]	Clamping range [mm]		Item no.	Designation	Price/ unit EUR
10	8	30	6 – 20	1	42400008	BO 8/10 6-20	-
20	12	35	10 – 50	1	42400012	BO 12/20 10-50	-
	-	-	10 – 50	1	42400062	BO MK 1/20 10-50	-



Poliflex blocks PUR

The PUR bond is manufactured with green silicon carbide (SiC). It is homogeneously interspersed with abrasive grain and very soft. The rhomboidal shape enables work to be effortlessly performed on hard-to-reach places such as corners.

Special features:
- Cool and very gentle grinding thanks to open structure and elastic bond.
- Produces a fine, matt surface finish.
- With a diamond cut-off wheel, the size can be adapted to the respective application as required.

L [mm]	B [mm]	H [mm]	Abrasive	Grit size		Item no.	Designation	Price/unit EUR
115	60	30	SiC	60	5	41020060	PFB 1156030 CU 60 PUR	-
				120	5	41020120	PFB 1156030 CU 120 PUR	-
				240	5	41020240	PFB 1156030 CU 240 PUR	-



Poliflex block set PSO PUR

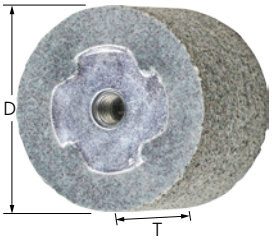
Set of different Poliflex blocks PUR. The PUR bond is manufactured with green silicon carbide (SiC). It is homogeneously interspersed with abrasive grain and very soft.

Contents:
Nine pieces, three each of the following Poliflex blocks: grit size 60 (coarse), 120 (medium) and 240 (fine).

Special features:
- Cool and very gentle grinding thanks to open structure and elastic bond.
- Produces a fine, matt surface finish.
- Promotional display box.

L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
285	150	60	1	41090002	Set PSO 11560	-

Poliflex tools
PUR bond

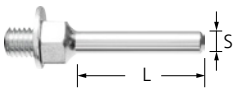


Poliflex marbling tool holders PFZY PUR

The PUR bond is manufactured with green silicon carbide (SiC). It is homogeneously interspersed with abrasive grain and very soft. Tools with female thread M8 for marbling surfaces.

Special features:
- Produces a fine, matt surface finish.
- Cool and very gentle grinding thanks to open structure and elastic bond.
- Please order compatible arbor separately.

D [mm]	T [mm]	H [mm]	Abra-sive	Grit size	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
50	40	M8	SiC	30	5,700	BO 6/8	5	41289403	PF ZY 5040 M8 CN 30 PUR	-
				80	5,700	BO 6/8	5	41289408	PF ZY 5040 M8 CN 80 PUR	-



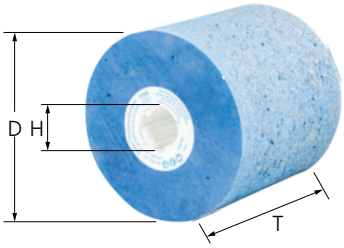
Arbor BO

Matching arbor for Poliflex marbling tool holders PFZY.

Special features:
- High economic efficiency as tool can be changed quickly.

S [mm]	L [mm]	Thread [mm]		Item no.	Designation	Price/unit EUR
6	40	M8	1	23600608	BO 6/8	-

PU-STRUC bond



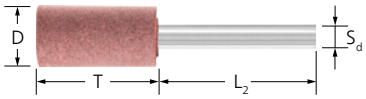
Poliflex texturing rollers PF W PU-STRUC

Structuring tools made of grey silicon carbide, homogeneously interspersed with a high proportion of abrasive grain. Ideal for work on components made of stainless steel (INOX). For structuring large surfaces.



Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- Cool and gentle grinding thanks to open structure and elastic bond.
- Quick and effective retouching of imperfections and transitions to directional textures.

D [mm]	T [mm]	H [mm]	Abrasive	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	100	19	SiC	1,000 – 1,900	2,800	1	41030016	PF W 100100/19 CU 16 PU-STRUC	-



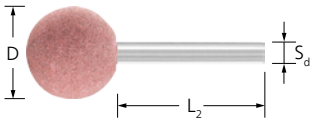
Poliflex fine grinding points PF ZY GR

This bond is a soft elastomer-based bond with pink aluminium oxide. Suitable for use on surfaces. Grinding point in cylindrical shape, for fine grinding of small surfaces.

Special features:
- Soft grinding thanks to soft, elastic bond.
- Produces a fine, shiny surface finish.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm											
4	8	3	30	A	120	47,500	71,600	10	41200112	PF ZY 0408/3 AR 120 GR	-
6	10	3	30	A	120	32,000	47,700	10	41200512	PF ZY 0610/3 AR 120 GR	-
8	8	3	30	A	120	24,000	35,800	10	41201112	PF ZY 0808/3 AR 120 GR	-
					220	24,000	35,800	10	41201120	PF ZY 0808/3 AR 220 GR	-
	12	3	30	A	120	24,000	35,800	10	41204112	PF ZY 0812/3 AR 120 GR	-
					220	24,000	35,800	10	41204120	PF ZY 0812/3 AR 220 GR	-
10	6	3	30	A	120	19,000	28,600	10	41258112	PF ZY 1006/3 AR 120 GR	-
	10	3	30	A	120	19,000	28,600	10	41207112	PF ZY 1010/3 AR 120 GR	-
					220	19,000	28,600	10	41207120	PF ZY 1010/3 AR 220 GR	-
	15	3	30	A	120	19,000	28,600	10	41213112	PF ZY 1015/3 AR 120 GR	-
					220	19,000	28,600	10	41213120	PF ZY 1015/3 AR 220 GR	-
12	8	3	30	A	120	16,000	23,800	10	41264112	PF ZY 1208/3 AR 120 GR	-
	12	3	30	A	120	16,000	23,800	10	41222112	PF ZY 1212/3 AR 120 GR	-
	20	3	30	A	120	16,000	23,800	10	41228112	PF ZY 1220/3 AR 120 GR	-
Shank diameter 6 mm											
10	10	6	40	A	120	19,000	28,600	10	41210112	PF ZY 1010/6 AR 120 GR	-
	15	6	40	A	120	19,000	28,600	10	41216112	PF ZY 1015/6 AR 120 GR	-
					220	19,000	28,600	10	41216120	PF ZY 1015/6 AR 220 GR	-
	25	6	40	A	80	19,000	28,600	10	41219108	PF ZY 1025/6 AR 80 GR	-
					120	19,000	28,600	10	41219112	PF ZY 1025/6 AR 120 GR	-
					220	19,000	28,600	10	41219120	PF ZY 1025/6 AR 220 GR	-
12	8	6	40	A	120	16,000	23,800	10	41267112	PF ZY 1208/6 AR 120 GR	-
	12	6	40	A	120	16,000	23,800	10	41225112	PF ZY 1212/6 AR 120 GR	-
	20	6	40	A	120	16,000	23,800	10	41231112	PF ZY 1220/6 AR 120 GR	-
					220	16,000	23,800	10	41231120	PF ZY 1220/6 AR 220 GR	-
15	15	6	40	A	120	12,500	19,000	10	41234112	PF ZY 1515/6 AR 120 GR	-
	25	6	40	A	120	12,500	19,000	10	41237112	PF ZY 1525/6 AR 120 GR	-
					220	12,500	19,000	10	41237120	PF ZY 1525/6 AR 220 GR	-
	30	6	40	A	120	12,500	19,000	10	41240112	PF ZY 1530/6 AR 120 GR	-
					220	12,500	19,000	10	41240120	PF ZY 1530/6 AR 220 GR	-
20	12	6	40	A	120	9,500	14,300	10	41273112	PF ZY 2012/6 AR 120 GR	-
	20	6	40	A	120	9,500	14,300	10	41243112	PF ZY 2020/6 AR 120 GR	-
					220	9,500	14,300	10	41243120	PF ZY 2020/6 AR 220 GR	-
	30	6	40	A	80	9,500	14,300	10	41246108	PF ZY 2030/6 AR 80 GR	-
					120	9,500	14,300	10	41246112	PF ZY 2030/6 AR 120 GR	-
25	15	6	40	A	120	7,500	14,300	10	41276112	PF ZY 2515/6 AR 120 GR	-
	25	6	40	A	120	7,500	11,400	10	41249112	PF ZY 2525/6 AR 120 GR	-
					220	7,500	11,400	10	41249120	PF ZY 2525/6 AR 220 GR	-
30	20	6	40	A	120	6,500	9,500	5	41279112	PF ZY 3020/6 AR 120 GR	-
	30	6	40	A	120	6,500	9,500	5	41252112	PF ZY 3030/6 AR 120 GR	-
Shank diameter 8 mm											
40	25	8	40	A	120	4,500	9,500	5	41282112	PF ZY 4025/8 AR 120 GR	-

Poliflex tools
GR bond

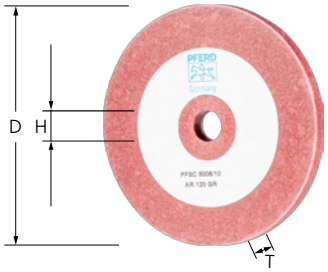


Poliflex fine grinding points PF KU GR

This bond is a soft elastomer-based bond with pink aluminium oxide. Suitable for use on surfaces. Grinding point in ball shape for fine grinding inner radii, contours and transitions.

Special features:
- Soft grinding thanks to soft, elastic bond.
- Produces a fine, shiny surface finish.

D [mm]	S_d [mm]	L_2 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm										
8	3	30	A	120	24,000	35,800	10	41401112	PF KU 08/3 AR 120 GR	-
10	3	30	A	120	19,000	28,600	10	41407112	PF KU 10/3 AR 120 GR	-
Shank diameter 6 mm										
12	6	40	A	120	16,000	23,800	10	41425112	PF KU 12/6 AR 120 GR	-
15	6	40	A	120	12,500	19,000	10	41434112	PF KU 15/6 AR 120 GR	-
20	6	40	A	120	9,500	14,300	10	41443112	PF KU 20/6 AR 120 GR	-
25	6	40	A	120	7,500	11,400	10	41449112	PF KU 25/6 AR 120 GR	-
30	6	40	A	120	6,500	9,500	5	41452112	PF KU 30/6 AR 120 GR	-



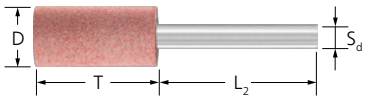
Poliflex fine grinding discs PF SC GR

A soft elastomer-based bond with pink aluminium oxide. Suitable for use on surfaces. Ideally suited to very fine grinding on all metallic materials, e.g. in tool and mould-making, in the dental sector and in the jewellery industry.

Special features:
- Soft grinding thanks to soft, elastic bond.
- Due to their construction, the small diameter variants are particularly suited to work on tight and hard-to-reach places.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
25	3	2	A	120	7,500	11,400	BO 2,3/1-6, BO 3/1,6	100	41982401	PF SC 2503/2 AR 120 GR	-
30	6	6	A	120	6,300	9,500	BO 6/6 3-10	5	41100112	PF SC 3006/6 AR 120 GR	-
50	6	6	A	120	3,800	5,700	BO 6/6 3-10	5	41102112	PF SC 5006/6 AR 120 GR	-
80	6	10	A	120	2,400	3,500	BO 8/10	5	41106112	PF SC 8006/10 AR 120 GR	-
100	20	10	A	120	1,900	2,800	BO 8/10	1	41109112	PF SC 10020/10 AR 120 GR	-

GHR bond



Poliflex fine grinding points PF ZY GHR

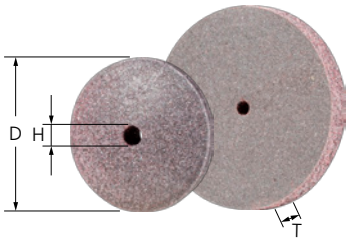
A soft yet sturdy bond with an abrasive mixture comprising aluminium oxide and silicon carbide (SiC), elastomer-based. Suitable for use on edges. Grinding point in cylindrical shape, for fine grinding of small surfaces.

Special features:
- Softer grinding with a longer tool life.
- Produces a fine, shiny surface finish.
- Poliflex fine grinding points with a grit size of 400 are manufactured from the abrasive AW white aluminium oxide.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm											
4	8	3	30	A	400	100,000	143,200	10	41200540	PF ZY 0408/3 AW 400 GHR	-
8	12	3	30	A/SiC	120	60,000	71,600	10	41204512	PF ZY 0812/3 ANCN 120 GHR	-
				A	400	60,000	71,600	10	41204540	PF ZY 0812/3 AW 400 GHR	-
10	10	3	30	A/SiC	120	45,000	57,200	10	41207512	PF ZY 1010/3 ANCN 120 GHR	-

Continued on next page

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Abra-sive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
10	15	3	30	A/SiC	120	45,000	52,000	10	41213512	PF ZY 1015/3 ANCN 120 GHR	-
Shank diameter 6 mm											
10	25	6	40	A/SiC	120	45,000	57,200	10	41219512	PF ZY 1025/6 ANCN 120 GHR	-
				A	400	45,000	57,200	10	41219540	PF ZY 1025/6 AW 400 GHR	-
15	30	6	40	A/SiC	46	32,000	47,700	10	41240504	PF ZY 1530/6 ANCN 46 GHR	-
					80	32,000	47,700	10	41240508	PF ZY 1530/6 ANCN 80 GHR	-
20	30	6	40	A/SiC	46	24,000	28,600	10	41246504	PF ZY 2030/6 ANCN 46 GHR	-
25	25	6	40	A/SiC	46	19,000	22,900	10	41249504	PF ZY 2525/6 ANCN 46 GHR	-



LI SC

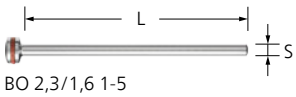
Poliflex fine grinding discs/lenses PF SC/LI GHR

A soft yet sturdy bond with an abrasive mixture comprising aluminium oxide and silicon carbide (SiC), elastomer-based. Suitable for use on edges. Ideally suited to very fine grinding on all metallic materials, e.g. in tool and mould-making, in the dental sector and in the jewellery industry.

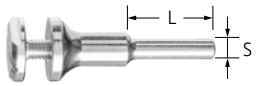
Special features:
- Softer grinding with a longer tool life.
- Produces a fine, shiny surface finish.
- Due to their construction, the small diameter variants are particularly suited to work on tight and hard-to-reach places.

D [mm]	T [mm]	H [mm]	Abra-sive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
Disc shape											
25	3	2	SiC	220	7,500	11,400	BO 2,3/1-6, BO 3/1,6	100	41982510	PF SC 2503/2 CU 220 GHR	-
Lens shape											
16	4	2	SiC	220	12,000	17,900	BO 2,3/1-6, BO 3/1,6	100	41962020	PF LI 1604/2 CU 220 GHR	-
24	3	2	SiC	220	8,000	12,000	BO 2,3/1-6, BO 3/1,6	100	41963010	PF LI 2403/2 CU 220 GHR	-

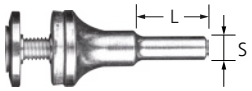
Arbor BO



BO 2,3/1,6 1-5
BO 3/1,6 1-5



BO 6/6 3-10



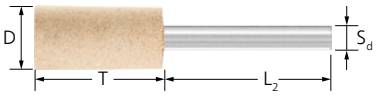
BO 8/10 6-20

Arbor BO

Matching arbor for POLIFLEX fine grinding discs PF SC.

Special features:
- High economic efficiency as tool can be changed quickly.

Suitable for hole diameter [mm]	S [mm]	L [mm]	Clamping range [mm]		Item no.	Designation	Price/ unit EUR
1,6	2.34	43	1 – 5	10	42460023	BO 2,3/1,6 1-5	-
	3	43	1 – 5	10	42460030	BO 3/1,6 1-5	-
6	6	25	3 – 10	1	42400006	BO 6/6 3-10	-
10	8	30	6 – 20	1	42400008	BO 8/10 6-20	-



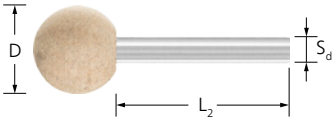
Poliflex fine grinding points PF ZY LR

A hard, sturdy bond with white aluminium oxide. Suitable for use on surfaces. Grinding point in cylindrical shape, for fine grinding of small surfaces.



Special features:
- Produces a fine, shiny surface finish.
- High economic efficiency due to high abrasive performance and long tool life.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm											
4	8	3	30	A	120	95,000	143,200	10	41200212	PF ZY 0408/3 AW 120 LR	-
					400	95,000	143,200	10	41200240	PF ZY 0408/3 AW 400 LR	-
6	10	3	30	A	120	64,000	95,400	10	41200612	PF ZY 0610/3 AW 120 LR	-
8	8	3	30	A	120	47,500	71,600	10	41201212	PF ZY 0808/3 AW 120 LR	-
	12	3	30	A	120	47,500	71,600	10	41204212	PF ZY 0812/3 AW 120 LR	-
					220	47,500	71,600	10	41204220	PF ZY 0812/3 AW 220 LR	-
					400	47,500	71,600	10	41204240	PF ZY 0812/3 AW 400 LR	-
10	10	3	30	A	120	38,000	57,200	10	41207212	PF ZY 1010/3 AW 120 LR	-
					220	38,000	57,200	10	41207220	PF ZY 1010/3 AW 220 LR	-
	15	3	30	A	120	38,000	57,200	10	41213212	PF ZY 1015/3 AW 120 LR	-
12	12	3	30	A	120	32,000	47,700	10	41222212	PF ZY 1212/3 AW 120 LR	-
	20	3	30	A	120	32,000	47,700	10	41228212	PF ZY 1220/3 AW 120 LR	-
Shank diameter 6 mm											
10	10	6	40	A	120	38,000	57,200	10	41210212	PF ZY 1010/6 AW 120 LR	-
	15	6	40	A	120	38,000	57,200	10	41216212	PF ZY 1015/6 AW 120 LR	-
	25	6	40	A	120	38,000	57,200	10	41219212	PF ZY 1025/6 AW 120 LR	-
					220	38,000	57,200	10	41219220	PF ZY 1025/6 AW 220 LR	-
12	12	6	40	A	120	32,000	47,700	10	41225212	PF ZY 1212/6 AW 120 LR	-
	20	6	40	A	120	32,000	47,700	10	41231212	PF ZY 1220/6 AW 120 LR	-
15	15	6	40	A	120	25,500	38,100	10	41234212	PF ZY 1515/6 AW 120 LR	-
	25	6	40	A	120	25,500	38,100	10	41237212	PF ZY 1525/6 AW 120 LR	-
	30	6	40	A	120	25,500	38,100	10	41240212	PF ZY 1530/6 AW 120 LR	-
20	20	6	40	A	120	19,000	28,600	10	41243212	PF ZY 2020/6 AW 120 LR	-
	30	6	40	A	120	19,000	28,600	10	41246212	PF ZY 2030/6 AW 120 LR	-
25	25	6	40	A	120	15,000	22,900	10	41249212	PF ZY 2525/6 AW 120 LR	-
30	30	6	40	A	120	12,500	19,000	5	41252212	PF ZY 3030/6 AW 120 LR	-



Poliflex fine grinding points PF KU LR

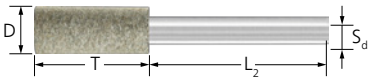
A hard, sturdy bond with white aluminium oxide. Suitable for use on surfaces. Grinding point in ball shape for fine grinding inner radii, contours and transitions.



Special features:
- Produces a fine, shiny surface finish.
- High economic efficiency due to high abrasive performance and long tool life.

D [mm]	S_d [mm]	L_2 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm										
8	3	30	A	120	47,000	71,600	10	41401212	PF KU 08/3 AW 120 LR	-
10	3	30	A	120	38,000	57,200	10	41410212	PF KU 10/3 AW 120 LR	-
Shank diameter 6 mm										
15	6	40	A	120	29,500	38,100	10	41434212	PF KU 15/6 AW 120 LR	-
20	6	40	A	120	19,000	28,600	10	41443212	PF KU 20/6 AW 120 LR	-

LHR bond



Poliflex fine grinding points PF ZY LHR

A hard, sturdy bond made of white aluminium oxide. Suitable for use on edges. Grinding point in cylindrical shape, for fine grinding of small surfaces.

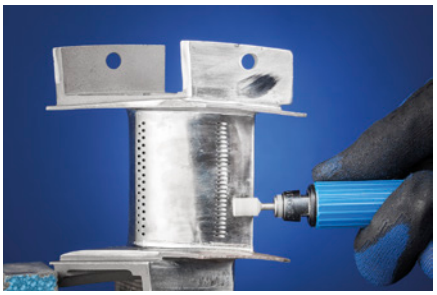
Special features:
- Produces a fine, shiny surface finish.
- High economic efficiency due to high abrasive performance and long tool life.
- Poliflex fine grinding points LHR with a grit size of 60 are manufactured from an abrasive mixture of AWCN white aluminium oxide and green silicon carbide (SiC).

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm											
8	12	3	30	A	120	47,000	76,700	10	41204312	PF ZY 0812/3 AW 120 LHR	-
Shank diameter 6 mm											
10	25	6	40	A	120	75,000	83,200	10	41219312	PF ZY 1025/6 AW 120 LHR	-
				A/SiC	60	75,000	83,200	10	41219306	PF ZY 1025/6 AWCN 60 LHR	-
20	20	6	40	A	120	38,000	47,700	10	41243312	PF ZY 2020/6 AW 120 LHR	-



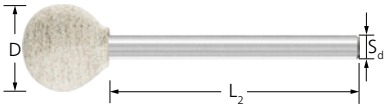
Poliflex fine grinding points PF ZY TX

Very hard, sturdy bond with textile fabric inlays made of regular aluminium oxide. Suitable for use on edges. Grinding point in cylindrical shape, for fine grinding of small surfaces.



Special features:
- Produces a fine, matt surface finish.
- High economic efficiency due to high abrasive performance and long tool life.
- The dimensions of 19 x 2.5 mm are particularly suitable for cleaning seat mounting rails (tracks) in commercial aircraft.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm											
6	10	3	30	A	80	63,000	95,400	10	41200708	PF ZY 0610/3 AN 80 TX	-
					120	63,000	95,400	10	41200712	PF ZY 0610/3 AN 120 TX	-
8	12	3	30	A	80	47,500	71,600	10	41204608	PF ZY 0812/3 AN 80 TX	-
					120	47,500	71,600	10	41204612	PF ZY 0812/3 AN 120 TX	-
Shank diameter 6 mm											
10	25	6	40	A	80	38,000	57,200	10	41219608	PF ZY 1025/6 AN 80 TX	-
					120	38,000	57,200	10	41219612	PF ZY 1025/6 AN 120 TX	-
16	32	6	40	A	80	24,000	35,800	10	41241608	PF ZY 1632/6 AN 80 TX	-
					120	24,000	35,800	10	41241612	PF ZY 1632/6 AN 120 TX	-
19	2.5	6	40	A	80	20,000	30,100	10	47000886	PF ZY 192,5/6 AN 80 TX	-
20	32	6	40	A	80	19,000	28,600	10	41247608	PF ZY 2032/6 AN 80 TX	-
					120	19,000	28,600	10	41247612	PF ZY 2032/6 AN 120 TX	-
25	32	6	40	A	80	15,000	22,900	10	41250608	PF ZY 2532/6 AN 80 TX	-
					120	15,000	22,900	10	41250612	PF ZY 2532/6 AN 120 TX	-



Poliflex fine grinding points PF KU TX

Very hard, sturdy bond with textile fabric inlays made of regular aluminium oxide. Suitable for use on edges. Grinding point in ball shape for fine grinding inner radii, contours and transitions.

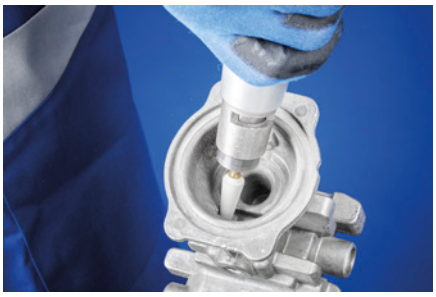
Special features:
- Produces a fine, matt surface finish.
- High economic efficiency due to high abrasive performance and long tool life.

D [mm]	S_d [mm]	L_2 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
6	3	30	A	80	63,000	95,400	10	41400608	PF KU 06/3 AN 80 TX	-
				120	63,000	95,400	10	41400612	PF KU 06/3 AN 120 TX	-
8	3	30	A	120	47,500	71,600	10	41401612	PF KU 08/3 AN 120 TX	-
10	3	30	A	120	38,000	57,200	10	41407612	PF KU 10/3 AN 120 TX	-



Poliflex fine grinding points PF KE TX

Very hard, sturdy bond with textile fabric inlays made of regular aluminium oxide. Suitable for use on edges. Grinding point in conical shape for fine grinding inner radii, contours and transitions.



Special features:
- Produces a fine, matt surface finish.
- High economic efficiency due to high abrasive performance and long tool life.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
10	25	6	40	A	80	38,000	57,200	10	41719608	PF KE 1025/6 AN 80 TX	-
					120	38,000	57,200	10	41719612	PF KE 1025/6 AN 120 TX	-
16	45	6	40	A	80	24,000	38,800	10	41738608	PF KE 1645/6 AN 80 TX	-
25	70	6	40	A	80	15,000	22,900	10	41750608	PF KE 2570/6 AN 80 TX	-



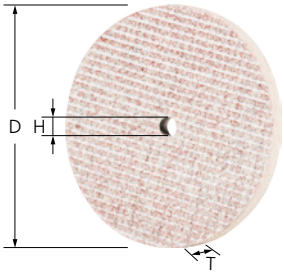
Poliflex fine grinding points PF SP TX

Very hard, sturdy bond with textile fabric inlays made of regular aluminium oxide. Grinding point in pointed tree shape for fine grinding inner radii, contours and transitions.



Special features:
- Produces a fine, matt surface finish.
- High economic efficiency due to high abrasive performance and long tool life.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter 3 mm											
10	20	3	30	A	80	38,000	57,200	10	41310608	PF SP 1020/3 AN 80 TX	-
					120	38,000	57,200	10	41310612	PF SP 1020/3 AN 120 TX	-
Shank diameter 6 mm											
20	32	6	40	A	80	19,000	28,600	10	41320608	PF SP 2032/6 AN 80 TX	-
					120	19,000	28,600	10	41320612	PF SP 2032/6 AN 120 TX	-

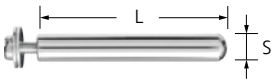


Poliflex fine grinding discs PF SC TX

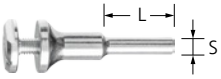
Very hard, sturdy bond with textile fabric inlays made of regular aluminium oxide. For fine peripheral grinding on small surfaces.

Special features:
- Produces a fine, matt surface finish.
- High economic efficiency due to high abrasive performance and long tool life.
- Please order compatible arbor separately.

D [mm]	T [mm]	H [mm]	Abrasive	Grit size	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
25	3	3	A	80	15,000	22,900	BO 6/3 1-6	20	41120308	PF SC 2503/3 A 80 TX	-
				120	15,000	22,900	BO 6/3 1-6	20	41120312	PF SC 2503/3 A 120 TX	-
	6	3	A	120	15,000	22,900	BO 6/3 1-6	20	41120612	PF SC 2506/3 A 120 TX	-
40	3	3	A	80	9,500	14,300	BO 6/3 1-6	10	41121408	PF SC 4003/3 A 80 TX	-
				120	9,500	14,300	BO 6/3 1-6	10	41121412	PF SC 4003/3 A 120 TX	-
	6	6	A	120	9,500	14,300	BO 6/6 3-10	10	41121612	PF SC 4006/6 A 120 TX	-



BO 6/3 1-6



BO 6/6 3-10

Arbor BO

Matching arbor for Poliflex fine grinding discs PF SC.

Special features:
- High economic efficiency as tool can be changed quickly.

Suitable for hole diameter [mm]	S [mm]	L [mm]	Clamping range [mm]		Item no.	Designation	Price/ unit EUR
3	6	40	1 – 6	1	42400003	BO 6/3 1-6	-
6	6	25	3 – 10	1	42400006	BO 6/6 3-10	-

Safety notes

- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.

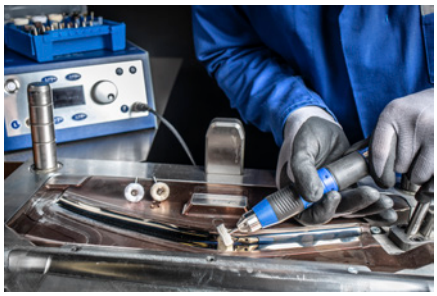
Wear eye protection!

Wear hearing protection!

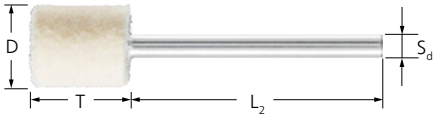
Wear gloves!

Wear a dust mask!

Follow the safety instructions!



Felt points FK



Shape ZYA

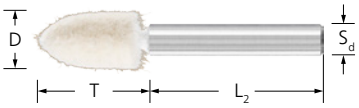
The cylindrical shape ZYA is mainly used peripherally for pre-polishing and high-gloss polishing. Can be profiled as desired, meaning they can also be used for tools with complex geometries. Precise retention of geometric shapes due to the hardness of these tools.

Special features:
- Use diamond polishing pastes and polishing paste bars. Please order separately.
- The variant with an end hole (ST-BO) is particularly suitable for face-down use.
- Felt points with metal inserts (MS) are used for increased stock removal when pre-polishing with diamond polishing pastes.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter of 2.35 mm										
6	10	2.35	35	M (medium)	16,000 – 32,000	79,500	10	*44100608*	FK ZYA 0610/2,35 M	-
				H (hard)	16,000 – 32,000	79,500	10	*44100612*	FK ZYA 0610/2,35 H	-
8	10	2.35	35	M (medium)	12,000 – 24,000	59,500	10	*44140808*	FK ZYA 0810/2,35 M	-
				H (hard)	12,000 – 24,000	59,500	10	*44140814*	FK ZYA 0810/2,35 H	-
Shank diameter 3 mm										
4	12	3	37	M (medium)	23,000 – 47,000	119,000	10	44100412	FK ZYA 0412/3 M	-
6	10	3	35	M (medium)	16,000 – 32,000	79,500	10	44140610	FK ZYA 0610/3 M	-
				H (hard)	16,000 – 32,000	79,500	10	44100614	FK ZYA 0610/3 H	-
8	10	3	35	M (medium)	12,000 – 24,000	59,500	10	44140810	FK ZYA 0810/3 M	-
				H (hard)	12,000 – 24,000	59,500	10	44140816	FK ZYA 0810/3 H	-
10	12	3	34	M (medium)	10,000 – 20,000	47,500	10	44111009	FK ZYA 1012/3 M	-
				H (hard)	10,000 – 20,000	47,500	10	44111010	FK ZYA 1012/3 H	-
	15	3	32	M (medium)	10,000 – 20,000	47,500	10	44111013	FK ZYA 1015/3 M	-
				H (hard)	10,000 – 20,000	47,500	10	44161015	FK ZYA 1015/3 H	-
				MS (metal insert)	10,000 – 20,000	47,500	10	44161014	FK ZYA 1015/3 MS	-
12	20	3	28	M (medium)	7,950 – 15,900	39,500	10	44100038	FK ZYA 1220/3 M	-
				H (hard)	7,950 – 15,900	39,500	10	44100040	FK ZYA 1220/3 H	-
Shank diameter of 3 mm – with end hole										
15	20	3	28	M (medium)	6,000 – 12,000	31,500	10	44100046	FK ZYA 1520/3 M ST-BO	-
				H (hard)	6,000 – 12,000	31,500	10	44100048	FK ZYA 1520/3 H ST-BO	-
Shank diameter 6 mm										
10	12	6	42	M (medium)	10,000 – 20,000	47,500	10	44111011	FK ZYA 1012/6 M	-
				H (hard)	10,000 – 20,000	47,500	10	44111012	FK ZYA 1012/6 H	-
	15	6	40	M (medium)	10,000 – 20,000	47,500	10	44101671	FK ZYA 1015/6 M	-
				H (hard)	10,000 – 20,000	47,500	10	44161016	FK ZYA 1015/6 H	-
12	20	6	36	M (medium)	7,950 – 15,900	39,500	10	44100042	FK ZYA 1220/6 M	-
				H (hard)	7,950 – 15,900	39,500	10	44100044	FK ZYA 1220/6 H	-

Continued on next page

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter of 6 mm – with end hole										
15	20	6	38	M (medium)	6,000 – 12,000	31,500	10	44151520	FK ZYA 1520/6 M ST-BO	-
				H (hard)	6,000 – 12,000	31,500	10	44100050	FK ZYA 1520/6 H ST-BO	-
				MS (metal insert)	6,000 – 12,000	31,500	10	44161520	FK ZYA 1520/6 MS ST-BO	-
20	25	6	43	M (medium)	5,000 – 10,000	23,500	10	44101701	FK ZYA 2025/6 M ST-BO	-
				H (hard)	5,000 – 10,000	23,500	10	44100052	FK ZYA 2025/6 H ST-BO	-
				MS (metal insert)	5,000 – 10,000	23,500	10	44162025	FK ZYA 2025/6 MS ST-BO	-
25	30	6	40	M (medium)	4,000 – 8,000	19,000	10	44112536	FK ZYA 2530/6 M ST-BO	-
				H (hard)	4,000 – 8,000	19,000	10	44100054	FK ZYA 2530/6 H ST-BO	-
				MS (metal insert)	4,000 – 8,000	19,000	10	44162530	FK ZYA 2530/6 MS ST-BO	-



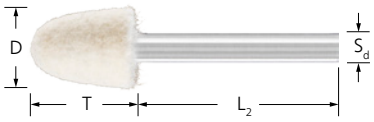
Shape SPK

The conical pointed shape SPK is mainly used for pre-polishing and high-gloss polishing of radii and contours.

Special features:

- Precise retention of geometric shapes due to the hardness of these tools.
- Can be profiled as desired, meaning they can also be used for tools with complex geometries.
- Use diamond polishing pastes and polishing paste bars. Please order separately.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter of 2.35 mm										
6	10	2.35	37	M (medium)	16,000 – 32,000	79,500	10	*44100110*	FK SPK 0610/2,35 M	-
				H (hard)	16,000 – 32,000	79,500	10	*44100112*	FK SPK 0610/2,35 H	-
	18	2.35		M (medium)	16,000 – 32,000	79,500	10	*44100116*	FK SPK 0618/2,35 M	-
				H (hard)	16,000 – 32,000	79,500	10	*44100120*	FK SPK 0618/2,35 H	-
8	12	2.35	36	M (medium)	12,000 – 24,000	59,500	10	*44100124*	FK SPK 0812/2,35 M	-
				H (hard)	12,000 – 24,000	59,500	10	*44100126*	FK SPK 0812/2,35 H	-
Shank diameter 3 mm										
6	10	3	37	M (medium)	16,000 – 32,000	79,500	10	47901120	FK SPK 0610/3 M	-
				H (hard)	16,000 – 32,000	79,500	10	44100114	FK SPK 0610/3 H	-
	18	3		M (medium)	16,000 – 32,000	79,500	10	44100118	FK SPK 0618/3 M	-
				H (hard)	16,000 – 32,000	79,500	10	44100122	FK SPK 0618/3 H	-
8	12	3	36	M (medium)	12,000 – 24,000	59,500	10	44140812	FK SPK 0812/3 M	-
				H (hard)	12,000 – 24,000	59,500	10	44100128	FK SPK 0812/3 H	-
10	18	3		M (medium)	10,000 – 20,000	47,500	10	44171013	FK SPK 1018/3 M	-
				H (hard)	10,000 – 20,000	47,500	10	44100130	FK SPK 1018/3 H	-
12	18	3		M (medium)	8,000 – 16,000	39,500	10	44141218	FK SPK 1218/3 M	-
Shank diameter 6 mm										
10	18	6	41	M (medium)	10,000 – 20,000	47,500	10	44101691	FK SPK 1018/6 M	-
				H (hard)	10,000 – 20,000	47,500	10	44100132	FK SPK 1018/6 H	-
15	20	6	42	M (medium)	6,000 – 12,000	31,500	10	44171526	FK SPK 1520/6 M	-
	30	6	45	M (medium)	6,000 – 12,000	31,500	10	44171536	FK SPK 1530/6 M	-
20	25	6	47	M (medium)	5,000 – 10,000	23,500	10	44152025	FK SPK 2025/6 M	-
25	30	6	45	M (medium)	4,000 – 8,000	19,000	10	47901128	FK SPK 2530/6 M	-
30	35	6	42	M (medium)	3,200 – 6,350	15,500	10	47901129	FK SPK 3035/6 M	-



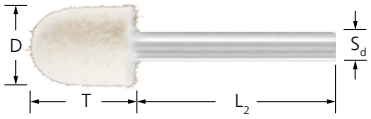
Shape KEL

The conical shape KEL is mainly used for pre-polishing and high-gloss polishing of radii.



Special features:
- Precise retention of geometric shapes due to the hardness of these tools.
- Can be profiled as desired, meaning they can also be used for tools with complex geometries.
- Use diamond polishing pastes and polishing paste bars. Please order separately.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter of 2.35 mm										
6	10	2.35	37	M (medium)	16,000 – 32,000	79,500	10	*44100180*	FK KEL 0610/2,35 M	-
Shank diameter 3 mm										
6	10	3	37	M (medium)	16,000 – 32,000	79,500	10	47901130	FK KEL 0610/3 M	-
10	15	3	34	M (medium)	10,000 – 20,000	47,500	10	47901133	FK KEL 1015/3 M	-
Shank diameter 6 mm										
10	15	6	40	M (medium)	10,000 – 20,000	47,500	10	47901141	FK KEL 1015/6 M	-
15	20	6	42	M (medium)	6,000 – 12,000	31,500	10	44151521	FK KEL 1520/6 M	-
20	25	6	47	M (medium)	5,000 – 10,000	23,500	10	44182026	FK KEL 2025/6 M	-
				H (hard)	5,000 – 10,000	23,500	10	44100190	FK KEL 2025/6 H	-
	30	6	45	M (medium)	5,000 – 10,000	23,500	10	44100192	FK KEL 2030/6 M	-
				H (hard)	5,000 – 10,000	23,500	10	44100193	FK KEL 2030/6 H	-
25	30	6	45	M (medium)	4,000 – 8,000	19,000	10	44101711	FK KEL 2530/6 M	-
30	35	6	42	M (medium)	3,200 – 6,350	15,500	10	44101721	FK KEL 3035/6 M	-

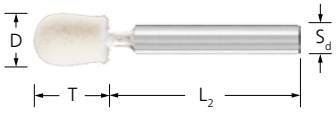


Shape WRC

The cylindrical shape with radius end WRC is mainly used for pre-polishing and high-gloss polishing of small, concave contours.

Special features:
- Precise retention of geometric shapes due to the hardness of these tools.
- Can be profiled as desired, meaning they can also be used for tools with complex geometries.
- Use diamond polishing pastes and polishing paste bars. Please order separately.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter of 2.35 mm										
6	10	2.35	37	M (medium)	16,000 – 32,000	79,500	10	*44100230*	FK WRC 0610/2,35 M	-
8	12	2.35	36	M (medium)	12,000 – 24,000	59,500	10	*44100232*	FK WRC 0812/2,35 M	-
10	14	2.35	35	M (medium)	10,000 – 20,000	47,500	10	*44100234*	FK WRC 1014/2,35 M	-
Shank diameter 3 mm										
6	10	3	36	M (medium)	16,000 – 32,000	79,500	10	47901099	FK WRC 0610/3 M	-
8	12	3	43	M (medium)	12,000 – 24,000	59,500	10	44140813	FK WRC 0812/3 M	-
10	14	3	35	M (medium)	10,000 – 20,000	47,500	10	44141014	FK WRC 1014/3 M	-
Shank diameter 6 mm										
15	20	6	42	M (medium)	6,000 – 12,000	31,500	10	44131526	FK WRC 1520/6 M	-
20	25	6	47	M (medium)	5,000 – 10,000	23,500	10	44132026	FK WRC 2025/6 M	-
25	30	6	45	M (medium)	4,000 – 8,000	19,000	10	44132536	FK WRC 2530/6 M	-

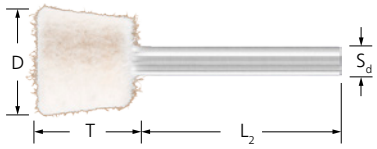


Shape TRE

The oval shape TRE is mainly used for pre-polishing and high-gloss polishing of small radii.

Special features:
- Precise retention of geometric shapes due to the hardness of these tools.
- Can be profiled as desired, meaning they can also be used for tools with complex geometries.
- Use diamond polishing pastes and polishing paste bars. Please order separately.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter of 2.35 mm										
6	10	2.35	37	M (medium)	16,000 – 32,000	79,500	10	*44100270*	FK TRE 0610/2,35 M	-
8	12	2.35	36	M (medium)	12,000 – 24,000	59,500	10	*44100274*	FK TRE 0812/2,35 M	-
10	14	2.35	35	M (medium)	10,000 – 20,000	47,500	10	*44100278*	FK TRE 1014/2,35 M	-
Shank diameter 3 mm										
6	10	3	37	M (medium)	16,000 – 32,000	79,500	10	44100272	FK TRE 0610/3 M	-
8	12	3	36	M (medium)	12,000 – 24,000	59,500	10	44100276	FK TRE 0812/3 M	-
10	14	3	35	M (medium)	10,000 – 20,000	47,500	10	44100280	FK TRE 1014/3 M	-
Shank diameter 6 mm										
10	14	6	43	M (medium)	10,000 – 20,000	47,500	10	44101681	FK TRE 1014/6 M	-

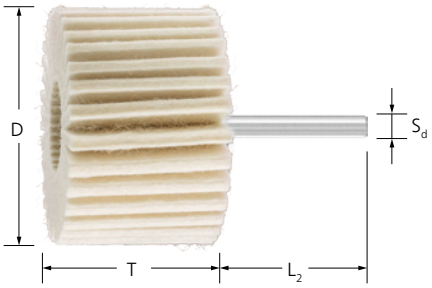


Shape WKN

The tapered shape WKN is mainly used for pre-polishing and high-gloss polishing of interior angles.

Special features:
- Precise retention of geometric shapes due to the hardness of these tools.
- Can be profiled as desired, meaning they can also be used for tools with complex geometries.
- Use diamond polishing pastes and polishing paste bars. Please order separately.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Shank diameter of 2.35 mm										
10	15	2.35	32	M (medium)	10,000 – 20,000	47,500	10	*44100324*	FK WKN 1015/2,35 M	-
12	12	2.35	34	M (medium)	8,000 – 16,000	39,500	10	*44100328*	FK WKN 1212/2,35 M	-
				H (hard)	8,000 – 16,000	39,500	10	*44100332*	FK WKN 1212/2,35 H	-
Shank diameter 3 mm										
10	15	3	32	M (medium)	10,000 – 20,000	47,500	10	44100326	FK WKN 1015/3 M	-
12	12	3	36	M (medium)	8,000 – 16,000	39,500	10	44100330	FK WKN 1212/3 M	-
				H (hard)	8,000 – 16,000	39,500	10	44100334	FK WKN 1212/3 H	-
15	15	3	32	M (medium)	6,000 – 12,000	31,500	10	44100336	FK WKN 1515/3 M	-
				H (hard)	6,000 – 12,000	31,500	10	44100338	FK WKN 1515/3 H	-
20	16	3	28	M (medium)	5,000 – 10,000	23,500	10	44100340	FK WKN 2016/3 M	-
Shank diameter 6 mm										
20	16	6	38	M (medium)	5,000 – 10,000	23,500	10	44152016	FK WKN 2016/6 M	-



FLS

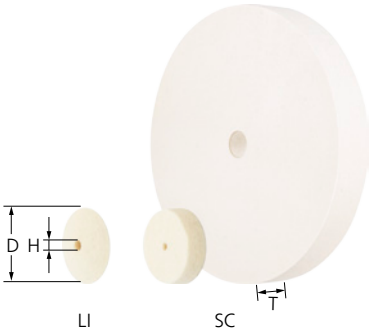
Mounted felt flap wheels are used for pre-polishing and high-gloss polishing on small to medium-sized components. Use the hard type for pre-polishing flat surfaces, and the soft type for high-gloss polishing and processing workpieces with lots of contours.



Special features:
- Highly flexible, enabling optimal adjustment to the contour. Low thermal load on the workpiece.
- If very fine finishes need to be achieved, the two types can be used successively.
- Use a polishing paste bar. Please order separately.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
30	20	6	40	W (soft)	6,300	20,000	5	44383020	FLS 3020/6 W	-
				H (hard)	6,300	20,000	5	44383021	FLS 3020/6 H	-
40	20	6	40	W (soft)	4,750	15,000	5	44384020	FLS 4020/6 W	-
				H (hard)	4,750	15,000	5	44384021	FLS 4020/6 H	-
50	30	6	40	W (soft)	3,800	12,000	5	44385030	FLS 5030/6 W	-
				H (hard)	3,800	12,000	5	44385031	FLS 5030/6 H	-
60	40	6	40	W (soft)	3,150	10,000	5	44386040	FLS 6040/6 W	-
				H (hard)	3,150	10,000	5	44386041	FLS 6040/6 H	-
80	50	6	40	W (soft)	2,400	7,500	5	44388050	FLS 8050/6 W	-
				H (hard)	2,400	7,500	5	44388051	FLS 8050/6 H	-

Felt wheels and lenses FK SC/LI



FK SC/LI

Felt wheels and lenses are mainly used peripherally.



Special features:
- Precise retention of geometric shapes due to the hardness of these tools.
- Felt wheels with metal inserts (MS) are used for increased stock removal when pre-polishing with diamond grinding pastes.
- Use diamond polishing pastes and polishing paste bars. Please order polishing pastes and compatible arbor separately.

D [mm]	T [mm]	H [mm]	Version	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
Lenses										
17	5	2	H (hard)	5,600 – 11,000	28,000	BO 2,3/1-6, BO 3/1,6	10	44367008	FK LI 1705/2 H	-
22	5	2	H (hard)	4,300 – 8,650	21,700	BO 2,3/1-6, BO 3/1,6	10	44367009	FK LI 2205/2 H	-
Discs										
17	5	2	M (medium)	5,600 – 11,000	28,000	BO 2,3/1-6, BO 3/1,6	10	44367005	FK SC 1705/2 M	-
20	5	2	M (medium)	5,000 – 10,000	23,500	BO 2,3/1-6, BO 3/1,6	10	44367006	FK SC 2005/2 M	-

Continued on next page

Polishing tools
Felt wheels and lenses FK SC/LI

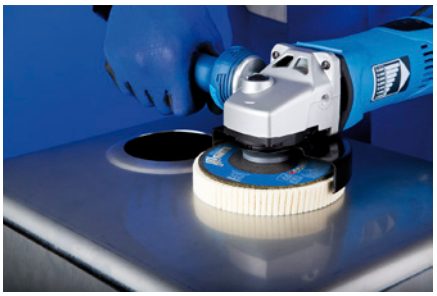
D [mm]	T [mm]	H [mm]	Version	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
30	5	2	M (medium)	3,000 – 6,000	20,000	BO 2,3/1-6, BO 3/1,6	10	44367007	FK SC 3005/2 M	-
	7	6	M (medium)	3,000 – 6,000	20,000	BO 6/6 3-10	5	44101742	FK SC 3007/6 M	-
45	9	6	M (medium)	2,000 – 4,000	13,500	BO 6/6 3-10	5	44101732	FK SC 4509/6 M	-
60	10	6	M (medium)	1,500 – 3,000	10,000	BO 6/6 3-10	5	44316010	FK SC 6010/6 M	-
80	10	10	M (medium)	1,000 – 2,000	7,500	BO 8/10	5	44367010	FK SC 8010/10 M	-
			MS (metal insert)	1,000 – 2,000	7,500	BO 8/10	5	44330801	FK SC 8010/10 MS	-
100	20	10	M (medium)	900 – 1,800	6,100	BO 8/10	1	44367110	FK SC 10020/10 M	-
			MS (metal insert)	900 – 1,800	6,100	BO 8/10	1	44331002	FK SC 10020/10 MS	-
125	20	20	M (medium)	750 – 1,500	4,900	BO 12/20, BO MK 1/20	1	44367220	FK SC 12520/20 M	-
			MS (metal insert)	750 – 1,500	4,900	BO 12/20, BO MK 1/20	1	44331252	FK SC 12520/20 MS	-
150	25	20	M (medium)	600 – 1,200	4,000	BO 12/20, BO MK 1/20	1	44367320	FK SC 15025/20 M	-
200	30	20	M (medium)	500 – 1,000	3,000	BO 12/20, BO MK 1/20	1	44367420	FK SC 20030/20 M	-

Felt flap discs FFS



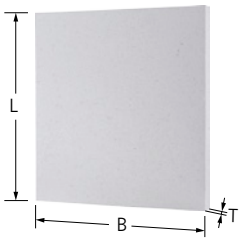
FFS

Felt flap discs are used for pre-polishing and high-gloss polishing on medium-sized to large components. Use the hard type for pre-polishing flat surfaces, and the soft type for high-gloss polishing and processing workpieces with lots of contours.



Special features:
- Highly flexible, enabling optimal adjustment to the contour. Low thermal load on the workpiece.
- If very fine finishes need to be achieved, the two types can be used successively.
- Use a polishing paste bar. Please order separately.

D [mm]	T [mm]	H [mm]	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
115	22	22.23	W (soft)	1,650	8,350	5	44370115	FFS 115/22,23 W	-
			H (hard)	1,650	8,350	5	44371115	FFS 115/22,23 H	-
125	22	22.23	W (soft)	1,500	7,650	5	44370125	FFS 125/22,23 W	-
			H (hard)	1,500	7,650	5	44371125	FFS 125/22,23 H	-



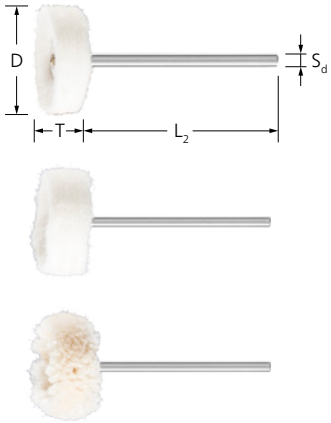
FK P

Felt sheets are suited to a very wide variety of manual polishing applications. The two different hardness grades available only multiply the number of potential applications.

Special features:
- Can be profiled as desired, meaning they can also be used for tools with complex geometries.
- Depending on the requirements, can be cut or punched into any shape (e.g. rectangle, square, stick or wheel) quickly and easily.

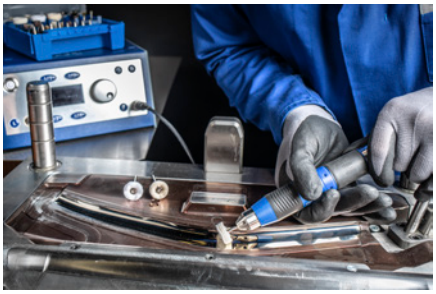
L [mm]	B [mm]	T [mm]	Version		Item no.	Designation	Price/unit EUR
250	250	3	M (medium)	1	44101100	FK P 250-250-3 M	-
		6	M (medium)	1	44101102	FK P 250-250-6 M	-
			H (hard)	1	44101104	FK P 250-250-6 H	-
		12	M (medium)	1	44101106	FK P 250-250-12 M	-
			H (hard)	1	44101108	FK P 250-250-12 H	-

Cloth rings



Shank-mounted cloth rings TR

For pre-polishing and high-gloss polishing with polishing pastes in tool and mould-making. Highly flexible, enabling optimal adjustment to the contour. Please order corresponding polishing pastes and arbor separately.



Special features:
- BW (cotton) type: very fine high-gloss polishing, dust removal and buffing.
- FZ (felt cloth) type: Pre-polishing and gloss polishing in combination with appropriate polishing pastes.
- FL (flannel) type: Buffing, gloss polishing and high-gloss polishing in combination with the appropriate polishing pastes.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Version	Opt. RPM	Max. RPM		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm										
22	10	3	40	BW	13,000	17,350	10	44270227	TR 2210/3 BW	-
				FZ	13,000	17,350	10	44270228	TR 2210/3 FZ	-
				FL	13,000	17,350	10	44270229	TR 2210/3 FL	-

Polishing tools
Cloth rings



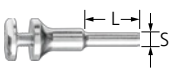
Cloth rings with hole TR

For pre-polishing and high-gloss polishing with polishing pastes. If the intention is to achieve very smooth surface finishes, use several or even all variants successively. Please order corresponding polishing pastes and arbor separately.

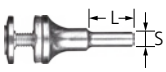
Special features:
- Highly flexible, enabling optimal adjustment to the contour.
- ST (sisal cloth) type: coarse pre-polishing; TH type (hard cloth): pre-polishing.
- TW (soft cloth) type: high-gloss polishing; FL (flannel) type: high-gloss polishing/ buffing.

D [mm]	Usage width [mm]	H [mm]	Version	Opt. RPM	Max. RPM	Suitable arbors		Item no.	Designation	Price/ unit EUR
50	10	6	TH	3,800	12,000	BO 6/6 3-10	5	44270503	TR 5010-6 TH	-
	10	6	TW	3,800	12,000	BO 6/6 3-10	5	44270504	TR 5010-6 TW	-
	10	6	FL	3,800	12,000	BO 6/6 3-10	5	44270505	TR 5010-6 FL	-
80	10	10	ST	2,500	7,500	BO 8/10	5	44270802	TR 8010-10 ST	-
			TH	2,500	7,500	BO 8/10	5	44270803	TR 8010-10 TH	-
			TW	2,500	7,500	BO 8/10	5	44270804	TR 8010-10 TW	-
			FL	2,500	7,500	BO 8/10	5	44270805	TR 8010-10 FL	-
100	10	10	ST	1,900	6,100	BO 8/10	5	44271003	TR 10010-10 ST	-
			TH	1,900	6,100	BO 8/10	5	44271004	TR 10010-10 TH	-
			TW	1,900	6,100	BO 8/10	5	44271005	TR 10010-10 TW	-
			FL	1,900	6,100	BO 8/10	5	44271006	TR 10010-10 FL	-
125	10	10	ST	1,300	4,900	BO 12/20, BO MK 1/20	5	44271253	TR 12510-10 ST	-
		20	TH	1,300	4,900	BO 12/20, BO MK 1/20	5	44271254	TR 12510-20 TH	-
			TW	1,300	4,900	BO 12/20, BO MK 1/20	5	44271255	TR 12510-20 TW	-
			FL	1,300	4,900	BO 12/20, BO MK 1/20	5	44271256	TR 12510-20 FL	-
150	10	20	ST	1,250	4,000	BO 12/20, BO MK 1/20	5	44271503	TR 15010-20 ST	-
			TH	1,250	4,000	BO 12/20, BO MK 1/20	5	44271504	TR 15010-20 TH	-
			TW	1,250	4,000	BO 12/20, BO MK 1/20	5	44271505	TR 15010-20 TW	-
			FL	1,250	4,000	BO 12/20, BO MK 1/20	5	44271506	TR 15010-20 FL	-
200	10	20	ST	950	3,000	BO 12/20, BO MK 1/20	5	44272003	TR 20010-20 ST	-
			TH	950	3,000	BO 12/20, BO MK 1/20	5	44272004	TR 20010-20 TH	-
			TW	950	3,000	BO 12/20, BO MK 1/20	5	44272005	TR 20010-20 TW	-
			FL	950	3,000	BO 12/20, BO MK 1/20	5	44272006	TR 20010-20 FL	-

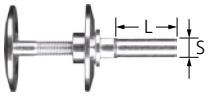
Arbor



BO 6/6 3-10



BO 8/10 6-20



BO 12/20 10-50


BO MK 1/20 10-50

Arbor for felt wheels and cloth rings BO

Matching arbors for felt wheels and cloth rings.

Special features:
- High economic efficiency as tool can be changed quickly.

Suitable for hole diameter [mm]	S [mm]	L [mm]	Clamping range [mm]		Item no.	Designation	Price/ unit EUR
6	6	25	3 – 10	1	42400006	BO 6/6 3-10	-
10	8	30	6 – 20	1	42400008	BO 8/10 6-20	-
20	12	35	10 – 50	1	42400012	BO 12/20 10-50	-
	-	-	10 – 50	1	42400062	BO MK 1/20 10-50	-



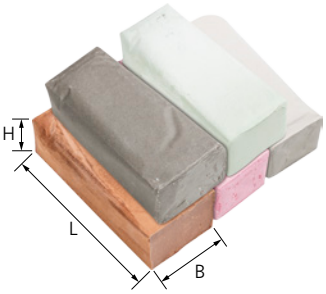
Grinding pastes SFP

Oil-soluble grinding pastes with sharp-edged silicon carbide grain (SiC) for very fine grinding work, e.g. grinding in valve seats, shaft bearings and as preparation for polishing with felt polishing tools and cloth rings.



Special features:
- High productivity.
- Quick results.
- Coordinated system.

Grit size	Contents [g]		Item no.	Designation	Price/unit EUR
90	250	1	44220090	SFP 90	-
150	250	1	44220150	SFP 150	-
280	250	1	44220280	SFP 280	-
360	250	1	44220360	SFP 360	-
600	250	1	44220600	SFP 600	-
800	250	1	44220800	SFP 800	-



Polishing paste bar PP

Polishing pastes for felt tools and cloth rings for pre-polishing and high-gloss polishing. To achieve very smooth surface finishes, use pre-polishing paste (VP) and high-gloss polishing paste (HGP) one after the other. The polishing pastes have high productivity and lead to quick results.



Special features:
- PP 1, PP 2, PP 3: Use cloth rings in the ST (sisal cloth) version for coarse pre-polishing, and cloth rings in the TH (hard cloth) version for pre-polishing.
- PP 4, PP 5: Use cloth rings in the TW (soft cloth) version for high-gloss polishing, and cloth rings in the FL (flannel) version for high-gloss polishing/buffing.

Version	Use for	Contents [g]	Colour	B [mm]	H [mm]	L [mm]		Item no.	Designation	Price/unit EUR
Bulk pack										
Pre-polishing	Steel + INOX	1,100	green	70	50	140	1	44250001	G-PP 1 VP STEELOX	-
	Aluminium + brass	1,300	grey	70	50	140	1	44250002	G-PP 2 VP ALU	-
	Non-ferrous metals	1,150	brown	70	50	140	1	44250003	G-PP 3 VP NON-FERROUS	-
High-gloss polishing	All metals	1,150	pink	70	50	140	1	44250004	G-PP 4 HGP UNIVERSAL	-
	Plastics	1,100	beige	70	50	140	1	44250005	G-PP 5 HGP PLAST	-
Small pack										
Pre-polishing	Steel + INOX	108	green	25	30	90	1	44250006	K-PP 1 VP STEELOX	-
	Aluminium + brass	142	grey	25	30	90	1	44250007	K-PP 2 VP ALU	-
	Non-ferrous metals	111	brown	25	30	90	1	44250008	K-PP 3 VP NON-FERROUS	-
High-gloss polishing	All metals	132	pink	25	30	90	1	44250009	K-PP 4 HGP UNIVERSAL	-
	Plastics	104	beige	25	30	90	1	44250010	K-PP 5 HGP PLAST	-



Diamond polishing pastes DPP, diamond polishing pastes type ECO DPP

Diamond polishing pastes guarantee quick and efficient work, particularly in tool-making and mould-making. For working on very hard materials, e.g. tungsten carbide and hardened steels. For use with felt polishing cones or wheels.

Special features:
- Can be thinned and dissolved with water and alcohol.
- High productivity. Quick results. Coordinated selections of grits.
- ECO diamond polishing pastes are an affordable alternative for less challenging applications.

Grit size [µm]	Contents [g]	Colour of sealing cap		Item no.	Designation	Price/unit EUR
DPP						
30 (coarse) = P 500	5	brown	1	44240030	DPP 30-5	-
	20	brown	1	44240130	DPP 30-20	-
15 (medium) = P 1200	5	blue	1	44240015	DPP 15-5	-
	20	blue	1	44240115	DPP 15-20	-
10 (medium-fine) = P 2000	5	light blue	1	44240010	DPP 10-5	-
	20	light blue	1	44240011	DPP 10-20	-
7 (fine) = P 3000	5	red	1	44240007	DPP 7-5	-
	20	red	1	44240107	DPP 7-20	-
3 (very fine) = P 5000	5	green	1	44240003	DPP 3-5	-
	20	green	1	44240103	DPP 3-20	-
1 (ultra-fine) = P 14000	5	yellow	1	44240001	DPP 1-5	-
	20	yellow	1	44240002	DPP 1-20	-
ECO DPP						
30 (coarse) = P 500	10	brown	1	44240202	DPP ECO 30-10	-
15 (medium) = P 1200	10	blue	1	44240192	DPP ECO 15-10	-
10 (medium-fine) = P 2000	10	light blue	1	44240182	DPP ECO 10-10	-
7 (fine) = P 3000	10	red	1	44240172	DPP ECO 7-10	-
3 (very fine) = P 5000	10	green	1	44240162	DPP ECO 3-10	-
1 (ultra-fine) = P 14000	10	yellow	1	44240152	DPP ECO 1-10	-



Special diluent for diamond polishing pastes PSP

The thinner is used to keep the lubricating layer between the support and the workpiece consistent during polishing work.

Special features:
- The diluent should be used extremely sparingly.
- Excessive use of the special diluent will wash out the diamond grit from the paste, thus diminishing polishing performance.

Contents [ml]		Item no.	Designation	Price/unit EUR
125	1	44250125	PSP 125	-



Grinding oils

Grinding oils are used in applications with coated abrasive tools. They increase the tool life and reduce heat build-up thanks to lubrication and cooling. Fewer chips adhere to the abrasive coating and a better surface is achieved.



Special features:
- Fe for steel: protects against corrosion.
- NE for non-ferrous metals and stainless steel (INOX): prevents the workpiece from becoming stained with unwanted marks, especially on stainless steel surfaces.
- ALU for aluminium: stops the grinding tool clogging up.

Use for	Contents [ml]		Item no.	Designation	Price/unit EUR
Aerosol can					
Steel	400	1	42200001	410 Fe	-
Non-ferrous metals, INOX	400	1	42200002	411 NE	-
Aluminium	400	1	42200007	412 ALU	-
1 l canister					
Steel	1,000	1	42200003	410/1 Fe	-
Non-ferrous metals, INOX	1,000	1	42200005	411/1 NE	-
Aluminium	1,000	1	42200008	412/1 ALU	-
5 l canister					
Steel	5,000	1	42200004	410/5 Fe	-
Non-ferrous metals, INOX	5,000	1	42200006	411/5 NE	-
Aluminium	5,000	1	42200009	412/5 ALU	-

Cleaner



Universal cleaner UC-S

Highly effective, general workshop cleaner for cleaning and de-greasing components as a preparation for painting. Removes polishing paste residue, processing oils, corrosion-protection oils, light waxes and other types of contamination.



Special features:
- Biodegradable surfactants.
- Short drying time. Non-combustible.
- Versatile.

Contents [ml]		Item no.	Designation	Price/unit EUR
500	1	42200060	UC-S 500	-



INOX SHINER IS-S maintenance product

Maintenance product for protecting and caring for stainless steel (INOX), aluminium, non-ferrous metals, glass and plastic. Removes dust, fingerprints, oil and light scale deposits.

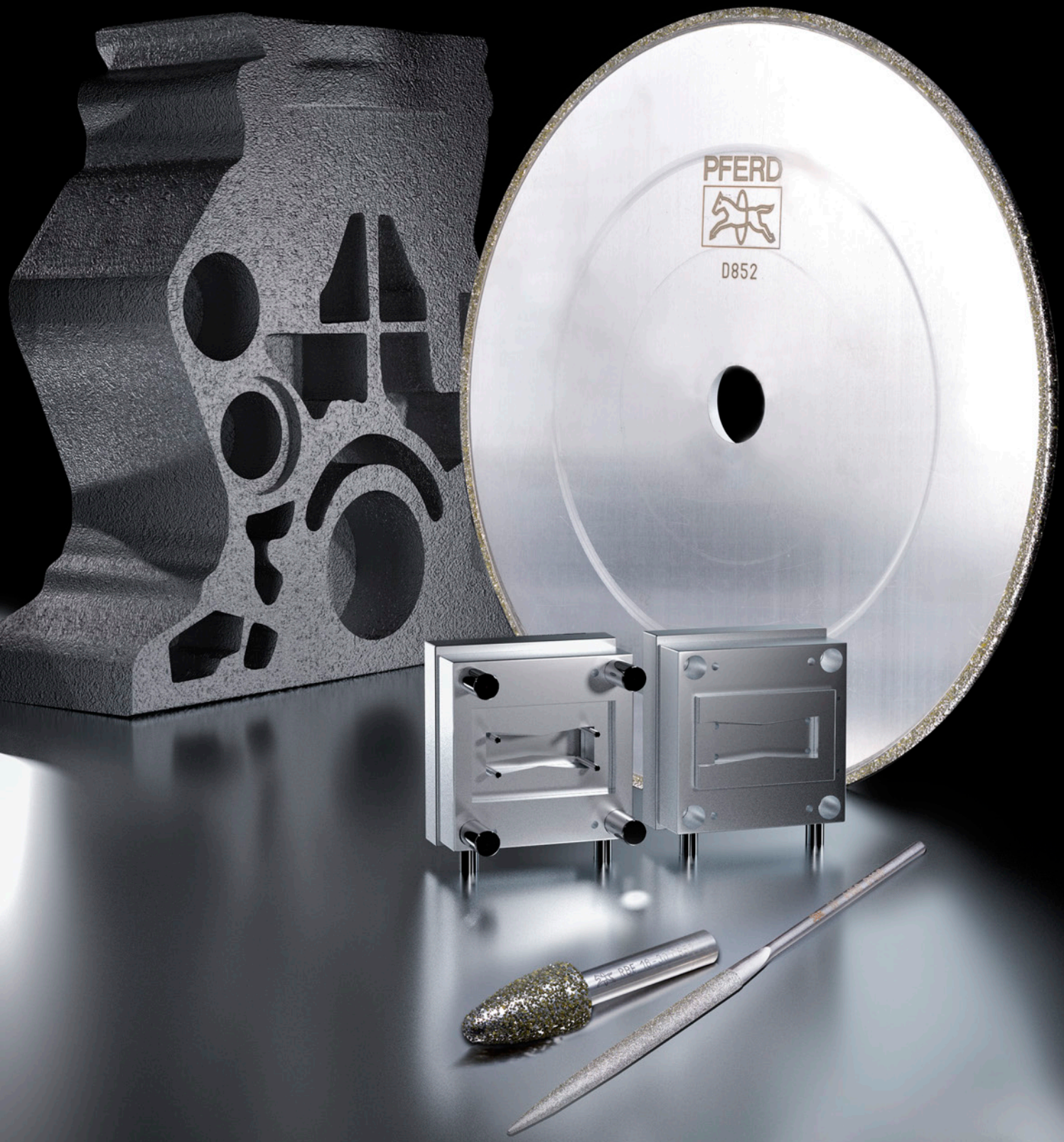


Special features:
- Leaves a dry, glossy protective film.
- Very easy to use. No cleaning marks.
- Versatile.

Contents [ml]		Item no.	Designation	Price/unit EUR
500	1	42200055	INOX SHINER IS-S 500	-

PFERD

5



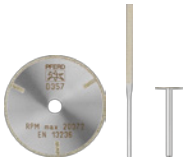
5

Diamond and CBN tools

Diamond and CBN tools
Table of contents

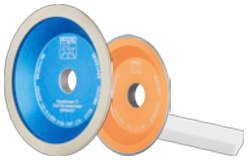
Diamond and CBN tools

- Highlights from the PFERD range 3
- The quick way to find the perfect tool 4
- Materials 5
- Customer-specific tool solutions 5
- Safety notes and recommended cutting speeds 6
- Recommended rotational speed range 7



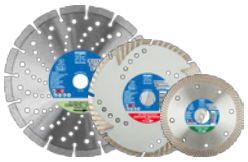
Diamond and CBN tools – electroplated bond

- Diamond escapement files 8
- Diamond needle files 10
- Diamond riffler files 14
- Diamond handy files 15
- Conical diamond files 17
- Diamond machinist's files 17
- Flexible diamond files 19
- Diamond sheets 19
- Diamond files for manual filing tools 20
- Diamond grinding points 21
- Diamond grinding discs 26
- CBN grinding points 27
- CBN grinding discs 30
- Diamond cut-off wheels 31
- Diamond cut-off wheels and grinding points for foundries 32
- Diamond grinding discs CC-GRIND SOLID DIAMOND 34
- Diamond sabre saw blades 34



Diamond and CBN tools – resinoid bond

- Diamond grinding tools 40
- CBN grinding tools 42
- Sharpening block for diamond and CBN tools 43



Diamond cut-off wheels for the construction industry

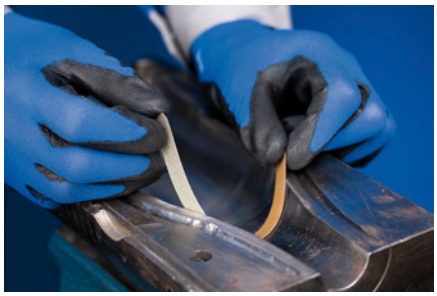
- Segmented type for fast cutting 44
- Type with continuous rim for easy cutting (TURBO) 45
- Type with continuous rim for very fine cutting 46
- Sharpening block 47

Flexible diamond files and diamond sheets

The flexible diamond files perfectly adapt to the workpiece surface. Due to their flexibility, they can be used in convex and concave contours with small radii.

The diamond sheets are exceptionally well-suited to work on larger surfaces. Convex and concave contours can be worked on with relatively little effort.

Scan the QR code to find out more about flexible diamond files and diamond sheets.



Advantages:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain. Compared against tools with conventional abrasives such as aluminium oxide and silicon carbide.

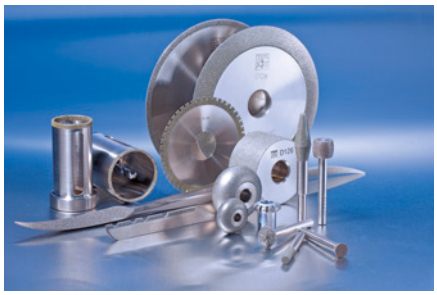
Customer-specific products made to order

PFERD specializes in consulting for and the production of customer-specific electroplated diamond and CBN tools.

Almost all tool blank geometries can be coated with various grit sizes. The electroplated bond also enables economic production of small batch sizes. Because of the diverse possibilities, our production can respond to individual customer requirements with a high degree of flexibility.

Our technical advisers will be happy to visit you on-site to develop individual and economical tool solutions for your applications.

Get the best possible advice for super-hard solutions! Scan the QR code to find out more about customer-specific products made to order.



Customer-specific tool solutions for grey and nodular cast iron



Tools for auxiliary spindles

PFERD offers tools for auxiliary spindles in different shapes/geometries and dimensions as well as with M12 and M16 threads.



Cut-off wheels and grinding discs

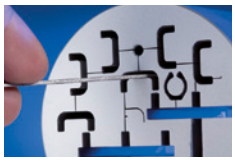
Diamond cut-off wheels and diamond grinding discs from PFERD can be purchased in diameters of up to 600 mm. Shapes and dimensions (hole, radius, reference circle, etc.) can be produced according to customer requirements.



Grinding points and grinding drums

The range of PFERD tools that can be produced according to customer requirements includes diamond grinding drums and diamond grinding points. These can be customized with different shapes, dimensions and shanks.

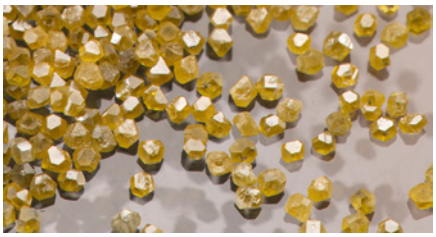
Diamond and CBN tools
The quick way to find the perfect tool

Use	Material	Application	Tools	
Filing 	Hardened steels, tungsten carbide, ceramics, glass, ferrite, nickel-based and titanium-based alloys	Precision filing	Diamond files	
		Precision filing with air-powered filing machines	Diamond files for air-powered filing machines	
		Machining concave and convex surfaces	Flexible diamond files	
			Diamond sheets	
	Fibre-reinforced plastics (GRP/CRP)	Deburring, chamfering and breaking of edges	Diamond machinist's files, grit size D 251	
Grinding   	Tungsten carbide, ceramics, glass, ferrite (magnetic material), nickel-based and titanium-based alloys	Grinding of bores, radii, contours, profiles and shoulders, as well as deburring and chamfering	Electroplated diamond grinding points	
			Diamond grinding disc CC-GRIND SOLID DIAMOND	
		Internal grinding of bores	Electroplated diamond grinding points, cylindrical shape ZY	
			Electroplated diamond grinding discs	
	Tungsten carbide	Sharpening of tungsten carbide tools	Resinoid-bonded diamond grinding discs	
	Hardened steels from approx. 54 HRC	Grinding of bores, radii, contours, profiles and shoulders, as well as deburring and chamfering	Electroplated CBN grinding points	
		Internal grinding of bores	Electroplated CBN grinding points, cylindrical shape ZY	
			Electroplated CBN grinding discs	
	HSS (High Speed Steel)	Sharpening of HSS tools	Resinoid-bonded CBN grinding discs	
	Fibre-reinforced plastics (GRP/CRP)	Deburring, chamfering and general grinding work	Electroplated diamond grinding points, cylindrical shape with radius end WR, grit size D 357	
			Diamond grinding disc CC-GRIND SOLID DIAMOND	
	Grey and nodular cast iron	Grinding burning-ins, sand inclusions and adhesions	Mounted points for foundries	
Cutting 	Tungsten carbide, ceramics, glass, ferrite, nickel-based and titanium-based alloys	Cutting	Diamond cut-off wheels, grit size D 64/D 151	
	Fibre-reinforced plastics (GRP/CRP)	Cut-off grinding, trimming, making cut-outs, and cutting straight contours to size	Diamond cut-off wheels, grit size D 357/D 427	
		Sawing, trimming, making cut-outs, and cutting curved contours to size	Diamond sabre saw blades	
	Grey and nodular cast iron	Separation of open risers, burrs, feeders, sprues, parting lines etc.	Diamond cut-off wheels, grit size D 852	

5

Materials

Diamond and CBN abrasives are used when materials cannot be machined with conventional abrasives such as aluminium oxide or silicon carbide. They also provide a more economical solution for many applications. Due to high chemical wear, rotating diamond tools are not suitable for work on steel. CBN tools are used for these applications. The two abrasives complement each other ideally. In the adjacent overview, you will find various materials associated with the abrasives.



Diamond
- Duroplastics, in particular with glass or carbon fibre reinforcement (GRP and CRP)
- Ferrite (magnetic material)
- Glass
- Graphite and synthetic carbon
- Grey and nodular cast iron
- Tungsten carbide
- Nickel or titanium-based superalloys
- Technical ceramics
- Wear-resistant coatings (powder metal alloys and hardfacing alloys)



CBN
- Case-hardened steels
- Roller-bearing and ball-bearing steels
- Tool steels
- Other hardened steel materials with a hardness from approx. 54 HRC

Customer-specific tool solutions

1. Process analysis and tool development

Contact us at www.pferd.com and arrange an appointment with our experienced sales representatives and technical advisers.

If you already have precise ideas about the desired tool, you can provide us with a technical drawing or a dimensioned sketch and information on the desired abrasives and grit sizes.

Our employees **will analyze your application with you on-site** and develop the most economic individual tool solution for you. You will then immediately receive a quote. Three production variants are possible:

2. Production

- **Complete production**
  From design and construction, through manufacture of the tool blank (steel, stainless steel or brass) and its coating with diamond or CBN grit, to the balancing of the finished tool, PFERD offers you all the production steps from a single source. This guarantees you the highest level of quality, flexibility and on-time delivery.
- **Coating**
  Steel, stainless steel or brass blanks provided by the customer can also be coated with diamond or CBN grit. Close cooperation at an early stage is recommended.
- **Recoating**
  PFERD offers recoating of blunt tools with steel or stainless steel blanks as an economical alternative to replacement production. Tools with brass blanks cannot be recoated.

3. Use

Our flexible production and global logistics network ensure that you receive your new tool on time.

If desired, your personal sales representative and a technical adviser will set up all the process parameters together with you.

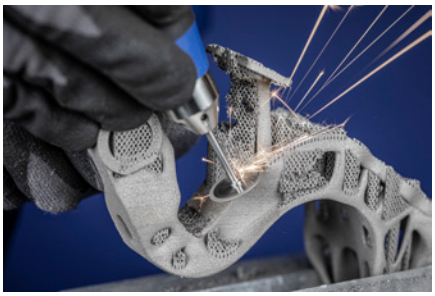
See the quality, performance and economic value of PFERD tools for yourself!

Diamond and CBN tools
Safety notes and recommended cutting speeds

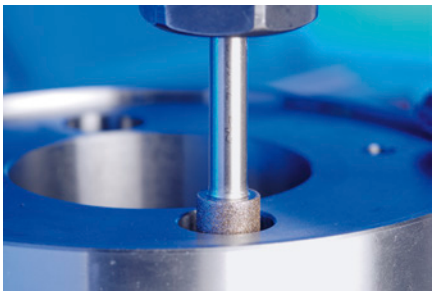
Safety notes

The operator is responsible for the grinding application, including correct tool drive use, correct handling and use of the grinding tools.

- Wear eye protection!
- Wear hearing protection!
- Wear gloves!
- Wear a dust mask!
- Follow the safety instructions!



Recommended cutting speeds



The recommended cutting speed ranges depend on the application and must not exceed the maximum permissible peripheral speed. Because of the wide range of tasks and application fields of electroplated diamond and CBN tools, as well as the large influence of the employed tool drive, it is not possible to specify a generally valid cutting speed. The recommended cutting speed ranges serve as reference values.

Generally, the following applies:

- In dry grinding, do not use diamond tools at too high a cutting speed in order to avoid thermal damage to the abrasive.
- If possible, do not use CBN tools under the cutting speeds specified below. The optimum cutting speed has a direct effect on the economic efficiency of the tools in use.
- All parameters must always be coordinated with each other within the grinding process. If the cutting speed is changed, the feed, infeed and coolant supply, among others, must be adjusted accordingly.
- Electroplated diamond and CBN tools can be used in dedicated stationary applications up to a peripheral speed of 125 m/s.

			Cutting speed [m/s] ▸ 5	10	15	20	25	30	35	40	45	...	80
Electroplated bond	Diamond	Dry grinding		8–18 m/s				30–80 m/s for CRP/GRP as well as grey and nodular cast iron					
		Wet grinding			15–25 m/s								
	CBN	Dry grinding			15–25 m/s								
		Wet grinding				20–40 m/s							
Resinoid bond	Diamond	Dry grinding			15–20 m/s								
		Wet grinding				20–30 m/s							
	CBN	Dry grinding				18–30 m/s							
		Wet grinding					25–40 m/s						
Metal bond	Diamond	Dry grinding		10–15 m/s									
		Wet grinding			15–30 m/s								
	CBN	Wet grinding					25–30 m/s						

Tool dia. [mm]	Cutting speed [m/s]											
	8	12	15	18	20	25	30	40	50	80	100	125
	Rotational speed rounded off [RPM]											
1	153,000	-	-	-	-	-	-	-	-	-	-	-
2	76,400	115,000	143,000	172,000	191,000	-	-	-	-	-	-	-
3	50,900	76,400	95,500	115,000	127,000	159,000	191,000	-	-	-	-	-
4	38,200	57,300	71,600	85,900	95,500	119,000	143,000	-	-	-	-	-
5	30,600	45,800	57,300	68,800	76,400	95,500	115,000	153,000	-	-	-	-
6	25,500	38,200	47,700	57,300	63,700	79,600	95,500	127,000	159,000	-	-	-
7	21,800	32,700	40,900	49,100	54,600	68,200	81,900	109,000	136,000	-	-	-
8	19,100	28,600	35,800	43,000	47,700	59,700	71,600	95,500	119,000	191,000	-	-
9	17,000	25,500	31,800	38,200	42,400	53,100	63,700	84,900	106,000	170,000	-	-
10	15,300	22,900	28,600	34,400	38,200	47,700	57,300	76,400	95,500	153,000	191,000	-
12	12,700	19,100	23,900	28,600	31,800	39,800	47,700	63,700	79,600	127,000	159,000	199,000
14	10,900	16,400	20,500	24,600	27,300	34,100	40,900	54,600	68,200	109,000	136,000	171,000
15	10,200	15,300	19,100	22,900	25,500	31,800	38,200	50,900	63,700	102,000	127,000	159,000
16	9,500	14,300	17,900	21,500	23,900	29,800	35,800	47,700	59,700	95,500	119,000	149,000
18	8,500	12,700	15,900	19,100	21,200	26,500	31,800	42,400	53,100	84,900	106,000	133,000
20	7,600	11,500	14,300	17,200	19,100	23,900	28,600	38,200	47,700	76,400	95,500	119,000
22	6,900	10,400	13,000	15,600	17,400	21,700	26,000	34,700	43,400	69,400	86,800	109,000
25	6,100	9,200	11,500	13,800	15,300	19,100	22,900	30,600	38,200	61,100	76,400	95,500
30	5,100	7,600	9,500	11,500	12,700	15,900	19,100	25,500	31,800	50,900	63,700	79,600
40	3,800	5,700	7,200	8,600	9,500	11,900	14,300	19,100	23,900	38,200	47,700	59,700
50	3,100	4,600	5,700	6,900	7,600	9,500	11,500	15,300	19,100	30,600	38,200	47,700
75	2,000	3,100	3,800	4,600	5,100	6,400	7,600	10,200	12,700	20,400	25,500	31,800
100	1,530	2,300	2,900	3,400	3,800	4,800	5,700	7,600	9,500	15,300	19,100	23,900
125	1,220	1,830	2,300	2,800	3,100	3,800	4,600	6,100	7,600	12,200	15,300	19,100
150	1,020	1,530	1,910	2,300	2,500	3,200	3,800	5,100	6,400	10,200	12,700	15,900
175	870	1,310	1,640	1,960	2,200	2,700	3,300	4,400	5,500	8,700	10,900	13,600
200	760	1,150	1,430	1,720	1,910	2,400	2,900	3,800	4,800	7,600	9,500	11,900
230	660	1,000	1,250	1,490	1,660	2,100	2,500	3,300	4,200	6,600	8,300	10,400
250	610	920	1,150	1,380	1,530	1,910	2,300	3,100	3,800	6,100	7,600	9,500
300	510	760	950	1,150	1,270	1,590	1,910	2,500	3,200	5,100	6,400	8,000
350	440	650	820	980	1,090	1,360	1,640	2,200	2,700	4,400	5,500	6,800
400	380	570	720	860	950	1,190	1,430	1,910	2,400	3,800	4,800	6,000
450	340	510	640	760	850	1,060	1,270	1,700	2,100	3,400	4,200	5,300
500	310	460	570	690	760	950	1,150	1,530	1,910	3,100	3,800	4,800
600	250	380	480	570	640	800	950	1,270	1,590	2,500	3,200	4,000

Refer to the table for the recommended rotational speed based on the diameter and cutting speed of your tool.
Example:
Diamond grinding point, diameter: 20 mm
Cutting speed: 25 m/s
Rotational speed rounded: 23,900 RPM



Diamond escapement files, half-round

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Half-round	4.2	1.5	140	40	D 25	1	15308143	DF 3608 D 25	-
					D 46	1	15308140	DF 3608 D 46	-
					D 91	1	15308141	DF 3608 D 91	-
					D 126	1	15308142	DF 3608 D 126	-



Diamond escapement files, crossing oval

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Crossing oval shape	3.8	1.8	140	40	D 25	1	*15309143*	DF 3609 D 25	-
					D 91	1	*15309141*	DF 3609 D 91	-
					D 126	1	*15309142*	DF 3609 D 126	-



Diamond escapement files, barrette

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Barrette shape	4	1.2	140	40	D 25	1	15310143	DF 3610 D 25	-
					D 46	1	15310140	DF 3610 D 46	-
					D 91	1	15310141	DF 3610 D 91	-
					D 126	1	15310142	DF 3610 D 126	-



Diamond escapement files, three square

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Three square	3	140	40	D 25	1	15314143	DF 3614 D 25	-
				D 46	1	15314140	DF 3614 D 46	-
				D 91	1	15314141	DF 3614 D 91	-
				D 126	1	15314142	DF 3614 D 126	-



Diamond escapement files, hand

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Hand	4	1.2	140	40	D 25	1	15317143	DF 3617 D 25	-
					D 46	1	15317140	DF 3617 D 46	-
					D 91	1	15317141	DF 3617 D 91	-
					D 126	1	15317142	DF 3617 D 126	-



Diamond escapement files, square

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Square	2	2	140	40	D 25	1	15319143	DF 3619 D 25	-
					D 46	1	15319140	DF 3619 D 46	-
					D 91	1	15319141	DF 3619 D 91	-
					D 126	1	15319142	DF 3619 D 126	-



Diamond escapement files, round

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Round	1.8	140	40	D 25	1	15321143	DF 3621 D 25	-
				D 46	1	15321140	DF 3621 D 46	-
				D 91	1	15321141	DF 3621 D 91	-
				D 126	1	15321142	DF 3621 D 126	-



Diamond escapement file sets

Diamond escapement file sets are supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.

Contents:
Contains one each of the following escapement files: DF 3608 (half-round), DF 3614 (three square), DF 3617 (hand), DF 3619 (square) and DF 3621 (round).

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Grit size		Item no.	Designation	Price/unit EUR
D 25	1	15830903	DF 3090 D 25	-
D 46	1	15830900	DF 3090 D 46	-
D 91	1	15830901	DF 3090 D 91	-
D 126	1	15830902	DF 3090 D 126	-

Diamond needle files



Diamond needle files, hand

Diamond needle files can be used generally in tool making. Diamond needle files in extra-slim design (S) are particularly suitable for work on deep-set, narrow contours.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Needle files, extra slim (S)									
Hand, ultra-slim	5.3	1.3	140	70	D 126	1	15102082	DF 4112S D 126	-
Needle files									
Hand	5.5	1.6	140	70	D 91	1	15101061	DF 4112 D 91	-
					D 126	1	15101062	DF 4112 D 126	-
					D 181	1	15101063	DF 4112 D 181	-





Diamond needle files, hand with rounded edges

Diamond needle files can be used generally in tool making.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Hand with round edges	5.5	1.6	140	70	D 91	1	15102061	DF 4112R D 91	-
					D 126	1	15102062	DF 4112R D 126	-
					D 181	1	15102063	DF 4112R D 181	-





Diamond needle files, flat

Diamond needle files can be used generally in tool making.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Flat	5.5	1.6	140	70	D 91	1	15103061	DF 4122 D 91	-
					D 126	1	15103062	DF 4122 D 126	-
					D 181	1	15103063	DF 4122 D 181	-



Diamond needle files, three square

Diamond needle files can be used generally in tool making. Diamond needle files in extra-slim design (S) are particularly suitable for work on deep-set, narrow contours.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Three square, ultra-slim	2.8	140	70	D 126	1	15104082	DF 4132S D 126	-
Three square	3.5	140	70	D 91	1	15104061	DF 4132 D 91	-
				D 126	1	15104062	DF 4132 D 126	-
				D 181	1	15104063	DF 4132 D 181	-

Diamond needle files, square

Diamond needle files can be used generally in tool making. Diamond needle files in extra-slim design (S) are particularly suitable for work on deep-set, narrow contours.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Square, ultra-slim	2.3	140	70	D 126	1	15105082	DF 4142S D 126	-
Square	2.6	140	70	D 91	1	15105061	DF 4142 D 91	-
				D 126	1	15105062	DF 4142 D 126	-
				D 181	1	15105063	DF 4142 D 181	-



Diamond needle files, half-round

Diamond needle files can be used generally in tool making.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Half-round	5.5	1.6	140	70	D 91	1	15106061	DF 4152 D 91	-
					D 126	1	15106062	DF 4152 D 126	-
					D 181	1	15106063	DF 4152 D 181	-

Diamond needle files, round

Diamond needle files can be used generally in tool making. Diamond needle files in extra-slim design (S) are particularly suitable for work on deep-set, narrow contours.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Round, ultra-slim	2.8	140	70	D 126	1	15107082	DF 4162S D 126	-
Round	3.2	140	70	D 91	1	15107061	DF 4162 D 91	-
				D 126	1	15107062	DF 4162 D 126	-
				D 181	1	15107063	DF 4162 D 181	-





Diamond needle files, knife

Diamond needle files can be used generally in tool making.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Knife shape	5	1.8	140	70	D 91	1	15108061	DF 4172 D 91	-
					D 126	1	15108062	DF 4172 D 126	-
					D 181	1	15108063	DF 4172 D 181	-





Diamond needle files, feather edge

Diamond needle files can be used generally in tool making.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Feather edge	5	2.4	140	70	D 91	1	15109061	DF 4182 D 91	-
					D 126	1	15109062	DF 4182 D 126	-





Diamond needle files, crossing oval

Diamond needle files can be used generally in tool making.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Crossing oval shape	5	2.2	140	70	D 91	1	15110061	DF 4192 D 91	-
					D 126	1	15110062	DF 4192 D 126	-





Diamond needle files, barrette

Diamond needle files can be used generally in tool making.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Barrette shape	5	2	140	70	D 91	1	15100061	DF 4102 D 91	-
					D 126	1	15100062	DF 4102 D 126	-



Diamond needle file sets

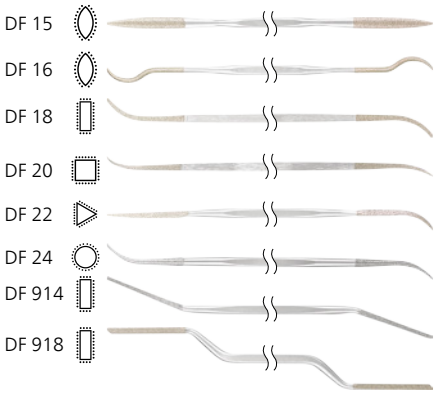
Diamond needle file sets are supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.

Contents:
The **DF 4205 needle file set** contains one each of the following needle files: DF 4112 (hand), DF 4132 (three square), DF 4142 (square), DF 4152 (half-round) and DF 4162 (round).
The **DF 4211 needle file set** contains one each of the following needle files: DF 4112 (hand), DF 4112R (hand with round edges), DF 4122 (flat), DF 4132 (three square), DF 4142 (square), DF 4152 (half-round), DF 4162 (round), DF 4172 (knife), DF 4182 (feather edge), DF 4192 (crossing oval) and DF 4102 (barrette).

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Grit size		Item no.	Designation	Price/unit EUR
D 91	1	15842051	DF 4205 D 91	-
D 126	1	15842052	DF 4205 D 126	-
D 181	1	15842053	DF 4205 D 181	-
D 91	1	15842111	DF 4211 D 91	-
D 126	1	15842112	DF 4211 D 126	-
D 181	1	15842113	DF 4211 D 181	-

Diamond riffler files



Diamond riffler files

Diamond riffler files are used for work in hard-to-reach areas and on complex geometries. The coating length is 25 mm on both sides of the files.

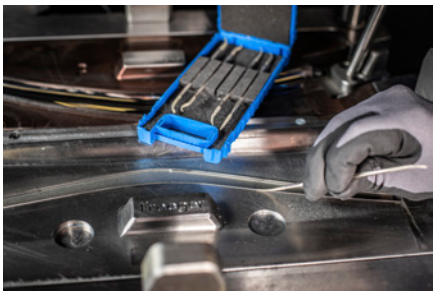
Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Double-sided coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Crossing oval shape	3.2	2	150	25	D 91	1	15215070	DF 15 D 91	-
					D 126	1	15215100	DF 15 D 126	-
	3.7	2	150	25	D 91	1	15216070	DF 16 D 91	-
					D 126	1	15216100	DF 16 D 126	-
Hand	3.1	3	150	25	D 91	1	15218070	DF 18 D 91	-
					D 126	1	15218100	DF 18 D 126	-
Square	2.5	2.5	150	25	D 91	1	15220070	DF 20 D 91	-
					D 126	1	15220100	DF 20 D 126	-
Three square	3	-	150	25	D 91	1	15222070	DF 22 D 91	-
					D 126	1	15222100	DF 22 D 126	-
Round	3	-	150	25	D 91	1	15224070	DF 24 D 91	-
					D 126	1	15224100	DF 24 D 126	-
Hand	3.8	1.6	150	25	D 91	1	15209141	DF 914 D 91	-
					D 126	1	15209142	DF 914 D 126	-
	4	2	150	25	D 91	1	15209181	DF 918 D 91	-
					D 126	1	15209182	DF 918 D 126	-



Diamond riffler file set

The diamond riffler file set is supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.



Contents:
Contains one each of the following riffler files: DF 16 (crossing oval), DF 18 (hand), DF 20 (square), DF 22 (three square), DF 24 (round).

Special features:
- Sturdy plastic box to prevent damage.

Grit size		Item no.	Designation	Price/unit EUR
D 126	1	15816242	DF 1624 D 126	-

Diamond handy files



Diamond handy files, hand

Diamond handy files have a forged shank which allows for use without an additional handle.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Hand	10.3	2.8	215	100	D 126	1	15430202	DF 2601 D 126	-
					D 181	1	15430203	DF 2601 D 181	-



Diamond handy files, half-round

Diamond handy files have a forged shank which allows for use without an additional handle.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Half-round	12.5	3.8	215	100	D 126	1	15431202	DF 2602 D 126	-
					D 181	1	15431203	DF 2602 D 181	-



Diamond handy files, three square

Diamond handy files have a forged shank which allows for use without an additional handle.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Three square	10	215	100	D 126	1	15432202	DF 2607 D 126	-
				D 181	1	15432203	DF 2607 D 181	-



Diamond handy files, square

Diamond handy files have a forged shank which allows for use without an additional handle.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Square	5.5	5.5	215	100	D 126	1	15433202	DF 2608 D 126	-
					D 181	1	15433203	DF 2608 D 181	-



Diamond handy files, round

Diamond handy files have a forged shank which allows for use without an additional handle.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Round	6.7	215	100	D 126	1	15434202	DF 2610 D 126	-
				D 181	1	15434203	DF 2610 D 181	-



Diamond handy file sets

Diamond handy file sets are supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.

Contents:
Contains one each of the following handy files: DF 2601 (hand), DF 2602 (half-round), DF 2607 (three square), DF 2608 (square) and DF 2610 (round).

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Grit size		Item no.	Designation	Price/unit EUR
D 126	1	15826272	DF 2627 D 126	-
D 181	1	15826273	DF 2627 D 181	-



Conical diamond files

The conical diamond files are used in tool-making for particularly narrow, deep-set contours. The forged shank allows for use without an additional handle.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Width A [mm]	Thickness B [mm]	Thickness B_1 [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
4	2	0.5	170	50	D 46	1	15917040	DF-K 170-4-2-0,5 D 46	-
					D 91	1	15917041	DF-K 170-4-2-0,5 D 91	-
					D 126	1	15917042	DF-K 170-4-2-0,5 D 126	-
6	2.4	0.5	170	50	D 46	1	15917060	DF-K 170-6-2,4-0,5 D 46	-
					D 91	1	15917061	DF-K 170-6-2,4-0,5 D 91	-
					D 126	1	15917062	DF-K 170-6-2,4-0,5 D 126	-
8	2.4	0.5	170	50	D 46	1	15917080	DF-K 170-8-2,4-0,5 D 46	-
					D 91	1	15917081	DF-K 170-8-2,4-0,5 D 91	-
					D 126	1	15917082	DF-K 170-8-2,4-0,5 D 126	-
10	2.5	0.5	170	50	D 46	1	15917100	DF-K 170-10-2,5-0,5 D 46	-
					D 91	1	15917101	DF-K 170-10-2,5-0,5 D 91	-
					D 126	1	15917102	DF-K 170-10-2,5-0,5 D 126	-



Diamond machinist's files, hand

Diamond machinist's files are used in many industries, such as the manufacturing of large tools. Grit size D 251 is also suitable for work on fibre-reinforced plastics (GRP/CRP). Diamond machinist's files are supplied with ergonomic file handles.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Hand	10	3.2	100	85	D 126	1	15400126	DF 1112/100 D 126	-
					D 151	1	15400151	DF 1112/100 D 151	-
					D 251	1	15400251	DF 1112/100 D 251	-
	11.2	4.2	125	110	D 126	1	15401126	DF 1112/125 D 126	-
					D 151	1	15401151	DF 1112/125 D 151	-
	13	5	150	135	D 126	1	15401192	DF 1112/150 D 126	-
					D 151	1	15401195	DF 1112/150 D 151	-
					D 251	1	15401199	DF 1112/150 D 251	-
	22.5	5.5	200	180	D 151	1	15401204	DF 1112/200 D 151	-
					D 251	1	15401205	DF 1112/200 D 251	-



Diamond machinist's files, three square

Diamond machinist's files are used in many industries, such as the manufacturing of large tools. Grit size D 251 is also suitable for work on fibre-reinforced plastics (GRP/CRP). Diamond machinist's files are supplied with ergonomic file handles.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Three square	7	100	85	D 126	1	15403126	DF 1132/100 D 126	-
				D 151	1	15403151	DF 1132/100 D 151	-
	14	200	180	D 151	1	15403204	DF 1132/200 D 151	-
				D 251	1	15403205	DF 1132/200 D 251	-



Diamond machinist's files, square

Diamond machinist's files are used in many industries, such as the manufacturing of large tools. Grit size D 251 is also suitable for work on fibre-reinforced plastics (GRP/CRP). Diamond machinist's files are supplied with ergonomic file handles.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Square	7.5	7.5	200	180	D 151	1	15404204	DF 1142/200 D 151	-



Diamond machinist's files, half-round pointed

Diamond machinist's files are used in many industries, such as the manufacturing of large tools. Grit size D 251 is also suitable for work on fibre-reinforced plastics (GRP/CRP). Diamond machinist's files are supplied with ergonomic file handles.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Half-round pointed	12	4	100	85	D 126	1	15405126	DF 1152/100 D 126	-
					D 151	1	15405151	DF 1152/100 D 151	-
	22	6.5	200	180	D 151	1	15405204	DF 1152/200 D 151	-
					D 251	1	15405205	DF 1152/200 D 251	-



Diamond machinist's files, round

Diamond machinist's files are used in many industries, such as the manufacturing of large tools. Grit size D 251 is also suitable for work on fibre-reinforced plastics (GRP/CRP). Diamond machinist's files are supplied with ergonomic file handles.

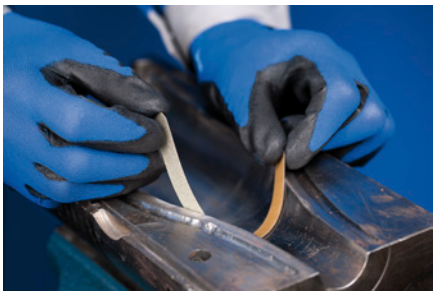
Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Total length [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
Round	8	200	180	D 151	1	15406204	DF 1162/200 D 151	-



Flexible diamond files

The flexible diamond files perfectly adapt to the workpiece surface. Due to its flexibility, they can be used in convex and concave contours with small radii.



Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating	Grit size		Item no.	Designation	Price/unit EUR
0.5	14	165	one side	D 76	5	15600076	DF-FLEX 14-165 D 76	-
				D 126	5	15600126	DF-FLEX 14-165 D 126	-
				D 181	5	15600181	DF-FLEX 14-165 D 181	-

Diamond sheets



Diamond sheets

The diamond sheets are exceptionally well-suited to work on larger surfaces. Convex and concave contours can be worked on with relatively little effort.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Width with coating [mm]	Height with coating [mm]	Total length [mm]	Coating	Grit size		Item no.	Designation	Price/unit EUR
0.7	30	170	complete	D 64	1	15600030	DBL 30-0,7-170 D 64	-
				D 126	1	15630126	DBL 30-0,7-170 D 126	-
1.3	35	350	complete	D 64	1	15635064	DBL 35-1,3-350 D 64	-
				D 126	1	15600035	DBL 35-1,3-350 D 126	-

Diamond and CBN tools – electroplated bond

Diamond files for manual filing tools



DF 5301–5309 
DF 5365–5375 

DF 5310–5314 
DF 5352–5362 

DF 5316 
DF 5380–5382 

DF 5390–5392 
DF 0103, DF 0106 

DF 5331–5347 

Diamond files for manual filing tools

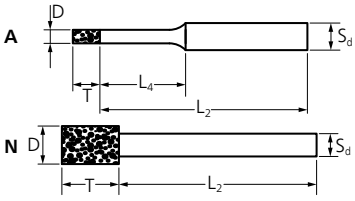
Diamond files for manual filing tools are suitable for use in machines, as well as for hand filing. The shank diameter of the diamond files is 3 mm.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Profile	Width with coating [mm]	Height with coating [mm]	Total length [mm]	Double-sided coating length [mm]	Coating	Grit size		Item no.	Designation	Price/unit EUR
Hand	3	1	50	15	one side	D 126	1	*15653032*	DF 5303 D 126	-
	4	1	50	15	one side	D 126	1	*15653052*	DF 5305 D 126	-
	5	2	50	15	one side	D 126	1	*15653072*	DF 5307 D 126	-
			60	25	one side	D 126	1	*15653092*	DF 5309 D 126	-
	2	1	50	15	both sides	D 126	1	15653102	DF 5310 D 126	-
	3	1	50	15	both sides	D 126	1	15653112	DF 5311 D 126	-
	4	1	50	15	both sides	D 126	1	15653122	DF 5312 D 126	-
	5	2	50	15	both sides	D 126	1	15653132	DF 5313 D 126	-
			60	25	both sides	D 126	1	15653142	DF 5314 D 126	-
	0.5	4	50	15	face-down	D 126	1	15653162	DF 5316 D 126	-
Round	1	-	50	15	complete	D 126	1	15653312	DF 5331 D 126	-
	2	-	50	15	complete	D 126	1	15653352	DF 5335 D 126	-
			60	25	complete	D 126	1	15653372	DF 5337 D 126	-
	3	-	50	15	complete	D 126	1	15653392	DF 5339 D 126	-
			60	25	complete	D 126	1	15653432	DF 5343 D 126	-
	4	-	50	15	complete	D 126	1	15653452	DF 5345 D 126	-
			60	25	complete	D 126	1	15653472	DF 5347 D 126	-
Crossing oval shape	2	1	50	15	complete	D 126	1	*15653522*	DF 5352 D 126	-
	3.5	2	50	15	complete	D 126	1	15653562	DF 5356 D 126	-
	6	3	60	25	complete	D 126	1	15653622	DF 5362 D 126	-
Three square	2	-	50	15	complete	D 126	1	15653652	DF 5365 D 126	-
	3.5	-	50	15	complete	D 126	1	15653672	DF 5367 D 126	-
			60	25	complete	D 126	1	15653712	DF 5371 D 126	-
	4.5	-	60	25	complete	D 126	1	15653752	DF 5375 D 126	-
Knife shape	2	6	50	15	complete	D 126	1	*15653822*	DF 5382 D 126	-
Square	1.5	1.5	50	15	complete	D 126	1	15653902	DF 5390 D 126	-
	3	3	50	15	complete	D 126	1	15653912	DF 5391 D 126	-
	4	4	50	15	complete	D 126	1	15653922	DF 5392 D 126	-
Flat conical	3.3	1	55	16	complete	D 126	1	15601032	DF 0103 D 126	-
	6.3	1	55	16	complete	D 126	1	15601062	DF 0106/55 D 126	-
			73	16	complete	D 126	1	15601064	DF 0106/73 D 126	-





Cylindrical shape ZY

The cylindrical shape ZY is suitable for grinding bores, radii and contours in stationary or manual applications. Grinding points with a diameter of 8 mm or more have a recess on the front surface.



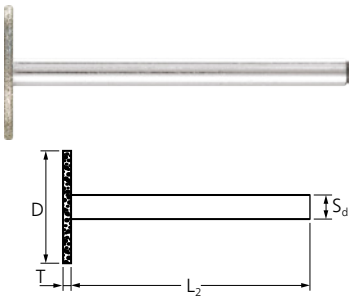
Special features:

- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm									
0.5	2	3	38	5	D 64	5	36000506	DZY-A 0,5-2/3 D 64	-
0.8	2	3	38	5	D 64	5	36000806	DZY-A 0,8-2/3 D 64	-
1	4	3	36	9	D 64	5	36001006	DZY-A 1,0-4/3 D 64	-
					D 91	5	36001009	DZY-A 1,0-4/3 D 91	-
					D 126	5	36001010	DZY-A 1,0-4/3 D 126	-
1.2	4	3	36	9	D 64	5	36001206	DZY-A 1,2-4/3 D 64	-
					D 91	5	36001209	DZY-A 1,2-4/3 D 91	-
					D 126	5	36001210	DZY-A 1,2-4/3 D 126	-
1.4	4	3	36	9	D 64	5	36001406	DZY-A 1,4-4/3 D 64	-
					D 91	5	36001409	DZY-A 1,4-4/3 D 91	-
					D 126	5	36001410	DZY-A 1,4-4/3 D 126	-
1.6	4	3	36	10	D 91	5	36001609	DZY-A 1,6-4/3 D 91	-
					D 126	5	36001610	DZY-A 1,6-4/3 D 126	-
1.8	4	3	36	10	D 91	5	36001809	DZY-A 1,8-4/3 D 91	-
					D 126	5	36001810	DZY-A 1,8-4/3 D126	-
2	4	3	36	10	D 64	5	36002006	DZY-A 2,0-4/3 D 64	-
					D 91	5	36002009	DZY-A 2,0-4/3 D 91	-
					D 126	5	36002010	DZY-A 2,0-4/3 D 126	-
2.2	4	3	36	14	D 91	5	*36002209*	DZY-A 2,2-4/3 D 91	-
2.4	4	3	36	14	D 91	5	36002409	DZY-A 2,4-4/3 D 91	-
					D 126	5	36002410	DZY-A 2,4-4/3 D 126	-
2.6	4	3	36	14	D 91	5	36002609	DZY-A 2,6-4/3 D 91	-
					D 126	5	36002610	DZY-A 2,6-4/3 D 126	-
2.8	4	3	36	14	D 126	5	*36002810*	DZY-A 2,8-4/3 D 126	-
3	4	3	36	19	D 64	5	36003006	DZY-A 3,0-4/3 D 64	-
					D 91	5	36003009	DZY-A 3,0-4/3 D 91	-
					D 126	5	36003010	DZY-A 3,0-4/3 D 126	-
3.5	5	3	45	-	D 91	5	36003509	DZY-N 3,5-5/3 D 91	-
					D 126	5	36003510	DZY-N 3,5-5/3 D 126	-
4	5	3	45	-	D 91	5	36004009	DZY-N 4,0-5/3 D 91	-
					D 126	5	36004010	DZY-N 4,0-5/3 D 126	-
					D 181	5	*36004018*	DZY-N 4,0-5/3 D 181	-
4.5	5	3	45	-	D 91	5	36004509	DZY-N 4,5-5/3 D 91	-
					D 126	5	36004510	DZY-N 4,5-5/3 D 126	-
5	5	3	45	-	D 91	5	36005009	DZY-N 5,0-5/3 D 91	-
					D 126	5	36005010	DZY-N 5,0-5/3 D 126	-
5.5	6	3	44	-	D 91	5	36005509	DZY-N 5,5-6/3 D 91	-
					D 126	5	36005510	DZY-N 5,5-6/3 D 126	-
					D 181	5	36005518	DZY-N 5,5-6/3 D 181	-

Continued on next page

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm									
6	6	6	54	19	D 91	1	36006009	DZY-A 6,0-6/6 D 91	-
					D 126	1	36006010	DZY-A 6,0-6/6 D 126	-
					D 181	1	36006018	DZY-A 6,0-6/6 D 181	-
7	8	6	52	-	D 126	1	36007010	DZY-N 7,0-8/6 D 126	-
8	8	6	52	-	D 91	1	36008009	DZY-N 8,0-8/6 D 91	-
					D 126	1	36008010	DZY-N 8,0-8/6 D 126	-
					D 181	1	36008018	DZY-N 8,0-8/6 D 181	-
9	8	6	52	-	D 126	1	36009010	DZY-N 9,0-8/6 D 126	-
10	8	6	52	-	D 91	1	36010009	DZY-N 10,0-8/6 D 91	-
					D 126	1	36010010	DZY-N 10,0-8/6 D 126	-
					D 181	1	36010018	DZY-N 10,0-8/6 D 181	-
12	8	6	52	-	D 91	1	36012009	DZY-N 12,0-8/6 D 91	-
					D 126	1	36012010	DZY-N 12,0-8/6 D 126	-
					D 181	1	36012018	DZY-N 12,0-8/6 D 181	-
15	10	6	50	-	D 126	1	36015010	DZY-N 15,0-10/6 D 126	-
18	10	6	50	-	D 126	1	36018010	DZY-N 18,0-10/6 D 126	-
20	10	6	50	-	D 126	1	36020010	DZY-N 20,0-10/6 D 126	-
Shank diameter 10 mm									
15	10	10	110	-	D 126	1	36015110	DZY-N 15,0-10/10 D 126	-
Shank diameter 12 mm									
25	10	12	110	-	D 126	1	36025110	DZY-N 25,0-10/12 D 126	-



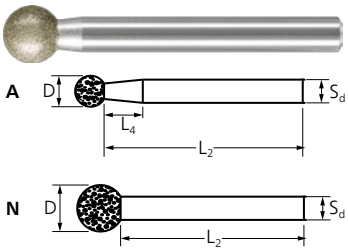
Special shape ZY

The special shape ZY is suitable for grinding slits and grooves in hard-to-reach areas.



Special features:
- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm								
8	0.5	3	35	D 64	1	36050806	DZY-N 8,0-0,5/3 D 64	-
14	0.5	3	35	D 64	1	36051406	DZY-N 14,0-0,5/3 D 64	-
	1	3	35	D 64	1	36051416	DZY-N 14,0-1,0/3 D 64	-
				D 91	1	36051419	DZY-N 14,0-1,0/3 D 91	-



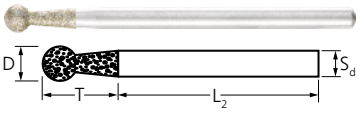
Ball shape KU

The ball shape KU is often used in manual applications. This shape is well-suited for engraving, contour grinding and deburring tasks.



Special features:
- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

D [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm								
1	3	44	10	D 64	5	36201006	DKU-A 1,0/3 D 64	-
				D 91	5	36201009	DKU-A 1,0/3 D 91	-
				D 126	5	36201010	DKU-A 1,0/3 D 126	-
				D 181	5	36201018	DKU-A 1,0/3 D 181	-
2	3	43	8	D 64	5	36202006	DKU-A 2,0/3 D 64	-
				D 91	5	36202009	DKU-A 2,0/3 D 91	-
				D 126	5	36202010	DKU-A 2,0/3 D 126	-
				D 181	5	36202018	DKU-A 2,0/3 D 181	-
3	3	42	6	D 64	5	36203006	DKU-A 3,0/3 D 64	-
				D 91	5	36203009	DKU-A 3,0/3 D 91	-
				D 126	5	36203010	DKU-A 3,0/3 D 126	-
				D 181	5	36203018	DKU-A 3,0/3 D 181	-
4	3	41	5	D 91	5	36204009	DKU-A 4,0/3 D 91	-
				D 126	5	36204010	DKU-A 4,0/3 D 126	-
				D 181	5	36204018	DKU-A 4,0/3 D 181	-
5	3	40	2	D 91	5	36205009	DKU-A 5,0/3 D 91	-
				D 126	5	36205010	DKU-A 5,0/3 D 126	-
				D 181	5	36205018	DKU-A 5,0/3 D 181	-
6	3	39	-	D 91	1	36206009	DKU-N 6,0/3 D 91	-
				D 126	1	36206010	DKU-N 6,0/3 D 126	-
				D 181	1	36206018	DKU-N 6,0/3 D 181	-
Shank diameter 6 mm								
8	6	52	10	D 126	1	36208010	DKU-A 8,0/6 D 126	-
10	6	50	5	D 126	1	36210010	DKU-A 10,0/6 D 126	-
12	6	48	-	D 126	1	36212010	DKU-N 12,0/6 D 126	-

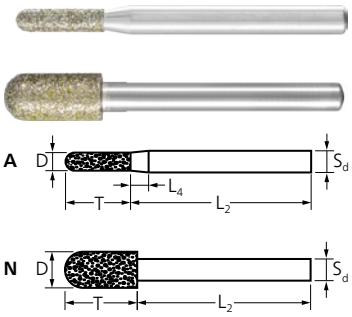


Special shape KU

Often used for deburring plastic profiles in manual applications. This shape is also coated with abrasive grain under the ball-shaped part of the grinding point on the stepped shank. The special shape provides optimum results when machining profiles.

Special features:
- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm								
3	10	3	40	D 181	1	36223018	DKU 3,0-10/3 D 181	-
4	10	3	40	D 181	1	36224018	DKU 4,0-10/3 D 181	-

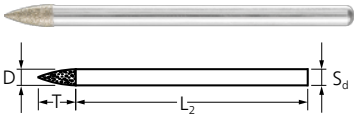


Cylindrical shape with radius end WR

The cylindrical shape with radius end WR is best suited to manual applications and can be used for a wide variety of deburring and grinding tasks. Coarse grit size D 357 is exceptionally well-suited for use on fibre-reinforced plastics (GRP/CRP).

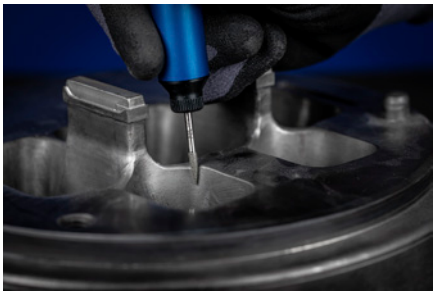
Special features:
- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm									
5	18	6	50	5	D 126	1	36425026	DWR-A 5,0-18/6 D 126	-
					D 357	1	36425035	DWR-A 5,0-18/6 D 357	-
6	18	6	50	5	D 126	1	36426026	DWR-A 6,0-18/6 D 126	-
					D 357	1	36426035	DWR-A 6,0-18/6 D 357	-
10	20	6	50	-	D 126	1	36431026	DWR-N 10,0-20/6 D 126	-
					D 357	1	36431057	DWR-N 10,0-20/6 D 357	-



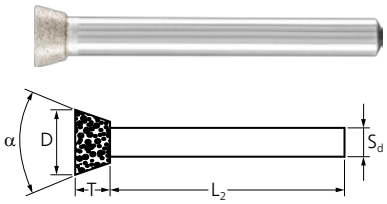
Pointed tree shape SPG

The pointed tree shape SPG is exceptionally well-suited to machining small holes or bores as well as for engraving work.



Special features:
- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm								
3	7	3	43	D 126	1	36443010	DSPG 3,0-7/3 D 126	-
	13	3	37	D 126	1	36443020	DSPG 3,0-13/3 D 126	-
Shank diameter 6 mm								
6	18	6	50	D 126	1	36443030	DSPG 6,0-18/6 D 126	-

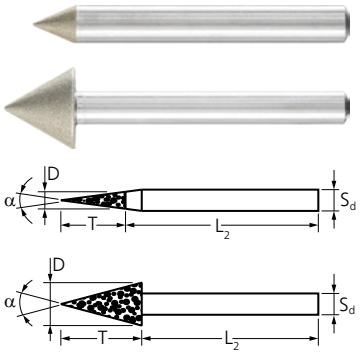


Cup shape KT

The cup shape KT is ideal for work on profiles, planar surfaces and ledges, without the cylindrical surface being damaged.

Special features:
- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

D [mm]	T [mm]	α [°]	S_d [mm]	L_2 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm									
3	7	8	3	43	D 126	1	36453010	DKT 3,0-8°/3 D 126	-
Shank diameter 6 mm									
10	5	30	6	50	D 126	1	36461010	DKT 10,0-30°/6 D 126	-



Conical pointed shape SK

The conical pointed shape SK is exceptionally well-suited to deburring bores, regrinding centring holes and chamfering.



Special features:
- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

D [mm]	T [mm]	α [°]	S_d [mm]	L_2 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm									
6	45	7	6	50	D 64	1	36476007	DSK 6,0-7°/6 D 64	-
					D 126	1	36476026	DSK 6,0-7°/6 D 126	-
	26	12	6	50	D 64	1	36476012	DSK 6,0-12°/6 D 64	-
					D 126	1	36476120	DSK 6,0-12°/6 D 126	-
	21	15	6	50	D 64	1	36476015	DSK 6,0-15°/6 D 64	-
					D 126	1	36476150	DSK 6,0-15°/6 D 126	-
	11	30	6	50	D 64	1	36476006	DSK 6,0-30°/6 D 64	-
					D 126	1	36476030	DSK 6,0-30°/6 D 126	-
	5	60	6	50	D 64	1	36476060	DSK 6,0-60°/6 D 64	-
					D 126	1	36470126	DSK 6,0-60°/6 D 126	-
10	9	60	6	50	D 64	1	36476104	DSK 10,0-60°/6 D 64	-
					D 126	1	36476106	DSK 10,0-60°/6 D 126	-
	5	90	6	50	D 64	1	36476124	DSK 10,0-90°/6 D 64	-
					D 126	1	36476126	DSK 10,0-90°/6 D 126	-
15	13	60	6	50	D 64	1	36476144	DSK 15,0-60°/6 D 64	-
					D 126	1	36476146	DSK 15,0-60°/6 D 126	-
	7.5	90	6	50	D 64	1	36476164	DSK 15,0-90°/6 D 64	-
					D 126	1	36476166	DSK 15,0-90°/6 D 126	-



Diamond grinding point set

The set contains 10 diamond grinding points with grit size D 126 in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

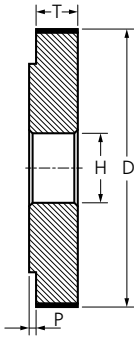
Contents:
Contains one each of the following diamond grinding points:
DZY-A 1.0-4/3 D 126,
DZY-A 2.0-4/3 D 126, DZY-N 4.0-5/3 D 126,
DZY-N 5.0-5/3 D 126, DZY-N 14.0-1.1/3 D 126,
DKU-A 2.0/3 D 126, DKU-A 4.0/3 D 126,
DKU-N 6.0/3 D 126, DSPG 3.0-7/3 D 126 and
DKT 3.0-8°/3 D 126.

Special features:
- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

S_d [mm]	Grit size		Item no.	Designation	Price/unit EUR
3	D 126	1	36476067	D-Set/3 D126	-

Diamond grinding discs





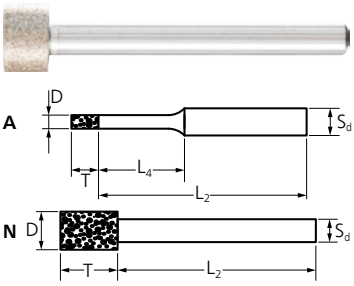
Grinding discs 1A1

Diamond grinding discs are intended for use on stationary machines. As from an outer diameter of 18 mm: with additional centring shoulder which allows them to be mounted and aligned on the machine spindle. Combined with a stable mandrel, these tools are ideal for work in deep-set or long bores.



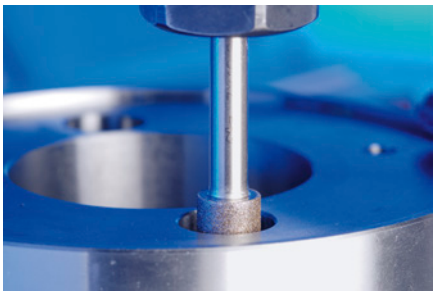
Special features:
- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

D [mm]	T [mm]	H [mm]	P [mm]	Grit size		Item no.	Designation	Price/unit EUR
18	10	8	2	D 151	1	36618015	D1A1 18-10-8 D 151	-
20	10	8	2	D 151	1	36622015	D1A1 20-10-8 D 151	-
30	10	10	2	D 151	1	36623015	D1A1 30-10-10 D 151	-
40	10	10	2	D 151	1	36624015	D1A1 40-10-10 D 151	-
50	10	10	2	D 151	1	36625015	D1A1 50-10-10 D 151	-



Cylindrical shape ZY

The cylindrical shape ZY is suitable for grinding bores, radii and contours in stationary or manual applications. Grinding points with a diameter of 8 mm or more have a recess on the front surface.



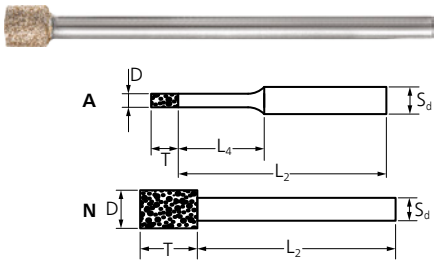
Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm									
0.5	2	3	38	5	B 64	5	36100506	BZY-A 0,5-2/3 B 64	-
0.8	2	3	38	5	B 64	5	36100806	BZY-A 0,8-2/3 B 64	-
1	4	3	36	9	B 64	5	36101006	BZY-A 1,0-4/3 B 64	-
					B 126	5	36101010	BZY-A 1,0-4/3 B 126	-
1.2	4	3	36	9	B 64	5	36101206	BZY-A 1,2-4/3 B 64	-
					B 126	5	36101210	BZY-A 1,2-4/3 B126	-
1.4	4	3	36	9	B 126	5	36101410	BZY-A 1,4-4/3 B 126	-
1.6	4	3	36	10	B 64	5	36101606	BZY-A 1,6-4/3 B 64	-
					B 126	5	36101610	BZY-A 1,6-4/3 B 126	-
1.8	4	3	36	10	B 126	5	36101810	BZY-A 1,8-4/3 B 126	-
2	4	3	36	10	B 64	5	36102006	BZY-A 2,0-4/3 B 64	-
					B 126	5	36102010	BZY-A 2,0-4/3 B 126	-
2.2	4	3	36	14	B 126	5	36102210	BZY-A 2,2-4/3 B 126	-
2.4	4	3	36	14	B 64	5	36102406	BZY-A 2,4-4/3 B 64	-
					B 126	5	36102410	BZY-A 2,4-4/3 B 126	-
2.6	4	3	36	14	B 64	5	36102606	BZY-A 2,6-4/3 B 64	-
					B 126	5	36102610	BZY-A 2,6-4/3 B 126	-
2.8	4	3	36	14	B 126	5	36102810	BZY-A 2,8-4/3 B 126	-
3	4	3	36	19	B 64	5	36103006	BZY-A 3,0-4/3 B 64	-
					B 126	5	36103010	BZY-A 3,0-4/3 B 126	-
3.5	5	3	45	-	B 64	5	36103506	BZY-N 3,5-5/3 B 64	-
					B 126	5	36103510	BZY-N 3,5-5/3 B 126	-
4	5	3	45	-	B 64	5	36104006	BZY-N 4,0-5/3 B 64	-
					B 126	5	36104010	BZY-N 4,0-5/3 B 126	-
4.5	5	3	45	-	B 126	5	36104510	BZY-N 4,5-5/3 B 126	-
5	5	3	45	-	B 64	5	36105006	BZY-N 5,0-5/3 B 64	-
					B 126	5	36105010	BZY-N 5,0-5/3 B 126	-
5.5	6	3	44	-	B 126	5	36105510	BZY-N 5,5-6/3 B 126	-
Shank diameter 6 mm									
6	6	6	54	19	B 126	1	36106010	BZY-A 6,0-6/6 B 126	-
7	8	6	52	-	B 126	1	36107010	BZY-N 7,0-8/6 B 126	-
8	8	6	52	-	B 126	1	36108010	BZY-N 8,0-8/6 B 126	-
9	8	6	52	-	B 126	1	36109010	BZY-N 9,0-8/6 B 126	-
10	8	6	52	-	B 126	1	36110010	BZY-N 10,0-8/6 B 126	-
12	8	6	52	-	B 126	1	36112010	BZY-N 12,0-8/6 B 126	-
13	10	6	50	-	B 126	1	36113010	BZY-N 13,0-10/6 B 126	-
14	10	6	50	-	B 126	1	36114010	BZY-N 14,0-10/6 B 126	-
15	10	6	50	-	B 126	1	36115010	BZY-N 15,0-10/6 B 126	-
18	10	6	50	-	B 126	1	36118010	BZY-N 18,0-10/6 B 126	-

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D [mm]	T [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size		Item no.	Designation	Price/unit EUR
20	10	6	50	-	B 126	1	36120010	BZY-N 20,0-10/6 B 126	-
Shank diameter 10 mm									
15	10	10	110	-	B 126	1	36115110	BZY-N 15,0-10/10 B 126	-

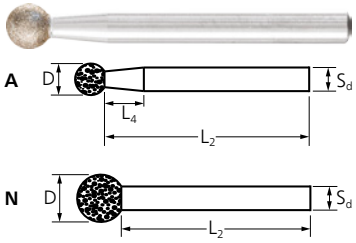


Cylindrical points with tungsten carbide shank

Cylindrical mounted points with tungsten carbide shanks are used for internal grinding on stationary machines. In internal grinding applications, tools with a tungsten carbide shank offer higher stock removal rates, superior surfaces and more precise shape and position tolerances.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm									
4	5	3	43	-	B 151	1	36154515	BZY-N 4,0-5/3 HM B 151	-
Shank diameter 6 mm									
6	6	6	98	19	B 151	1	36136615	BZY-A 6,0-6/6 HM B 151	-
8	8	6	98	-	B 151	1	36158815	BZY-N 8,0-8/6 HM B 151	-
12	8	6	98	-	B 151	1	36161151	BZY-N 12,0-8/6 HM B 151	-

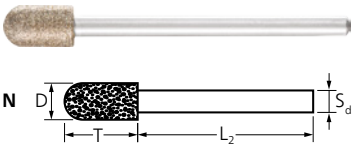


Ball shape KU

Spherical shape CBN grinding points are often used for engraving, contours and deburring work.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

D [mm]	S_d [mm]	L_2 [mm]	L_4 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm								
1	3	44	10	B 64	5	*36301006*	BKU-A 1,0/3 B 64	-
				B 126	5	36301010	BKU-A 1,0/3 B 126	-
2	3	43	8	B 126	5	36302010	BKU-A 2,0/3 B 126	-
3	3	42	6	B 64	5	36303006	BKU-A 3,0/3 B 64	-
				B 126	5	36303010	BKU-A 3,0/3 B 126	-
4	3	41	5	B 126	5	36304010	BKU-A 4,0/3 B 126	-
5	3	40	2	B 126	5	36305010	BKU-A 5,0/3 B 126	-
6	3	39	-	B 126	1	36306010	BKU-N 6,0/3 B 126	-
Shank diameter 6 mm								
8	6	52	10	B 126	1	36308010	BKU-A 8,0/6 B 126	-
10	6	50	5	B 126	1	36310010	BKU-A 10,0/6 B 126	-
12	6	48	-	B 126	1	36312010	BKU-N 12,0/6 B 126	-

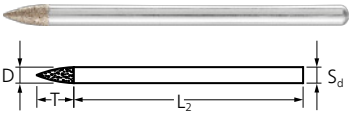


Cylindrical shape with radius end WR

The cylindrical shape with radius end WR is best suited to manual applications and can be used for a wide variety of deburring and grinding tasks.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm								
5	10	3	40	B 126	1	36525010	BWR-N 5,0-10/3 B 126	-
6	10	3	40	B 126	1	36526010	BWR-N 6,0-10/3 B 126	-

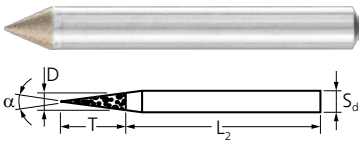


Pointed tree shape SPG

The pointed tree shape SPG is exceptionally well-suited to machining small holes or bores as well as for engraving work.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 3 mm								
3	7	3	43	B 126	1	36543010	BSPG 3,0-7/3 B 126	-
Shank diameter 6 mm								
6	18	6	50	B 126	1	36546010	BSPG 6,0-18/6 B 126	-



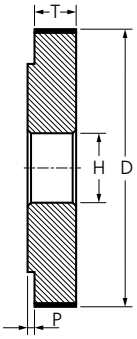
Conical pointed shape SK

The conical pointed shape SK is exceptionally well-suited to deburring bores, regrinding centring holes and chamfering.

Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

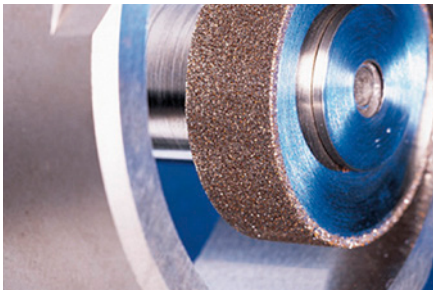
D [mm]	T [mm]	α [°]	S_d [mm]	L_2 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Shank diameter 6 mm									
6	7	45	6	50	B 64	1	36576045	BSK 6,0-45°/6 B 64	-
	5	60	6	50	B 64	1	36576060	BSK 6,0-60°/6 B 64	-





Grinding discs 1A1

CBN grinding discs are intended for use on stationary machines. They have an additional centring shoulder which allows them to be accurately mounted and aligned on the machine spindle. Combined with a stable mandrel, these tools are ideal for work in deep-set or long bores.



Special features:
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

D [mm]	T [mm]	H [mm]	P [mm]	Grit size		Item no.	Designation	Price/unit EUR
20	10	8	2	B 151	1	36722015	B1A1 20-10-8 B 151	-
30	10	10	2	B 151	1	36723015	B1A1 30-10-10 B 151	-
40	10	10	2	B 151	1	36724015	B1A1 40-10-10 B 151	-
50	10	10	2	B 151	1	36725015	B1A1 50-10-10 B 151	-



Shape D (continuous coating)

The continuous coating is particularly suitable for very fine separating cuts.



Shape G (with protective segments)

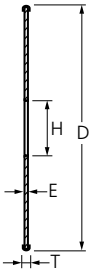
The continuous coating with protective segments facilitates optimum free-cutting.



Shape S 2 (segmented)

The segmentation allows particularly good chip removal.





Diamond cut-off wheels

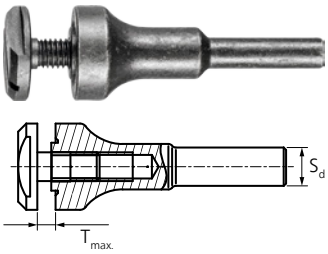
Electroplated diamond cut-off wheels are used with grit sizes from D 64 to D 427 for cutting hard materials such as tungsten carbide or ceramics and fibre-reinforced plastics (GRP/CRP).



Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

D [mm]	T [mm]	E [mm]	H [mm]	Shape	Protective seg. per side	Grit size		Item no.	Designation	Price/ unit EUR
Hard materials, e.g. glass, ceramic or tungsten carbide										
22	0.5	0.3	1.7	D	no	D 64	1	68402206	D1A1R 22-0,5-1,7 D 64 GAD	-
30	1	0.6	10	D	no	D 151	1	68403015	D1A1R 30-1-10 D 151 GAD	-
40	1	0.6	10	D	no	D 151	1	68404015	D1A1R 40-1-10 D 151 GAD	-
50	1.4	1	10	D	no	D 151	1	68405025	D1A1R 50-1,4-10 D 151 GAD	-
			6	D	no	D 151	1	68405015	D1A1R 50-1,4-6 D 151 GAD	-
125	1.4	1	20	D	no	D 151	1	68412115	D1A1R 125-1,4-20 D 151 GAD	-
Fibre-reinforced plastics (GRP and CRP) as well as pre-sintered and green ceramic										
50	2	1	10	D	no	D 357	1	68405164	D1A1R 50-2-10 D 357 GAD	-
				G	3	D 357	1	68405163	D1A1R 50-2-10 D 357 GAG	-
			6	D	no	D 357	1	68405064	D1A1R 50-2-6 D 357 GAD	-
				G	3	D 357	1	68405063	D1A1R 50-2-6 D 357 GAG	-
75	2	1	10	D	no	D 357	1	68407503	D1A1R 75-2-10 D 357 GAD	-
				G	3	D 357	1	68407103	D1A1R 75-2-10 D 357 GAG	-
100	2	1	22.23	D	no	D 427	1	68410237	D1A1R 100-2-22,23 D 427 GAD	-
				G	3	D 427	1	68410238	D1A1R 100-2-22,23 D 427 GAG	-
115	2	1	22.23	D	no	D 427	1	68411237	D1A1R 115-2-22,23 D 427 GAD	-
				G	3	D 427	1	68411238	D1A1R 115-2-22,23 D 427 GAG	-
125	2	1	22.23	D	no	D 427	1	68412237	D1A1R 125-2-22,23 D 427 GAD	-
				G	3	D 427	1	68412238	D1A1R 125-2-22,23 D 427 GAG	-
178	2	1	22.23	D	no	D 427	1	68417838	D1A1R 178-2-22,23 D 427 GAD	-
230	2.5	1.5	22.23	S2	no	D 427	1	68423227	D1A1RSS 230-2,5-22,23 D 427 GAS2	-
250	2.5	1.5	22.23	S2	no	D 427	1	68425037	D1A1RSS 250-2,5-22,23 D 427 GAS2	-
300	2.5	1.5	30	S2	no	D 427	1	68430037	D1A1RSS 300-2,5-30,0 D 427 GAS2	-
350	2.8	1.8	30	S2	no	D 427	1	68435037	D1A1RSS 350-2,8-30,0 D 427 GAS2	-
400	3.8	2.8	30	S2	no	D 427	1	68440137	D1A1RSS 400-3,8-30,0 D 427 GAS2	-

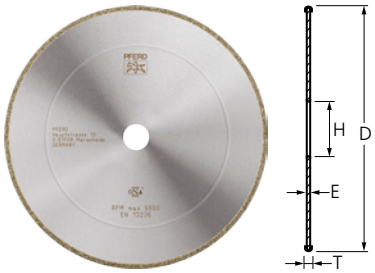


Arbor for diamond cut-off wheels

Accessory for mounting diamond cut-off wheels up to and including a diameter of 75 mm.

S_d [mm]	Suitable for hole diameter [mm]	$T_{max.}$ [mm]	Max. RPM [mm]		Item no.	Designation	Price/unit EUR
3	1.7	1	28,000	1	68400317	BO 3/1,7 1	-
6	10	3	30,000	1	33512040	BO 6/10 3	-
8	10	3	30,000	1	33513900	BO 8/10 3	-

Diamond cut-off wheels and grinding points for foundries



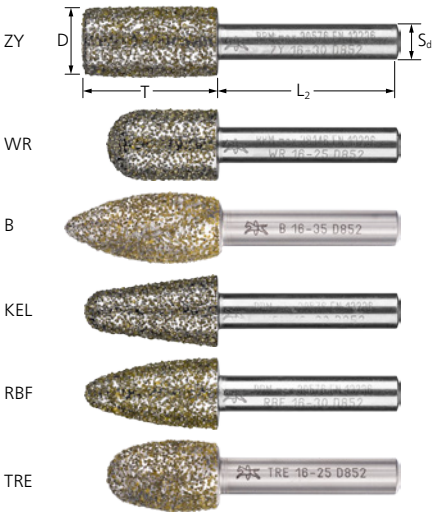
Diamond cut-off wheels for grey and nodular cast iron

Electroplated diamond cut-off wheels with grit size D 852 are exceptionally well-suited to machining grey cast iron and nodular cast iron (GG and GGG or GJL and GJS) as well as for use in robots. They have a very long tool life.



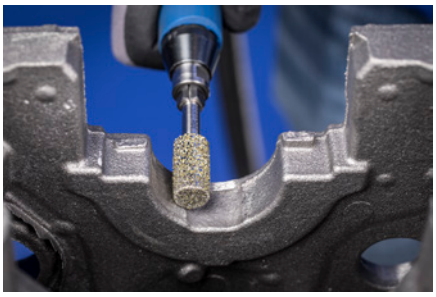
Special features:
- Ideal for work on deep areas because of the constant tool diameter.
- Easy and quick elimination of metal contamination.
- Minimized dust formation due to the monolayer coating and coarse chips.

D [mm]	T [mm]	E [mm]	H [mm]	Shape	Protective seg. per side	Grit size		Item no.	Designation	Price/unit EUR
Grey and nodular cast iron (GG and GGG or GJL and GJS)										
230	3.8	1.8	22.23	D	no	D 852	1	68423228	D1A1R 230-3,8-22,23 D 852 GAD	-
400	4.5	2.5	40	D	no	D 852	1	68440037	D1A1R 400-4,5-40,0 D 852 GAD	-



Diamond grinding points for grey and nodular cast iron

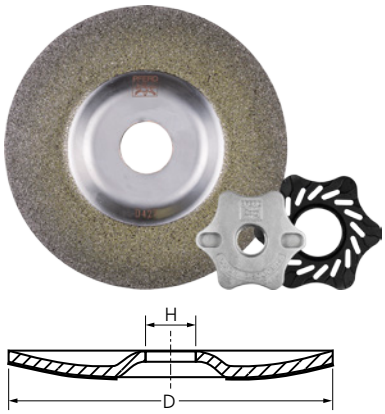
Diamond grinding points with grit size D 852 are exceptionally well-suited to machining grey cast iron and nodular cast iron (GG and GGG or GJL and GJS). They have an outstanding tool life.



Special features:

- Fast, aggressive grinding with maximum stock removal rate.
- Easy and quick elimination of metal contamination thanks to diamond as a super-hard abrasive.
- Lower dust load due to the dimensional stability of the grinding tool (no tool wear).

D [mm]	T [mm]	S_d [mm]	L_2 [mm]	Grit size		Item no.	Designation	Price/unit EUR
Cylindrical shape ZY								
16	30	8	40	D 852	1	36015019	DZY-N 16-30/8 D 852	-
20	30	8	40	D 852	1	36015020	DZY-N 20-30/8 D 852	-
24	30	8	40	D 852	1	36015022	DZY-N 24-30/8 D 852	-
45	6.5	8	40	D 852	1	36803965	DZY-N 45-6,5/8 D 852	-
Cylindrical shape with radius end WR								
10	20	6	40	D 852	1	36476061	DWR-N 10-20/6 D 852	-
12	25	6	40	D 852	1	36476062	DWR-N 12-25/6 D 852	-
16	25	8	40	D 852	1	36476063	DWR-N 16-25/8 D 852	-
20	30	8	40	D 852	1	36476068	DWR-N 20-30/8 D 852	-
24	30	8	40	D 852	1	36476069	DWR-N 24-30/8 D 852	-
Flame-shaped B								
16	35	8	40	D 852	1	36803966	DB-N 16-35/8 D 852	-
Conical shape KEL								
12	25	6	40	D 852	1	36476071	DKEL-N 12-25/6 D 852	-
16	30	8	40	D 852	1	36476064	DKEL-N 16-30/8 D 852	-
20	30	8	40	D 852	1	36476070	DKEL-N 20-30/8 D 852	-
24	30	8	40	D 852	1	36476072	DKEL-N 24-30/8 D 852	-
Tree shape with radius end RBF								
12	25	6	40	D 852	1	36476065	DRBF-N 12-25/6 D 852	-
16	30	8	40	D 852	1	36476066	DRBF-N 16-30/8 D 852	-
20	30	8	40	D 852	1	36476073	DRBF-N 20-30/8 D 852	-
Oval shape TRE								
16	25	8	40	D 852	1	36803967	DTRE-N 16-25/8 D852	-



CC-GRIND SOLID DIAMOND

The CC-GRIND SOLID DIAMOND has been specially developed for applications on hard materials which cannot be machined with conventional tools made of aluminium oxide or silicon carbide.



Special features:
- Fast, aggressive grinding with maximum stock removal rate.
- Easy and quick elimination of metal contamination thanks to diamond as a super-hard abrasive.
- Lower dust load due to the dimensional stability of the grinding tool (no tool wear).

D [mm]	H [mm]	Grit size	Max. RPM		Item no.	Designation	Price/unit EUR
Integrated clamping flange set SFS CC-GRIND SOLID 100 M10							
100	16	D 427	15,300	1	*36610042*	CC-GRIND SOLID DIAMOND 100-16.0 D 427	-
		D 852	15,300	1	*36610085*	CC-GRIND SOLID DIAMOND 100-16.0 D 852	-
Integrated clamping flange set SFS CC-GRIND SOLID/FLEX 115/125 M14							
115	22.23	D 427	13,300	1	36611542	CC-GRIND SOLID DIAMOND 115-22.23 D 427	-
		D 852	13,300	1	36611585	CC-GRIND SOLID DIAMOND 115-22.23 D 852	-
125	22.23	D 427	12,200	1	36612542	CC-GRIND SOLID DIAMOND 125-22.23 D 427	-
		D 852	12,200	1	36612585	CC-GRIND SOLID DIAMOND 125-22.23 D 852	-

Diamond sabre saw blades



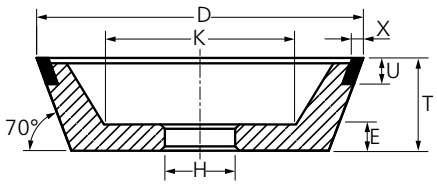
Diamond sabre saw blades

Diamond sabre saw blades are suitable for work on fibre-reinforced plastics (GRP/CRP). Flexible cutting line for producing a wide range of geometries, plus a long tool life. Suitable for cutting out holes and for cutting.

Total length [mm]	Total width [mm]	Coating length [mm]	Grit size		Item no.	Designation	Price/unit EUR
75	2	50	D 357	1	15600571	DIA-SSB 50/75 D 357	-
100	2	75	D 357	1	15600791	DIA-SSB 75/100 D 357	-

In addition to the standard resinoid-bonded diamond and CBN grinding tools available from stock, customer-specific tool solutions are also possible. In your request, please specify the material to be worked, the application and the tool drive.

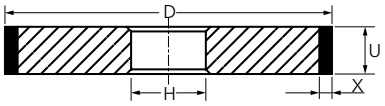
In the following tables, all the available shapes and dimensions are shown. For dimensions separated by slashes, please select the desired dimension.



Explanation of the abbreviations

α = Mount angle
D [mm] = Outer diameter
E [mm] = Bottom thickness
H [mm] = Bore diameter
J [mm] = Smaller diameter
K [mm] = Internal diameter
L_2 [mm] = Shank length
L_4 [mm] = Reduced diameter length
R [mm] = Radius
S_1 [mm] = Reduced diameter
S_d [mm] = Shank diameter
T [mm] = Total width
U [mm] = Coating width
W [mm] = Mounted point width
X [mm] = Usable abrasive coating thickness

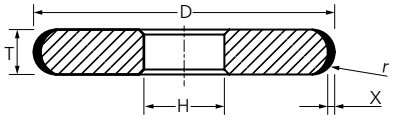
Shape 1A1



D [mm]	U [mm]	X [mm]	H [mm]
50	4 / 6 / 8 / 10 / 12	3 / 4 / 5 / 6	Please specify
75	6 / 8 / 10 / 12	3 / 4 / 5 / 6	
100	6 / 8 / 10 / 12	3 / 4 / 5 / 6	
125	8 / 10 / 12 / 15	3 / 4 / 5 / 6	
150	8 / 10 / 12 / 15 / 20	3 / 4 / 5 / 6	
175	10 / 12 / 15 / 20	3 / 4 / 5	
200	12 / 15 / 20 / 25 / 30	3 / 4 / 5 / 6	
225	12 / 15 / 20	3 / 4 / 5	
250	15 / 20 / 25 / 30 / 40 / 50	3 / 4 / 5	
300	15 / 20 / 25 / 30 / 40 / 50	3 / 4 / 5 / 6	
350	20 / 25 / 30 / 40 / 50	3 / 4 / 5 / 6	
400	25 / 30 / 40 / 50	3 / 4 / 5 / 6	
450	25 / 30 / 40 / 50	3 / 4 / 5 / 6	
500	30 / 40 / 50	3 / 4 / 5 / 6	
600	35 / 40	3 / 5	

Ordering example: 1A1 200-20-4-127 D 126 PHN C 75

Shape 1FF1

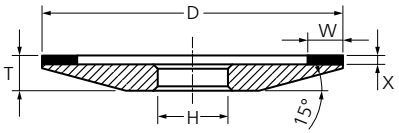


D [mm]	T [mm]	X [mm]	R [mm]	H [mm]
50	6	2	3	Please specify
	8		4	
	10		5	
75	6		3	
	8		4	
	10		5	
100	6		3	
	8		4	
	10		5	
	12		6	
125	6		3	
	8		4	
	10		5	
	12		6	
150	6		3	
	8		4	
	10		5	
	12		6	

Ordering example: 1FF1 150-8/4R-2-32 D 126 PHN C 75

5

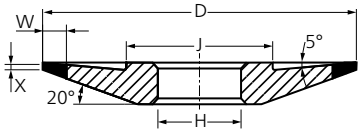
Shape 4A2



D [mm]	W [mm]	X [mm]	H [mm]	T - X [mm]
50	3 / 5	2 / 3 / 4	Please specify	5
75	3 / 5			5
100	3 / 4 / 5 / 6 / 8 / 10			6
125	3 / 4 / 5 / 6 / 8 / 10			7
150	3 / 4 / 5 / 6 / 8 / 10 / 12.5			9

Ordering example: 4A2 100-4-2-20 D 64 PHT C 50

Shape 4BT9

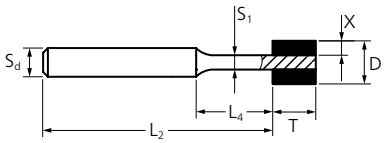


D [mm]	W [mm]	X [mm]	H [mm]	T [mm]	J [mm]
75	6	1	Please specify	8	36
100	6 / 10	1		10	50
125	6 / 10	1		12	65
150	6 / 10	1		15	80

Ordering example: 4BT9 100-6-1-20 D 126 PHN C 75

Other dimensions on request!

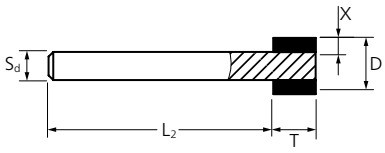
Shape 1A1W



D [mm]	T [mm]	X [mm]	S_d [mm]	L_2 [mm]	S_1 [mm]	L_4 [mm]
3	6	0.75	3	60	1.5	8
4	6	1	3	60	2	8
5	6	1.5	3	60	2	8
6	6	1.5	6	60	3	8
6	8	1.5	6	60	3	10
7	6	2	6	60	3	8
8	6	2	6	60	4	8
8	10	2	6	60	4	12
9	6	2	6	60	5	8

Ordering example: 1A1W 8-6-2-6-60-4-8 D 91 PHNT C 100

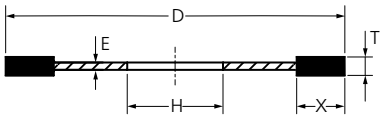
Shape 1A1W



D [mm]	T [mm]	X [mm]	S_d [mm]	L_2 [mm]
10	6	2	6	60
	10	2	6	60
12	6	2	6	60
	10	2	6	60
15	6	2	6	60
	10	2	6	60
18	6	2	6	60
	10	2	6	60
20	6	2	6	60
	10	2	6	60

Ordering example: 1A1W 15-10-2-6-60 D 91 PHNT C 100

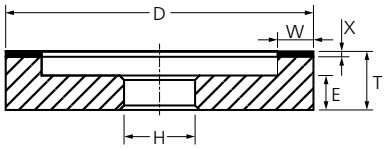
Shape 1A1R



D [mm]	T [mm]	X [mm]	H [mm]	E [mm]
75	1	5	H ≥ 20 mm	0.8
100	1	5		0.8
125	1	5	Please specify	0.8
150	1	7		0.8
175	1.2	7		0.9
200	1.2	7		0.9

Ordering example: 1A1R 150-1-7-20 D 151 PHT C 75

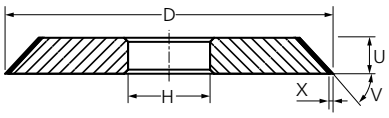
Shape 6A2



D [mm]	W [mm]	X [mm]	H [mm]	T - X [mm]	E [mm]
50	3 / 5	2 / 3 / 4	Please specify	20	10
75	3 / 5 / 10			20	10
100	5 / 8 / 10 / 12.5 / 15			20	10
125	4 / 6 / 8 / 10 / 12.5 / 15 / 20 / 25			23	10
150	6 / 8 / 10 / 12.5 / 15 / 20 / 25			23	10

Ordering example: 6A2 125-10-2-20 D 126 PHT C 50

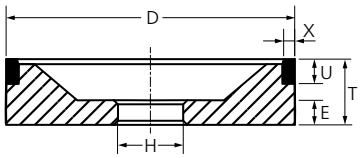
Shape 1V1



D [mm]	U [mm]	X [mm]	V	H [mm]
50	6 / 8	3 / 4	20° to 89°	Please specify
75	6 / 8 / 10			
100	8 / 10		Please specify	
125	8 / 10			
150	8 / 10			
175	10			
200	12 / 15			
250	15 / 20			
300	15 / 20			

Ordering example: 1V1 150-8-3/60°-32 B 126 PHN C 75

Shape 6A9

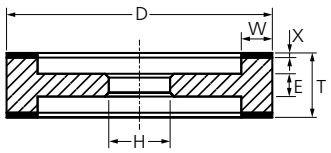


D [mm]	X [mm]	U [mm]	H [mm]	T [mm]	E [mm]
75	1.5	6 / 10	Please specify	25	10
	2	6 / 10		25	10
	3	6 / 10		25	10
100	1.5	6 / 10		30	10
	2	6 / 10		30	10
	3	6 / 10		30	10
125	1.5	6 / 10		30	10
	2	6 / 10		30	10
	3	6 / 10		30	10
150	1.5	6 / 10		35	10
	2	6 / 10		35	10
	3	6 / 10		35	10

Ordering example: 6A9 100-2-10-20 D 126 PHN C 100

Other dimensions on request!

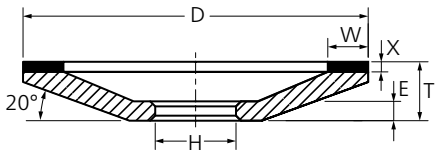
Shape 9A3



D [mm]	W [mm]	X [mm]	T [mm]	H [mm]	E [mm]
100	6 / 8 / 10	2 / 3	22	Please specify	10
125	6 / 8 / 10		22		10
150	4 / 6 / 8 / 10 / 15		25 / 35		14
175	3 / 4 / 6 / 8 / 10 / 15		25 / 35		14
200	8 / 10 / 15		30		18

Ordering example: 9A3 150-8-2-25-20 D 64 PHN C 75

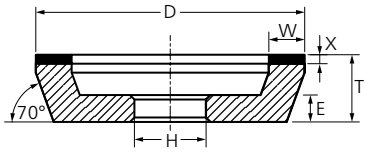
Shape 12A2/20°



D [mm]	W [mm]	X [mm]	H [mm]	T - X [mm]	E [mm]
75	3 / 5 / 6 / 8 / 10	2 / 3 / 4	Please specify	8	5
100	3 / 5 / 6 / 8 / 10			10	6
125	5 / 6 / 8 / 10			14	8
150	5 / 6 / 8 / 10			16	9
175	6 / 10			18	10
200	6 / 10			20	11
250	6 / 10			23	13

Ordering example: 12A2/20° 125-10-2-20 D 126 PHT C 50

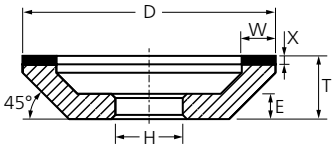
Shape 11A2



D [mm]	W [mm]	X [mm]	H [mm]	T - X [mm]	E [mm]
50	3 / 6	2 / 3 / 4	Please spec-ify	20	8
75	3 / 6 / 10			20	10
100	4 / 6 / 8 / 10			20	10
125	5 / 6 / 8 / 10 / 12.5 / 15			23	10
150	6 / 8 / 10 / 12.5 / 15			23	10
175	6 / 10 / 12.5 / 15			25	12

Ordering example: 11A2 125-10-2-20 D 126 PHT C 50

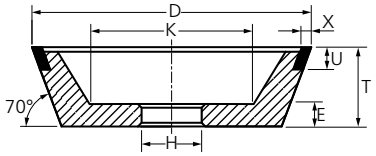
Shape 12A2/45°



D [mm]	W [mm]	X [mm]	H [mm]	T - X [mm]	E [mm]
50	3 / 6	2 / 3 / 4	Please specify	15	8
75	3 / 6 / 10			20	9
100	4 / 6 / 8 / 10			23	10
125	5 / 6 / 8 / 10 / 12.5 / 15			23	10
150	6 / 8 / 10 / 12.5 / 15			23	10
175	6 / 10 / 12.5 / 15			25	12

Ordering example: 12A2/45° 125-10-2-20 D 126 PHT C 50

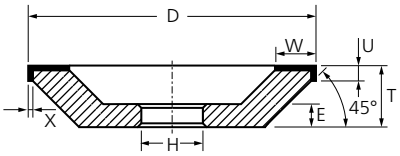
Shape 11V9



D [mm]	X [mm]	U [mm]	H [mm]	T [mm]	E [mm]	K [mm]
50	2	10	Please specify	30	10	22
75	1.5 / 2 / 3	10		30	10	41
100	1.5 / 2 / 3	10		35	10	60
125	1.5 / 2 / 3	10		40	10	75
150	1.5 / 2 / 3	10		50	10	89

Ordering example: 11V9 100-2-10-20 D 126 PHT C 75

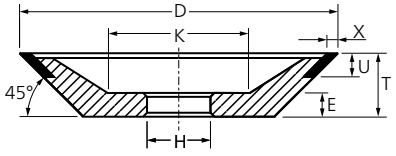
Shape 12C9



D [mm]	W [mm]	U [mm]	X [mm]	H [mm]	T [mm]	E [mm]
100	6 / 10	4	2	Please specify	26	10
	10	4	3		27	10
125	6 / 10	4	2		26	10
	10	4	3		27	10
	12.5	5	2		26	10
150	10	4	2		26	10
	10	4	3		27	10
	12.5 / 15	5	2		26	10

Ordering example: 12C9 100-10-4-2-20 D 64 PHN C 75

Shape 12V9

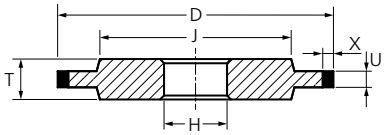


D [mm]	X [mm]	U [mm]	H [mm]	T [mm]	E [mm]	K [mm]
50	2	6	Please specify	20	10	24
75	2 / 3	10		20	10	41
100	1.5 / 2 / 3	10		20	10	62
125	1.5 / 2 / 3	10		25	10	76
150	2 / 3	10		25	10	97

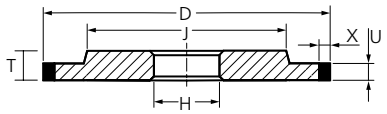
Ordering example: 12V9 100-2-10-20 D 126 PHT C 75

Other dimensions on request!

Shape 14A1



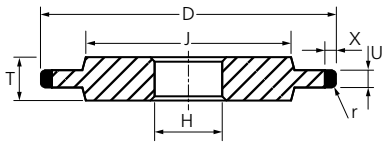
Shape 3A1



D [mm]	U [mm]	X [mm]	H [mm]	T [mm]	J [mm]
75	1 / 2	3 / 6	Please specify	6	50
	3 / 4 / 5	3 / 4 / 6		6	50
100	1 / 2	3 / 6		6	80
	3 / 4 / 5	3 / 4 / 6		6	70
125	1 / 2	3 / 6		7	105
	3 / 4 / 5 / 6	3 / 4 / 6		7	100
150	1 / 2	3 / 6		8	130
	3 / 4 / 5 / 6	3 / 4 / 6		8	120
175	1 / 2	3 / 6		10	150
	3 / 4 / 5 / 6 / 8	3 / 4 / 6		10	140
200	1 / 2	6		12	175
	3 / 4 / 5 / 6 / 8 / 10	3 / 4 / 5 / 6		12	160
225	6 / 8 / 10	3 / 4 / 5		12	180
250	6 / 8 / 10 / 12	3 / 4 / 5		15	200
300	8 / 10 / 12	3 / 4 / 5 / 6		15	250
350	10 / 12 / 15	3 / 4 / 5 / 6		20	300
400	10 / 12 / 15 / 20	3 / 4 / 5 / 6		25	350
450	10 / 12 / 15 / 20	3 / 4 / 5 / 6		25	400
500	15 / 20 / 25	3 / 4 / 5 / 6		30	450
600	15 / 20 / 25 / 30	3 / 5		35	550

Ordering example: 14A1 150-6-3-32 D 107 PHN C 100

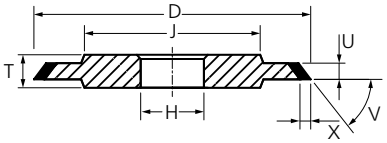
Shape 14F1



D [mm]	U [mm]	X [mm]	R [mm]	H [mm]	T [mm]	J [mm]
40	2	3 / 4 / 5 / 6	1	Please specify	6	25
	3		1.5		6	25
	4		2		6	25
50	2		1		6	30
	3		1.5		6	30
	4		2		6	30
75	2		1		6	50
	3		1.5		6	50
	4		2		6	50
100	2		1		6	70
	3		1.5		6	70
	4		2		6	70
125	2		1		8	100
	3		1.5		8	100
	4		2		8	100
150	2		1		8	120
	3		1.5		8	120
	4		2		8	120

Ordering example: 14F1 150-2/1R-6-32 D 107 PHN C 125

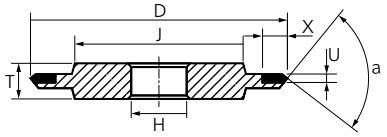
Shape 14V1



D [mm]	U [mm]	X [mm]	V	C [mm]	T [mm]	J [mm]
50	3 / 4 / 5	2 / 3 / 4	20° to 89° Please specify	Please specify	6	30
75	3 / 4 / 5				6	45
100	4 / 6				8	70
125	4 / 6				8	100
150	4 / 6				8	120
175	4 / 6 / 8				10	140
200	4 / 6 / 8 / 10				12	160
250	4 / 6 / 8 / 10 / 12				15	200
300	4 / 6 / 8 / 10 / 12				15	250

Ordering example: 14V1 150-6-3/60°-32 B 126 PHN C 75

Shape 14E9

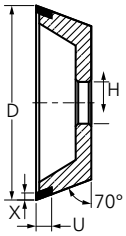


D [mm]	U [mm]	X [mm]	α	H [mm]	T [mm]	J [mm]
50	1 / 2	6	35° / 45° / 60° / 90°	Please specify	6	32
75	1 / 2	6	35° / 45° / 60° / 90°		6	50
100	1 / 2	6	35° / 45° / 60° / 90°		6	70
125	1 / 2	6	35° / 45° / 60° / 90°		8	100
150	1 / 2	6	35° / 45° / 60° / 90°		8	120

Ordering example: 14E9 150-2-6-60°-32 D 107 PHN C 125

Other dimensions on request!





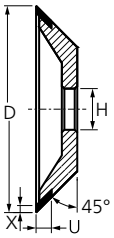
Shape 11V9

Phenolic resin bond for dry grinding. The PHT bond allows cool grinding, even without coolant. The PHST bond can withstand higher loads, i.e. it allows a higher infeed per stroke, but has a slightly shorter grinding time and tool life.

Special features:
- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

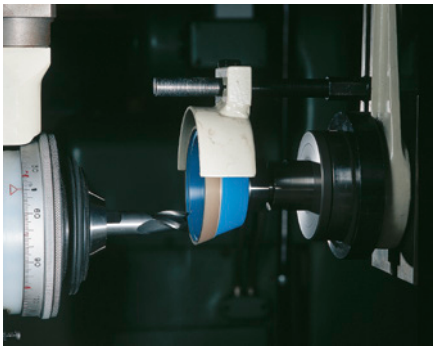
Shape	D [mm]	X [mm]	U [mm]	H [mm]	Bond	Grit size		Item no.	Designation	Price/ unit EUR
11V9	100	2	10	20	PHT	D 126	1	68611021	11V9 100-2-10-20 D 126 PHT C75	-
		3	10	20	PHST	D 126	1	68611032	11V9 100-3-10-20 D 126 PHST C75	-





Shape 12V9

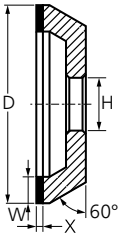
Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.



Special features:
- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

Shape	D [mm]	X [mm]	U [mm]	H [mm]	Bond	Grit size		Item no.	Designation	Price/ unit EUR
12V9	100	2	10	20	PHT	D 126	1	68612021	12V9 100-2-10-20 D 126 PHT C75	-





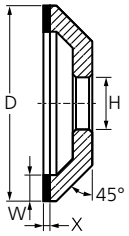
Shape 11A2/60°

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:
- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

Shape	D [mm]	W [mm]	X [mm]	H [mm]	Bond	Grit size		Item no.	Designation	Price/ unit EUR
11A2/60°	100	8	2	20	PHT	D 126	1	68613081	11A2/60° 100-8-2-20 D 126 PHT C75	-
						D 64	1	68613086	11A2/60° 100-8-2-20 D 64 PHT C75	-





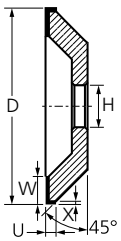
Shape 12A2/45°

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:
- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

Shape	D [mm]	W [mm]	X [mm]	H [mm]	Bond	Grit size		Item no.	Designation	Price/ unit EUR
12A2/45°	125	10	2	20	PHT	D 126	1	68612101	12A2/45° 125-10-2-20 D 126 PHT C75	-
						D 64	1	68612106	12A2/45° 125-10-2-20 D 64 PHT C50	-





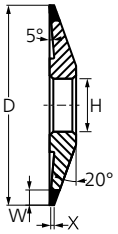
Shape 12C9

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:
- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

Shape	D [mm]	W [mm]	X [mm]	U [mm]	H [mm]	Bond	Grit size		Item no.	Designation	Price/ unit EUR
12C9	100	10	3	4	20	PHT	D 126	1	68612023	12C9 100-10-4-3-20 D 126 PHT C75	-





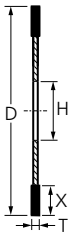
Shape 4BT9

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:
- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

Shape	D [mm]	W [mm]	X [mm]	H [mm]	Bond	Grit size		Item no.	Designation	Price/ unit EUR
4BT9	100	6	1	20	PHT	D 126	1	68615101	4BT9 100-6-1-20 D 126 PHT C75	-





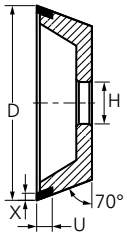
Shape 1A1R

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:
- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

Shape	D [mm]	T [mm]	X [mm]	H [mm]	Bond	Grit size		Item no.	Designation	Price/ unit EUR
1A1R	100	1	5	20	PHT	D 151	1	68620102	1A1R 100-1-5-20 D 151 PHT C75	-
	150	1	7	20	PHT	D 151	1	68620152	1A1R 150-1-7-20 D 151 PHT C75	-





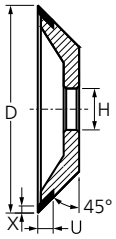
Shape 11V9

PH 4.1 is a phenolic resin bond for maximum stock removal rates. Very long tool life and suitable for dry and wet grinding. PH 4.2 is a high-performance bond for cool dry grinding at low infeed rates. Only for 11V9 and 12V9 up to dia. 150 mm.

Special features:
- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

Shape	D [mm]	X [mm]	U [mm]	H [mm]	Bond	Grit size		Item no.	Designation	Price/ unit EUR
11V9	100	2	10	20	PH 4.1	B 126	1	68664101	11V9 100-2-10-20 B 126 PH 4.1 C75	-
					PH 4.2	B 151	1	68661032	11V9 100-2-10-20 B 151 PH 4.2	-





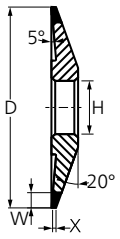
Shape 12V9

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:
- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

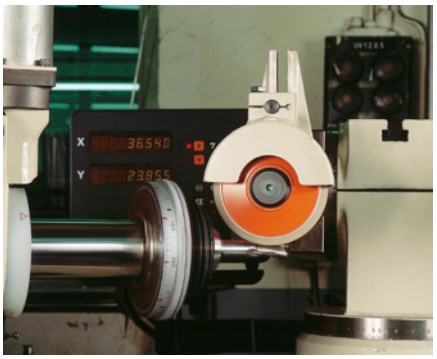
Shape	D [mm]	X [mm]	U [mm]	H [mm]	Bond	Grit size		Item no.	Designation	Price/ unit EUR
12V9	100	2	10	20	PHT	B 126	1	68662022	12V9 100-2-10-20 B 126 PHT C75	-





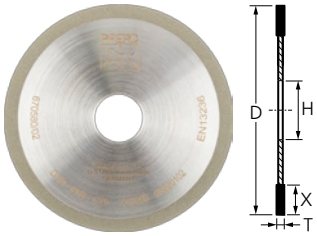
Shape 4BT9

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.



Special features:
- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

Shape	D [mm]	W [mm]	X [mm]	H [mm]	Bond	Grit size		Item no.	Designation	Price/ unit EUR
4BT9	100	6	1	20	PHT	B 126	1	68665101	4BT9 100-6-1-20 B 126 PHT C75	-



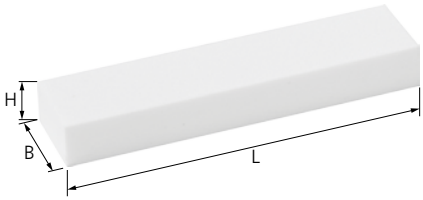
Shape 1A1R

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:
- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

Shape	D [mm]	T [mm]	X [mm]	H [mm]	Bond	Grit size		Item no.	Designation	Price/ unit EUR
1A1R	100	1	5	20	PHT	B 151	1	68670102	1A1R 100-1-5-20 B 151 PHT C100	-

Sharpening block for diamond and CBN tools



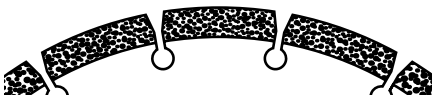
Sharpening block for diamond and CBN tools

Used to restore the sharpness of resinoid-bonded diamond and CBN grinding discs. The sharpening block is first soaked in coolant and then fed in. The grinding process restores the sharpness very quickly.

L [mm]	B [mm]	H [mm]		Item no.	Designation	Price/unit EUR
100	24	13	5	68402413	SBL 1002413	-

Diamond cut-off wheels for the construction industry

General information



Shape DS

Segmented type for fast cutting



Shape DG

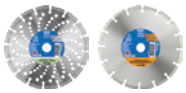
Type with continuous rim for easy cutting (TURBO)



Shape DG FL

Type with continuous rim for very fine cutting, e.g. tiles and glazed tiles

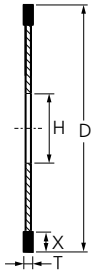
The quick way to find the perfect tool

Application	Material	Tools	
Aggressive, fast cutting	■ Concrete (medium-hard, reinforced, hard) ■ Aerated concrete ■ Pumice ■ Brick ■ Soft clinker brick ■ Sand-lime brick	Cut-off wheels of the type DS ■ Universal Line PSF ■ Performance Line SG	
Easy cutting with high cutting quality	■ Fresh concrete ■ Screed ■ Firebrick	Cut-off wheels of the type DG ■ Performance Line SG	
	■ Sandstone ■ Clay brick ■ Slate ■ Granite ■ Marble	Cut-off wheels of the type DG ■ Universal Line PSF ■ Performance Line SG	
	■ Glazed tiles ■ Ceramic tiles ■ Porcelain stoneware ■ Slate ■ Marble	Cut-off wheels of the type DG FL ■ Universal Line PSF ■ Performance Line SG	

5

Segmented type for fast cutting





DS PSF type

General-purpose segmented-rim tool for aggressive, fast cutting with high cutting performance and a good tool life.

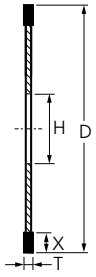
Special features:
- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

D [mm]	T [mm]	H [mm]	X [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
115	2.2	22.23	7	13,300	1	68011221	DS 115 x 2,2 x 22,23 PSF	-
125	2.2	22.23	7	12,200	1	68012221	DS 125 x 2,2 x 22,23 PSF	-
178	2.4	22.23	7	8,600	1	68017221	DS 178 x 2,4 x 22,23 PSF	-
230	2.4	22.23	7	6,600	1	68023223	DS 230 x 2,4 x 22,23 PSF	-

Diamond cut-off wheels for the construction industry

Segmented type for fast cutting





DS SG type

High-performance segmented-edge tool for aggressive, fast cutting of hard materials with high cutting performance and very good tool life.



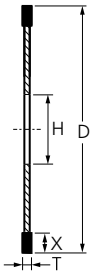
Contents:
All diamond cut-off wheels with a centre hole diameter of 25.4 mm are supplied with a reducing ring to 22.23 mm for use on angle grinders.

Special features:
- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

D [mm]	T [mm]	H [mm]	X [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
115	2.4	22.23	10	13,300	1	68000041	DS 115 x 2,4 x 22,23 SG	-
125	2.4	22.23	10	12,200	1	68000042	DS 125 x 2,4 x 22,23 SG	-
178	2.6	22.23	10	8,600	1	68000043	DS 178 x 2,6 x 22,23 SG	-
230	2.8	22.23	10	6,600	1	68000044	DS 230 x 2,8 x 22,23 SG	-
300	2.8	20	10	6,400	1	68000045	DS 300 x 2,8 x 20,0 SG	-
		25.4	10	6,400	1	68000046	DS 300 x 2,8 x 25,4 SG	-
350	2.8	20	10	5,400	1	68000047	DS 350 x 2,8 x 20,0 SG	-
		25.4	10	5,400	1	68000048	DS 350 x 2,8 x 25,4 SG	-
400	3.2	25.4	10	4,800	1	68000049	DS 400 x 3,2 x 25,4 SG	-

Type with continuous rim for easy cutting (TURBO)





DG PSF type

General-purpose continuous-rim tool for easy cutting (TURBO) with high cutting performance and a good tool life.



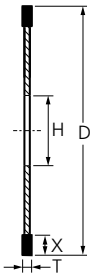
Special features:
- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

D [mm]	T [mm]	H [mm]	X [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
115	2.1	22.23	7	13,300	1	68011222	DG 115 x 2,1 x 22,23 PSF	-
125	2.1	22.23	7	12,200	1	68012222	DG 125 x 2,1 x 22,23 PSF	-
178	2.4	22.23	7	8,600	1	68017222	DG 178 x 2,4 x 22,23 PSF	-
230	2.6	22.23	7	6,600	1	68023222	DG 230 x 2,6 x 22,23 PSF	-

Diamond cut-off wheels for the construction industry

Type with continuous rim for easy cutting (TURBO)





DG SG type

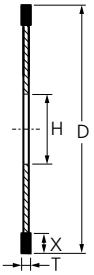
High-performance continuous-edge tool for easy cutting (TURBO) with high cutting performance and very good tool life.

Special features:
- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

D [mm]	T [mm]	H [mm]	X [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
115	2.2	22.23	8	13,300	1	68000021	DG 115 x 2,2 x 22,23 SG	-
125	2.2	22.23	8	12,200	1	68000022	DG 125 x 2,2 x 22,23 SG	-
178	2.5	22.23	8	8,600	1	68000023	DG 178 x 2,5 x 22,23 SG	-
230	2.8	22.23	8	6,600	1	68000024	DG 230 x 2,8 x 22,23 SG	-

Type with continuous rim for very fine cutting





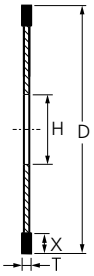
DG FL PSF type

General-purpose continuous-rim tool for cutting without edge breakages on workpieces with high-quality surfaces. High cutting performance and good tool life.

Special features:
- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

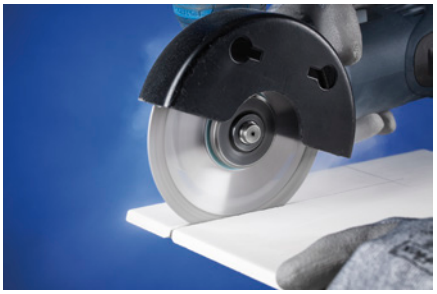
D [mm]	T [mm]	H [mm]	X [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
115	1.6	22.23	7	13,300	1	68000011	DG 115 x 1,6 x 22,23 FL PSF	-
125	1.6	22.23	7	12,200	1	68000012	DG 125 x 1,6 x 22,23 FL PSF	-





DG FL SG type

High-performance continuous-rim tool for cutting without edge breakages on workpieces with high-quality surfaces. High cutting performance and very good tool life.



Special features:
- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

D [mm]	T [mm]	H [mm]	X [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
115	1.4	22.23	8	13,300	1	68000031	DG 115 x 1,4 x 22,23 FL SG	-
125	1.4	22.23	8	12,200	1	68000032	DG 125 x 1,4 x 22,23 FL SG	-



Sharpening block DSB

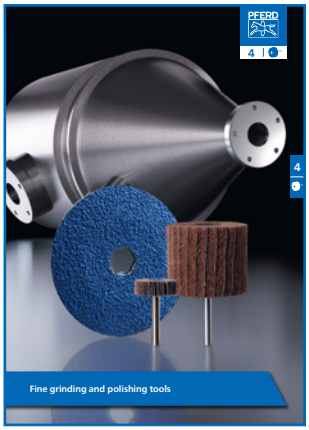
The sharpening block is used to resharpen metal-bonded diamond cut-off wheels (e.g. after cutting lubricating materials).

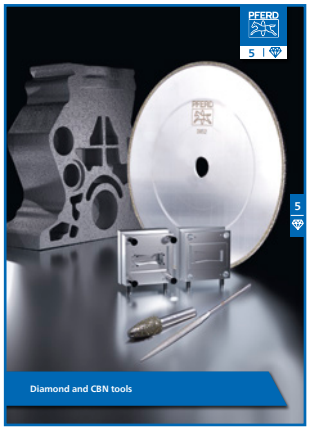
L [mm]	B [mm]	H [mm]	Grit size		Item no.	Designation	Price/unit EUR
200	50	25	80	1	68075025	DSB 2005025	-

















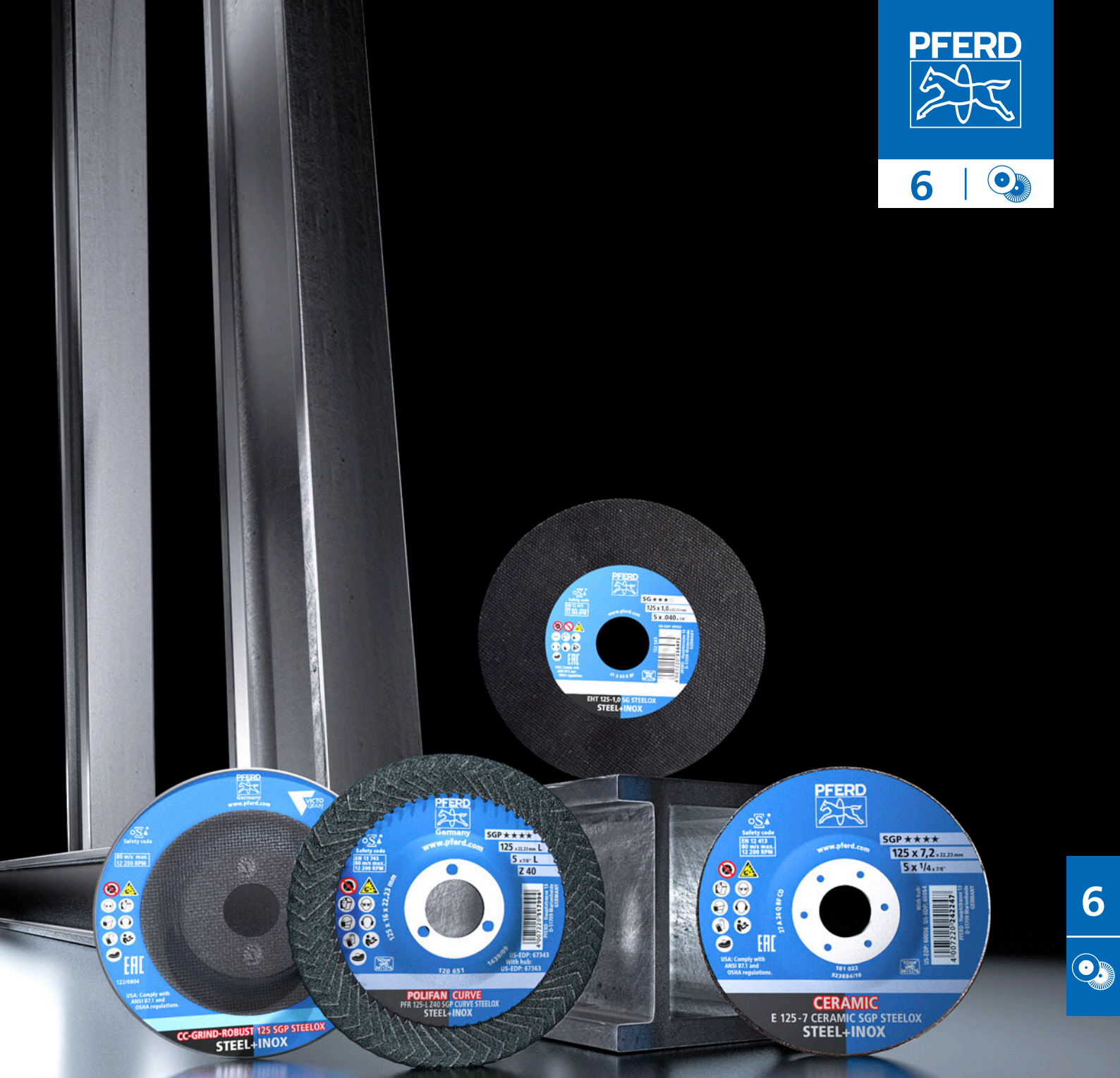




5

New additions to the PFERD product range

Stay up to date and discover our new products digitally and online. Our new products have **blue** item numbers in the Tool Manual.



Cut-off wheels, flap discs and grinding wheels

6

Cut-off wheels, flap discs and grinding wheels

Table of contents

Cut-off wheels, flap discs and grinding wheels

- Highlights from the PFERD range 3
- General information 4
- Label and packaging 5
- Technical information and safety notes 6



Cut-off wheels

- Universal Line PSF ★★☆☆ 9
- Performance Line SG ★★★☆ 13
- Special Line SGP ★★★★ 17
- Clamping flanges 18



Cut-off wheels for foundries

- Performance Line SG ★★★☆ 19



DUODISC for foundries and fettling shops

- Performance Line SG ★★★☆ 21



Cut-off wheels for straight grinders

- Performance Line SG ★★★☆ 22



Cut-off wheels for petrol cutters and cut-off grinders

- Performance Line SG ★★★☆ 24



POLIFAN flap discs

- Universal Line PSF ★★☆☆ 27
- Performance Line SG ★★★☆ 29
- Special Line SGP ★★★★ 35



CC-GRIND grinding discs

- Performance Line SG ★★★☆ 38
- Special Line SGP ★★★★ 41



Grinding wheels

- Universal Line PSF ★★☆☆ 44
- Performance Line SG ★★★☆ 45
- Special Line SGP ★★★★ 47



Grinding wheels for foundries

- Performance Line SG ★★★☆ 49



Cup wheels

- Performance Line SG ★★★☆ 51



Snagging wheels

- Performance Line SG ★★★☆ 53

6

Cut-off wheels, flap discs and grinding wheels

Highlights from the PFERD range

Thin cut-off wheels – flat type EHT (shape 41)

The PFERD product range includes thin cut-off wheels in various designs and therefore the right tool solution for any application – ergonomically optimized, efficient and with the highest level of safety. The thin cut-off wheels from PFERD are characterized by their special bond formulation. Scan the QR code to find out more about PFERD's range of thin cut-off wheels.



Advantages:

- Thin cuts with minimal burr formation.
- Maximum economic efficiency thanks to fast cutting.
- Convenient and safe.

Flap discs POLIFAN POWER Z 40 and POLIFAN CURVE

PFERD presents two real highlights from the flap disc range: the POLIFAN flap disc POLIFAN POWER Z 40 which is normally the most economical, and the innovative POLIFAN CURVE flap disc designed specifically for work on fillet welds. Scan the QR code to find out more about PFERD's range of flap discs.



Advantages:

- Fastest work progress and maximum economic efficiency thanks to the aggressive stock removal rate on the POLIFAN POWER Z 40.
- The POLIFAN CURVE provides precise and optimum grinding of the fillet weld geometry.

CC-GRIND grinding disc CC-GRIND ROBUST

With the CC-GRIND ROBUST, PFERD offers a modern, high-performance and ergonomic alternative to grinding wheels, flap discs and fibre discs. In the SGP type, PFERD also offers the CC-GRIND ROBUST with high-quality **VICTO**GRAIN. PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance. Scan the QR code to find out more about PFERD's CC-GRIND grinding discs.



Advantages:

- The ultimate in aggressive performance for the fastest work progress.
- Combines the best available abrasive with the cutting-edge, innovative tool design from PFERD.
- Although the **VICTO**GRAIN tools only have one layer of abrasive grain, they offer an outstanding tool life – longer than grinding wheels and many flap discs.
- Significantly more ergonomic than a grinding wheel: Noise, vibrations and dust are significantly reduced. A considerably superior surface quality is also produced.
- In contrast to flap discs, they can achieve flat surfaces thanks to their dimensional stability.

CERAMIC SGP STEELOX grinding wheel

High-performance grinding wheel with ceramic oxide grain for quick and economical grinding. Scan the QR code to find out more about PFERD's range of grinding wheels.



Advantages:

- Ultimate aggressiveness and outstanding tool life due to the self-sharpening effect of the high-performance abrasive ceramic oxide grain in connection with a special bond technology.
- Labour cost savings due to much faster work progress compared to conventional grinding wheels.
- Labour-saving work.

Cut-off wheels, flap discs and grinding wheels
General information

Organization for the Safety of Abrasives (oSa)

As a founding member of the Organization for the Safety of Abrasives (oSa), PFERD has committed to conform to tougher inspection requirements that go beyond EN 12413 and EN 13743. Member companies of oSa are committed to continuous product safety and quality monitoring. Scan the QR code for further information.

Product lines and colour coding

PSF ★★☆☆



SG ★★★☆



SGP ★★★★



Universal Line PSF ★★☆☆

The introductory range Universal Line PSF includes **robust tools** for processing the **most common materials**. Universal Line PSF tools achieve **good results** with **high economic efficiency**.

Performance Line SG ★★★☆

The broad Performance Line SG range offers **a high-performance tool solution for every application and every material**. Performance Line SG tools achieve **optimum results** with **maximum economic efficiency**.

Special Line SGP ★★★★

Special Line SGP tools are specially developed for **specific tasks** and offer the user **key advantages over conventional products**. Furthermore, the Special Line SGP includes tools that offer **ultimate economic efficiency** thanks to their particularly high performance during use.

Materials and colour coding

Steel, cast steel	Steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, tempering steels
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels, e.g. **Name** **EN** **AISI** V2A 1.4301 304 V2A 1.4310 301 V4A 1.4401 316 V4A 1.4571 316Ti
Aluminium	Non-hardening and hardening wrought alloys, cast aluminium alloys with low silicon content, cast aluminium alloys without silicon	
Other non-ferrous metals	Soft non-ferrous metals	Brass, copper, zinc
	Hard non-ferrous metals	Bronze, titanium
	High-temperature-resistant materials	Inconel, nickel-based alloys
Cast iron	Grey cast iron	Cast iron with flake graphite EN-GJL (GG), cast iron with nodular graphite/nodular cast iron EN-GJS (GGG)
	Annealed cast iron	White annealed cast iron EN-GJMW (GTW), black annealed cast iron EN-GJMB (GTS)
Stone	Asphalt, cotto, pumice, light concrete, sandstone, concrete, reinforced concrete, concrete blocks, roofing tiles, granite, clinker bricks, exposed aggregate concrete, glazed tiles, ceramic tiles, slate	

Label

① oSa – Organization for the Safety of Abrasives
As a founder member of oSa, PFERD has voluntarily undertaken to produce quality tools conforming to the most exacting safety standards. Member companies of oSa are committed to continuous product safety and quality monitoring.

② Safety information
Please follow the information in the product insert supplied with cut-off wheels regarding how to use grinding tools safely.

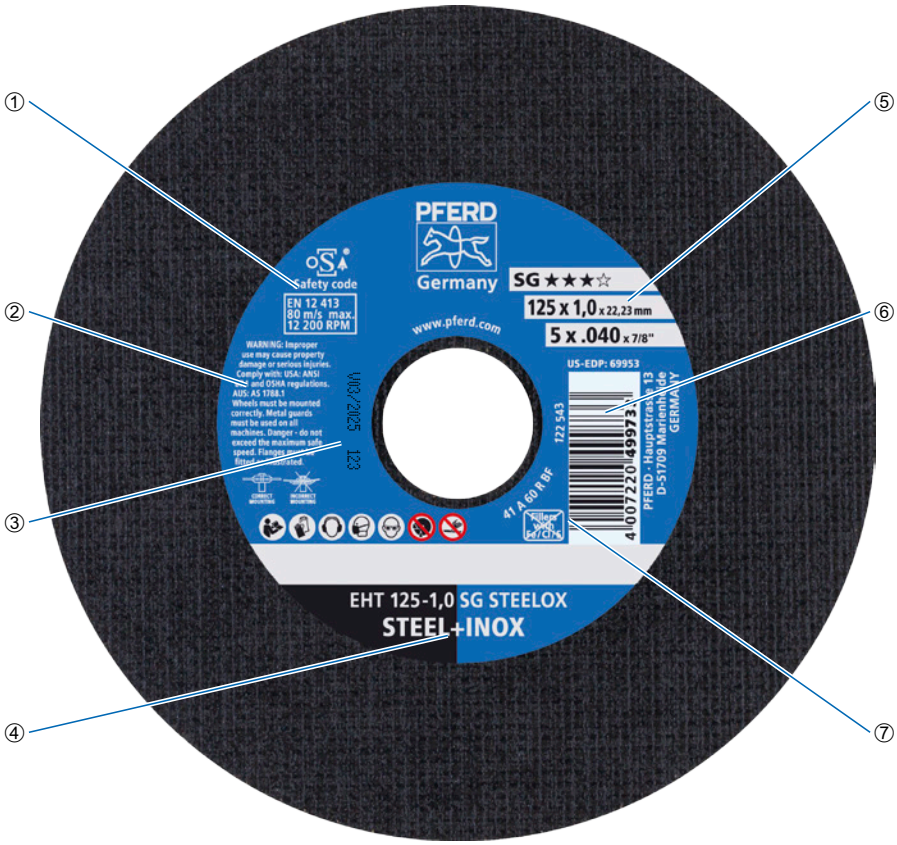
③ Expiry date and lot number

④ Material information
The bottom section of every label indicates the material or materials for which the tool is suitable.

⑤ Information bar
Here you will find the product line, the dimensions, and the abrasive and grit size for POLIFAN flap discs.

⑥ EAN (European Article Number)

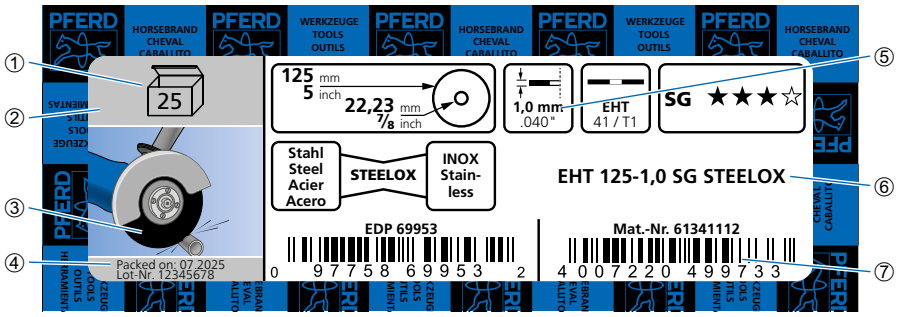
⑦ Suitable for stainless steel (INOX)
Manufactured without the addition of ferrous, chlorinated or sulphurous fillers.



Packaging

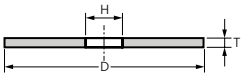
PFERD supplies cut-off wheels, flap discs and grinding wheels in robust industrial packaging that protects the tools against damage. All important technical and ordering information can be found on the packaging label.

① Packaging unit
② Product line (colour coding system)
③ Tool type
④ Packing date and lot number
⑤ Technical information
⑥ PFERD designation
⑦ EAN (European Article Number)

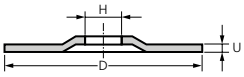


Cut-off wheels, flap discs and grinding wheels
Technical information and safety notes

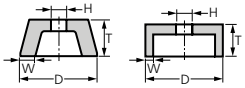
Overview of shapes and letter symbols



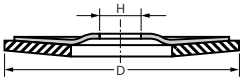
Cut-off wheel, flat type EHT (shape 41)



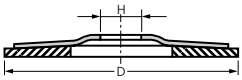
Grinding wheel E (shape 27) or cut-off wheel, depressed-centre type EH (shape 42)



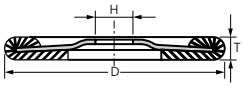
Conical (shape 11) and cylindrical (shape 6) cup wheel ETT



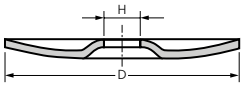
Flap disc, conical type PFC (shape B)



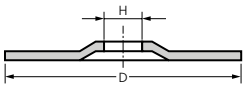
Flap disc, flat type PFF (shape A)



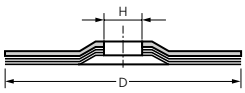
Flap disc, radial type PFR (CURVE)



CC-GRIND SOLID



CC-GRIND FLEX



CC-GRIND STRONG

Safety during cutting and grinding

Grinding tool manufacturers, machine manufacturers and users contribute equally to ensuring safety during cutting and grinding.

PFERD produces all its tools according to the specified safety regulations. During cutting and grinding, the user is responsible for correct use of the tool drive as well as correct handling and use of the tools.

Explanation of the labelling of grinding tools

- Always observe the instructions on the grinding tool, the grinding machine and all accompanying user information.
- Only use grinding tools that meet current safety standards. These products carry the relevant EN standard number and the "oSa" mark:
  EN 12413 for grinding tools with bonded abrasives (reinforced grinding wheels, cut-off wheels, cup wheels and grinding wheels).
  EN 13743 for coated abrasives (POLIFAN flap discs, CC-GRIND grinding discs).
- Use a grinding tool that is suitable for the respective application. A tool that cannot be clearly identified should never be used.



- Grinding tools for hand-held grinding with bond types B (e.g. cup wheels) and BF (reinforced grinding wheels, cut-off wheels and grinding wheels) must not be used after the indicated expiry date in accordance with EN 12413. The expiry date is stated as the month and year, e.g. 04/2026. The bond type is always marked on the label.

Safety notes

Observe any usage restrictions, warnings and safety notes:


Not permitted for hand-held grinding!


Not permitted for face grinding!


Not permitted for wet grinding!


Do not use if damaged!


Follow the safety instructions!


Wear eye protection!

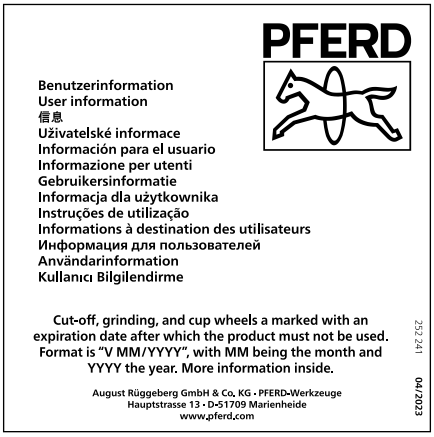

Wear hearing protection!


Wear gloves!


Wear a dust mask!



Observe the minimum contact angle!


PFERD

Benutzerinformation
User information
信息
Uživatelské informace
Información para el usuario
Informazione per utenti
Gebruikersinformatie
Informacja dla użytkownika
Instruções de utilização
Informations à destination des utilisateurs
Информация для пользователей
Användarinformation
Kullanıcı Bilgilendirme

Cut-off, grinding, and cup wheels a marked with an expiration date after which the product must not be used. Format is "V MM/YYYY", with MM being the month and YYYY the year. More information inside.

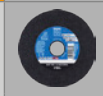
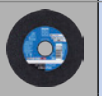
August Rüggeberg GmbH & Co. KG • PFERD-Werkzeuge
Hauptstrasse 13 • D-51709 Marienheide
www.pferd.com

252 241 04/2023

Cut-off wheels

The quick way to find the perfect tool

Product group selection

Tool drive	Application	Product line	Steel (STEEL)		Stainless steel (INOX)		Aluminium (ALU)	Cast material (CAST)	Stone (STONE)	
Angle grinders	Cutting	Universal Line PSF ★★☆☆	 PSF STEEL	 PSF STEELOX	 PSF STEELOX		 PSF ALU+STONE		 PSF ALU+STONE	
		Performance Line SG ★★★☆	 SG STEEL	 SG STEELOX	 SG INOX	 SG STEELOX	 SG ALU	 Foundry cut-off wheels		
		Special Line SGP ★★★★	 CERAMIC SGP STEEL	 SGP STEELOX	 SGP STEELOX					
	Cutting and grinding	Universal Line PSF ★★☆☆	 PSF DUO STEELOX		 PSF DUO STEELOX					
		Performance Line SG ★★★☆						 (ZIRKON) SG DUO CAST		
Straight grinders (< 100 mm)	Cutting	Performance Line SG ★★★☆	 SG STEELOX		 SG STEELOX		 SG STEELOX	 SG STEELOX		
Petrol cutters and cut-off grinders (> 230 mm)	Cutting	Performance Line SG ★★★☆	 SG STEEL					 SG CAST + STONE	 SG STONE	 SG CAST + STONE

Cut-off wheel width selection

Diameter 76–125 mm			PFERDVALUE
Thin cut-off wheels	0.8 mm	Maximum precision and cutting quality for sheet metal work	Vibration Filter, Noise Filter, Emission Filter, Haptic Filter, Energy Saving, Time Saving
	1.0 mm	Universal width with a focus on speed, comfort and cutting quality	
	1.3 and 1.6 mm	Universal width with a focus on tool life and comfort	
Cut-off wheels	≥ 1.9 mm	Heavy-duty use	-

Diameter 150–230 mm			PFERDVALUE
Thin cut-off wheels	≤ 2.0 mm	Universal width with a focus on speed, comfort and cutting quality	Vibration Filter, Noise Filter, Emission Filter, Haptic Filter, Energy Saving, Time Saving
Cut-off wheels	2.5 mm	Universal width with a focus on tool life and comfort	-
	≥ 2.9 mm	Heavy-duty use	-

Universal Line PSF ★★☆☆



PSF STEEL ★★☆☆

Cut-off wheel for steel with high cutting performance and good tool life. Suitable for cutting sheet metal, profiles and solid material, and for cutting out holes.



Special features:
- Fast work progress thanks to good cutting performance.
- High economic efficiency due to good tool life.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
100	2.4	16	15,300	A	25	61741116	EHT 100-2,4 PSF STEEL/16,0	-
105	1	16	14,500	A	25	69121029	EHT 105-1,0 PSF STEEL/16,0	-
115	1	22.23	13,300	A	25	61730010	EHT 115-1,0 PSF STEEL	-
	1.6	22.23	13,300	A	25	61730021	EHT 115-1,6 PSF STEEL	-
	2.4	22.23	13,300	A	25	61730026	EHT 115-2,4 PSF STEEL	-
125	1	22.23	12,200	A	25	61719010	EHT 125-1,0 PSF STEEL	-
	1.6	22.23	12,200	A	25	61719021	EHT 125-1,6 PSF STEEL	-
	2.4	22.23	12,200	A	25	61719026	EHT 125-2,4 PSF STEEL	-

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Cut-off wheels
Universal Line PSF ★★☆☆

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
150	1.6	22.23	10,200	A	25	61721221	EHT 150-1,6 PSF STEEL	-
180	1.6	22.23	8,500	A	25	61719121	EHT 180-1,6 PSF STEEL	-
	3	22.23	8,500	A	25	61726222	EHT 180-3,0 PSF STEEL	-
230	1.9	22.23	6,600	A	25	61728231	EHT 230-1,9 PSF STEEL	-
	3	22.23	6,600	A	25	61728222	EHT 230-3,0 PSF STEEL	-
Depressed-centre design EH (shape 42)								
100	2.4	16	15,300	A	25	61739116	EH 100-2,4 PSF STEEL/16,0	-
115	2.4	22.23	13,300	A	25	61740122	EH 115-2,4 PSF STEEL	-
	3.2	22.23	13,300	A	25	61740126	EH 115-3,2 PSF STEEL	-
125	2.4	22.23	12,200	A	25	61720222	EH 125-2,4 PSF STEEL	-
	3.2	22.23	12,200	A	25	61720226	EH 125-3,2 PSF STEEL	-
180	3	22.23	8,500	A	25	61723222	EH 180-3,0 PSF STEEL	-
230	3	22.23	6,600	A	25	61724222	EH 230-3,0 PSF STEEL	-



PSF STEELOX ★★☆☆

Cut-off wheel for steel and stainless steel (INOX) with high cutting performance and good tool life. Suitable for cutting sheet metal, profiles and solid material, and for cutting out holes.



Special features:
- Fast work progress due to high cutting performance and high efficiency thanks to excellent tool life.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.
- Thin cut-off wheels are ideal for cordless angle grinders.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
76	0.8	10	20,100	A	25	65508109	EHT 76-0,8 PSF STEELOX/10,0	-
	1	10	20,100	A	25	65508100	EHT 76-1,0 PSF STEELOX/10,0	-
105	1	16	14,500	A	25	61741105	EHT 105-1,0 PSF STEELOX/16,0	-
115	1	22.23	13,300	A	25	61730100	EHT 115-1,0 PSF STEELOX	-
	1.6	22.23	13,300	A	25	61730121	EHT 115-1,6 PSF STEELOX	-
	2.4	22.23	13,300	A	25	61730122	EHT 115-2,4 PSF STEELOX	-
125	1	22.23	12,200	A	25	61721100	EHT 125-1,0 PSF STEELOX	-
					10	61721110	EHT 125-1,0 PSF STEELOX (10)	-
	1.6	22.23	12,200	A	25	61721121	EHT 125-1,6 PSF STEELOX	-
	2	22.23	12,200	A	25	69120850	EHT 125-2,0 PSF STEELOX	-
	2.4	22.23	12,200	A	25	61721122	EHT 125-2,4 PSF STEELOX	-
150	1.6	22.23	10,200	A	25	61724121	EHT 150-1,6 PSF STEELOX	-
180	1.6	22.23	8,500	A	25	61726121	EHT 180-1,6 PSF STEELOX	-
	2.5	22.23	8,500	A	25	61726122	EHT 180-2,5 PSF STEELOX	-
230	1.9	22.23	6,600	A	25	61728327	EHT 230-1,9 PSF HD STEELOX	-
						61728131	EHT 230-1,9 PSF STEELOX	-
	2	22.23	6,600	A	25	69901410	EHT 230-2,0 PSF STEELOX	-
	2.5	22.23	6,600	A	25	61728122	EHT 230-2,5 PSF STEELOX	-
Flat design EHT (type 41) with X-LOCK holder						**X-LOCK**		
115	1	22.23	13,300	A	25	61730101	EHT 115-1,0 PSF STEELOX/X-LOCK	-
	1.6	22.23	13,300	A	25	61730124	EHT 115-1,6 PSF STEELOX/X-LOCK	-
125	1	22.23	12,200	A	25	61721101	EHT 125-1,0 PSF STEELOX/X-LOCK	-

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D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
125	1.6	22.23	12,200	A	25	61721124	EHT 125-1,6 PSF STEELOX/X-LOCK	-
Depressed-centre design EH (shape 42)								
100	2.4	16	15,300	A	25	61739326	EH 100-2,4 PSF STEELOX/16,0	-
115	2.4	22.23	13,300	A	25	61740326	EH 115-2,4 PSF STEELOX	-
125	2.4	22.23	12,200	A	25	61720326	EH 125-2,4 PSF STEELOX	-
180	2.5	22.23	8,500	A	25	61726326	EH 180-2,5 PSF STEELOX	-
230	2.5	22.23	6,600	A	25	61728326	EH 230-2,5 PSF STEELOX	-
Depressed-centre design EH (type 42) with X-LOCK holder							**X-LOCK**	
125	2.4	22.23	12,200	A	25	61740125	EH 125-2,4 PSF STEELOX/X-LOCK	-



PSF CLASSIC STEELOX ★★☆☆

Cut-off wheel for steel and stainless steel (INOX) with high cutting performance and good tool life. Suitable for cutting sheet metal, profiles and solid material, and for cutting out holes.



Special features:
- Fast work progress due to high cutting performance and high efficiency thanks to excellent tool life.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.
- Suitable for general use on steel and stainless steel (INOX).

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
115	1	22.23	13,300	A	25	61715150	EHT 115-1,0 PSF CLASSIC STEELOX	-
125	1	22.23	12,200	A	25	61715250	EHT 125-1,0 PSF CLASSIC STEELOX	-
	1.6	22.23	12,200	A	25	61715253	EHT 125-1,6 PSF CLASSIC STEELOX	-



PSF DUODISC STEELOX ★★☆☆ combination wheel

Combination wheel for steel and stainless steel (INOX) with high cutting performance and good tool life. Suitable for cutting, deburring, grouting, surface grinding, and for work on fillet welds and weld seams.



Special features:
- Safe, standard-compliant solution for cutting and face grinding with just one tool.
- Ideal for cordless angle grinders.
- Problem solver for grinding work on scale.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design E								
76	1.4	10	20,100	A	25	*62007614*	E 76-1,4 PSF DUO STEELOX/10,0	-

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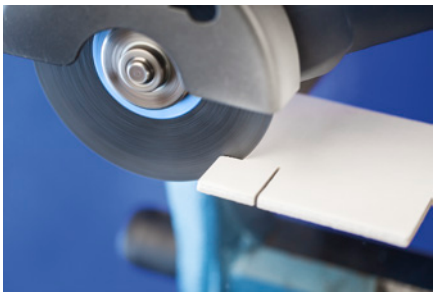
Cut-off wheels
Universal Line PSF ★★☆☆

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
100	1.9	16	15,300	A	10	62010630	E 100-1,9 PSF DUO STEELOX/16,0	-
	2.8	16	15,300	A	10	62010632	E 100-2,8 PSF DUO STEELOX/16,0	-
115	1.9	22.23	13,300	A	10	62011630	E 115-1,9 PSF DUO STEELOX	-
	2.8	22.23	13,300	A	10	62011620	E 115-2,8 PSF DUO STEELOX	-
125	1.9	22.23	12,200	A	10	62012630	E 125-1,9 PSF DUO STEELOX	-
	2.8	22.23	12,200	A	10	62012620	E 125-2,8 PSF DUO STEELOX	-
150	3.5	22.23	10,200	A	10	62015420	E 150-3,5 PSF DUO STEELOX	-
180	3.5	22.23	8,500	A	10	62017420	E 180-3,5 PSF DUO STEELOX	-



PSF ALU + STONE ★★☆☆

Cut-off wheel with high cutting performance and good tool life for use on aluminium, titanium, other non-ferrous metals, stone, concrete, tiles, duroplastics, cast iron. Suitable for cutting sheet metal, profiles and solid material, and for cutting out holes.



Special features:
- Fast work progress thanks to good cutting performance.
- Width of 1.0 mm is also ideal for cordless angle grinders.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
115	1	22.23	13,300	C	25	61818010	EHT 115-1,0 PSF ALU+STONE	-
	1.6	22.23	13,300	C	25	61818021	EHT 115-1,6 PSF ALU+STONE	-
125	1	22.23	12,200	C	25	61819010	EHT 125-1,0 PSF ALU+STONE	-
					10	61819015	EHT 125-1,0 PSF ALU+STONE/10	-
	1.6	22.23	12,200	C	25	61819021	EHT 125-1,6 PSF ALU+STONE	-
180	3.2	22.23	8,500	C	25	61826222	EHT 180-3,2 PSF ALU+STONE	-
230	3.2	22.23	6,600	C	25	61828222	EHT 230-3,2 PSF ALU+STONE	-
Depressed-centre design EH (shape 42)								
115	2.4	22.23	13,300	C	25	61830122	EH 115-2,4 PSF ALU+STONE	-
125	2.4	22.23	12,200	C	25	61820222	EH 125-2,4 PSF ALU+STONE	-
150	3	22.23	10,200	C	25	61823326	EH 150-3,0 PSF ALU+STONE	-
180	3.2	22.23	8,500	C	25	61823222	EH 180-3,2 PSF ALU+STONE	-
230	3.2	22.23	6,600	C	25	61824222	EH 230-3,2 PSF ALU+STONE	-



SG STEEL ★★★☆

Cut-off wheel for steel with high cutting performance and maximum tool life. Suitable for cutting profiles and solid material, and for cutting out holes.



Special features:

- Fast work progress thanks to good cutting performance.
- Thin cut-off wheels are ideal for cordless angle grinders.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
100	2.4	16	15,300	A	25	61340116	EHT 100-2,4 SG STEEL/16,0	-
115	1	22.23	13,300	A	25	61340382	EHT 115-1,0 SG STEEL	-
	1.6	22.23	13,300	A	25	61330122	EHT 115-1,6 SG STEEL	-
	2.4	22.23	13,300	A	25	61340222	EHT 115-2,4 SG STEEL	-
125	1	22.23	12,200	A	25	61341082	EHT 125-1,0 SG STEEL	-
	1.6	22.23	12,200	A	25	61331122	EHT 125-1,6 SG STEEL	-
	2.4	22.23	12,200	A	25	61321222	EHT 125-2,4 SG STEEL	-
150	1.6	22.23	10,200	A	25	61323106	EHT 150-1,6 SG STEEL	-
	3	22.23	10,200	A	25	61322222	EHT 150-3,0 SG STEEL	-
180	1.6	22.23	8,500	A	25	61326122	EHT 180-1,6 SG STEEL	-
	2.9	22.23	8,500	A	25	61326322	EHT 180-2,9 SG STEEL	-
	3.2	22.23	8,500	A	25	61326222	EHT 180-3,2 SG STEEL	-
230	1.9	22.23	6,600	A	25	61328131	EHT 230-1,9 SG STEEL	-
	2.9	22.23	6,600	A	25	61328322	EHT 230-2,9 SG STEEL	-
	3.2	22.23	6,600	A	25	61328222	EHT 230-3,2 SG STEEL	-
Depressed-centre design EH (shape 42)								
100	2.4	16	15,300	A	25	61339116	EH 100-2,4 SG STEEL/16,0	-
115	2.4	22.23	13,300	A	25	61340122	EH 115-2,4 SG STEEL	-
	3.2	22.23	13,300	A	25	61340132	EH 115-3,2 SG STEEL	-
125	2.4	22.23	12,200	A	25	61320222	EH 125-2,4 SG STEEL	-
	3.2	22.23	12,200	A	25	61320232	EH 125-3,2 SG STEEL	-
150	3	22.23	10,200	A	25	61323122	EH 150-3,0 SG STEEL	-
180	2.9	22.23	8,500	A	25	61323322	EH 180-2,9 SG STEEL	-
	3.2	22.23	8,500	A	25	61323222	EH 180-3,2 SG STEEL	-
230	2.9	22.23	6,600	A	25	61324322	EH 230-2,9 SG STEEL	-
	3.2	22.23	6,600	A	25	61324222	EH 230-3,2 SG STEEL	-

Cut-off wheels
Performance Line SG ★★★☆



SG STEELOX ★★★☆

Cut-off wheel for steel and stainless steel (INOX) with high cutting performance and maximum tool life. Suitable for cutting sheet metal, profiles and solid material, and for cutting out holes.



Special features:
- Fast work progress thanks to good cutting performance.
- Maximum economic efficiency due to maximum tool life.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
105	1	16	14,500	A	25	69121043	EHT 105-1,0 SG STEELOX/16,0	-
115	1	22.23	13,300	A	25	61340412	EHT 115-1,0 SG STEELOX	-
	1.6	22.23	13,300	A	25	61340422	EHT 115-1,6 SG STEELOX	-
	2.4	22.23	13,300	A	25	61340432	EHT 115-2,4 SG STEELOX	-
125	1	22.23	12,200	A	25	61341112	EHT 125-1,0 SG STEELOX	-
	1.6	22.23	12,200	A	25	61341122	EHT 125-1,6 SG STEELOX	-
	2	22.23	12,200	A	25	61320120	EHT 125-2,0 SG STEELOX	-
	2.4	22.23	12,200	A	25	61331432	EHT 125-2,4 SG STEELOX	-
150	1.6	22.23	10,200	A	25	61342122	EHT 150-1,6 SG STEELOX	-
	2	22.23	10,200	A	25	61342400	EHT 150-2,0 SG STEELOX	-
	2.5	22.23	10,200	A	25	61100150	EHT 150-2,5 SG STEELOX	-
180	1.6	22.23	8,500	A	25	61326410	EHT 180-1,6 SG STEELOX	-
	2	22.23	8,500	A	25	69901412	EHT 180-2,0 SG STEELOX	-
	2.5	22.23	8,500	A	25	61326422	EHT 180-2,5 SG STEELOX	-
230	1.9	22.23	6,600	A	25	61328430	EHT 230-1,9 SG STEELOX	-
	2	22.23	6,600	A	25	61328400	EHT 230-2,0 SG STEELOX	-
	2.5	22.23	6,600	A	25	61328422	EHT 230-2,5 SG STEELOX	-
	3.2	22.23	6,600	A	25	61328432	EHT 230-3,2 SG STEELOX	-
Flat design EHT (type 41) with X-LOCK holder						**X-LOCK**		
125	1	22.23	12,200	A	25	61341113	EHT 125-1,0 SG STEELOX/X-LOCK	-
	1.6	22.23	12,200	A	25	61341123	EHT 125-1,6 SG STEELOX/X-LOCK	-
Depressed-centre design EH (shape 42)								
115	2.4	22.23	13,300	A	25	61340123	EH 115-2,4 SG STEELOX	-
	3.2	22.23	13,300	A	25	61332432	EH 115-3,2 SG STEELOX	-
125	2.4	22.23	12,200	A	25	61341222	EH 125-2,4 SG STEELOX	-
	3.2	22.23	12,200	A	25	61333432	EH 125-3,2 SG STEELOX	-
180	2.5	22.23	8,500	A	25	61323223	EH 180-2,5 SG STEELOX	-
230	2.5	22.23	6,600	A	25	61324223	EH 230-2,5 SG STEELOX	-
Depressed-centre design EH (type 42) with X-LOCK holder						**X-LOCK**		
125	2.4	22.23	12,200	A	25	61340125	EH 125-2,4 SG STEELOX/X-LOCK	-



SG CLASSIC STEELOX ★★★☆

Cut-off wheel for steel and stainless steel (INOX) with high cutting performance and maximum tool life. Suitable for cutting sheet metal, profiles and solid material, and for cutting out holes.

Special features:
- Fast work progress thanks to good cutting performance.
- Maximum economic efficiency due to maximum tool life.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
115	1.6	22.23	13,300	A	25	*61340151*	EHT 115-1,6 SG CLASSIC STEELOX	-
125	1	22.23	12,200	A	25	61341106	EHT 125-1,0 SG CLASSIC STEELOX	-
	1.6	22.23	12,200	A	25	61341120	EHT 125-1,6 SG CLASSIC STEELOX	-
180	1.6	22.23	8,600	A	25	61326406	EHT 178-1,6 SG CLASSIC STEELOX	-



SG INOX ★★★☆

Cut-off wheel for stainless steel (INOX) with high cutting performance and maximum tool life. Suitable for cutting sheet metal, profiles and solid material, and for cutting out holes.



Special features:
- Fast work progress thanks to good cutting performance.
- Maximum economic efficiency due to maximum tool life.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
105	1	16	14,500	A	25	61315113	EHT 105-1,0 SG INOX/16,0	-
115	0.8	22.23	13,300	A	25	61340396	EHT 115-0,8 SG INOX	-
	1	22.23	13,300	A	25	61340416	EHT 115-1,0 SG INOX	-
	1.6	22.23	13,300	A	25	61340424	EHT 115-1,6 SG INOX	-
125	0.8	22.23	12,200	A	25	61341096	EHT 125-0,8 SG INOX	-
	1	22.23	12,200	A	25	61341116	EHT 125-1,0 SG INOX	-
	1.6	22.23	12,200	A	25	61341124	EHT 125-1,6 SG INOX	-
150	1.6	22.23	10,200	A	25	61342124	EHT 150-1,6 SG INOX	-
180	1.6	22.23	8,500	A	25	61326124	EHT 180-1,6 SG INOX	-
	2.5	22.23	8,500	A	25	61326423	EHT 180-2,5 SG INOX	-
230	1.9	22.23	6,600	A	25	61328124	EHT 230-1,9 SG INOX	-
	2.5	22.23	6,600	A	25	61328423	EHT 230-2,5 SG INOX	-
Depressed-centre design EH (shape 42)								
115	2.4	22.23	13,300	A	25	61340124	EH 115-2,4 SG INOX	-
125	2.4	22.23	12,200	A	25	61341223	EH 125-2,4 SG INOX	-

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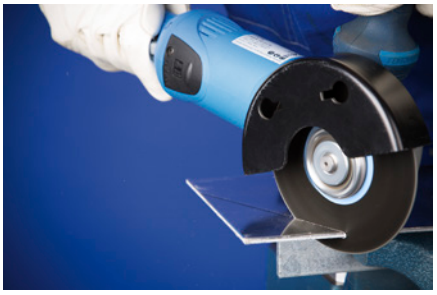
Cut-off wheels
Performance Line SG ★★★☆

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
180	2.5	22.23	8,500	A	25	61323224	EH 180-2,5 SG INOX	-
230	2.5	22.23	6,600	A	25	61324224	EH 230-2,5 SG INOX	-



SG ALU ★★★☆

Cut-off wheel for aluminium and other non-ferrous metals with high cutting performance and maximum tool life. Suitable for cutting sheet metal, profiles and solid material, and for cutting out holes.



Special features:
- Special abrasive mixture and bond technology prevent the cut-off wheel clogging up, even on soft, tough aluminium.
- Does not contain any fillers that could leave undesirable residues on the workpiece. The surface can therefore be welded immediately.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
105	1	16	14,500	A/C	25	61339430	EHT 105-1,0 SG ALU/16,0	-
115	1	22.23	13,300	A/C	25	61340415	EHT 115-1,0 SG ALU	-
	1.6	22.23	13,300	A/C	25	61340425	EHT 115-1,6 SG ALU	-
	2.4	22.23	13,300	A/C	25	61340550	EHT 115-2,4 SG ALU	-
125	1	22.23	12,200	A/C	25	61341115	EHT 125-1,0 SG ALU	-
	1.6	22.23	12,200	A/C	25	61341225	EHT 125-1,6 SG ALU	-
	2.4	22.23	12,200	A/C	25	61331550	EHT 125-2,4 SG ALU	-
150	1.6	22.23	10,200	A/C	25	61323116	EHT 150-1,6 SG ALU	-
180	1.6	22.23	8,500	A/C	25	61326119	EHT 180-1,6 SG ALU	-
	2.9	22.23	8,500	A/C	25	61326323	EHT 180-2,9 SG ALU	-
230	1.9	22.23	6,600	A/C	25	61328119	EHT 230-1,9 SG ALU	-
	2.9	22.23	6,600	A/C	25	61328323	EHT 230-2,9 SG ALU	-
Depressed-centre design EH (shape 42)								
115	2.4	22.23	13,300	A/C	25	61340312	EH 115-2,4 SG ALU	-
125	2.4	22.23	12,200	A/C	25	61320822	EH 125-2,4 SG ALU	-
180	2.9	22.23	8,500	A/C	25	61323323	EH 180-2,9 SG ALU	-
230	2.9	22.23	6,600	A/C	25	61324323	EH 230-2,9 SG ALU	-



CERAMIC SGP STEEL ★★★★

Special cut-off wheel with ceramic oxide grain for steel with ultimate cutting performance and excellent tool life. Suitable for cutting large cross-sections, profiles and solid material, and for cutting out holes.



Special features:
- Extremely fast work progress, even with large cross-sections.
- Previously unattained cutting performance thanks to high-performance abrasive ceramic oxide grain in conjunction with a special bond technology.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
100	1.3	16	15,300	CO	25	61301013	EHT 100-1,3 CERAMIC SGP STEEL/16,0	-
115	1	22.23	13,300	CO	25	61301510	EHT 115-1,0 CERAMIC SGP STEEL	-
	1.6	22.23	13,300	CO	25	61301516	EHT 115-1,6 CERAMIC SGP STEEL	-
125	1	22.23	12,200	CO	25	61312510	EHT 125-1,0 CERAMIC SGP STEEL	-
	1.6	22.23	12,200	CO	25	61312516	EHT 125-1,6 CERAMIC SGP STEEL	-
	2	22.23	12,200	CO	25	61312520	EHT 125-2,0 CERAMIC SGP STEEL	-
150	1.6	22.23	10,200	CO	25	61315016	EHT 150-1,6 CERAMIC SGP STEEL	-
180	1.6	22.23	8,500	CO	25	61318016	EHT 180-1,6 CERAMIC SGP STEEL	-
	2.5	22.23	8,500	CO	25	61318025	EHT 180-2,5 CERAMIC SGP STEEL	-
230	1.9	22.23	6,600	CO	25	61323019	EHT 230-1,9 CERAMIC SGP STEEL	-
	2.5	22.23	6,600	CO	25	61323025	EHT 230-2,5 CERAMIC SGP STEEL	-
Depressed-centre design EH (shape 42)								
115	1.6	22.23	13,300	CO	25	61300115	EH 115-1,6 CERAMIC SGP STEEL	-
125	1.6	22.23	12,200	CO	25	61300125	EH 125-1,6 CERAMIC SGP STEEL	-



SGP STEELOX ★★★★

Cut-off wheel for steel and stainless steel (INOX) with high cutting performance and an excellent tool life. Suitable for cutting thin sheet and profiles, and for cutting out holes.



Special features:
- Excellent tool life on thin sheet metal and profiles thanks to wear-resistant bond system.
- Fast work progress thanks to good cutting performance.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
105	0.8	16	14,500	A	25	61330008	EHT 105-0,8 SGP STEELOX/16,0	-
	1	16	14,500	A	25	61330012	EHT 105-1,0 SGP STEELOX/16,0	-
115	0.8	22.23	13,300	A	25	61340394	EHT 115-0,8 SGP STEELOX	-
	1	22.23	13,300	A	25	61330421	EHT 115-1,0 SGP STEELOX	-
	1.6	22.23	13,300	A	25	61330420	EHT 115-1,6 SGP STEELOX	-

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Cut-off wheels
Special Line SGP ★★★★

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
115	2.2	22.23	13,300	A	25	61330422	EHT 115-2,2 SGP STEELOX	-
125	0.8	22.23	12,200	A	25	61341094	EHT 125-0,8 SGP STEELOX	-
	1	22.23	12,200	A	25	61331421	EHT 125-1,0 SGP STEELOX	-
	1.6	22.23	12,200	A	25	61331420	EHT 125-1,6 SGP STEELOX	-
	2.2	22.23	12,200	A	25	61331622	EHT 125-2,2 SGP STEELOX	-
150	1.6	22.23	10,200	A	25	61342164	EHT 150-1,6 SGP STEELOX	-
	2.5	22.23	10,200	A	25	61342225	EHT 150-2,5 SGP STEELOX	-
180	1.6	22.23	8,500	A	25	61343122	EHT 180-1,6 SGP STEELOX	-
230	1.9	22.23	6,600	A	25	61328702	EHT 230-1,9 SGP STEELOX	-
	2.3	22.23	6,600	A	25	61328712	EHT 230-2,3 SGP STEELOX	-
	2.8	22.23	6,600	A	25	61328722	EHT 230-2,8 SGP STEELOX	-

Clamping flanges



Clamping flange set for thin 180/230 mm cut-off wheels

Clamping flange set for increasing lateral stability and precise guidance, especially when using cut-off wheels from 1.6 to 2.0 mm in width with diameters of 180 and 230 mm. The set can be used with any standard angle grinder with M14 or 5/8''-11 drive spindle.

For angle grinders with a spindle	D [mm]		Item no.	Designation	Price/unit EUR
M 14	76	1	33500760	SFS 76 M14	-
5/8-11 inch	76	1	33500761	SFS 76 5/8"-11	-



SG CAST + STEEL ★★★☆

Cut-off wheel optimized for use in harsh conditions in foundries and fettling shops with high cutting performance, good tool life and high lateral stability. Suitable for cutting cast iron and cast steel.

Special features:
- The reinforced fabric armouring for tough foundry applications guarantees the highest degree of safety.
- Fast work progress due to high cutting performance and high efficiency thanks to excellent tool life.
- Optimized for use on compressed-air turbine and high-frequency angle grinders.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
230	3.2	22.23	6,600	A	25	*61328228*	EHT 230-3,2 SG CAST+STEEL	-



SG CAST + INOX ★★★☆

Cut-off wheel optimized for use in harsh conditions in foundries and fettling shops with high cutting performance, good tool life and high lateral stability. Suitable for cutting cast iron, stainless steel (INOX) and cast steel.

Special features:
- The reinforced fabric armouring for tough foundry applications guarantees the highest degree of safety.
- Fast work progress due to high cutting performance and high efficiency thanks to excellent tool life.
- Optimized for use on compressed-air turbine and high-frequency angle grinders.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
230	2.9	22.23	6,600	A	25	61328832	EHT 230-2,9 SG CAST+INOX	-
Depressed-centre design EH (shape 42)								
230	2.9	22.23	6,600	A	25	61324832	EH 230-2,9 SG CAST+INOX	-

Cut-off wheels for foundries
Performance Line SG ★★★☆



SG CAST + ALU ★★★☆

Cut-off wheel optimized for use in harsh conditions in foundries and fettling shops with high cutting performance, good tool life and high lateral stability. Suitable for cutting grey/nodular cast iron (GG/GJL, GGG/GJS) and hard aluminium alloys.

Special features:
- The reinforced fabric armouring for tough foundry applications guarantees the highest degree of safety.
- Fast work progress due to high cutting performance and high efficiency thanks to excellent tool life.
- Optimized for use on compressed-air turbine and high-frequency angle grinders.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design EH (shape 42)								
230	3.2	22.23	6,600	A/C	25	61324802	EH 230-3,2 SG CAST+ALU	-



ZIRKON SG CAST ★★★☆

Cut-off wheel optimized for use in foundries and fettling shops with high cutting performance, maximum tool life and high lateral stability. For cutting grey/nodular cast iron (GG/GJL, GGG/GJS).

Special features:
- The reinforced fabric armouring for tough foundry applications guarantees the highest degree of safety.
- Fast work progress due to high cutting performance and maximum efficiency thanks to optimum tool life.
- Optimized for use on compressed-air turbine and high-frequency angle grinders.

D [mm]	T/U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
230	3.2	22.23	6,600	Z/C	25	*61110000*	EHT 230-3,2 ZIRKON SG CAST	-
Depressed-centre design EH (shape 42)								
230	3.2	22.23	6,600	Z/C	25	69120642	EH 230-3,2 ZIRKON SG CAST	-



SG DUODISC CAST combination disc ★★★☆

The DUODISC combination wheel is the solution for safe cutting and grinding in harsh conditions in foundries and fettling shops using just one tool. Suitable for work on grey/nodular cast iron (GG/GJL, GGG/GJS) and for cutting, surface grinding and deburring.



Special features:

- Safe, standard-compliant solution for cutting and face grinding with just one tool.
- Optimized for use on compressed-air turbine and high-frequency angle grinders.
- Unlike cut-off wheels, can also be used with protective cover open.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
230	3.8	22.23	6,600	A/C	10	*62023100*	E 230-3,8 SG DUO CAST	-

Cut-off wheels for straight grinders
Performance Line SG ★★★☆



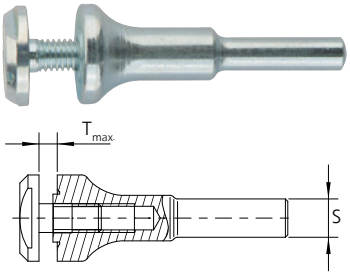
SG STEELOX ★★★☆

Universal cut-off wheel for a range of materials, for use on straight grinders. Suitable for cutting sheet metal, profiles and solid material, and for cutting out holes.



Special features:
- Ideal for hard-to-reach areas.
- Thin cut-off wheels are ergonomically optimised, efficient and provide impressively fast and thin cuts with minimized burr formation.
- Maximum economic efficiency due to maximum tool life.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design EHT (shape 41)								
30	1	6	51,000	A	50	65503010	EHT 30-1,0 SG STEELOX/6,0	-
	1.4	6	51,000	A	50	65503020	EHT 30-1,4 SG STEELOX/6,0	-
40	1	6	38,200	A	50	65504010	EHT 40-1,0 SG STEELOX/6,0	-
	2	6	38,200	A	50	65504020	EHT 40-2,0 SG STEELOX/6,0	-
50	0.8	6	30,600	A	50	65505008	EHT 50-0,8 SG STEELOX/6,0	-
	1	6	30,600	A	50	65505000	EHT 50-1,0 SG STEELOX/6,0	-
	1.4	6	30,600	A	50	65505010	EHT 50-1,4 SG STEELOX/6,0	-
	2	6	30,600	A	50	65505020	EHT 50-2,0 SG STEELOX/6,0	-
	3	6	30,600	A	50	65505030	EHT 50-3,0 SG STEELOX/6,0	-
65	0.8	10	23,500	A	50	65506009	EHT 65-0,8 SG STEELOX/10,0	-
		6	23,500	A	50	65506008	EHT 65-0,8 SG STEELOX/6,0	-
	1	10	23,500	A	50	65506001	EHT 65-1,0 SG STEELOX/10,0	-
		6	23,500	A	50	65506000	EHT 65-1,0 SG STEELOX/6,0	-
	1.4	10	23,500	A	50	65506011	EHT 65-1,4 SG STEELOX/10,0	-
	2	10	23,500	A	50	65506021	EHT 65-2,0 SG STEELOX/10,0	-
	3	10	23,500	A	50	65506031	EHT 65-3,0 SG STEELOX/10,0	-
70	1	10	21,800	A	50	65507001	EHT 70-1,0 SG STEELOX/10,0	-
	1.4	10	21,800	A	50	65507011	EHT 70-1,4 SG STEELOX/10,0	-
	2	10	21,800	A	50	65507021	EHT 70-2,0 SG STEELOX/10,0	-
	3	10	21,800	A	50	*65507031*	EHT 70-3,0 SG STEELOX/10,0	-
76	0.8	10	20,100	A	50	65508008	EHT 76-0,8 SG STEELOX/10,0	-
		6	20,100	A	50	65508009	EHT 76-0,8 SG STEELOX/6,0	-
	1	10	20,100	A	50	65508001	EHT 76-1,0 SG STEELOX/10,0	-
		6	20,100	A	50	65508000	EHT 76-1,0 SG STEELOX/6,0	-
	1.4	10	20,100	A	50	65508011	EHT 76-1,4 SG STEELOX/10,0	-
	2	10	20,100	A	50	65508021	EHT 76-2,0 SG STEELOX/10,0	-
	3	10	20,100	A	50	65508031	EHT 76-3,0 SG STEELOX/10,0	-



Arbor for small cut-off wheels

Accessory for mounting small cut-off wheels on straight grinders. Sturdy version with maximum shank breakage resistance.



S [mm]	Suitable for hole diameter [mm]	T_{max} [mm]		Item no.	Designation	Price/unit EUR
6	6	0 – 4	1	33510000	BO 6/6 0-4	-
	10	0 – 4	1	33512000	BO 6/10 0-4	-
6.35	6	0 – 4	1	33511000	BO 6,35/6 0-4 (1/4)	-
	10	0 – 4	1	33513000	BO 6,35/10 0-4 (1/4)	-
8	10	0 – 4	1	33514000	BO 8/10 0-4	-

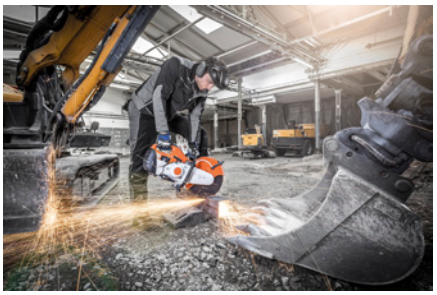
Cut-off wheels for petrol cutters and cut-off grinders

Performance Line SG ★★★☆



SG STEEL ★★★☆

Cut-off wheel for use on petrol cutters and cut-off grinders with high cutting performance and maximum tool life. Suitable for cutting cast iron and steel.



Special features:

- Fast work progress thanks to good cutting performance.
- Maximum economic efficiency due to maximum tool life.
- Suitable for hand-held cutting.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Maximum operating speed 80 m/s, flat design EHT (type 41)								
300	4	20	5,100	A	20	61329320	80 EHT 300-4,0 SG STEEL/20,0	-
		22.23	5,100	A	20	61329322	80 EHT 300-4,0 SG STEEL/22,23	-
		25.4	5,100	A	20	61329325	80 EHT 300-4,0 SG STEEL/25,4	-
Maximum operating speed 100 m/s, flat design EHT (type 41)								
300	4	20	6,400	A	20	61329120	100 EHT 300-4,0 SG STEEL/20,0	-
		22.23	6,400	A	20	61329122	100 EHT 300-4,0 SG STEEL/22,23	-
		25.4	6,400	A	20	61329125	100 EHT 300-4,0 SG STEEL/25,4	-
350	4.5	20	5,500	A	10	61329520	100 EHT 350-4,5 SG STEEL/20,0	-
		22.23	5,500	A	10	61329522	100 EHT 350-4,5 SG STEEL/22,23	-
		25.4	5,500	A	10	61329525	100 EHT 350-4,5 SG STEEL/25,4	-
400	4.8	20	4,800	A	10	61329820	100 EHT 400-4,8 SG STEEL/20,0	-
		22.23	4,800	A	10	61329822	100 EHT 400-4,8 SG STEEL/22,23	-
		25.4	4,800	A	10	61329825	100 EHT 400-4,8 SG STEEL/25,4	-



SG STONE ★★★☆

Cut-off wheel for use on petrol cutters and cut-off grinders with high cutting performance and maximum tool life. Suitable for cutting aluminium, asphalt, cast iron, concrete, stone and other non-ferrous metals.



Special features:

- Fast work progress thanks to good cutting performance.
- Maximum economic efficiency due to maximum tool life.
- Suitable for hand-held cutting.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Maximum operating speed 80 m/s, flat design EHT (type 41)								
300	4	20	5,100	C	20	61629320	80 EHT 300-4,0 SG STONE/20,0	-
		22.23	5,100	C	20	61629322	80 EHT 300-4,0 SG STONE/22,23	-
		25.4	5,100	C	20	61629325	80 EHT 300-4,0 SG STONE/25,4	-
Maximum operating speed 100 m/s, flat design EHT (type 41)								
350	4.5	20	5,500	C	10	61629520	100 EHT 350-4,5 SG STONE/20,0	-
		22.23	5,500	C	10	61629522	100 EHT 350-4,5 SG STONE/22,23	-
		25.4	5,500	C	10	61629525	100 EHT 350-4,5 SG STONE/25,4	-

Cut-off wheels for petrol cutters and cut-off grinders

Performance Line SG ★★★☆



SG CAST + STONE ★★★☆

Cut-off wheel for use on petrol cutters and cut-off grinders with high cutting performance and maximum tool life. Suitable for cutting cast iron, concrete, ductile cast iron and reinforced concrete.



Special features:

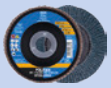
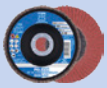
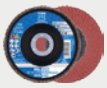
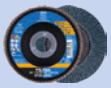
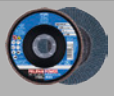
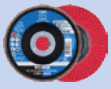
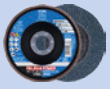
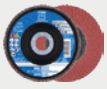
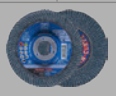
- Fast work progress thanks to good cutting performance.
- Maximum economic efficiency due to maximum tool life.
- Suitable for hand-held cutting.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Maximum operating speed 100 m/s, flat design EHT (type 41)								
300	4	20	6,400	A/C	20	61329130	100 EHT 300-4,0 SG CAST+STONE/20,0	-
		22.23	6,400	A/C	20	61329131	100 EHT 300-4,0 SG CAST+STONE/22,23	-
		25.4	6,400	A/C	20	61329132	100 EHT 300-4,0 SG CAST+STONE/25,4	-
350	4.5	20	5,500	A/C	10	61329530	100 EHT 350-4,5 SG CAST+STONE/20,0	-
		22.23	5,500	A/C	10	61329531	100 EHT 350-4,5 SG CAST+STONE/22,23	-
		25.4	5,500	A/C	10	61329532	100 EHT 350-4,5 SG CAST+STONE/25,4	-

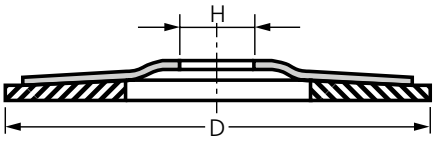
POLIFAN flap discs

The quick way to find the perfect tool

Product group selection

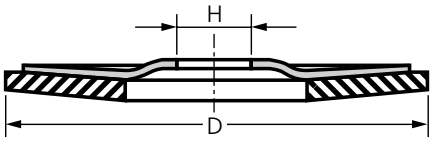
Application	Product line	Steel (STEEL)		Stainless steel (INOX)		Aluminium (ALU)
■ Surface grinding ■ Work on weld seams	Universal Line PSF ★★☆☆	 Z PSF STEELOX	 A PSF STEELOX	 Z PSF STEELOX		
	Performance Line SG ★★★☆	 Z SG POWER STEELOX	 A SG STEELOX	 CO-FREEZE SG INOX	 A-COOL SG INOX + ALU	 A-COOL SG INOX + ALU
	Special Line SGP ★★★★	 Z SGP STRONG STEEL	 Z SGP POLIFAN FORCE	 CO-FREEZE SGP STRONG INOX		
■ Chamfering ■ Deburring	Universal Line PSF ★★☆☆	 Z PSF STEELOX		 Z PSF STEELOX		
	Performance Line SG ★★★☆	 Z SG POWER STEELOX	 Z SG DURABLE STEEL	 CO-COOL SG STEELOX	 Z SG POWER STEELOX	 A-COOL SG INOX + ALU
	Special Line SGP ★★★★	 Z SGP STRONG STEEL	 Z SGP POLIFAN FORCE			
■ Work on fillet welds	Special Line SGP ★★★★	 Z SGP CURVE STEELOX		 CO SGP CURVE STEELOX		 A SGP CURVE ALU

Shape selection



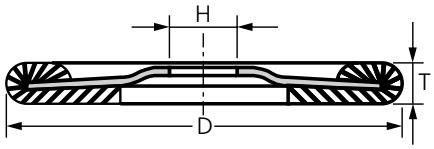
Flat design PFF

Larger grinding area for surface grinding. Optimum exploitation of the flap configuration at a contact angle of 0–15°.



Conical type PFC

Narrower grinding area for work on weld seams, chamfering and deburring. Optimum exploitation of the flap configuration at a contact angle of 10–25°.



Radial type PFR (CURVE)

The specialist for work on fillet welds. After the circumference has worn down, can continue to be used as a conventional flap disc.

Grit size selection

Note: With POLIFAN flap discs, grit that is one grade coarser can be selected in order to achieve the same surface as with fibre discs.

	Grit size			
	36/40	50/60	80	120
Application	Work on weld seams			
	Chamfering			
		Deburring		
		Surface grinding for refining the surface		

Universal Line PSF ★★☆☆



A PSF STEELOX ★★☆☆

POLIFAN flap disc for steel and stainless steel (INOX) with high stock removal rate and good tool life. Suitable for surface grinding and work on weld seams.



Special features:
- Fast work progress and high economic efficiency thanks to the good stock removal rate.
- Good tool life.
- Also ideal for cordless angle grinders.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design PFF								
115	40	22.23	13,300	A	10	67644115	PFF 115 A 40 PSF STEELOX	-
	60	22.23	13,300	A	10	67646115	PFF 115 A 60 PSF STEELOX	-
	80	22.23	13,300	A	10	67648115	PFF 115 A 80 PSF STEELOX	-
	120	22.23	13,300	A	10	67649115	PFF 115 A 120 PSF STEELOX	-
125	40	22.23	12,200	A	10	67644125	PFF 125 A 40 PSF STEELOX	-
	60	22.23	12,200	A	10	67646125	PFF 125 A 60 PSF STEELOX	-
	80	22.23	12,200	A	10	67648125	PFF 125 A 80 PSF STEELOX	-
	120	22.23	12,200	A	10	67649125	PFF 125 A 120 PSF STEELOX	-
180	40	22.23	8,500	A	10	67644185	PFF 180 A 40 PSF STEELOX	-
Conical type PFC								
115	40	22.23	13,300	A	10	67744115	PFC 115 A 40 PSF STEELOX	-
	60	22.23	13,300	A	10	67746115	PFC 115 A 60 PSF STEELOX	-
	80	22.23	13,300	A	10	67748115	PFC 115 A 80 PSF STEELOX	-
	120	22.23	13,300	A	10	67749115	PFC 115 A 120 PSF STEELOX	-
125	40	22.23	12,200	A	10	67744125	PFC 125 A 40 PSF STEELOX	-
	60	22.23	12,200	A	10	67746125	PFC 125 A 60 PSF STEELOX	-
	80	22.23	12,200	A	10	67748125	PFC 125 A 80 PSF STEELOX	-
	120	22.23	12,200	A	10	67749125	PFC 125 A 120 PSF STEELOX	-
180	40	22.23	8,500	A	10	67744185	PFC 180 A 40 PSF STEELOX	-
	60	22.23	8,500	A	10	67746185	PFC 180 A 60 PSF STEELOX	-

POLIFAN flap discs
Universal Line PSF ★★☆☆



Z PSF STEELOX ★★☆☆

POLIFAN flap disc for steel and stainless steel (INOX) with aggressive stock removal rate and good tool life. Suitable for surface grinding, chamfering, deburring and work on weld seams.

Special features:
- Fast work progress and high economic efficiency thanks to the aggressive stock removal rate.
- Good tool life.
- Also suitable for low-power angle grinders.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design PFF								
100	40	16	15,300	Z	10	69300660	PFF 100 Z 40 PSF STEELOX/16,0	-
	60	16	15,300	Z	10	69300661	PFF 100 Z 60 PSF STEELOX/16,0	-
	80	16	15,300	Z	10	69300662	PFF 100 Z 80 PSF STEELOX/16,0	-
115	40	22.23	13,300	Z	10	67664115	PFF 115 Z 40 PSF STEELOX	-
	60	22.23	13,300	Z	10	67666115	PFF 115 Z 60 PSF STEELOX	-
	80	22.23	13,300	Z	10	67668115	PFF 115 Z 80 PSF STEELOX	-
125	40	22.23	12,200	Z	10	67664125	PFF 125 Z 40 PSF STEELOX	-
	60	22.23	12,200	Z	10	67666125	PFF 125 Z 60 PSF STEELOX	-
	80	22.23	12,200	Z	10	67668125	PFF 125 Z 80 PSF STEELOX	-
180	40	22.23	8,500	Z	10	67664185	PFF 180 Z 40 PSF STEELOX	-
	60	22.23	8,500	Z	10	67666185	PFF 180 Z 60 PSF STEELOX	-
Conical type PFC								
100	40	16	15,300	Z	10	67764100	PFC 100 Z 40 PSF STEELOX/16	-
	60	16	15,300	Z	10	67766100	PFC 100 Z 60 PSF STEELOX/16,0	-
	80	16	15,300	Z	10	67768100	PFC 100 Z 80 PSF STEELOX/16,0	-
	120	16	15,300	Z	10	67769100	PFC 100 Z 120 PSF STEELOX/16,0	-
115	40	22.23	13,300	Z	10	67764115	PFC 115 Z 40 PSF STEELOX	-
	60	22.23	13,300	Z	10	67766115	PFC 115 Z 60 PSF STEELOX	-
	80	22.23	13,300	Z	10	67768115	PFC 115 Z 80 PSF STEELOX	-
	120	22.23	13,300	Z	10	67769115	PFC 115 Z 120 PSF STEELOX	-
125	40	22.23	12,200	Z	10	67764125	PFC 125 Z 40 PSF STEELOX	-
	60	22.23	12,200	Z	10	67766125	PFC 125 Z 60 PSF STEELOX	-
	80	22.23	12,200	Z	10	67768125	PFC 125 Z 80 PSF STEELOX	-
	120	22.23	12,200	Z	10	67769125	PFC 125 Z 120 PSF STEELOX	-
150	40	22.23	10,200	Z	10	67764150	PFC 150 Z 40 PSF STEELOX	-
	60	22.23	10,200	Z	10	67766150	PFC 150 Z 60 PSF STEELOX	-
180	40	22.23	8,500	Z	10	67764185	PFC 180 Z 40 PSF STEELOX	-
	60	22.23	8,500	Z	10	67766185	PFC 180 Z 60 PSF STEELOX	-
	80	22.23	8,500	Z	10	67768185	PFC 180 Z 80 PSF STEELOX	-
180	120	22.23	8,500	Z	10	67769185	PFC 180 Z 120 PSF STEELOX	-
Conical design PFC with X-LOCK mounting						X-LOCK		
115	40	22.23	13,300	Z	10	67664116	PFC 115 Z 40 PSF STEELOX/X-LOCK	-
	60	22.23	13,300	Z	10	67666116	PFC 115 Z 60 PSF STEELOX/X-LOCK	-
	80	22.23	13,300	Z	10	67668116	PFC 115 Z 80 PSF STEELOX/X-LOCK	-
125	40	22.23	12,200	Z	10	67664126	PFC 125 Z 40 PSF STEELOX/X-LOCK	-
	60	22.23	12,200	Z	10	67666126	PFC 125 Z 60 PSF STEELOX/X-LOCK	-
	80	22.23	12,200	Z	10	67668126	PFC 125 Z 80 PSF STEELOX/X-LOCK	-



Z PSF TRIM STEELOX ★★☆☆

POLIFAN flap disc for steel and stainless steel (INOX) with aggressive stock removal rate and good tool life. Suitable for surface grinding, chamfering, deburring, gradual fine grinding and work on weld seams.

Special features:
- Fast work progress and high economic efficiency thanks to the aggressive stock removal rate.
- Trimming the tool enables the abrasive to be used optimally.
- Also suitable for low-power angle grinders.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Conical type PFC								
115	40	22.23	13,300	Z	10	67771114	PFC 115 Z 40 PSF TRIM STEELOX	-
	60	22.23	13,300	Z	10	67771116	PFC 115 Z 60 PSF TRIM STEELOX	-
	80	22.23	13,300	Z	10	67771118	PFC 115 Z 80 PSF TRIM STEELOX	-
125	40	22.23	12,200	Z	10	67771124	PFC 125 Z 40 PSF TRIM STEELOX	-
	60	22.23	12,200	Z	10	67771126	PFC 125 Z 60 PSF TRIM STEELOX	-
	80	22.23	12,200	Z	10	67771128	PFC 125 Z 80 PSF TRIM STEELOX	-

Performance Line SG ★★★☆



A SG STEELOX ★★★☆

POLIFAN flap disc for steel and stainless steel (INOX) with high stock removal rate and very long tool life. Suitable for surface grinding and work on weld seams.



Special features:
- Fast work progress and high economic efficiency thanks to the good stock removal rate.
- Fewer tool changes due to the very long tool life.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design PFF								
100	40	16	15,300	A	10	67604100	PFF 100 A 40 SG STEELOX/16,0	-
	60	16	15,300	A	10	67606100	PFF 100 A 60 SG STEELOX/16,0	-
	80	16	15,300	A	10	67608100	PFF 100 A 80 SG STEELOX/16,0	-
	120	16	15,300	A	10	67612100	PFF 100 A 120 SG STEELOX/16,0	-
115	40	22.23	13,300	A	10	67604115	PFF 115 A 40 SG STEELOX	-
	60	22.23	13,300	A	10	67606115	PFF 115 A 60 SG STEELOX	-
	80	22.23	13,300	A	10	67608115	PFF 115 A 80 SG STEELOX	-
	120	22.23	13,300	A	10	67612115	PFF 115 A 120 SG STEELOX	-
125	40	22.23	12,200	A	10	67604125	PFF 125 A 40 SG STEELOX	-
	60	22.23	12,200	A	10	67606125	PFF 125 A 60 SG STEELOX	-
	80	22.23	12,200	A	10	67608125	PFF 125 A 80 SG STEELOX	-
	120	22.23	12,200	A	10	67612125	PFF 125 A 120 SG STEELOX	-

Continued on next page

POLIFAN flap discs
Performance Line SG ★★★☆

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
180	40	22.23	8,500	A	10	67604185	PFF 180 A 40 SG STEELOX	-
	60	22.23	8,500	A	10	67606185	PFF 180 A 60 SG STEELOX	-
	80	22.23	8,500	A	10	67608185	PFF 180 A 80 SG STEELOX	-
	120	22.23	8,500	A	10	67612185	PFF 180 A 120 SG STEELOX	-
Conical type PFC								
115	40	22.23	13,300	A	10	67704115	PFC 115 A 40 SG STEELOX	-
	60	22.23	13,300	A	10	67706115	PFC 115 A 60 SG STEELOX	-
	80	22.23	13,300	A	10	67708115	PFC 115 A 80 SG STEELOX	-
	120	22.23	13,300	A	10	67712115	PFC 115 A 120 SG STEELOX	-
125	40	22.23	12,200	A	10	67704125	PFC 125 A 40 SG STEELOX	-
	60	22.23	12,200	A	10	67706125	PFC 125 A 60 SG STEELOX	-
	80	22.23	12,200	A	10	67708125	PFC 125 A 80 SG STEELOX	-
	120	22.23	12,200	A	10	67712125	PFC 125 A 120 SG STEELOX	-
180	40	22.23	8,500	A	10	67704185	PFC 180 A 40 SG STEELOX	-
	60	22.23	8,500	A	10	67706185	PFC 180 A 60 SG STEELOX	-
	80	22.23	8,500	A	10	67708185	PFC 180 A 80 SG STEELOX	-
	120	22.23	8,500	A	10	67712185	PFC 180 A 120 SG STEELOX	-



A-COOL SG INOX + ALU ★★★☆

POLIFAN flap disc with particularly cool grinding on materials that do not conduct heat well such as stainless steel (INOX) and aluminium. Suitable for surface grinding, chamfering, deburring and work on weld seams.



Special features:
- Less heat build-up in the workpiece compared with other flap discs.
- The active grinding abrasive coating prevents clogging, for example on soft aluminium.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design PFF								
100	40	16	15,300	A-COOL	10	67654100	PFF 100 A-COOL 40 SG INOX+ALU/16,0	-
	60	16	15,300	A-COOL	10	67656100	PFF 100 A-COOL 60 SG INOX+ALU/16,0	-
	80	16	15,300	A-COOL	10	67658100	PFF 100 A-COOL 80 SG INOX+ALU/16,0	-
115	40	22.23	13,300	A-COOL	10	67654115	PFF 115 A-COOL 40 SG INOX+ALU	-
	60	22.23	13,300	A-COOL	10	67656115	PFF 115 A-COOL 60 SG INOX+ALU	-
	80	22.23	13,300	A-COOL	10	67658115	PFF 115 A-COOL 80 SG INOX+ALU	-
125	40	22.23	12,200	A-COOL	10	67654125	PFF 125 A-COOL 40 SG INOX+ALU	-
	60	22.23	12,200	A-COOL	10	67656125	PFF 125 A-COOL 60 SG INOX+ALU	-
	80	22.23	12,200	A-COOL	10	67658125	PFF 125 A-COOL 80 SG INOX+ALU	-
180	40	22.23	8,500	A-COOL	10	67654185	PFF 180 A-COOL 40 SG INOX+ALU	-
	60	22.23	8,500	A-COOL	10	67656185	PFF 180 A-COOL 60 SG INOX+ALU	-
	80	22.23	8,500	A-COOL	10	67658185	PFF 180 A-COOL 80 SG INOX+ALU	-
Conical type PFC								
115	40	22.23	13,300	A-COOL	10	67754115	PFC 115 A-COOL 40 SG INOX+ALU	-
	60	22.23	13,300	A-COOL	10	67756115	PFC 115 A-COOL 60 SG INOX+ALU	-
	80	22.23	13,300	A-COOL	10	67758115	PFC 115 A-COOL 80 SG INOX+ALU	-

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D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
125	40	22.23	12,200	A-COOL	10	67754125	PFC 125 A-COOL 40 SG INOX+ALU	-
	60	22.23	12,200	A-COOL	10	67756125	PFC 125 A-COOL 60 SG INOX+ALU	-
	80	22.23	12,200	A-COOL	10	67758125	PFC 125 A-COOL 80 SG INOX+ALU	-
180	40	22.23	8,500	A-COOL	10	67754185	PFC 180 A-COOL 40 SG INOX+ALU	-
	60	22.23	8,500	A-COOL	10	67756185	PFC 180 A-COOL 60 SG INOX+ALU	-
	80	22.23	8,500	A-COOL	10	67758185	PFC 180 A-COOL 80 SG INOX+ALU	-



Z SG POWER STEELOX ★★★☆

The POLIFAN Z SG POWER STEELOX flap disc stands out due to its aggressive stock removal rate and excellent tool life while achieving maximum efficiency. Suitable for work on weld seams, as well as for chamfering and deburring.



Special features:

- Fast work progress and maximum economic efficiency thanks to the aggressive stock removal rate.
- Maximum aggressiveness over the entire tool life.
- Fewer tool changes due to the excellent tool life.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design PFF								
115	40	22.23	13,300	Z	10	67684115	PFF 115 Z 40 SG POWER STEELOX	-
	50	22.23	13,300	Z	10	67685116	PFF 115 Z 50 SG POWER STEELOX	-
	60	22.23	13,300	Z	10	67686115	PFF 115 Z 60 SG POWER STEELOX	-
125	40	22.23	12,200	Z	10	67684125	PFF 125 Z 40 SG POWER STEELOX	-
	50	22.23	12,200	Z	10	67685126	PFF 125 Z 50 SG POWER STEELOX	-
	60	22.23	12,200	Z	10	67686125	PFF 125 Z 60 SG POWER STEELOX	-
180	40	22.23	8,500	Z	10	67684185	PFF 180 Z 40 SG POWER STEELOX	-
	50	22.23	8,500	Z	10	67685186	PFF 180 Z 50 SG POWER STEELOX	-
	60	22.23	8,500	Z	10	67686185	PFF 180 Z 60 SG POWER STEELOX	-
Conical type PFC								
115	40	22.23	13,300	Z	10	67784115	PFC 115 Z 40 SG POWER STEELOX	-
	50	22.23	13,300	Z	10	67785116	PFC 115 Z 50 SG POWER STEELOX	-
	60	22.23	13,300	Z	10	67786115	PFC 115 Z 60 SG POWER STEELOX	-
	80	22.23	13,300	Z	10	67788116	PFC 115 Z 80 SG POWER STEELOX	-
	120	22.23	13,300	Z	10	67789116	PFC 115 Z 120 SG POWER STEELOX	-
125	40	22.23	12,200	Z	10	67784125	PFC 125 Z 40 SG POWER STEELOX	-
	50	22.23	12,200	Z	10	67785126	PFC 125 Z 50 SG POWER STEELOX	-
	60	22.23	12,200	Z	10	67786125	PFC 125 Z 60 SG POWER STEELOX	-
	80	22.23	12,200	Z	10	67788126	PFC 125 Z 80 SG POWER STEELOX	-
	120	22.23	12,200	Z	10	67789126	PFC 125 Z 120 SG POWER STEELOX	-
150	40	22.23	10,200	Z	10	67784150	PFC 150 Z 40 SG POWER STEELOX	-
	60	22.23	10,200	Z	10	67786150	PFC 150 Z 60 SG POWER STEELOX	-
180	40	22.23	8,500	Z	10	67784185	PFC 180 Z 40 SG POWER STEELOX	-
	50	22.23	8,500	Z	10	67785186	PFC 180 Z 50 SG POWER STEELOX	-
	60	22.23	8,500	Z	10	67786185	PFC 180 Z 60 SG POWER STEELOX	-
Conical design PFC with X-LOCK mounting						**X-LOCK**		
115	40	22.23	13,300	Z	10	*67784116*	PFC 115 Z 40 SG POWER STEELOX/X-LOCK	-
	60	22.23	13,300	Z	10	*67786116*	PFC 115 Z 60 SG POWER STEELOX/X-LOCK	-
	80	22.23	13,300	Z	10	*67788117*	PFC 115 Z 80 SG POWER STEELOX/X-LOCK	-

Continued on next page

POLIFAN flap discs
Performance Line SG ★★★☆

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
125	40	22.23	12,200	Z	10	67784126	PFC 125 Z 40 SG POWER STEELOX/X-LOCK	-
	60	22.23	12,200	Z	10	67786126	PFC 125 Z 60 SG POWER STEELOX/X-LOCK	-
	80	22.23	12,200	Z	10	67788127	PFC 125 Z 80 SG POWER STEELOX/X-LOCK	-



Z SG POWER TRIM STEELOX ★★★☆

The POLIFAN Z SG POWER TRIM STEELOX flap disc stands out due to its aggressive stock removal rate and excellent tool life while achieving maximum efficiency. Suitable for work on weld seams, as well as for chamfering and deburring.



Special features:
- Fast work progress and maximum economic efficiency thanks to the aggressive stock removal rate.
- Trimming the tool enables the abrasive to be used optimally.
- Fewer tool changes due to the excellent tool life.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Conical type PFC								
115	40	22.23	13,300	Z	10	67772114	PFC 115 Z 40 SG POWER TRIM STEELOX	-
	60	22.23	13,300	Z	10	67772116	PFC 115 Z 60 SG POWER TRIM STEELOX	-
	80	22.23	13,300	Z	10	67772118	PFC 115 Z 80 SG POWER TRIM STEELOX	-
125	40	22.23	12,200	Z	10	69301039	PFC 125 Z 40 SG POWER TRIM STEELOX	-
	60	22.23	12,200	Z	10	67772126	PFC 125 Z 60 SG POWER TRIM STEELOX	-
	80	22.23	12,200	Z	10	67772128	PFC 125 Z 80 SG POWER TRIM STEELOX	-



Z SG DURABLE STEEL ★★★☆

The powerful POLIFAN Z SG DURABLE STEEL flap disc is especially well-suited to applications in which the flaps are subjected to higher mechanical loads and to applications involving coarser work, e.g. chamfering or working on burn burrs.



Special features:
- Fast work progress and maximum economic efficiency thanks to the aggressive stock removal rate.
- Maximum aggressiveness over the entire tool life.
- Fewer tool changes due to the ultimate tool life.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Conical type PFC								
115	40	22.23	13,300	Z	10	67782114	PFC 115 Z 40 SG DURABLE STEEL	-
	60	22.23	13,300	Z	10	67782116	PFC 115 Z 60 SG DURABLE STEEL	-
125	40	22.23	12,200	Z	10	67782124	PFC 125 Z 40 SG DURABLE STEEL	-
	60	22.23	12,200	Z	10	67782126	PFC 125 Z 60 SG DURABLE STEEL	-



CO-COOL SG STEELOX ★★★☆

POLIFAN flap disc with particularly cool grinding for materials that are difficult to machine such as high-alloy and rust-resistant steel, nickel-based alloys or titanium alloys. Suitable for surface grinding, chamfering, deburring and work on weld seams.



Special features:
- The self-sharpening action of the ceramic oxide grain guarantees optimal results, even on materials that are difficult to machine.
- Less heat build-up in the workpiece compared with other flap discs.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design PFF								
115	40	22.23	13,300	CO-COOL	10	67660415	PFF 115 CO-COOL 40 SG STEELOX	-
	60	22.23	13,300	CO-COOL	10	67660615	PFF 115 CO-COOL 60 SG STEELOX	-
125	40	22.23	12,200	CO-COOL	10	67660425	PFF 125 CO-COOL 40 SG STEELOX	-
	60	22.23	12,200	CO-COOL	10	67660625	PFF 125 CO-COOL 60 SG STEELOX	-
180	40	22.23	8,500	CO-COOL	10	67660485	PFF 180 CO-COOL 40 SG STEELOX	-
Conical type PFC								
115	40	22.23	13,300	CO-COOL	10	67760415	PFC 115 CO-COOL 40 SG STEELOX	-
	60	22.23	13,300	CO-COOL	10	67760615	PFC 115 CO-COOL 60 SG STEELOX	-
125	40	22.23	12,200	CO-COOL	10	67760425	PFC 125 CO-COOL 40 SG STEELOX	-
	60	22.23	12,200	CO-COOL	10	67760625	PFC 125 CO-COOL 60 SG STEELOX	-
180	40	22.23	8,500	CO-COOL	10	67760485	PFC 180 CO-COOL 40 SG STEELOX	-

POLIFAN flap discs
Performance Line SG ★★★☆



CO-FREEZE SG INOX ★★★☆

POLIFAN flap disc specifically designed for stainless steel (INOX) with very cool grinding. Suitable for surface grinding and work on weld seams. No heat discolouration occurs, which means that no reworking is required.



Special features:
- The FREEZE coating significantly reduces heat build-up in the workpiece compared with standard flap discs.
- The usual flying sparks are minimized.
- Damage to stainless steel workpieces from flying glowing sparks is therefore almost entirely ruled out.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Flat design PFF								
115	36	22.23	13,300	CO-FREEZE	10	67611536	PFF 115 CO-FREEZE 36 SG INOX	-
	50	22.23	13,300	CO-FREEZE	10	67611550	PFF 115 CO-FREEZE 50 SG INOX	-
	80	22.23	13,300	CO-FREEZE	10	67611580	PFF 115 CO-FREEZE 80 SG INOX	-
125	36	22.23	12,200	CO-FREEZE	10	67612536	PFF 125 CO-FREEZE 36 SG INOX	-
	50	22.23	12,200	CO-FREEZE	10	67612550	PFF 125 CO-FREEZE 50 SG INOX	-
	80	22.23	12,200	CO-FREEZE	10	67612580	PFF 125 CO-FREEZE 80 SG INOX	-
Conical type PFC								
115	36	22.23	13,300	CO-FREEZE	10	67711536	PFC 115 CO-FREEZE 36 SG INOX	-
	50	22.23	13,300	CO-FREEZE	10	67711550	PFC 115 CO-FREEZE 50 SG INOX	-
	80	22.23	13,300	CO-FREEZE	10	67711580	PFC 115 CO-FREEZE 80 SG INOX	-
125	36	22.23	12,200	CO-FREEZE	10	67712536	PFC 125 CO-FREEZE 36 SG INOX	-
	50	22.23	12,200	CO-FREEZE	10	67712550	PFC 125 CO-FREEZE 50 SG INOX	-
	80	22.23	12,200	CO-FREEZE	10	67712580	PFC 125 CO-FREEZE 80 SG INOX	-
180	36	22.23	8,500	CO-FREEZE	10	67718036	PFC 180 CO-FREEZE 36 SG INOX	-
	50	22.23	8,500	CO-FREEZE	10	67718050	PFC 180 CO-FREEZE 50 SG INOX	-



Z SGP STRONG STEEL ★★★★

The innovative POLIFAN STRONG flap disc delivers an exceptionally high performance level. Its design is significantly more efficient than conventional flap discs. Suitable for work on weld seams, as well as for chamfering and deburring.



Special features:
- Fast grinding thanks to constant grinding aggressiveness down to the last abrasive grit.
- Ultimate economic efficiency thanks to maximum stock removal per time unit and less wear on discs, plus the ultimate tool life.
- PFERD's POLIFAN STRONG is patented in many countries across the globe.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Conical type PFC								
115	36	22.23	13,300	Z	10	67788015	PFC 115 Z 36 SGP STRONG STEEL	-
	50	22.23	13,300	Z	10	67788115	PFC 115 Z 50 SGP STRONG STEEL	-
125	36	22.23	12,200	Z	10	67788025	PFC 125 Z 36 SGP STRONG STEEL	-
	50	22.23	12,200	Z	10	67788125	PFC 125 Z 50 SGP STRONG STEEL	-
180	36	22.23	8,500	Z	10	67788080	PFC 180 Z 36 SGP STRONG STEEL	-
	50	22.23	8,500	Z	10	67788180	PFC 180 Z 50 SGP STRONG STEEL	-
Conical design PFC with X-LOCK mounting						**X-LOCK**		
115	36	22.23	13,300	Z	10	*67788016*	PFC 115 Z 36 SGP STRONG STEEL/X-LOCK	-
	50	22.23	13,300	Z	10	*67788118*	PFC 115 Z 50 SGP STRONG STEEL/X-LOCK	-



CO-FREEZE SGP STRONG INOX ★★★★

Flap disc combining the STRONG design and its long, compact flaps with an innovative abrasive. Suitable for surface grinding and work on weld seams. The POLIFAN STRONG is patented in many countries across the globe.



Special features:
- Self-sharpening ceramic oxide grain and active grinding FREEZE special coating achieve very cool grinding and ensure that no heat discolouration occurs.
- The usual flying sparks are minimized.
- Damage to stainless steel workpieces from flying glowing sparks is therefore almost entirely ruled out.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Conical type PFC								
115	36	22.23	13,300	CO-FREEZE	10	67789015	PFC 115 CO-FREEZE 36 SGP STRONG INOX	-
	50	22.23	13,300	CO-FREEZE	10	67789115	PFC 115 CO-FREEZE 50 SGP STRONG INOX	-
125	36	22.23	12,200	CO-FREEZE	10	67789025	PFC 125 CO-FREEZE 36 SGP STRONG INOX	-
	50	22.23	12,200	CO-FREEZE	10	67789125	PFC 125 CO-FREEZE 50 SGP STRONG INOX	-

POLIFAN flap discs
Special Line SGP ★★★★



Z SGP CURVE STEELOX ★★★★

High-performance flap disc for maximum stock removal on steel and stainless steel (INOX). The POLIFAN CURVE flap disc has been specially developed for work on fillet welds. Also suitable for work on weld seams, as well as for chamfering and deburring.



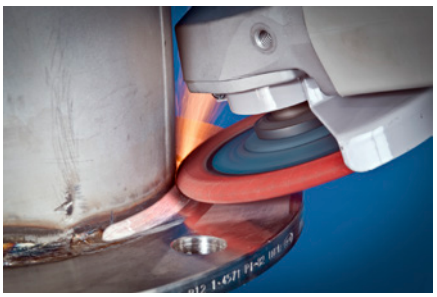
Special features:
- It is the only flap disc in the world that has flaps on the grinding side, on the rear and on the radius.
- Outstanding tool life when working on fillet welds and high stock removal rate, ensuring fast working and lower production costs.
- PFERD's POLIFAN CURVE is patented in many countries across the globe.

D [mm]	Fillet weld radius > [mm]	Grit size	Width	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Radial design PFR										
115	5	40	M (11 mm)	22.23	13,300	Z	10	67689032	PFR 115-M Z 40 SGP CURVE STEELOX	-
	8	40	L (14 mm)	22.23	13,300	Z	10	67689042	PFR 115-L Z 40 SGP CURVE STEELOX	-
125	5	40	M (11 mm)	22.23	12,200	Z	10	67689052	PFR 125-M Z 40 SGP CURVE STEELOX	-
	8	40	L (14 mm)	22.23	12,200	Z	10	67689062	PFR 125-L Z 40 SGP CURVE STEELOX	-
150	5	40	M (14 mm)	22.23	10,200	Z	10	67689072	PFR 150-M Z 40 SGP CURVE STEELOX	-
	8	40	L (16 mm)	22.23	10,200	Z	10	67689082	PFR 150-L Z 40 SGP CURVE STEELOX	-
180	8	40	L (16 mm)	22.23	8,500	Z	10	67689095	PFR 180-L Z 40 SGP CURVE STEELOX	-
Radial design PFR with X-LOCK mounting								**X-LOCK**		
125	5	40	M (11 mm)	22.23	12,200	Z	10	67689053	PFR 125-M Z 40 SGP CURVE STEELOX/X-LOCK	-
	8	40	L (14 mm)	22.23	12,200	Z	10	67689063	PFR 125-L Z 40 SGP CURVE STEELOX/X-LOCK	-



CO SGP CURVE STEELOX ★★★★

High-performance flap disc for achieving fine finishes on steel and stainless steel (INOX). The POLIFAN CURVE flap disc has been specially developed for work on fillet welds. Also suitable for work on weld seams, as well as for chamfering and deburring.



Special features:
- It is the only flap disc in the world that has flaps on the grinding side, on the rear and on the radius.
- Ceramic oxide grain CO with active-grinding special coating with cooling effect (CO-COOL) – no heat discolouration, even under adverse thermal conditions.
- PFERD's POLIFAN CURVE is patented in many countries across the globe.

D [mm]	Fillet weld radius > [mm]	Grit size	Width	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Radial design PFR										
115	5	60	M (11 mm)	22.23	13,300	CO-COOL	10	67689036	PFR 115-M CO 60 SGP CURVE STEELOX	-
	8	60	L (14 mm)	22.23	13,300	CO-COOL	10	67689046	PFR 115-L CO 60 SGP CURVE STEELOX	-
125	5	60	M (11 mm)	22.23	12,200	CO-COOL	10	67689056	PFR 125-M CO 60 SGP CURVE STEELOX	-
	8	60	L (14 mm)	22.23	12,200	CO-COOL	10	67689066	PFR 125-L CO 60 SGP CURVE STEELOX	-



A SGP CURVE ALU ★★★★

Special flap disc for work on fillet welds on aluminium. The POLIFAN CURVE flap disc has been specially developed for work on fillet welds. Also suitable for work on weld seams, as well as for chamfering and deburring.

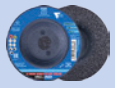
Special features:

- It is the only flap disc in the world that has flaps on the grinding side, on the rear and on the radius.
- The active grinding additives prevent clogging and facilitate cool grinding.
- PFERD's POLIFAN CURVE is patented in many countries across the globe.

D [mm]	Fillet weld radius > [mm]	Grit size	Width	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Radial design PFR										
115	8	40	L (14 mm)	22.23	13,300	A-COOL	10	67689048	PFR 115-L A 40 SGP CURVE ALU	-
125	8	40	L (14 mm)	22.23	12,200	A-COOL	10	67689068	PFR 125-L A 40 SGP CURVE ALU	-

CC-GRIND grinding discs
The quick way to find the perfect tool

Product group selection

Application	Product line	Steel (STEEL)					Stainless steel (INOX)		
		... SOLID	... FLEX	... STRONG	... ROBUST	... VIEW	... SOLID	... ROBUST	... VIEW
■ Surface grinding ■ Levelling ■ Work on weld seams ■ Chamfering ■ Deburring	**Performance Line SG** ★★★☆	 CC-GRIND SOLID SG STEEL		 CC-GRIND STRONG SG STEEL	 CC-GRIND ROBUST SG STEELOX		 CC-GRIND SOLID SG INOX	 CC-GRIND ROBUST SG STEELOX	
	Special Line SGP ★★★★	 CC-GRIND SOLID SGP STEEL			 CC-GRIND ROBUST SGP STEELOX	 CC-GRIND VIEW SGP STEELOX	 CC-GRIND SOLID SGP INOX	 CC-GRIND ROBUST SGP STEELOX	 CC-GRIND VIEW SGP STEELOX
■ Levelling butt welds	**Performance Line SG** ★★★☆		 CC-GRIND FLEX SG STEEL						
	Special Line SGP ★★★★		 CC-GRIND FLEX SGP STEEL						

Performance Line SG ★★★☆



CC-GRIND clamping flange set

The CC-GRIND clamping flange set optimally aligns the CC-GRIND SOLID and FLEX in the angle grinder protective guard. This means that the grinding discs can be positioned so that they are particularly flat against the workpiece, therefore maximizing efficiency.



Suitable for angle grinders		Item no.	Designation	Price/unit EUR
Metric				
100 mm, M10 spindle	1	*33500000*	SFS CC-GRIND 100 M10	-
115 / 125 mm, M14 spindle	1	33500015	SFS CC-GRIND 115/125 M14	-
150 / 180 mm, M14 spindle	1	33500018	SFS CC-GRIND 150/180 M14	-
Imperial				
115 / 125 mm, 5/8"-11 spindle	1	33500115	SFS CC-GRIND 115/125 5/8"	-
150 / 180 mm, 5/8"-11 spindle	1	33500180	SFS CC-GRIND 150/180 5/8"	-



CC-GRIND SOLID SG STEEL ★★★☆

Grinding disc for steel with high grinding performance and maximum tool life. Modern, high performance and ergonomic alternative to a grinding wheel. Suitable for surface grinding, chamfering, deburring and work on weld seams.



Special features:
- Extremely fast work progress due to highly aggressive abrasive grit and significantly improved surface compared to grinding wheels.
- Significantly more ergonomic than a grinding wheel: 50% reduction in noise and vibrations, 80% less dust.
- Layered structure of the glass fibre backing pad guarantees use that is just as durable and safe as with a grinding wheel.

D [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
SOLID							
115	22.23	13,300	CO-COOL	10	64185115	CC-GRIND SOLID 115 SG STEEL	-
125	22.23	12,200	CO-COOL	10	64185125	CC-GRIND SOLID 125 SG STEEL	-
150	22.23	10,200	CO-COOL	10	64185150	CC-GRIND SOLID 150 SG STEEL	-
180	22.23	8,500	CO-COOL	10	64185180	CC-GRIND SOLID 180 SG STEEL	-



CC-GRIND SOLID SG INOX ★★★☆

Grinding disc for stainless steel (INOX) with high grinding performance and maximum tool life. Modern, high performance and ergonomic alternative to a grinding wheel. Suitable for work on weld seams, as well as for chamfering and deburring.

Special features:
- Extremely fast work progress due to highly aggressive abrasive grit and significantly improved surface compared to grinding wheels.
- Significantly more ergonomic than a grinding wheel: 50% reduction in noise and vibrations, 80% less dust.
- Layered structure of the glass fibre backing pad guarantees use that is just as durable and safe as with a grinding wheel.

D [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
SOLID							
115	22.23	13,300	CO-COOL	10	64186115	CC-GRIND SOLID 115 SG INOX	-
125	22.23	12,200	CO-COOL	10	64186125	CC-GRIND SOLID 125 SG INOX	-
180	22.23	8,500	CO-COOL	10	64186180	CC-GRIND SOLID 180 SG INOX	-

CC-GRIND grinding discs
Performance Line SG ★★★☆



CC-GRIND FLEX SG STEEL ★★★☆

Semi-flexible grinding disc for steel with high grinding performance and maximum tool life. Butt welds can be completely smoothed. Suitable for work on weld seams, as well as for chamfering and deburring.



Special features:
- Complete smoothing of butt welds – without dents or bumps.
- Significantly more ergonomic than a grinding wheel: 50% reduction in noise and vibrations, 80% less dust.
- Layered structure of the glass fibre backing pad guarantees use that is just as durable and safe as with a grinding wheel.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
FLEX								
115	FINE	22.23	13,300	CO-COOL	10	64187115	CC-GRIND FLEX 115 SG STEEL FINE	-
	COARSE	22.23	13,300	CO-COOL	10	64188115	CC-GRIND FLEX 115 SG STEEL COARSE	-
125	FINE	22.23	12,200	CO-COOL	10	64187125	CC-GRIND FLEX 125 SG STEEL FINE	-
	COARSE	22.23	12,200	CO-COOL	10	64188125	CC-GRIND FLEX 125 SG STEEL COARSE	-



CC-GRIND STRONG SG STEEL ★★★☆

The CC-GRIND STRONG is the stepping stone between the classic grinding wheel and the modern alternative CC-GRIND SOLID. Suitable for surface grinding, chamfering, deburring and work on weld seams.



Special features:
- Three times the tool life compared to CC-GRIND SOLID SG STEEL due to backer that also grinds and three abrasive layers.
- Extremely fast work progress due to highly aggressive abrasive grit and significantly improved surface compared to grinding wheels.
- Significantly more ergonomic than a grinding wheel: 50% reduction in noise and vibrations, 70% less dust.

D [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
STRONG							
115	22.23	13,300	CO	10	64181115	CC-GRIND STRONG 115 SG STEEL	-
125	22.23	12,200	CO	10	64181125	CC-GRIND STRONG 125 SG STEEL	-



CC-GRIND ROBUST SG STEELOX ★★★☆

Grinding disc for steel and stainless steel (INOX) with high grinding performance and maximum tool life. Suitable for surface grinding, chamfering, deburring, gradual fine grinding and work on weld seams.



Special features:

- Extremely fast work progress due to highly aggressive abrasive grit and significantly improved surface compared to grinding wheels.
- Significantly more ergonomic than a grinding wheel: Noise and vibrations are significantly reduced.
- Glass fibre reinforced plastic backer guarantees use that is as robust and safe as with a grinding wheel.

D [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
ROBUST							
115	22.23	13,300	CO	10	64195115	CC-GRIND ROBUST 115 SG STEELOX	-
125	22.23	12,200	CO	10	64195125	CC-GRIND ROBUST 125 SG STEELOX	-

Special Line SGP ★★★★



CC-GRIND clamping flange set

The CC-GRIND clamping flange set optimally aligns the CC-GRIND SOLID and FLEX in the angle grinder protective guard. This means that the grinding discs can be positioned so that they are particularly flat against the workpiece, therefore maximizing efficiency.



Suitable for angle grinders		Item no.	Designation	Price/unit EUR
Metric				
100 mm, M10 spindle	1	*33500000*	SFS CC-GRIND 100 M10	-
115 / 125 mm, M14 spindle	1	33500015	SFS CC-GRIND 115/125 M14	-
150 / 180 mm, M14 spindle	1	33500018	SFS CC-GRIND 150/180 M14	-
Imperial				
115 / 125 mm, 5/8"-11 spindle	1	33500115	SFS CC-GRIND 115/125 5/8"	-
150 / 180 mm, 5/8"-11 spindle	1	33500180	SFS CC-GRIND 150/180 5/8"	-

CC-GRIND grinding discs
Special Line SGP ★★★★



CC-GRIND SOLID SGP STEEL ★★★★

Grinding disc with precision-moulded, triangular high-performance **VICTO**GRAIN abrasive for steel with maximum grinding performance and outstanding tool life. Suitable for surface grinding, chamfering, deburring and work on weld seams.

Special features:
- The ultimate in aggressive performance for ultra-fast work progress and significantly improved surfaces compared to grinding wheels.
- Significantly more ergonomic than a grinding wheel: 50% reduction in noise and vibrations, 80% less dust.
- Layered structure of the glass fibre backing pad guarantees use that is just as durable and safe as with a grinding wheel.

D [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
SOLID							
100	16	15,300	VICTOGRAIN	10	*64187100*	CC-GRIND SOLID 100 SGP STEEL/16.0	-
115	22.23	13,300	VICTOGRAIN	10	64187116	CC-GRIND SOLID 115 SGP STEEL	-
125	22.23	12,200	VICTOGRAIN	10	64187126	CC-GRIND SOLID 125 SGP STEEL	-
150	22.23	10,200	VICTOGRAIN	10	64187150	CC-GRIND SOLID 150 SGP STEEL	-
180	22.23	8,500	VICTOGRAIN	10	64187180	CC-GRIND SOLID 180 SGP STEEL	-



CC-GRIND SOLID SGP INOX ★★★★

Grinding disc with precision-moulded, triangular high-performance abrasive **VICTO**GRAIN for stainless steel (INOX) with maximum grinding performance and outstanding tool life. Suitable for work on weld seams, as well as for chamfering and deburring.

Special features:
- The ultimate in aggressive performance for ultra-fast work progress and significantly improved surfaces compared to grinding wheels.
- Significantly more ergonomic than a grinding wheel: 50% reduction in noise and vibrations, 80% less dust.
- Layered structure of the glass fibre backing pad guarantees use that is just as durable and safe as with a grinding wheel.

D [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
SOLID							
115	22.23	13,300	VICTOGRAIN	10	64189115	CC-GRIND SOLID 115 SGP INOX	-
125	22.23	12,200	VICTOGRAIN	10	64189125	CC-GRIND SOLID 125 SGP INOX	-
180	22.23	8,500	VICTOGRAIN	10	64189180	CC-GRIND SOLID 180 SGP INOX	-



CC-GRIND FLEX SGP STEEL ★★★★

Semi-flexible grinding disc with precision-formed, triangular high-performance **VICTO**GRAIN abrasive grain for steel with maximum grinding performance and outstanding tool life. Suitable for work on weld seams and for surface grinding.

Special features:
- Complete smoothing of butt welds – without dents or bumps.
- Significantly more ergonomic than a grinding wheel: 50% reduction in noise and vibrations, 70% less dust.
- Layered structure of the glass fibre backing pad guarantees use that is just as durable and safe as with a grinding wheel.

D [mm]	Grit size	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
FLEX								
115	COARSE	22.23	13,300	VICTOGRAIN-COOL	10	64188116	CC-GRIND FLEX 115 COARSE SGP STEEL	-
125	COARSE	22.23	12,200	VICTOGRAIN-COOL	10	64188126	CC-GRIND FLEX 125 COARSE SGP STEEL	-



CC-GRIND ROBUST SGP STEELOX ★★★★

Grinding disc with precision-moulded, triangular high-performance **VICTO**GRAIN abrasive for steel and stainless steel (INOX) with the ultimate grinding performance and outstanding tool life. Suitable for surface grinding, chamfering, deburring and work on weld seams.



Special features:
- Thanks to the adapted geometry, the use of a special clamping flange set and a backer is not necessary.
- Significantly more ergonomic than a grinding wheel: Noise and vibrations are significantly reduced.
- Glass fibre reinforced plastic backer guarantees use that is as robust and safe as with a grinding wheel.

D [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
ROBUST							
115	22.23	13,300	VICTOGRAIN	10	64195116	CC-GRIND ROBUST 115 SGP STEELOX	-
125	22.23	12,200	VICTOGRAIN	10	64195126	CC-GRIND ROBUST 125 SGP STEELOX	-



CC-GRIND VIEW SGP STEELOX ★★★★

Grinding disc with unique design and the **VICTO**GRAIN high-performance abrasive grain. The viewing pane enables users to work precisely whilst monitoring the work process. Suitable for surface grinding, chamfering, deburring and work on weld seams.

Special features:
- Users can ensure an optimal contact angle based on the sparking in the middle of the viewing pane.
- Significantly more ergonomic than a grinding wheel: Noise and vibrations are significantly reduced.
- Glass fibre reinforced plastic backer guarantees use that is as robust and safe as with a grinding wheel.

D [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
VIEW							
125	22.23	12,200	VICTOGRAIN	10	64196126	CC-GRIND VIEW 125 SGP STEELOX	-

Grinding wheels
The quick way to find the perfect tool

Product group selection

Application	Product line	Steel (STEEL)		Stainless steel (INOX)		Aluminium (ALU)	Cast material (CAST)
■ Surface grinding ■ Work on weld seams ■ Chamfering ■ Deburring ■ Fillet weld grinding ■ Work on root seams ■ Grouting	Universal Line PSF ★★☆☆	 PSF STEEL	 PSF STEELOX	 PSF STEELOX			
	Performance Line SG ★★★☆	 SG STEEL	 CERAMIC SG COMFORT STEEL	 SG INOX		 SG ALU	 Foundry grinding wheels
	Special Line SGP ★★★★	 CERAMIC SGP STEELOX	 ZIRKON SGP STEEL	 WHISPER SGP STEELOX	 CERAMIC SGP STEELOX	 WHISPER SGP STEELOX	

Universal Line PSF ★★☆☆



PSF STEEL ★★☆☆

Grinding wheel for steel and cast iron with high grinding performance and good tool life. Suitable for surface grinding, grouting, chamfering, deburring, and for work on weld seams and fillet welds.



Special features:
- Fast work progress and high economic efficiency thanks to the high grinding performance.
- Good tool life and soft grinding characteristics, outstanding grinding results even at low contact pressure.
- Also suitable for low-power angle grinders.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
100	6.3	16	15,300	A	10	62010634	E 100-6 PSF STEEL/16,0	-
115	7.2	22.23	13,300	A	10	62011634	E 115-7 PSF STEEL	-
125	7.2	22.23	12,200	A	10	62012634	E 125-7 PSF STEEL	-
150	7.2	22.23	10,200	A	10	62015628	E 150-7 PSF STEEL	-
180	7.2	22.23	8,500	A	10	62017634	E 180-7 PSF STEEL	-
	8.3	22.23	8,500	A	10	62017834	E 180-8 PSF STEEL	-
230	7.2	22.23	6,600	A	10	62023634	E 230-7 PSF STEEL	-
	8.3	22.23	6,600	A	10	62023834	E 230-8 PSF STEEL	-
Depressed-centre design E (type 27) with X-LOCK holder						**X-LOCK**		
115	7.2	22.23	13,300	A	10	62011115	E 115-7 PSF STEEL/X-LOCK	-
125	7.2	22.23	12,200	A	10	62011125	E 125-7 PSF STEEL/X-LOCK	-



PSF STEELOX ★★☆☆

Grinding wheel for steel and stainless steel (INOX) with high grinding performance and good tool life. Suitable for surface grinding, grouting, chamfering and for work on weld seams and fillet welds.

Special features:
- Fast work progress and high economic efficiency thanks to the high grinding performance.
- Good tool life and soft grinding characteristics, outstanding grinding results even at low contact pressure.
- Also suitable for low-power angle grinders.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
100	6.3	16	15,300	A	10	62010720	E 100-6 PSF STEELOX/16,0	-
115	4.1	22.23	13,300	A	10	62011531	E 115-4,1 PSF STEELOX	-
	7.2	22.23	13,300	A	10	62011640	E 115-7 PSF STEELOX	-
125	4.1	22.23	12,200	A	10	69220531	E 125-4,1 PSF STEELOX	-
	7.2	22.23	12,200	A	10	62012640	E 125-7 PSF STEELOX	-
150	4.1	22.23	10,200	A	10	62015520	E 150-4,1 PSF STEELOX	-
	7.2	22.23	10,200	A	10	62015640	E 150-7 PSF STEELOX	-
180	4.1	22.23	8,500	A	10	62017950	E 180-4,1 PSF STEELOX	-
	4.6	22.23	8,500	A	10	62017520	E 180-4,6 PSF STEELOX	-
	7.2	22.23	8,500	A	10	62017640	E 180-7 PSF STEELOX	-
	8.3	22.23	8,500	A	10	62017831	E 180-8 PSF STEELOX	-
230	7.2	22.23	6,600	A	10	62023640	E 230-7 PSF STEELOX	-
	8.3	22.23	6,600	A	10	62023831	E 230-8 PSF STEELOX	-

Performance Line SG ★★★☆



SG STEEL ★★★☆

Grinding wheel for steel with high grinding performance and very good tool life. Suitable for surface grinding, grouting, chamfering and for work on weld seams and fillet welds.



Special features:
- Fast work progress and maximum economic efficiency thanks to the high grinding performance.
- Fewer tool changes due to the very good tool life.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
70	6.3	10	21,800	A	10	62207626	E 70-6 SG STEEL/10.0	-
76	6.3	10	20,200	A	10	62208626	E 76-6 SG STEEL/10.0	-
100	4.1	16	15,300	A	10	62210426	E 100-4,1 SG STEEL/16,0	-

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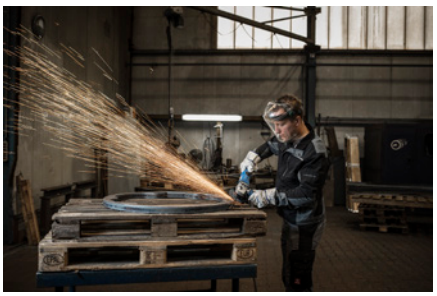
Grinding wheels
Performance Line SG ★★★☆

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
100	6.3	16	15,300	A	10	62210626	E 100-6 SG STEEL/16,0	-
115	4.1	22.23	13,300	A	10	62211436	E 115-4,1 SG STEEL	-
	7.2	22.23	13,300	A	10	62211626	E 115-7 SG STEEL	-
125	4.1	22.23	12,200	A	10	62212426	E 125-4,1 SG STEEL	-
	7.2	22.23	12,200	A	10	62212626	E 125-7 SG STEEL	-
150	4.1	22.23	10,200	A	10	69220473	E 150-4,1 SG STEEL	-
	7.2	22.23	10,200	A	10	62215726	E 150-7 SG STEEL	-
180	4.1	22.23	8,500	A	10	62217426	E 180-4,1 SG STEEL	-
	7.2	22.23	8,500	A	10	62217626	E 180-7 SG STEEL	-
	8.3	22.23	8,500	A	10	62217826	E 180-8 SG STEEL	-
230	7.2	22.23	6,600	A	10	62223626	E 230-7 SG STEEL	-
	8.3	22.23	6,600	A	10	62223826	E 230-8 SG STEEL	-



SG INOX ★★★☆

Grinding wheel for stainless steel (INOX) with high grinding performance and very good tool life. Suitable for surface grinding, grouting, chamfering and for work on weld seams and fillet welds.



Special features:
- Soft grinding characteristics for cool grinding on stainless steel (INOX).
- Fast work progress and maximum economic efficiency thanks to the high grinding performance.
- Fewer tool changes due to the very good tool life.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
115	4.1	22.23	13,300	A	10	62211423	E 115-4,1 SG INOX	-
	7.2	22.23	13,300	A	10	62211623	E 115-7 SG INOX	-
125	4.1	22.23	12,200	A	10	62212423	E 125-4,1 SG INOX	-
	5.2	22.23	12,200	A	10	62212523	E 125-5,2 SG INOX	-
	7.2	22.23	12,200	A	10	62212623	E 125-7 SG INOX	-
150	7.2	22.23	10,200	A	10	62222730	E 150-7 SG INOX	-
180	4.1	22.23	8,500	A	10	62217432	E 180-4,1 SG INOX	-
	7.2	22.23	8,500	A	10	62217632	E 180-7 SG INOX	-
	8.3	22.23	8,500	A	10	62217832	E 180-8 SG INOX	-
230	7.2	22.23	6,600	A	10	62223632	E 230-7 SG INOX	-
	8.3	22.23	6,600	A	10	62223832	E 230-8 SG INOX	-



SG ALU ★★★☆

Grinding wheel for aluminium and other non-ferrous metals with high grinding performance and very good tool life. Suitable for surface grinding, grouting, chamfering and for work on weld seams and fillet welds.



Special features:
- Operates without the grinding wheel clogging, even on soft, lubricating materials.
- Fast work progress and maximum economic efficiency thanks to the high grinding performance.
- Does not contain any fillers that could leave undesirable residues on the workpiece. The surface can therefore be welded immediately.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
115	7.2	22.23	13,300	A/C	10	62211622	E 115-7 SG ALU	-
125	7.2	22.23	12,200	A/C	10	62212622	E 125-7 SG ALU	-
150	7.2	22.23	10,200	A/C	10	62215717	E 150-7 SG ALU	-
180	7.2	22.23	8,500	A/C	10	62217622	E 180-7 SG ALU	-
230	7.2	22.23	6,600	A/C	10	62223700	E 230-7 SG ALU	-

Special Line SGP ★★★★



WHISPER SGP STEELOX ★★★★

With its multi-layer design, the WHISPER generates considerably less vibration and noise than conventional grinding wheels. Suitable for surface grinding and for work on weld seams and fillet welds.



Special features:
- Noise level decreased by up to 12 dB(A), which corresponds to a reduction of more than 90%.
- Tool structure enables gentle, comfortable grinding with an outstanding surface quality.
- Problem solver for scale.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
115	7.4	22.23	13,300	A	10	62211848	E 115-7 SGP WHISPER STEELOX	-
125	7.4	22.23	12,200	A	10	62212848	E 125-7 SGP WHISPER STEELOX	-



ZIRKON SGP STEEL ★★★★

Zirconia alumina grinding wheel with very good grinding performance and an excellent tool life. Suitable for surface grinding, grouting, chamfering and for work on weld seams and fillet welds.



Special features:
- Very fast work progress and maximum economic efficiency thanks to the very good grinding performance.
- Fewer tool changes due to the excellent tool life.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
115	7.2	22.23	13,300	Z/A	10	62211737	E 115-7 ZIRKON SGP STEEL	-
125	7.2	22.23	12,200	Z/A	10	62212737	E 125-7 ZIRKON SGP STEEL	-
150	7.2	22.23	10,200	Z/A	10	62215326	E 150-7 ZIRKON SGP STEEL	-
180	7.2	22.23	8,500	Z/A	10	62217737	E 180-7 ZIRKON SGP STEEL	-
230	7.2	22.23	6,600	Z/A	10	62223737	E 230-7 ZIRKON SGP STEEL	-



CERAMIC SGP STEELOX ★★★★

High-performance grinding wheel with ceramic oxide grain for quick and economical grinding. Suitable for surface grinding, grouting, chamfering and for work on weld seams and fillet welds.



Special features:
- The ultimate in aggressive performance and outstanding tool life due to self-sharpening effect of the high-performance abrasive and special bond technology.
- Lower production costs due to much faster work progress compared to conventional grinding wheels.
- Labour-saving work.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
115	4.1	22.23	13,300	CO	10	62100115	E 115-4,1 CERAMIC SGP STEELOX	-
	7.2	22.23	13,300	CO	10	62211300	E 115-7 CERAMIC SGP STEELOX	-
125	4.1	22.23	12,200	CO	10	62100125	E 125-4,1 CERAMIC SGP STEELOX	-
	7.2	22.23	12,200	CO	10	62212300	E 125-7 CERAMIC SGP STEELOX	-
150	4.1	22.23	10,200	CO	10	62100150	E 150-4,1 CERAMIC SGP STEELOX	-
	7.2	22.23	10,200	CO	10	69901759	E 150-7 CERAMIC SGP STEELOX	-
180	4.1	22.23	8,500	CO	10	62100180	E 180-4,1 CERAMIC SGP STEELOX	-
	7.2	22.23	8,500	CO	10	62217300	E 180-7 CERAMIC SGP STEELOX	-
230	4.1	22.23	6,600	CO	10	62100230	E 230-4,1 CERAMIC SGP STEELOX	-
	7.2	22.23	6,600	CO	10	62218300	E 230-7 CERAMIC SGP STEELOX	-



SG CAST + ALU ★★★☆

Grinding wheel optimized for use on grey/nodular cast iron (GG/GJL, GGG/GJS), casting scale with sand contamination and metal contamination, and hard aluminium alloys with high grinding performance and very good tool life. Suitable for surface grinding, chamfering, deburring.

Special features:
- Very fast work progress and high efficiency thanks to high grinding performance and very good tool life.
- Optimized for use on compressed-air turbine and high-frequency angle grinders.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
180	7.2	22.23	8,500	A/C	10	62217681	E 180-7 SG CAST+ALU	-
230	7.2	22.23	6,600	A/C	10	62223681	E 230-7 SG CAST+ALU	-



SG CAST + STONE ★★★☆

Grinding wheel optimized for use on cast iron, casting scale, stone, concrete and hard aluminium alloys with high grinding performance and very good tool life. Suitable for surface grinding, chamfering and deburring.

Special features:
- Very fast work progress and high efficiency thanks to high grinding performance and very good tool life.
- Optimized for use on compressed-air turbine and high-frequency angle grinders.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
115	7.2	22.23	13,300	C	10	62911625	E 115-7 SG CAST+STONE	-
125	7.2	22.23	12,200	C	10	62912725	E 125-7 SG CAST+STONE	-
180	7.2	22.23	8,500	C	10	62917625	E 180-7 SG CAST+STONE	-
230	7.2	22.23	6,600	C	10	62914720	E 230-7 SG CAST+STONE	-

Grinding wheels for foundries
Performance Line SG ★★★☆



ZIRKON SG CAST + STEEL ★★★☆

Zirconia alumina grinding wheel optimized for use on grey/nodular cast iron (GG/GJL, GGG/GJS) and steel with excellent grinding performance and very good tool life. Suitable for surface grinding, grouting, chamfering, deburring and for work on weld seams and fillet welds.



Special features:
- Very fast work progress and high efficiency thanks to high grinding performance and very good tool life.
- Optimized for use on compressed-air turbine and high-frequency angle grinders.

D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
115	7.2	22.23	13,300	Z/A	10	62211747	E 115-7 ZIRKON SG CAST+STEEL	-
125	7.2	22.23	12,200	Z/A	10	62212747	E 125-7 ZIRKON SG CAST+STEEL	-
180	7.2	22.23	8,500	Z/A	10	62217628	E 180-7 ZIRKON SG CAST+STEEL	-
	8.3	22.23	8,500	Z/A	10	62217837	E 180-8 ZIRKON SG CAST+STEEL	-
230	4.1	22.23	6,600	Z/A	10	62218310	E 230-4,1 ZIRKON SG CAST+STEEL	-
	5.2	22.23	6,600	Z/A	10	62223527	E 230-5,2 ZIRKON SG CAST+STEEL	-
	7.2	22.23	6,600	Z/A	10	62223628	E 230-7 ZIRKON SG CAST+STEEL	-



ZIRKON SG CAST ★★★☆

Zirconia alumina grinding wheel optimized for use on grey/nodular cast iron (GG/GJL, GGG/GJS) and casting scale with excellent grinding performance and tool life. Suitable for surface grinding, chamfering and deburring.

Special features:
- Extremely fast work progress and high efficiency thanks to excellent grinding performance and outstanding tool life.
- Optimized for use on compressed-air turbine and high-frequency angle grinders.

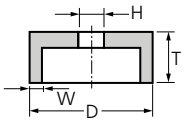
D [mm]	U [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
Depressed-centre design E (type 27)								
180	7.2	22.23	8,500	Z/A/C	10	62217738	E 180-7 ZIRKON SG CAST	-
	8.3	22.23	8,500	Z/A/C	10	62217747	E 180-8 ZIRKON SG CAST	-
230	7.2	22.23	6,600	Z/A/C	10	62223738	E 230-7 ZIRKON SG CAST	-
	8.3	22.23	6,600	Z/A/C	10	62223747	E 230-8 ZIRKON SG CAST	-

Product group selection

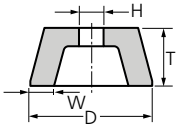
Application	Steel (STEEL)	Stainless steel (INOX)	Cast material (CAST)	Stone (STONE)
Surface grinding	SG STEELOX A 16	SG STEELOX A 16	SG CAST + STONE C 16	SG CAST + STONE C 16–80
Work on weld seams			-	-
Chamfering	SG STEELOX A 24	SG STEELOX A 24	SG CAST + STONE C 24	SG CAST + STONE C 60/80
Deburring	SG STEELOX A 36/80	SG STEELOX A 36/80	SG CAST + STONE C 30	-

Performance Line SG ★★★☆





Form 6



Form 11

SG STEELOX ★★★☆

Cup wheel for steel and stainless steel (INOX) with high grinding performance and good tool life. Suitable for chamfering, deburring, surface grinding, and for work on weld seams.

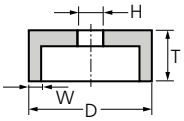


Special features:
- High grinding performance.
- Good tool life.

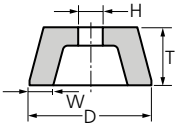
D [mm]	Grit size	H [mm]	Thread	T [mm]	W [mm]	Max. RPM	Abra-sive		Item no.	Designation	Price/ unit EUR
Cylindrical cup wheel ETT (type 6)											
80	36	22.23	-	27	8	11,900	A	5	63417122	50 ETT 80-8 A 36 SG STEELOX	-
	80	22.23	-	27	8	11,900	A	5	63418702	50 ETT 80-8 A 80 SG STEELOX	-
Conical cup wheel ETT (type 11)											
110	16	22.23	-	55	20	8,600	A	2	63418222	50 ETT 110-20 A 16 SG STEELOX	-
	24	22.23	-	55	20	8,600	A	2	63418224	50 ETT 110-20 A 24 SG STEELOX	-
	36	22.23	-	55	20	8,600	A	2	63418226	50 ETT 110-20 A 36 SG STEELOX	-
125	16	-	M14	51	25	7,600	A	2	63418402	50 ETT 125-25 A 16 SG STEELOX/M14	-

Cup wheels
Performance Line SG ★★★☆





Form 6



Form 11

SG CAST + STONE ★★★☆

Cup wheel for use on cast iron, casting scale, concrete and stone with high grinding performance and good tool life. Suitable for chamfering, deburring and surface grinding.

Special features:
- High grinding performance.
- Good tool life.

D [mm]	Grit size	H [mm]	T [mm]	W [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Cylindrical cup wheel ETT (type 6)										
80	80	22.23	27	8	11,900	C	5	63588122	50 ETT 80-8 C 80 SG CAST+STONE	-
Conical cup wheel ETT (type 11)										
110	16	22.23	55	20	8,600	C	2	63518222	50 ETT 110-20 C 16 SG CAST+STONE	-
	24	22.23	55	20	8,600	C	2	63518224	50 ETT 110-20 C 24 SG CAST+STONE	-
	30	22.23	55	20	8,600	C	2	63538222	50 ETT 110-20 C 30 SG CAST+STONE	-
	60	22.23	55	20	8,600	C	2	63518424	50 ETT 110-20 C 60 SG CAST+STONE	-



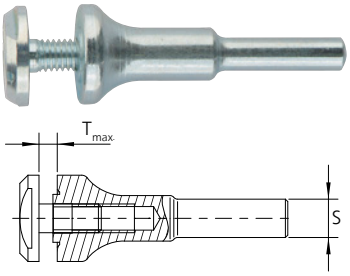
SG STEEL + INOX + CAST ★★★☆

Grinding wheel for use on steel, cast steel, stainless steel (INOX) and cast iron, with high grinding performance and good tool life for work in hard-to-reach areas. Suitable for chamfering, deburring, grouting, and for work on weld seams.



Special features:
- High grinding performance.
- Good tool life.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/unit EUR
ER (type 1) design								
30	4.2	6	51,000	A	20	*65303040*	ER 30-4 SG STEEL+INOX+CAST/6,0	-
	6.2	6	51,000	A	20	*65303060*	ER 30-6 SG STEEL+INOX+CAST/6,0	-
40	4.2	6	38,200	A	20	*65304040*	ER 40-4 SG STEEL+INOX+CAST/6,0	-
	6.2	6	38,200	A	20	*65304060*	ER 40-6 SG STEEL+INOX+CAST/6,0	-
50	6.2	6	30,600	A	20	65305060	ER 50-6 SG STEEL+INOX+CAST/6,0	-
	10.5	10	30,600	A	20	65305101	ER 50-10 SG STEEL+INOX+CAST/10,0	-
		6	30,600	A	20	65305100	ER 50-10 SG STEEL+INOX+CAST/6,0	-
70	10.5	10	21,800	A	20	65307101	ER 70-10 SG STEEL+INOX+CAST/10,0	-
	15.7	10	21,800	A	20	65307151	ER 70-15 SG STEEL+INOX+CAST/10,0	-
	6.2	10	21,800	A	20	65307061	ER 70-6 SG STEEL+INOX+CAST/10,0	-
	8.7	10	21,800	A	20	*65507081*	ER 70-8 SG STEEL+INOX+CAST/10,0	-



Arbor for snagging wheels

Accessory for mounting snagging wheels on straight grinders. Sturdy version with maximum shank breakage resistance.

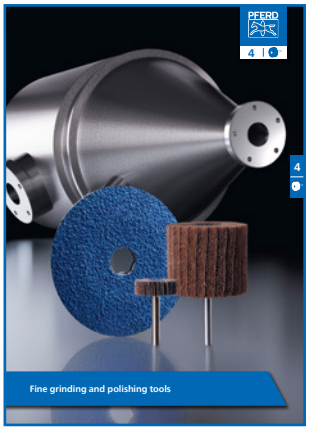


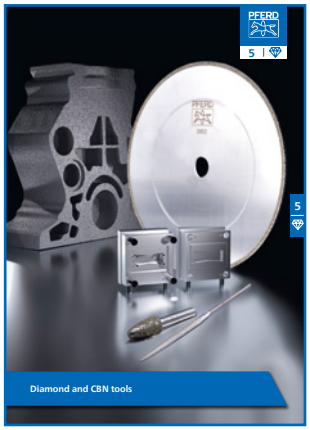
S [mm]	Suitable for hole diameter [mm]	T_{max} [mm]		Item no.	Designation	Price/unit EUR
6	6	3 – 10	1	42400006	BO 6/6 3-10	-
8	10	6 – 20	1	42400008	BO 8/10 6-20	-





















6

New additions to the PFERD product range

Stay up to date and discover our new products digitally and online. Our new products have **blue** item numbers in the Tool Manual.

PFERD

7



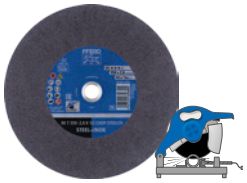
Cut-off wheels for stationary applications

7

Cut-off wheels for stationary applications
Table of contents

Cut-off wheels for stationary applications

- Highlights from the PFERD range – custom-made products 3
- General information 4
- Safety notes 4
- Transport and storage 5
- Product lines and colour coding 6
- The quick way to find the perfect tool 6
- Custom-made products 8



CHOPSAW dia. 300–400 mm

- Universal Line PSF ★★☆☆ 10
- Performance Line SG ★★★☆ 11



CHOPSAW HD dia. 300–400 mm

- Performance Line SG ★★★☆ 12



LABOR dia. 150–400 mm

- Performance Line SG ★★★☆ 14



RAIL dia. 300–400 mm

- Performance Line SG ★★★☆ 15



HEAVY DUTY dia. 250–600 mm

- Special Line SGP ★★★★ 16



Reducing rings for stationary cut-off wheels

- Reducing rings for stationary cut-off wheels 18

7

Cut-off wheels for stationary applications

Highlights from the PFERD range – custom-made products

What is the correct procedure for selecting a stationary cut-off wheel?

Our experienced technical advisers will start by analyzing your current set-up. They will visit you on site to see your machine, application and the wheel dimensions. PFERD will determine the wheel thickness based on how thick the wheel needs to be for cutting. The drive output of the machine motor and the diameter of the clamping flange are also important for selecting the right stationary cut-off wheel. Based on this information and other data, we check which customized solution PFERD can produce for you.



What are the operating conditions and which cross sections need to be cut?

In addition to the information about the machine, it is essential to know the operating conditions for the cutting work. A distinction is made between cold (up to 100°), warm (100 to 600°) and hot cutting-off (600 to over 1,000°), depending on the material temperature of the workpieces being cut. The main cutting applications are cross sections measuring 20 mm to 500 mm in a round design, and square designs from 50 mm to 250 mm (depending on the specific requirements and industry), as well as a range of profiles such as various rails. Based on the operating conditions and cross sections, you can determine which wheel diameter is required/recommended.

For medium-sized cut-off wheels the range is 400 – 600 mm (traditional applications in foundries, finishing processes and when cutting to size); for large cut-off wheels the range is 800 – 2,000 mm (applications in rolling mills and forging plants in the steel production industry).



What are the requirements for the cuts?

A good result for cold cutting-off is that the cut surface is blank (no blue or brown discolouration) and that the cut itself is perpendicular. The heat ingress into the material should also be minimal to prevent hard spots at the ends of the cut, which could cause cracks in the steel.

Ideally, the formation of burrs on the material should be minimized to negate the need for reworking. The blank cut does not play a role in warm and hot cutting-off – the aim here is to ensure a long tool life, a perpendicular cut and a reliable process.



Customized solutions

Upon request, PFERD can manufacture stationary cut-off wheels up to a diameter of 2,000 mm in the excellent PFERD quality, specifically for your application. Please contact us for further information. Our experienced technical advisers will be pleased to assist you. Scan the QR code to access the contact form.



Cut-off wheels for stationary applications
General information

Advantages of stationary cut-off grinding

- Universal cutting process for all steels and castings, non-ferrous metal alloys, special alloys such as nickel and titanium-based alloys, as well as materials on which sawing and flame cutting are difficult or impossible.
- Due to smooth cutting surfaces and blank cuts in cold cutting-off, no post-processing is required.
- Short cutting times regardless of the material quality.
- Significantly lower burr formation with hot cutting-off than with hot sawing.
- Lower noise levels than with hot sawing.
  Example:
  Hot cutting-off: 85 to 95 dBA
  Hot sawing: 105 to 110 dBA
- Consistent cutting quality over the entire life of the cut-off wheel due to its continuous self-sharpening qualities.
- Enables cutting of already cooled rolled or forged parts in hot cut lines.

Applications

Cut-off grinding is one of the most powerful and cost-effective cutting processes and is used in the following areas:

- Rolling mills
- Foundries
- Mechanical engineering
- Steel construction
- Maintenance of rails
- Forging plants and their finishing processes
- Laboratories

Safety notes

PFERD is a founding member of oSa

Together with other renowned manufacturers, PFERD has voluntarily undertaken to produce quality tools conforming to the most exacting safety standards. Member companies of oSa (the Organization for the Safety of Abrasives) are committed to continuous product safety and quality monitoring. PFERD tools carry the oSa mark. Scan the QR code for further information.

Safety standard:

- PFERD cut-off wheels conform to the highest safety requirements and are marked according to EN 12413 for grinding tools made of bonded abrasives.



VDS Verband Deutscher Schleifmittelwerke





German Abrasives Association (VDS)

Please observe the safety notes of the German Abrasives Association (VDS). Further information can be found at: **www.pferd.com**

User information

Please observe the user information provided with all products on the safe use of stationary cut-off wheels as well as the user information for the grinding machine used.

FEPA

The FEPA safety recommendations can be downloaded at **www.pferd.com**.

Proper clamping of cut-off wheels

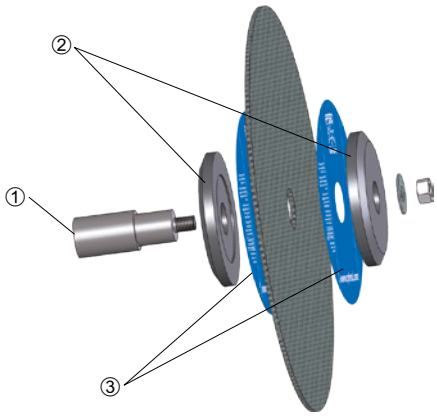
The correct clamping of the cut-off wheel is a prerequisite for optimum performance and is essential to ensure user safety. The adjacent illustration shows the right way to do it:

① Machine spindle with high concentricity.

② Equally sized flanges.

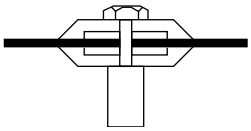
③ Intermediate paper layers, if required for secure clamping and safe use.

Our recommendations:
- After every second wheel change, change the intermediate paper layers.
- As from a wheel diameter > 400 mm, always use intermediate paper layers.

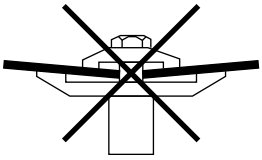


Safety notes

The safe use of PFERD tools depends largely on proper clamping systems. Both flanges between which a grinding tool is mounted must have the same outer diameter and same support area (according to EN 13218, ANSI B7.1).



Correct



Incorrect

Transport and storage

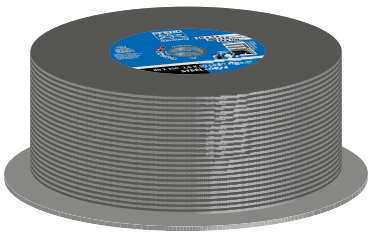
Transport and storage

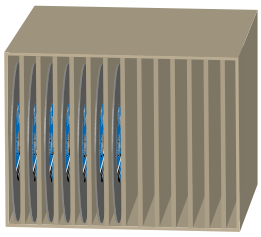
To avoid damage to the cut-off wheels through improper transport or adverse environmental influences during storage, e.g. UV radiation, temperature or humidity, please observe the following advice:
- As far as possible, transport and store cut-off wheels in their original packaging lying on a flat surface, e.g. on a shelf or vertically in racks.
- Avoid bending the tools.
- Ensure that the cut-off wheels are stored in dry, frost-free rooms with consistent temperatures.
- Use supplies in the order of their arrival.

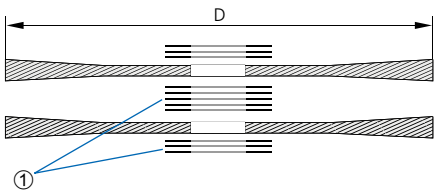
Advice on the storage of conical wheels (CT):

Conical cut-off wheels must be stacked with intermediate paper layers, so that the tapered area is supported and bending of the cut-off wheels is avoided.

PFERD supplies conical cut-off wheels with intermediate paper layers included.







① Intermediate paper layers

Recommendation



Room temperature: 18-22°C



Relative humidity: 45-65%



No direct sunlight

Cut-off wheels for stationary applications

Product lines and colour coding

PSF ★★☆☆



Universal Line PSF ★★☆☆

The introductory range Universal Line PSF includes **robust tools** for processing the **most common materials**. Universal Line PSF tools achieve **good results** with **high economic efficiency**.

SG ★★★☆



Performance Line SG ★★★☆

The broad Performance Line SG range offers **a high-performance tool solution for every application and every material**. Performance Line SG tools achieve **optimum results** with **maximum economic efficiency**.

SGP ★★★★



Special Line SGP ★★★★

Special Line SGP tools are specially developed for **specific tasks** and offer the user **key advantages over conventional products**. Furthermore, the Special Line SGP includes tools that offer **ultimate economic efficiency** thanks to their particularly high performance during use.

The quick way to find the perfect tool

Product labels

① **oSa – Organization for the Safety of Abrasives**
As a founder member of oSa, PFERD has voluntarily undertaken to produce quality tools conforming to the most exacting safety standards. Member companies of oSa are committed to continuous product safety and quality monitoring.

② **Safety information**
Handling grinding tools is dangerous. Observe all safety rules and regulations.

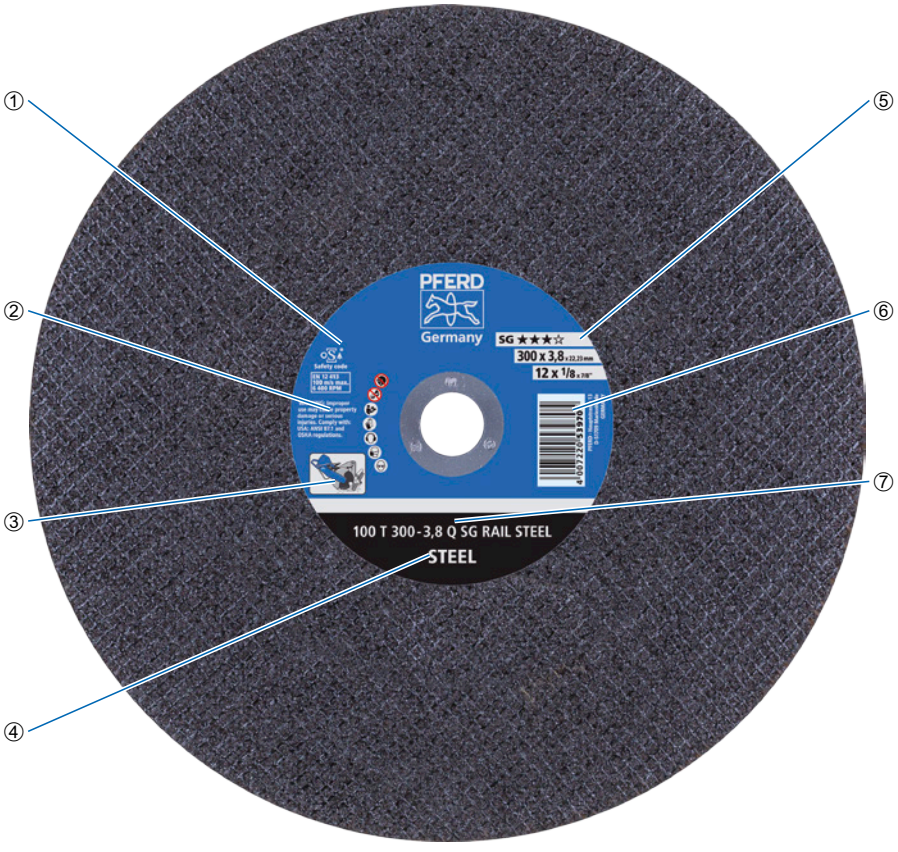
③ **Advice on tool drive**
The pictogram shows on which drive the tool can be used.

④ **Material information**
The bottom section of every label indicates the material or materials for which the tool is suitable.

⑤ **Information bar**
Here you will find the product line and the dimensions.

⑥ **EAN (European Article Number)**

⑦ **Hardness grade**
The hardness denotes the strength with which the abrasive grit is held by the bond within the grinding tool. The hardness is indicated with a letter:
K, H = very soft / L, N = soft /
O, P, Q = medium-hard / R, S = hard /
T = very hard

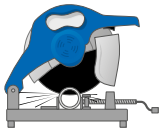
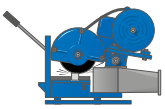
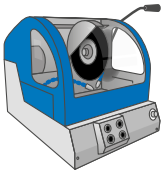
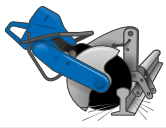
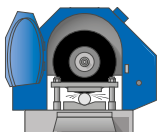
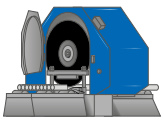


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Cut-off wheels for stationary applications

The quick way to find the perfect tool

Product group selection

Tool drive	Application	Product line	Steel (STEEL)		Stainless steel (INOX)	Cast material (CAST)	Stone (STONE)
CHOPSAW dia. 300–400 mm 12–16" dia. < 3 KW 	Cutting of solid material, profiles and pipes	**Universal Line PSF** ★★☆☆	PSF CHOP STEEL Hardness K	PSF CHOP STEELOX Hardness K	PSF CHOP STEELOX Hardness K		
		Performance Line SG ★★★☆	SG CHOP STEEL Hardness K	SG CHOP STEELOX Hardness K	SG CHOP STEELOX Hardness K		
CHOPSAW HD dia. 300–400 mm 12–16" dia. 	Cutting of solid material, profiles and pipes	**Performance Line SG** ★★★☆	SG CHOP HD STEEL Hardness L + O	SG CHOP HD STEELOX Hardness L	SG CHOP HD STEELOX Hardness L	SG CHOP HD CAST + STONE Hardness L	SG CHOP HD CAST + STONE Hardness L
LABOR dia. 150–400 mm 6–16" dia. 	Producing precision cuts, cutting of laboratory samples	**Performance Line SG** ★★★☆	SG LAB STEEL Hardness H	SG LAB HD STEELOX Hardness H	SG LAB HD STEELOX Hardness H		
RAIL dia. 300–400 mm 12–16" dia. 	Cutting of rails	**Performance Line SG** ★★★☆	SG RAIL STEEL Hardness Q				
HEAVY DUTY dia. 250–600 mm 10–26" dia. 	Cutting of solid material, profiles and pipes	**Special Line SGP** ★★★★	SGP HD STEEL Hardness L, N, Q + S	ZIRKON SGP HD CAST + STEEL Hardness P, R + T		ZIRKON SGP HD CAST + STEEL Hardness P, R + T	
Products made to order up to dia. 2,000 mm 10–80" dia. 	On request, we can produce stationary cut-off wheels in premium PFERD quality up to a diameter of 2,000 mm, tailor-made to meet the requirements of your special application. Please contact us for further information. Our experienced technical advisers will be pleased to assist you.						

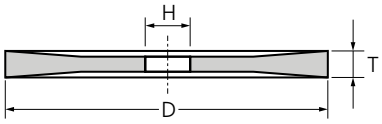
 With middle fabric for aggressive cutting with minimized burr formation

 With two outer fabrics for high lateral stability

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Cut-off wheels for stationary applications
Custom-made products

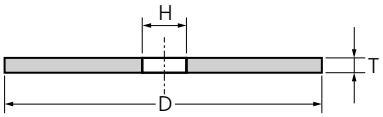
Dimensions and designs to meet customer requirements



CT – Conical type

Particularly suitable for use in the steel industry.

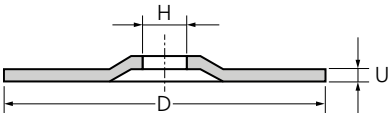
Advantages:
- Less lateral friction.
- Particularly advantageous for deep cuts and traverse cutting.



T – Flat type

Suitable for use in steel and plant construction, in the steel industry and in foundries.

Advantages:
- Suitable for universal use.



PT – Depressed-centre type

Particularly suitable for use in foundries.

Advantages:
- Clamping flange does not protrude beyond the cut-off wheel.
- Flush cutting of risers from castings is possible.
- In general, no post-processing required.

Outer dia. D [mm]	Centre hole diameter H [mm]
2,000	80/100/127/152.4/200/203.3/230/280
1,840	80/100/127/152.4/200/203.3/230/280
1,600	80/100/127/152.4/200/203.3/230/280
1,500	80/100/127/152.4/200/203.3/230/280
1,380	80/100/127/152.4/200/203.3/230/280
1,250	80/100/127/152.4/200/203.3/230/250/280
1,000	80/100/127/152.4/200/203.3/230
800	80/100/127/152.4/200/203.3/230

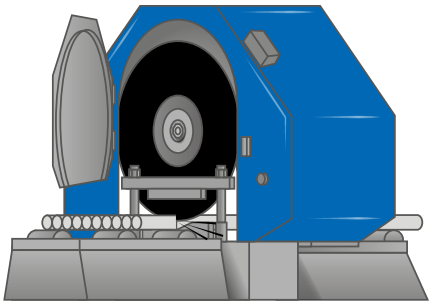
Outer dia. D [mm]	Centre hole diameter H [mm]
800	80/100/127/152.4/200/203.3/230
700	80/100/127/152.4/200/203.3/230
660	25.4/40/60/76.2/80/100
600	25.4/40/60/76.2/80/100
500	25.4/40/60/76.2/80/100
450	25.4/32/40/60/80
400	25.4/32/40/60/80
350	25.4/32/40
300	25.4/32/40
250	25.4/30/32

Outer dia. D [mm]	Centre hole diameter H [mm]
800	80/100
700	80/100
600	60/76.2/80/100
500	40/60/76.2/80/100
400	40/60/80

Other designs and centre hole diameters are available on request. Please contact us for further information.

METALCORE cut-off wheel







METALCORE type

The steel-core cut-off wheel developed by PFERD is characterized, as compared to the conventional type, by its solid steel body constructed in layers which does not contain any abrasive.

The tool structure has the following advantages:

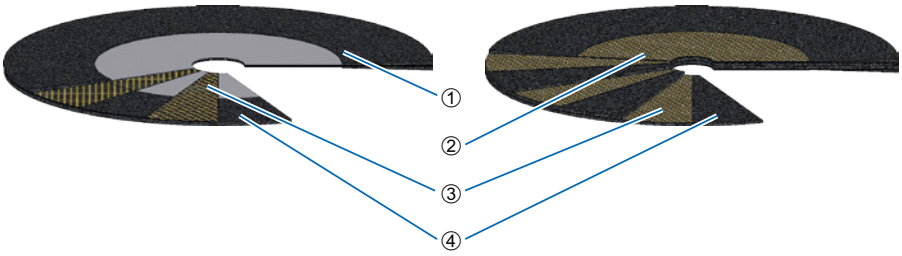
- Reduced cutting costs due to the use of smaller clamping flanges.
- Longer tool life.
- Reduced cut-off wheel width for chop stroke cut due to increased lateral stability.
- No cost for the disposal of the old wheel.

Conventional type

For stationary cut-off grinding, resinoid-bonded, fibre-reinforced cut-off wheels are used, which are essentially composed of four components: abrasive, bond, fabric layers/ flange fabric and active grinding fillers.

Structure of cut-off wheels

① Steel core
② Flange fabric
③ Fabric layers
④ Bonded abrasives



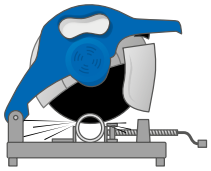
CHOPSAW dia. 300–400 mm

Universal Line PSF ★★☆☆



PSF CHOP STEEL ★★☆☆

Tool of hardness K, which cuts very easily, with a middle fabric for steel. For aggressive cutting with minimal burr formation. Suitable for cutting solid material, profiles and pipes. Suitable tool drives: CHOPSAW up to 3 kW.



Special features:

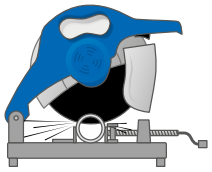
- High economic efficiency due to long tool life.
- Fast work progress thanks to good cutting performance.
- Cutting with minimal burr formation due to less lateral friction.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 80 m/s, flat design T (type 41)								
300	2.8	25.4	5,100	A	20	66323074	80 T 300-2,8 K PSF CHOP STEEL/25,4	-
350	2.8	25.4	4,400	A	10	66323574	80 T 350-2,8 K PSF CHOP STEEL/25,4	-
400	3.8	25.4	3,800	A	10	66324095	80 T 400-3,8 K PSF CHOP STEEL/25,4	-



PSF CHOP STEELOX ★★☆☆

Tool of hardness K, which cuts very easily, with a middle fabric for steel and stainless steel (INOX). For aggressive cutting with minimal burr formation. Suitable for cutting solid material, profiles and pipes. Suitable tool drives: CHOPSAW up to 3 kW.



Special features:

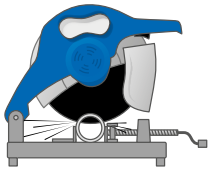
- High economic efficiency due to long tool life.
- Fast work progress thanks to high cutting performance.
- Cutting with minimal burr formation due to less lateral friction.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 80 m/s, flat design T (type 41)								
300	2.8	25.4	5,100	A	20	66323075	80 T 300-2,8 K PSF CHOP STEELOX/25,4	-
350	2.8	25.4	4,400	A	10	66323575	80 T 350-2,8 K PSF CHOP STEELOX/25,4	-
400	3.8	25.4	3,800	A	10	66324096	80 T 400-3,8 K PSF CHOP STEELOX/25,4	-



SG CHOP STEEL ★★★☆

Tool of hardness K, which cuts very easily, with a middle fabric for steel. For aggressive cutting with minimal burr formation. Suitable for cutting solid material, profiles and pipes. Suitable tool drives: CHOPSAW up to 3 kW.



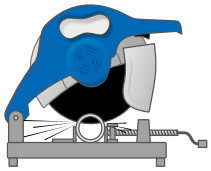
Special features:
- Maximum economic efficiency due to very long tool life.
- The fastest work progress thanks to very high cutting performance.
- Cutting with minimal burr formation due to less lateral friction.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 80 m/s, flat design T (type 41)								
300	2.8	25.4	5,100	A	20	66323070	80 T 300-2,8 K SG CHOP STEEL/25,4	-
		32	5,100	A	20	66323071	80 T 300-2,8 K SG CHOP STEEL/32,0	-
350	2.8	25.4	4,400	A	10	66323570	80 T 350-2,8 K SG CHOP STEEL/25,4	-
		32	4,400	A	10	66323571	80 T 350-2,8 K SG CHOP STEEL/32,0	-
400	3.8	25.4	3,800	A	10	66324093	80 T 400-3,8 K SG CHOP STEEL/25,4	-
		32	3,800	A	10	66324094	80 T 400-3,8 K SG CHOP STEEL/32,0	-



SG CHOP STEELOX ★★★☆

Tool of hardness K, which cuts very easily, with a middle fabric for steel and stainless steel (INOX). For aggressive cutting with minimal burr formation. Suitable for cutting solid material, profiles and pipes. Suitable tool drives: CHOPSAW up to 3 kW.



Special features:
- Maximum economic efficiency due to very long tool life.
- The fastest work progress thanks to very high cutting performance.
- Cutting with minimal burr formation due to less lateral friction.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 80 m/s, flat design T (type 41)								
300	2.8	25.4	5,100	A	20	66323052	80 T 300-2,8 K SG CHOP STEELOX/25,4	-
350	2.8	25.4	4,400	A	10	66323572	80 T 350-2,8 K SG CHOP STEELOX/25,4	-
400	2.8	25.4	3,800	A	10	66324091	80 T 400-2,8 K SG CHOP STEELOX/25,4	-

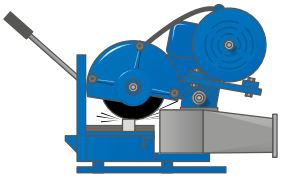
CHOPSAW HD dia. 300–400 mm

Performance Line SG ★★★☆



SG CHOP HD STEEL ★★★☆

Tool of hardness L and O with two outer fabrics for steel. For cutting work that requires high stability. Suitable for cutting solid material, profiles and pipes. Suitable tool drives: CHOPSAW HD.



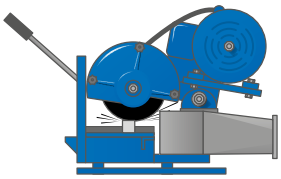
Special features:
- High lateral stability thanks to reinforcing outer fabric.
- Maximum economic efficiency due to very long tool life.
- For demanding cutting work.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 80 m/s, flat design T (type 41)								
300	3	25.4	5,100	A	20	66323080	80 T 300-3,0 L SG CHOP HD STEEL/25,4	-
		32	5,100	A	20	66323081	80 T 300-3,0 L SG CHOP HD STEEL/32,0	-
	3.4	25.4	5,100	A	20	66323013	80 T 300-3,4 O SG CHOP HD STEEL/25,4	-
350	3	25.4	4,400	A	10	66323580	80 T 350-3,0 L SG CHOP HD STEEL/25,4	-
		32	4,400	A	10	66323581	80 T 350-3,0 L SG CHOP HD STEEL/32,0	-
	3.8	25.4	4,400	A	10	66323513	80 T 350-3,8 O SG CHOP HD STEEL/25,4	-
400	4	25.4	3,800	A	10	66324080	80 T 400-4,0 L SG CHOP HD STEEL/25,4	-
		32	3,800	A	10	66324081	80 T 400-4,0 L SG CHOP HD STEEL/32,0	-
Maximum operating speed 100 m/s, flat design T (type 41)								
350	4.2	25.4	5,500	A	10	66323613	100 T 350-4,2 O SG CHOP HD STEEL/25,4	-



SG CHOP HD STEELOX ★★★☆

Tool of hardness L, which cuts easily, with two outer fabrics for steel and stainless steel (INOX). For cutting work that requires high stability. Suitable for cutting solid material, profiles and pipes. Suitable tool drives: CHOPSAW HD.



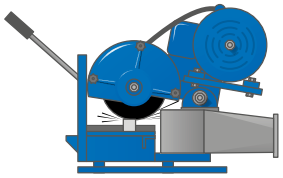
Special features:
- High lateral stability thanks to reinforcing outer fabric.
- Maximum economic efficiency due to very long tool life.
- For demanding cutting work.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 80 m/s, flat design T (type 41)								
300	3	25.4	5,100	A	20	66323082	80 T 300-3,0 L SG CHOP HD STEELOX/25,4	-
350	3	25.4	4,400	A	10	66323582	80 T 350-3,0 L SG CHOP HD STEELOX/25,4	-
400	4	25.4	3,800	A	10	66324082	80 T 400-4,0 L SG CHOP HD STEELOX/25,4	-



SG CHOP HD CAST + STONE ★★★☆

Tool of hardness L, which cuts easily, with two outer fabrics for use on cast iron, stone, plastics, aluminium and other non-ferrous metals. Suitable for cutting solid material, profiles and pipes. Suitable tool drives: CHOPSAW HD.



Special features:
- High lateral stability thanks to reinforcing outer fabric.
- Maximum economic efficiency due to very long tool life.
- For demanding cutting work.

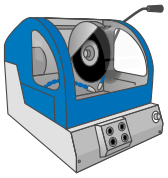
D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 80 m/s, flat design T (type 41)								
350	3.4	25.4	4,400	C	10	66623583	80 T 350-3,4 L SG CHOP HD CAST+STONE/25,4	-
400	4	25.4	3,800	C	10	66624083	80 T 400-4,0 L SG CHOP HD CAST+STONE/25,4	-

LABOR dia. 150–400 mm
Performance Line SG ★★★☆



SG LAB STEEL ★★★☆

Tool of hardness H, which cuts very easily, with a middle fabric for steel and cast iron. Suitable for producing precision cuts, fast cutting of lab samples, solid material, profiles and pipes. Suitable tool drives: Lab cutting machine.



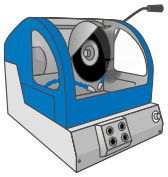
Special features:
- Special tool for metallographic sampling thanks to aggressive abrasive.
- Safe cutting work thanks to the highest possible cutting quality.
- High stability thanks to reinforcing centre fabric.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 80 m/s, flat design T (type 41)								
250	2	32	6,100	A	20	66300060	80 T 250-2,0 H SG LAB STEEL/32,0	-
300	2	32	5,100	A	20	66300100	80 T 300-2,0 H SG LAB STEEL/32,0	-
350	2.5	32	4,400	A	10	66300130	80 T 350-2,5 H SG LAB STEEL/32,0	-
400	3	32	3,800	A	10	66300150	80 T 400-3,0 H SG LAB STEEL/32,0	-



SG LAB HD STEELOX ★★★☆

Tool of hardness H, which cuts very easily, with two outer fabrics for steel and stainless steel (INOX). Suitable for producing precision cuts, fast cutting of lab samples, solid material, profiles and pipes. Suitable tool drives: Lab cutting machine.



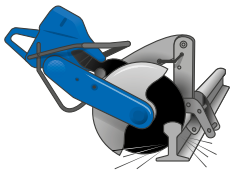
Special features:
- Special tool for metallographic sampling thanks to aggressive abrasive.
- Safe cutting work thanks to the highest possible cutting quality.
- Very sturdy thanks to reinforcing outer fabric.

D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 80 m/s, flat design T (type 41)								
150	1	22.23	10,200	A	25	66300010	80 T 150-1,0 H SG LAB HD STEELOX/22,23	-
230	1.5	22.23	6,600	A	25	66300030	80 T 230-1,5 H SG LAB HD STEELOX/22,23	-



SG RAIL STEEL ★★★☆

Tool of hardness Q for fast and economic cutting of rails. Suitable tool drives: RAIL cutting machine.



Special features:
- The fastest work progress thanks to aggressive abrasive.
- Safe cutting work thanks to the highest possible cutting quality.
- High economic efficiency due to optimal tool life.

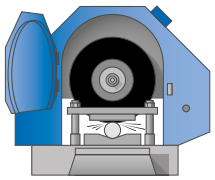
D [mm]	T [mm]	H [mm]	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 100 m/s, flat design T (type 41)								
300	3.8	22.23	6,400	A	20	66323162	100 T 300-3,8 Q SG RAIL STEEL/22,23	-
		25.4	6,400	A	20	66323163	100 T 300-3,8 Q SG RAIL STEEL/25,4	-
350	3.8	22.23	5,500	A	10	66323662	100 T 350-3,8 Q SG RAIL STEEL/22,23	-
		25.4	5,500	A	10	66323663	100 T 350-3,8 Q SG RAIL STEEL/25,4	-
400	4.2	25.4	4,800	A	10	66324163	100 T 400-4,2 Q SG RAIL STEEL/25,4	-

HEAVY DUTY dia. 250–600 mm
Special Line SGP ★★★★



SGP HD STEEL ★★★★

Tool for the most demanding cutting work on steel. Particularly well suited to use in finishing work and to cutting solid material, profiles, pipes and large cross-sections. Suitable tool drives: HEAVY DUTY cutting machine.



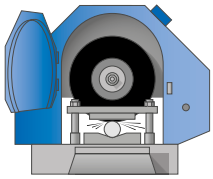
Special features:
- Ultimate economic efficiency due to optimum tool life.
- Fast work progress thanks to excellent cutting characteristics.

D [mm]	T [mm]	H [mm]	Hardness grade	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 80 m/s, flat design T (type 41)									
300	3.4	25.4	Q (medium-hard)	5,100	A	20	66323025	80 T 300-3,4 Q SGP HD STEEL/25,4	-
350	3.8	25.4	Q (medium-hard)	4,400	A	10	66323525	80 T 350-3,8 Q SGP HD STEEL/25,4	-
400	4.2	40	Q (medium-hard)	3,800	A	10	66324040	80 T 400-4,2 Q SGP HD STEEL/40,0	-
500	5.5	40	Q (medium-hard)	3,100	A	5	66325040	80 T 500-5,5 Q SGP HD STEEL/40,0	-
Maximum operating speed 100 m/s, flat design T (type 41)									
250	1.8	30	Q (medium-hard)	7,600	A	20	66322130	100 T 250-1,8 Q SGP HD STEEL/30,0	-
		32	Q (medium-hard)	7,600	A	20	66322132	100 T 250-1,8 Q SGP HD STEEL/32,0	-
300	3	40	N (soft)	6,400	A	20	66323195	100 T 300-3,0 N SGP HD STEEL/40,0	-
	3.6	40	Q (medium-hard)	6,400	A	20	66323140	100 T 300-3,6 Q SGP HD STEEL/40,0	-
350	3.8	40	N (soft)	5,500	A	10	66323695	100 T 350-3,8 N SGP HD STEEL/40,0	-
	4	25.4	Q (medium-hard)	5,500	A	10	66323625	100 T 350-4,0 Q SGP HD STEEL/25,4	-
400	4.3	40	N (soft)	4,800	A	10	66324195	100 T 400-4,3 N SGP HD STEEL/40,0	-
	4.6	40	S (hard)	4,800	A	10	66324140	100 T 400-4,6 S SGP HD STEEL/40,0	-
	4.8	40	Q (medium-hard)	4,800	A	10	66324205	100 T 400-4,8 Q SGP HD STEEL/40,0	-
500	5.8	40	N (soft)	3,800	A	5	66325205	100 T 500-5,8 N SGP HD STEEL/40,0	-
			Q (medium-hard)	3,800	A	5	66325140	100 T 500-5,8 Q SGP HD STEEL/40,0	-
			S (hard)	3,800	A	5	66325225	100 T 500-5,8 S SGP HD STEEL/40,0	-
	6.3	40	L (soft)	3,800	A	5	66325050	100 T 500-6,3 L SGP HD STEEL/40,0	-
600	7.6	60	N (soft)	3,200	A	5	66397706	100 T 600-7,6 N SGP HD STEEL/60,0	-
			S (hard)	3,200	A	5	66397707	100 T 600-7,6 S SGP HD STEEL/60,0	-



ZIRKON SGP HD CAST + STEEL ★★★★

For the most demanding cutting work on cast iron and steel. Suitable for cutting risers, sprues, solid material, profiles, pipes and large cross-sections. Developed for use in foundries. Suitable tool drives: HEAVY DUTY cutting machine.

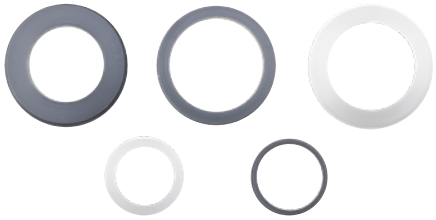


Special features:
- Ultimate economic efficiency due to optimum tool life.
- Fast work progress thanks to excellent cutting characteristics.
- Products made to order available on request.

D [mm]	T [mm]	H [mm]	Hardness grade	Max. RPM	Abrasive		Item no.	Designation	Price/ unit EUR
Maximum operating speed 100 m/s, flat design T (type 41)									
400	4.8	40	T (very hard)	4,800	Z/A	10	66323235	100 T 400-4,8 ZIRKON T SGP HD CAST+STEEL/40,0	-
500	5.6	40	T (very hard)	3,800	Z/A	5	66325065	100 T 500-5,6 ZIRKON T SGP HD CAST+STEEL/40,0	-
600	7.8	60	P (medium-hard)	3,200	Z/A	5	66397708	100 T 600-7,8 ZIRKON P SGP HD CAST+STEEL/60,0	-
	8	60	R (hard)	3,200	Z/A	5	66397196	100 T 600-8,0 ZIRKON R SGP HD CAST+STEEL/60,0	-

Reducing rings for stationary cut-off wheels

Reducing rings for stationary cut-off wheels



Reducing rings for stationary cut-off wheels

Reducing rings enable secure adjustment of the standard centre hole to a reduced centre hole dimension.

Special features:

- Flexible adjustment to the prerequisites of the drive system.
- With stop collar, to prevent the ring from pushing through the centre hole of the cut-off wheel.

External diameter [mm]	Inner diameter [mm]	Width [mm]		Item no.	Designation	Price/unit EUR
25.4	20	3	5	69900173	RDR 25,4-20-3,0	-
	22.23	3	5	69900174	RDR 25,4-22,2-3,0	-
40	25.4	3	5	69900172	RDR 40-25,4-3,0	-
		4.5	5	69900009	RDR 40-25,4-4,5	-
	30	3	5	69900171	RDR 40-30-3,0	-
		4.5	5	69900007	RDR 40-30-4,5	-
	32	3	5	69900170	RDR 40-32-3,0	-
		4.5	5	69900006	RDR 40-32-4,5	-
60	40	6.5	5	69900175	RDR 60-40-6,5	-

PFERD

8



8

Industrial power brushes

Industrial power brushes
Table of contents

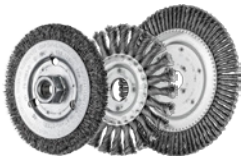
Industrial power brushes
- Highlights from the PFERD range 4
- Filament materials and their application 5
- The quick way to find the perfect tool 6
- Safety notes 9
- Cutting speeds 10
- Well packaged and presented 11



Threaded cup brushes
- crimped 12
- knotted 13



Threaded bevel brushes
- crimped 16
- knotted 16



Wheel brushes
- crimped 18
- knotted 19
- Pipeline 21
- knotted, with hole 23
- crimped, with hole 24



Composite brushes
- Wheel brushes, crimped 29
- Composite disc brushes, crimped 31
- Shank-mounted end brushes, crimped 33



Shank-mounted end brushes
- crimped 34
- knotted 37



Shank-mounted cup brushes
- crimped 39



Shank-mounted bevel brushes
- crimped 40



Shank-mounted wheel brushes
- crimped 41
- knotted 43



Brush sets
- Brush sets 44



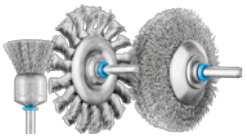
Universal shank-mounted cup brushes
- crimped 45



Universal shank-mounted wheel brushes
- crimped 46



Wheel brushes for burnishing machines
- crimped 47

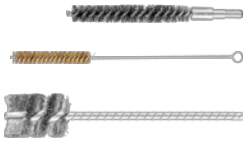


INOX-TOTAL
- Wheel brushes 48
- Shank-mounted end brushes 49
- Shank-mounted wheel brushes 50
- Shank-mounted bevel brushes 51



Miniature brushes
- End brushes, crimped 52
- Cup brushes, crimped 53
- Wheel brushes, crimped 54

Industrial power brushes
Table of contents



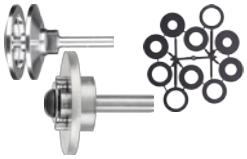
Tube brushes

- Tube brushes 56



Scratch brushes

- Scratch brushes 61



Accessories

- Arbor 65
- Flexible shaft adapter 66
- Accessories for tube brushes 67

Industrial power brushes
Highlights from the PFERD range

Composite brushes for stationary applications

PFERD offers a comprehensive range of high-quality industrial power brushes, specially designed for stationary applications on robots and CNC machines.

Composite brushes from PFERD are specially designed for the demands of automated workpiece machining. Compared to conventional metal constructions, they feature an extremely high filament density and a very even distribution of the filament material. This guarantees a long tool life and extremely smooth running.

All of the industrial power brushes made by PFERD can also be used on robots.

Industrial power brushes in stationary applications are most commonly used for deburring and rounding edges, processing holes and female threads, work on surfaces and cleaning.

Scan the QR code to find out more about composite brushes for stationary applications.

Advantages:
- Long tool life and aggressive brushing effect due to a very high filament density.
- High flexibility due to their ability to adapt to contours. Industrial power brushes are easier to program and can often be used without compliance.
- Very reliable process with extremely smooth operation due to even distribution of the filament material.



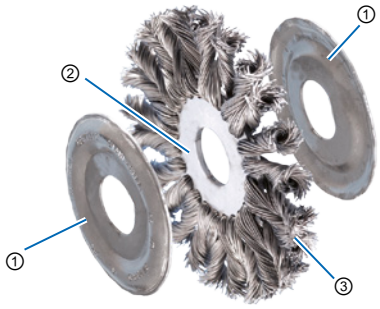
INOX-TOTAL

In addition to brushes with a stainless steel filament, PFERD also offers brushes for work on stainless steel (INOX) with the INOX-TOTAL type. They are particularly well-suited to use in extremely critical environments.

Structure of a wheel brush with arbor hole INOX-TOTAL:
① Stainless steel (INOX) side plates
② Stainless steel (INOX) centre ring
③ Stainless steel (INOX) filament

Scan the QR code to find out more about INOX-TOTAL brushes.

Advantages:
- Maximum protection against corrosion as all components are produced from stainless steel (INOX) in quality 1.4310 (V2A).

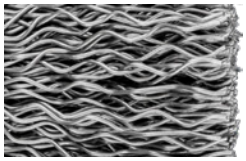


Selecting the filament material

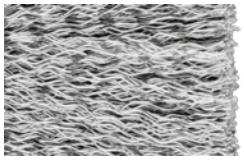
Filament material	The material you will be working on						
	Steel	Stainless steel (INOX)	Non-ferrous metals			Cast iron	Plastics
			Aluminium	Soft non-ferrous metals Brass, copper, zinc	Hard non-ferrous metals Titanium, bronze, nickel-based and cobalt-based alloys		
Steel wire (ST)	●	-	-	-	-	●	○
Stainless steel wire (INOX)	○	●	●	○	○	-	-
Stainless steel wire (INOX) Diamond (DIA)	○	-	-	-	●	●	●
Brass wire (MES)	-	-	-	●	-	-	-
Silicon carbide (SiC)	●	●	●	-	○	●	●
Aluminium oxide (AO)	○	○	●	-	-	○	○
Ceramic oxide grain (CO)	●	○	○	-	●	●	-
Diamond (DIA)	○	-	-	-	●	●	●
Nylon	-	-	○	○	-	-	●
Bristle and goat hair (with polishing paste)	●	●	●	●	●	●	●

● = highly suitable ○ = suitable - = not suitable

Wire filament
- **Crimped brushes (wavy wire):** for work with particular requirements on the flexibility of the brushes, such as machining of highly contoured workpieces.
- K**notted brushes (straight wire):** for work that requires aggressive brushing behaviour, such as work on weld seams.



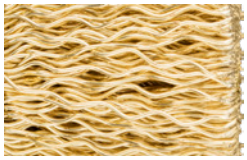
Steel wire (ST)
Advantages/properties:
- PFERD special wire with high tensile strength and bending fatigue strength.
- Guarantees a long tool life, even for extreme brushing applications.
- Temperature resistance: up to 300°C



Stainless steel wire (INOX)
Advantages/properties:
- Wire quality 1.4310 (V2A): stainless; does not leave corroding residues on the workpiece.
- Used with low rotational speeds, compared to steel wire.
- PFERD brushes with INOX filament are usually degreased.
- Temperature resistance: up to 450°C

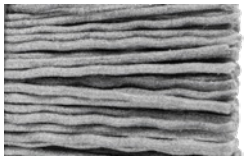


Stainless steel wire (INOX) diamond (DIA)
Advantages/properties:
- Particularly well suited to applications that place particular demands on the aggressiveness of the brush.
- Primarily used on materials with high material strength.
- Temperature resistance: up to 450°C



Brass wire (MES)
Advantages/properties:
- Wire quality CuZn37: brass wire is softer than steel wire.
- It is non-sparking and produces fine surface finishes.
- Temperature resistance: up to 180°C

Plastic filament
- Abrasive grains are embedded in flexible plastic filaments, which means that the filament works on the sides as well as at the tip.
- **Round filament:** for applications that place particular demands on the flexibility of the brush.
- **Rectangular filament (REC):** for applications that place particular demands on the aggressiveness of the brush.
- Recommendation for use: Use coolant for applications where large amounts of heat are produced.

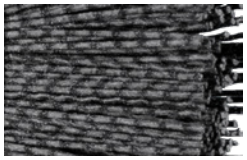


Silicon carbide (SiC)
Advantages/properties:
- Particularly well suited to deburring work and for improving surfaces.
- Temperature resistance up to 220°C



Aluminium oxide (AO)
Advantages/properties:
- Less sharp-edged and aggressive compared with SiC.
- Primarily suitable for polishing and smoothing finishes on soft metals.
- Temperature resistance up to 220°C

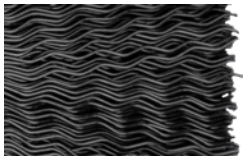
Industrial power brushes
Filament materials and their application



Ceramic oxide grain (CO)
Advantages/properties:
- Offers good toughness and excellent sharpness.
- For high stock removal and aggressive brushing.
- Temperature resistance up to 220°C



Diamond (DIA)
Advantages/properties:
- Particularly well suited to applications that place particular demands on the aggressiveness of the brush.
- Primarily used on materials with high material strength.
- Temperature resistance up to 220°C



Nylon
Advantages/properties:
- Particularly suited to working with materials that would otherwise be scratched or damaged, e.g. soft plastics.
- Temperature resistance up to 220°C

Natural bristles
- Primarily suitable for light cleaning and dust removal, as well as for polishing (in combination with polishing pastes).



White (SBW) and black (SBS) bristles
Advantages/properties:
- Bristles are harder and less flexible than brushes with goat hair filament.
- Temperature resistance: up to 150°C

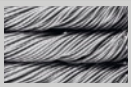
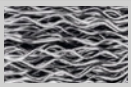
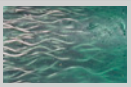
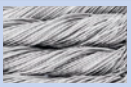
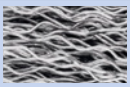


Goat hair (ZHW)
Advantages/properties:
- Goat hair is more flexible and softer than bristle.
- Temperature resistance: up to 150°C

The quick way to find the perfect tool

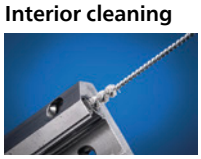
The quick way to find the perfect tool

① **Select the filament material.** The material that you are working with is key to determining the optimum filament material.
② **Select the filament type.** The brushing effect you want determines which filament type to choose.
③ **Select the tool.** The application and geometry of the workpiece indicate the optimum brush.

Materials that can be worked	Steel, cast iron, plastics			Stainless steel (INOX), aluminium, other non-ferrous metals	Stainless steel (INOX), aluminium, other non-ferrous metals
Filament material	Steel wire (ST) Colour code: grey			Stainless steel wire (INOX) Colour code: blue	Stainless steel wire (INOX) Colour code: blue
Filament type	 knotted	 crimped	 encapsulated	 knotted	 crimped
Desired effect	Aggressive brushing effect, less flexible	Light brushing effect, flexible	Very aggressive brushing effect, not flexible	Aggressive brushing effect, less flexible	Light brushing effect, flexible
Weld seam 	 RBG  RBG PIPE	 HBU  HBK	 RBV	 RBG  RBG PIPE	 HBU  HBK
Structuring surfaces 		 RBU  RBU SC  WBU			 RBU  WBU
Edge deburring 	 KBG  RBG  RBG	 KBU  RBU  RBU  RBU	 RBV	 KBG  RBG  RBG	 KBU  RBU  RBU  RBU
Surface deburring 	 TBG	 TBU TBU		TBG	TBU TBU
Interior deburring	PBG	PBU PBU TBU IBU	PBV	PBG	PBU PBU TBU IBU
Surface cleaning	TBG KBG RBG RBG	TBU KBU RBU RBU HBU		TBG KBG RBG RBG	TBU KBU RBU RBU HBU
Interior cleaning	PBG	PBU PBU TBU	PBV	PBG	PBU PBU TBU IBU

Industrial power brushes

The quick way to find the perfect tool

Materials that can be worked	Steel, stainless steel (INOX), aluminium, non-ferrous metals, titanium, cast, plastics, wood	Brass, copper, other non-ferrous metals	Steel, stainless steel (INOX), non-ferrous metals, cast iron
Filament material	Plastic filament (SiC, CO, nylon) Colour code: red	Brass wire (MES) Colour code: yellow	Natural materials Colour code: brown
Filament type	 crimped	 crimped	 crimped
Desired effect	Grinding brushing effect, very flexible	Light brushing effect, flexible	Light brushing effect (use with polishing pastes)
Weld seam 		 HBU	
Structuring surfaces 	 RBU  RBUP  WBU		
Edge deburring 	 RBU  RBUP  RBU  RBU	 RBU  RBU	
Surface deburring 	 TBU  DBU  TBU		
Interior deburring 	 PBU  PBU  TBU  IBU	 PBU  PBU  TBU  IBU	
Surface cleaning 	 TBU  RBU  RBUP  DBU  TBU  RBU	 RBU  HBU	
Interior cleaning 	 PBU PBU TBU IBU	PBU IBU	PBU TBU
Polishing 			RBU PBU TBU

8

Safety notes:

As one of the leading manufacturers of brush tools, PFERD fulfils the requirements of European standard EN 1083. Guidelines on the safe and economic use of PFERD brushes are supplied with every packaging unit. They help you to increase your level of personal work safety.


Wear eye protection!


Wear hearing protection!


Wear a dust mask!


Wear gloves!


Observe the safety notes!


Use a protective machine guard!



Maximum permitted rotational speed

In order to guarantee operating safety, the maximum permitted rotational speed indicated on the brush, label and in this catalogue must never be exceeded! Please refer to our product information and product tables for further recommendations regarding optimum operating speeds. These give details of the recommended rotational speeds [RPM] for an optimum working result.

Brush diameter

In the case of hand-held tool drives, the brush diameter should never exceed 180 mm, regardless of the filament material.

Total dia. D of the brush [mm]	Minimum arbor hole dia. D_A [mm]
50	4.6
75	6.5
100	10
150	13
200	16
250	20
300	20
350	32

Minimum arbor hole diameter according to EN 1083

Brushes must comply with the minimum arbor hole diameters (D_A) listed below, depending on their total diameter (D).

Industrial power brushes
Cutting speeds

Determining the recommended rotational speed

① Select the brush type.
② Read the recommended cutting speed.
③ Determine the rotational speed using the brush diameter and cutting speed.

The recommended cutting speed ranges [m/s] depend on the respective application and lie below the maximum permitted cutting speed.

① Brush type	② Cutting speed
End brushes	5–15 m/s
Cup brushes	15–45 m/s
Shank-mounted wheel brushes	15–40 m/s
Wheel/bevel brushes with arbor hole/ threaded	See diagram below

② Recommended cutting speed [m/s] for wheel/bevel brushes with arbor hole/ threaded.
The colour bars correspond to the colour codes of the filament materials.

Application [m/s]		10	15	20	25	30	35	40	45	50	55
Deburring/ edge breaking	knotted						35–45 m/s				
						30–40 m/s					
	crimped				25–40 m/s						
			15–30 m/s								
			15–30 m/s								
Removal of scale/ mill scale	knotted						35–55 m/s				
						30–40 m/s					
Cleaning/ roughening of surfaces	knotted						35–40 m/s				
						30–35 m/s					
	crimped			20–40 m/s							
			15–35 m/s								
			15–30 m/s								
Weld dressing	knotted						35–55 m/s				
						30–40 m/s					
	crimped					30–45 m/s					
					25–40 m/s						

③ Recommended rotational speeds [RPM]
Example:
RBG 11512 ST
Cleaning surfaces
Brush diameter D: 115 mm
Cutting speed: 39 m/s
Rotational speed: 6.500 RPM

n [RPM]	Brush dia. D [mm]																	
	10	15	20	25	30	40	50	60	75	80	100	115	125	150	175	200	250	300
1,000	1	1	1	1	2	2	3	3	4	4	5	6	7	8	9	10	13	16
1,250	1	1	1	2	2	3	3	4	5	5	7	8	8	10	11	13	16	20
1,500	1	1	2	2	2	3	4	5	6	6	8	9	10	12	14	16	20	24
1,750	1	1	2	2	3	4	5	5	7	7	9	11	11	14	16	18	23	27
2,000	1	2	2	3	3	4	5	6	8	8	10	12	13	16	18	21	26	31
2,500	1	2	3	3	4	5	7	8	10	10	13	15	16	20	23	26	33	39
3,000	2	2	3	4	5	6	8	9	12	13	16	18	20	24	27	31	39	47
3,500	2	3	4	5	5	7	9	11	14	15	18	21	23	27	32	37	46	55
4,000	2	3	4	5	6	8	10	13	16	17	21	24	26	31	37	42	52	63
4,500	2	4	5	6	7	9	12	14	18	19	24	27	29	35	41	47	59	71
5,000	3	4	5	7	8	10	13	16	20	21	26	30	33	39	46	52	65	79
5,500	3	4	6	7	9	12	14	17	22	23	29	33	36	43	50	58	72	
6,000	3	5	6	8	9	13	16	19	24	25	31	36	39	47	55	63	79	
6,500	3	5	7	9	10	14	17	20	26	27	34	39	43	51	60	68		
7,000	4	5	7	9	11	15	18	22	27	29	37	42	46	55	64	73		
7,500	4	6	8	10	12	16	20	24	29	31	39	45	49	59	69	79		
8,000	4	6	8	10	13	17	21	25	31	34	42	48	52	63	73			
10,000	5	8	10	13	16	21	26	31	39	42	52	60	65	79				
12,000	6	9	13	16	19	25	31	38	47	50	63	72	79					
14,000	7	11	15	18	22	29	37	44	55	59	73							
16,000	8	13	17	21	25	34	42	50	63	67								
20,000	10	16	21	26	31	42	52	63	79									
22,000	12	17	23	29	35	46	58	69	Cutting speed (v) =				dia. (D) x π x rot. speed (n)					
25,000	13	20	26	33	39	52	65	79					1,000 x 60					

Industrial packaging

PFERD provides industrial power brushes in industrial packaging (IP) as standard.

Advantages:
- Robust, damage-resistant packaging.

POS packaging

PFERD provides wheel, cup, end and bevel brushes in promotional individual packaging. Individually packed shank brushes are supplied in a practical cardboard box. The addition of "POS" in the designation indicates all brushes in POS packaging.

Advantages:
- Functional European standard hole mounting for optimum product presentation on the sales wall.
- Product is easily recognizable through the viewing window.

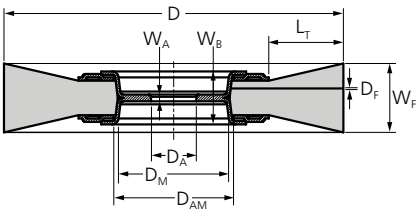


IP

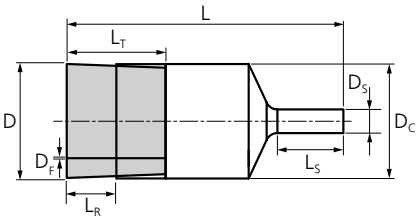


POS

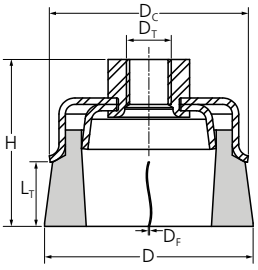
Dimensions



Wheel brushes



End brushes



Cup brushes

Explanation of dimensions

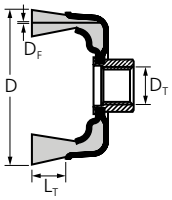
D	Nominal outer diameter of the brush or the working surface for end brushes
D_A	Hole diameter
D_{AM}	Max. hole diameter in main body
D_C	Max. diameter of the main body
D_F	Nominal dimension of the filament material (wire thickness)
D_M	Diameter in hole area
D_S	Shank diameter in shank-mounted brushes, shaft diameter for wheel brushes for burnishing machines, stem diameter (core) for pipe brushes
D_T	Nominal thread designation
H	Nominal total height (incl. components for arbor hole or thread as well as shank)
L	Nominal total length for end brushes (without guide pins) and pipe brushes
L_R	Total length of the filament material (free length without bridle)
L_S	Usable length for shank or stem, total length of the mounting shaft, usable thread length
L_T	Nominal length of the filament material (free length of the filament material)
W_A	Width of the main body at the hole / thread
W_B	Installation width, widest point of the main body
W_F	Nominal dimension of the working width

Custom-made products

If you cannot find the solution for your particular application in our extensive catalogue range, we can produce brushes in premium PFERD quality specifically for your application on request. Products that can be made to order include different wire thicknesses and qualities, arbor holes or threads and other dimensions.

Threaded cup brushes
crimped





TBU

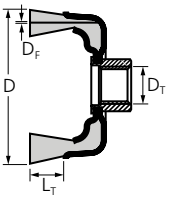
Excellent for medium-duty brushing such as deburring, cleaning and derusting on large surfaces.



Special features:
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

D [mm]	L_T [mm]	D_T	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)									
60	20	M14x2	0.30	6,300 – 9,400	12,500	1	43468902	POS TBU 60/M14 ST 0,30	-
						5	43468880	TBU 60/M14 ST 0,30	-
		X-LOCK	0.30	6,300 – 9,400	12,500	1	43468922	POS TBU 60/X-LOCK ST 0,30	-
75	25	M14x2	0.30	6,300 – 9,400	12,500	1	43469001	POS TBU 75/M14 ST 0,30	-
						5	43469010	TBU 75/M14 ST 0,30	-
	22	X-LOCK	0.30	6,300 – 9,400	12,500	1	*43469006*	POS TBU 75/X-LOCK ST 0,30	-
100	25	M14x2	0.30	4,300 – 6,400	8,500	1	43469102	POS TBU 100/M14 ST 0,30	-
Stainless steel wire (INOX) – All INOX brushes are degreased.									
60	20	M14x2	0.30	5,000 – 8,100	12,500	1	43468905	POS TBU 60/M14 INOX 0,30	-
						5	43468882	TBU 60/M14 INOX 0,30	-
		X-LOCK	0.30	5,000 – 8,100	12,500	1	43468925	POS TBU 60/X-LOCK INOX 0,30	-
75	25	M14x2	0.30	5,000 – 8,100	12,500	1	43469003	POS TBU 75/M14 INOX 0,30	-
						5	43469012	TBU 75/M14 INOX 0,30	-
	22	X-LOCK	0.30	5,000 – 8,100	12,500	1	*43469007*	POS TBU 75/X-LOCK INOX 0,30	-
100	25	M14x2	0.30	3,400 – 5,500	8,500	1	43469103	POS TBU 100/M14 INOX 0,30	-
Silicon carbide (SiC) plastic filament									
100	46	M14x2	1.00	2,400 – 3,900	6,000	1	43469104	POS TBU 100/M14 SiC 120 1,00	-





TBG

Aggressive brush. Excellent for heavy-duty brushing such as deburring, cleaning, derusting and descaling and removal of spatter.

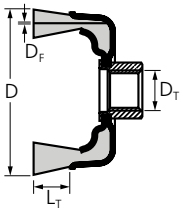


Special features:
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	L_T [mm]	D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
65	22	M14x2	0.35	18	6,300 – 12,500	12,500	1	43305002	POS TBG 65/M14 ST 0,35	-
							5	43305020	TBG 65/M14 ST 0,35	-
		X-LOCK	0.35	18	6,300 – 12,500	12,500	1	*43305025*	POS TBG 65/X-LOCK ST 0,35	-
		M14x2	0.50	18	6,300 – 12,500	12,500	1	43305001	POS TBG 65/M14 ST 0,50	-
							5	43305021	TBG 65/M14 ST 0,50	-
		X-LOCK	0.50	18	6,300 – 12,500	12,500	1	43305026	POS TBG 65/X-LOCK ST 0,50	-
		M14x2	0.80	18	6,300 – 12,500	12,500	1	43305018	POS TBG 65/M14 ST 0,80	-
80	20	M14x2	0.50	20	5,000 – 10,000	10,000	1	43306031	POS TBG 80/M14 ST 0,50	-
							5	43306040	TBG 80/M14 ST 0,50	-
		X-LOCK	0.50	20	5,000 – 10,000	11,500	1	*43306036*	POS TBG 80/X-LOCK ST 0,50	-
100	25	M14x2	0.50	24	4,500 – 9,000	9,000	1	43308031	POS TBG 100/M14 ST 0,50	-
							5	43308040	TBG 100/M14 ST 0,50	-
Stainless steel wire (INOX) – All INOX brushes are degreased.										
65	22	M14x2	0.35	18	5,000 – 12,500	12,500	1	43305003	POS TBG 65/M14 INOX 0,35	-
							5	43305023	TBG 65/M14 INOX 0,35	-
		X-LOCK	0.35	18	5,000 – 12,500	12,500	1	*43305027*	POS TBG 65/X-LOCK INOX 0,35	-
		M14x2	0.50	18	5,000 – 12,500	12,500	1	43305004	POS TBG 65/M14 INOX 0,50	-
							5	43305024	TBG 65/M14 INOX 0,50	-
		X-LOCK	0.50	18	5,000 – 12,500	12,500	1	43305028	POS TBG 65/X-LOCK INOX 0,50	-
80	20	M14x2	0.35	20	4,000 – 10,000	10,000	1	43306033	POS TBG 80/M14 INOX 0,35	-
							5	43306042	TBG 80/M14 INOX 0,35	-
			0.50	20	4,000 – 10,000	10,000	1	43306035	POS TBG 80/M14 INOX 0,50	-
							5	43306044	TBG 80/M14 INOX 0,50	-
		X-LOCK	0.50	20	4,000 – 10,000	11,500	1	*43306037*	POS TBG 80/X-LOCK INOX 0,50	-
100	25	M14x2	0.35	24	3,600 – 9,000	9,000	1	43308033	POS TBG 100/M14 INOX 0,35	-
							5	43308042	TBG 100/M14 INOX 0,35	-
			0.50	24	3,600 – 9,000	9,000	1	43308035	POS TBG 100/M14 INOX 0,50	-
							5	43308044	TBG 100/M14 INOX 0,50	-

Threaded cup brushes
knotted







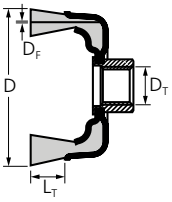
TBG HD, two rows

Double-row, very aggressive and robust brush that is able to withstand high mechanical loads. Excellent for heavy-duty brushing such as deburring, cleaning, derusting and descaling and removal of spatter. Extremely high filament density for optimum tool life.

Special features:
- Double-row design enables fast brushing results thanks to larger filament width.
- High level of comfort thanks to smooth running on corners and edges.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	L_T [mm]	D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
65	22	M14x2	0.50	48	6,300 – 12,500	12,500	1	43305032	POS TBG 65/M14 ST 0,50 2RH HD	-
Stainless steel wire (INOX) – All INOX brushes are degreased.										
65	22	M14x2	0.50	48	5,000 – 12,500	12,500	1	43305033	POS TBG 65/M14 INOX 0,50 2RH HD	-





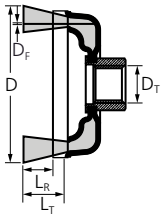
TBG, DIA

Brushes with stainless steel wire (INOX) diamond (DIA) filament material are suitable for applications that place particular demands on the aggressiveness of the brush. They are primarily used on materials with high material strength.

Special features:
- The knots of the brush are knotted to 50% of the length, ensuring an optimal ratio of aggressiveness and flexibility.
- The brush achieves a better surface quality on uneven surfaces than conventional knotted brushes.

D [mm]	L_T [mm]	D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Stainless steel wire (INOX) diamond (DIA)										
65	22	M14x2	0.50	18	1,500 – 3,700	12,500	1	43703023	TBG 65/M14 INOX 0,50 DIA 270	-
100	38	M14x2	0.50	24	1,000 – 2,400	9,000	1	43703022	TBG 100/M14 INOX 0,50 DIA 270	-
								43703021	TBG 100/M14 INOX 0,50 DIA 400	-





TBGR, with bridle

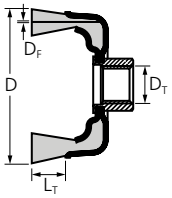
Aggressive brush with bridle. Excellent for heavy-duty brushing such as deburring, cleaning, derusting and descaling, as well as removing spatter on large areas. The brush impresses with a particularly long tool life.



Special features:
- The bridle prevents the wires spreading out sideways. The bridle enables the spreading out and flexibility of the brush filament to be controlled.
- If the filament has worn away down to the bridle, it can be removed from the bridle for further use. This does not affect the brushing behaviour.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	L_R [mm]	L_T [mm]	D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
80	25	40	M14x2	0.50	22	4,300 – 8,500	8,500	1	43306001	TBGR 80/M14 ST 0,50	-
100	25	40	M14x2	0.50	26	4,300 – 8,500	8,500	1	43308001	TBGR 100/M14 ST 0,50	-
			5/8-11	0.50	26	4,300 – 8,500	8,500	1	*43308006*	TBGR 100/5/8 ST 0,50	-
125	25	30	5/8-11	0.50	32	3,300 – 6,500	6,500	1	*43308010*	TBGR 125/5/8 ST 0,50	-







TBG CT, COMBITWIST

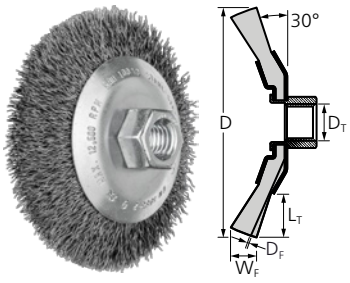
Very aggressive brush. Excellent for heavy-duty brushing such as deburring, cleaning, derusting and descaling and removal of spatter. Suitable for work on corners and edges as the knots are less likely to unravel.



Special features:
- Maximum economic efficiency due to maximum tool life and stock removal rate.
- High level of comfort thanks to smooth running with no brush recoiling.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	L_T [mm]	D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
65	22	M14x2	0.35	18	6,300 – 12,500	12,500	1	43305041	POS TBG 65/M14 CT ST 0,35	-
							5	43305030	TBG 65/M14 CT ST 0,35	-
			0.50	18	6,300 – 12,500	12,500	1	43305051	POS TBG 65/M14 CT ST 0,50	-
							5	43305031	TBG 65/M14 CT ST 0,50	-
80	20	M14x2	0.50	20	5,000 – 10,000	10,000	1	43306061	POS TBG 80/M14 CT ST 0,50	-
							5	43306070	TBG 80/M14 CT ST 0,50	-
100	25	M14x2	0.50	24	4,500 – 9,000	9,000	1	43308061	POS TBG 100/M14 CT ST 0,50	-
							5	43308070	TBG 100/M14 CT ST 0,50	-
Stainless steel wire (INOX) – All INOX brushes are degreased.										
65	22	M14x2	0.35	18	5,000 – 12,500	12,500	1	43305043	POS TBG 65/M14 CT INOX 0,35	-
			0.50	18	5,000 – 12,500	12,500	1	43305053	POS TBG 65/M14 CT INOX 0,50	-
80	20	M14x2	0.35	20	4,000 – 10,000	10,000	1	43306063	POS TBG 80/M14 CT INOX 0,35	-
			0.50	20	4,000 – 10,000	10,000	1	*43306065*	POS TBG 80/M14 CT INOX 0,50	-
100	25	M14x2	0.35	24	3,600 – 9,000	9,000	1	43308063	POS TBG 100/M14 CT INOX 0,35	-
			0.50	24	3,600 – 9,000	9,000	1	*43308065*	POS TBG 100/M14 CT INOX 0,50	-

Threaded bevel brushes
crimped



KBU

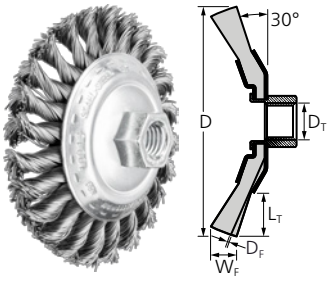
Excellent for medium-duty brushing such as deburring, cleaning and derusting. Can be used on angle grinders up to 80 m/s.



Special features:
- Optimal access to hard-to-reach areas such as inner edges, grooves and keyways.
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

D [mm]	W_F [mm]	L_T [mm]	D_T	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
100	10	22	M14x2	0.35	6,300 – 12,500	12,500	1	43316001	POS KBU 10010/M14 ST 0,35	-
							5	43316010	KBU 10010/M14 ST 0,35	-
115	10	30	M14x2	0.35	6,300 – 12,500	12,500	1	43316021	POS KBU 11510/M14 ST 0,35	-
125	10	22	M14x2	0.35	6,300 – 11,000	11,000	5	43220120	POS KBU 12510/M14 ST 0,35	-
Stainless steel wire (INOX) – All INOX brushes are degreased.										
100	10	22	M14x2	0.35	5,000 – 12,500	12,500	1	43316003	POS KBU 10010/M14 INOX 0,35	-
							5	43316012	KBU 10010/M14 INOX 0,35	-
115	10	30	M14x2	0.35	5,000 – 12,500	12,500	1	43316023	POS KBU 11510/M14 INOX 0,35	-
125	10	22	M14x2	0.35	5,000 – 11,000	11,000	5	43220121	POS KBU 12510/M14 INOX 0,35	-

knotted



KBG

Aggressive brush. Excellent for heavy-duty brushing such as deburring, cleaning, derusting and descaling and removal of spatter.

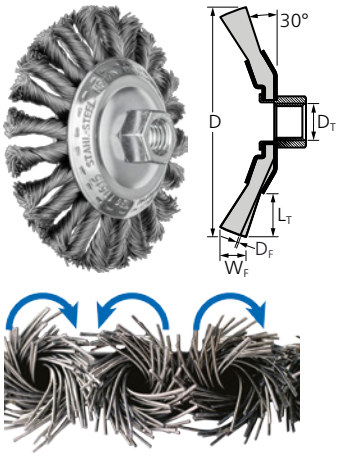


Special features:
- Optimal access to hard-to-reach areas such as inner edges, grooves and keyways.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	W_F [mm]	L_T [mm]	D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
100	13	22	M14x2	0.50	24	10,000 – 15,000	20,000	1	43313001	POS KBG 10013/M14 ST 0,50	-
								5	43312910	KBG 10013/M14 ST 0,50	-
115	15	26	M14x2	0.50	24	7,500 – 12,500	15,000	1	43315001	POS KBG 11515/M14 ST 0,50	-
								5	43314010	KBG 11515/M14 ST 0,50	-
125	15	19	M14x2	0.50	28	7,500 – 12,000	15,000	1	43317001	POS KBG 12515/M14 ST 0,50	-
Stainless steel wire (INOX) – All INOX brushes are degreased.											
100	13	22	M14x2	0.35	24	8,600 – 15,000	20,000	1	43313003	POS KBG 10013/M14 INOX 0,35	-
				0.50	24	8,600 – 15,000	20,000	1	43313006	POS KBG 10013/M14 INOX 0,50	-

Continued on next page

D [mm]	W_F [mm]	L_T [mm]	D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
100	13	22	M14x2	0.50	24	8,600 – 15,000	20,000	5	*43312914*	KBG 10013/M14 INOX 0,50	-
115	15	26	M14x2	0.35	24	6,000 – 12,500	15,000	1	43315003	POS KBG 11515/M14 INOX 0,35	-
				0.50	24	6,000 – 12,500	15,000	1	*43315007*	POS KBG 11515/M14 INOX 0,50	-
125	15	19	M14x2	0.35	28	6,000 – 12,500	15,000	1	43317003	POS KBG 12515/M14 INOX 0,35	-
				0.50	28	6,000 – 12,500	15,000	1	43317007	POS KBG 12515/M14 INOX 0,50	-



KBG CT, COMBITWIST

Very aggressive brush. Excellent for heavy-duty brushing such as deburring, cleaning, derusting and descaling and removal of spatter. Suitable for work on corners and edges as the knots are less likely to unravel.

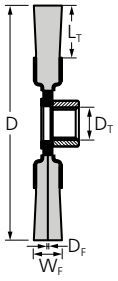


Special features:
- Optimal access to hard-to-reach areas such as inner edges, grooves and keyways.
- Maximum economic efficiency due to maximum tool life and stock removal rate and high level of comfort thanks to smooth running with no brush recoiling.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	W_F [mm]	L_T [mm]	D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
100	13	22	M14x2	0.50	24	10,000 – 15,000	20,000	1	43313011	POS KBG 10013/M14 CT ST 0,50	-
								5	43312920	KBG 10013/M14 CT ST 0,50	-
115	15	26	M14x2	0.50	24	7,500 – 12,500	15,000	1	43315011	POS KBG 11515/M14 CT ST 0,50	-
								5	43314020	KBG 11515/M14 CT ST 0,50	-
125	15	19	M14x2	0.50	28	7,500 – 12,500	15,000	1	43317011	POS KBG 12515/M14 CT ST 0,50	-
Stainless steel wire (INOX) – All INOX brushes are degreased.											
100	13	22	M14x2	0.35	24	8,000 – 15,000	20,000	1	43313013	POS KBG 10013/M14 CT INOX 0,35	-
				0.50	24	8,000 – 15,000	20,000	1	43313016	POS KBG 10013/M14 CT INOX 0,50	-
115	15	26	M14x2	0.35	24	6,000 – 12,500	15,000	1	43315013	POS KBG 11515/M14 CT INOX 0,35	-
				0.50	24	6,000 – 12,500	15,000	1	*43315015*	POS KBG 11515/M14 CT INOX 0,50	-
125	15	19	M14x2	0.35	28	6,000 – 12,500	15,000	1	43317013	POS KBG 12515/M14 CT INOX 0,35	-
				0.50	28	6,000 – 12,500	15,000	1	*43317016*	POS KBG 12515/M14 CT INOX 0,50	-

Wheel brushes
crimped





RBU, for angle grinders

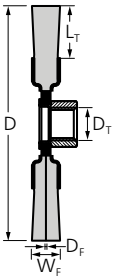
Suitable for medium-duty brushing such as derusting, cleaning of weld seams and light deburring work. Can be used on angle grinders up to 80 m/s.



Special features:
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

D [mm]	W_F [mm]	L_T [mm]	D_T	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
115	12	25	M14x2	0.30	6,300 – 12,500	12,500	1	43502201	POS RBU 11512/M14 ST 0,30	-
125	12	15	M14x2	0.30	5,500 – 11,000	11,000	1	43502301	POS RBU 12512/M14 ST 0,30	-
Stainless steel wire (INOX) – All INOX brushes are degreased.										
115	12	25	M14x2	0.30	5,000 – 12,500	12,500	1	43502202	POS RBU 11512/M14 INOX 0,30	-
125	12	15	M14x2	0.30	4,400 – 11,000	11,000	1	43502302	POS RBU 12512/M14 INOX 0,30	-





RBU, POLISCRATCH

Excellent for processing and removing soft materials such as underseal and anti-drumming compound. Most suitable for achieving rough surfaces with a sandblasted appearance due to the specific geometry of the filament material.



Special features:
- High cooling effect and no smearing or loading of the brush due to the open construction of the filament material.
- Longer tool life as the brush can be re-sharpened using a sharpening block.
- Use only on speed-adjustable angle and straight grinders.

D [mm]	W_F [mm]	L_T [mm]	D_T	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
100	20	18	M14x2	0.60	1,200 – 3,500	6,000	5	43502102	POS RBU 10020/M14 SC ST 0,60	-



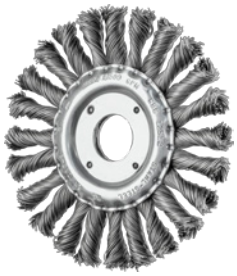
RBG

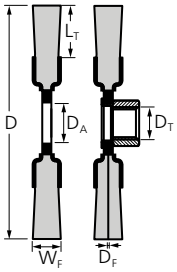
Aggressive brush. Suitable for heavy-duty brushing in metalwork such as descaling, derusting, deburring, cleaning of weld seams, removal of adhesive residues and spatter.



Special features:
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	W_F [mm]	L_T [mm]	D_A / D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
100	12	28	M14x2	0.50	22	10,000 – 15,000	20,000	1	43302000	POS RBG 10012/M14 ST 0,50	-
115	12	22	22.2	0.50	24	6,300 – 12,500	12,500	1	43312001	POS RBG 11512/22,2 ST 0,50	-
								10	43302120	RBG 11512/22,2 ST 0,50	-
			M14x2	0.50	24	6,300 – 12,500	12,500	1	43312002	POS RBG 11512/M14 ST 0,50	-
			X-LOCK	0.50	24	6,300 – 12,500	12,500	1	43312031	POS RBG 11512/X-LOCK ST 0,50	-
125	12	28	22.2	0.50	24	5,500 – 12,500	12,500	1	43303005	POS RBG 12512/22,2 ST 0,50	-
								10	43303020	RBG 12512/22,2 ST 0,50	-
			M14x2	0.50	24	5,500 – 12,500	12,500	1	43303013	POS RBG 12512/M14 ST 0,50	-
			X-LOCK	0.50	24	6,300 – 12,500	12,500	1	43303035	POS RBG 12512/X-LOCK ST 0,50	-
150	13	26	22.2	0.60	30	5,000 – 10,000	10,000	1	43309015	POS RBG 15013/22,2 ST 0,60	-
178	13	38	22.2	0.50	30	4,500 – 8,500	9,000	1	43304001	POS RBG 17813/22,2 ST 0,50	-
								10	43304020	RBG 17813/22,2 ST 0,50	-
				0.80	30	4,500 – 8,500	9,000	1	43304007	POS RBG 17813/22,2 ST 0,80	-
			M14x2	0.50	30	4,500 – 8,500	9,000	1	43304009	POS RBG 17813/M14 ST 0,50	-
Stainless steel wire (INOX) – All INOX brushes are degreased.											
115	12	22	22.2	0.35	24	5,000 – 12,500	12,500	1	43312003	POS RBG 11512/22,2 INOX 0,35	-
								10	43302122	RBG 11512/22,2 INOX 0,35	-
				0.50	24	5,000 – 12,500	12,500	1	43312006	POS RBG 11512/22,2 INOX 0,50	-
								10	43302124	RBG 11512/22,2 INOX 0,50	-
			M14x2	0.35	24	5,000 – 12,500	12,500	1	43312004	POS RBG 11512/M14 INOX 0,35	-
				0.50	24	5,000 – 12,500	12,500	1	43312008	POS RBG 11512/M14 INOX 0,50	-
			X-LOCK	0.50	24	5,000 – 12,500	12,500	1	43312036	POS RBG 11512/X-LOCK INOX 0,50	-
125	12	28	22.2	0.35	24	4,400 – 12,500	12,500	1	43303006	POS RBG 12512/22,2 INOX 0,35	-
								10	43303022	RBG 12512/22,2 INOX 0,35	-
				0.50	24	4,400 – 12,500	12,500	1	43303008	POS RBG 12512/22,2 INOX 0,50	-
								10	43303024	RBG 12512/22,2 INOX 0,50	-
			M14x2	0.35	24	4,400 – 12,500	12,500	1	43303007	POS RBG 12512/M14 INOX 0,35	-
				0.50	24	4,400 – 12,500	12,500	1	43303009	POS RBG 12512/M14 INOX 0,50	-
			X-LOCK	0.50	24	5,000 – 12,500	12,500	1	43303038	POS RBG 12512/X-LOCK INOX 0,50	-
178	13	38	22.2	0.35	30	3,600 – 8,500	9,000	1	43304003	POS RBG 17813/22,2 INOX 0,35	-
								10	43304022	RBG 17813/22,2 INOX 0,35	-
				0.50	30	3,600 – 8,500	9,000	1	43304002	POS RBG 17813/22,2 INOX 0,50	-
								10	43304024	RBG 17813/22,2 INOX 0,50	-
			M14x2	0.35	30	3,600 – 8,500	9,000	1	43304010	POS RBG 17813/M14 INOX 0,35	-
				0.50	30	3,600 – 8,500	9,000	1	43304012	POS RBG 17813/M14 INOX 0,50	-







RBG CT, COMBITWIST

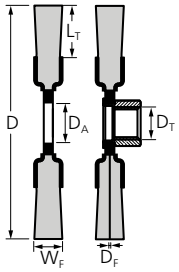
Very aggressive brush. Suitable for heavy-duty brushing in metalwork such as descaling, derusting, deburring, cleaning of weld seams and removal of adhesive residues and spatter. Suitable for work on corners and edges as the knots are less likely to unravel.



Special features:
- Maximum economic efficiency due to maximum tool life and stock removal rate.
- High level of comfort thanks to smooth running with no brush recoiling.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	W_F [mm]	L_T [mm]	D_A / D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
115	12	22	22.2	0.50	24	6,300 – 12,500	12,500	1	43312011	POS RBG 11512/22,2 CT ST 0,50	-
								10	43302140	RBG 11512/22,2 CT ST 0,50	-
			M14x2	0.50	24	6,300 – 12,500	12,500	1	43302131	POS RBG 11512/M14 CT ST 0,50	-
125	12	28	22.2	0.50	24	5,500 – 12,500	12,500	1	43303010	POS RBG 12512/22,2 CT ST 0,50	-
								10	43303070	RBG 12512/22,2 CT ST 0,50	-
			M14x2	0.50	24	5,500 – 12,500	12,500	1	43303051	POS RBG 12512/M14 CT ST 0,50	-
178	13	38	22.2	0.50	30	4,500 – 8,500	9,000	1	43304011	POS RBG 17813/22,2 CT ST 0,50	-
								10	43304040	RBG 17813/22,2 CT ST 0,50	-
				0.80	30	4,500 – 8,500	9,000	1	43304017	POS RBG 17813/22,2 CT ST 0,80	-
Stainless steel wire (INOX) – All INOX brushes are degreased.											
115	12	22	22.2	0.35	24	5,000 – 12,500	12,500	1	43312013	POS RBG 11512/22,2 CT INOX 0,35	-
								10	43302142	RBG 11512/22,2 CT INOX 0,35	-
				0.50	24	5,000 – 12,500	12,500	1	43312015	POS RBG 11512/22,2 CT INOX 0,50	-
			M14x2	0.35	24	5,000 – 12,500	12,500	1	43302133	POS RBG 11512/M14 CT INOX 0,35	-
				0.50	24	5,000 – 12,500	12,500	1	43302135	POS RBG 11512/M14 CT INOX 0,50	-
125	12	28	22.2	0.35	24	4,400 – 12,500	12,500	1	43303011	POS RBG 12512/22,2 CT INOX 0,35	-
								10	43303072	RBG 12512/22,2 CT INOX 0,35	-
				0.50	24	4,400 – 12,500	12,500	1	43303012	POS RBG 12512/22,2 CT INOX 0,50	-
								10	43303074	RBG 12512/22,2 CT INOX 0,50	-
			M14x2	0.35	24	4,400 – 12,500	12,500	1	43303053	POS RBG 12512/M14 CT INOX 0,35	-
				0.50	24	4,400 – 12,500	12,500	1	43303055	POS RBG 12512/M14 CT INOX 0,50	-
178	13	38	22.2	0.35	30	3,600 – 8,500	9,000	1	43304013	POS RBG 17813/22,2 CT INOX 0,35	-
				0.50	30	3,600 – 8,500	9,000	1	43304018	POS RBG 17813/22,2 CT INOX 0,50	-
								10	43304046	RBG 17813/22,2 CT INOX 0,50	-







RBG CT HD, COMBITWIST

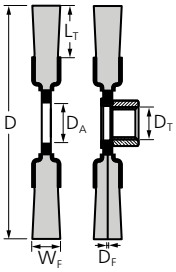
Very aggressive brush. Suitable for heavy-duty brushing in metalwork such as descaling, derusting, deburring, cleaning of weld seams and removal of adhesive residues and spatter. Suitable for work on corners and edges as the knots are less likely to unravel.

Special features:
- Extremely high filament density for optimum tool life.
- High level of comfort thanks to smooth running with no brush recoiling.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	W_F [mm]	L_T [mm]	D_A / D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
125	12	28	22.2	0.50	24	5,500 – 12,500	12,500	1	43303016	POS RBG 12512/22,2 CT ST HD 0,50	-
			M14x2	0.50	24	5,500 – 12,500	12,500	1	43303015	POS RBG 12512/M14 CT ST HD 0,50	-
Stainless steel wire (INOX) – All INOX brushes are degreased.											
125	12	28	22.2	0.35	24	4,400 – 12,500	12,500	1	43303018	POS RBG 12512/22,2 CT INOX HD 0,35	-
			M14x2	0.35	24	4,400 – 12,500	12,500	1	43303017	POS RBG 12512/M14 CT INOX HD 0,35	-

Pipeline





RBG PIPE, Pipeline

Aggressive and robust brush that is able to withstand high mechanical loads. Perfect for heavy-duty brushing in pipeline and container construction.



Special features:
- Extra-slim design enables optimal access to hard-to-reach areas such as root weld seams.
- Aggressive brushing effect due to the very stiff wire knots.

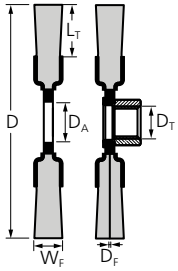
D [mm]	W_F [mm]	L_T [mm]	D_A / D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
100	6	19	16	0.50	32	10,000 – 15,000	20,000	10	43301001	RBG 10006/16,0 PIPE ST 0,50	-
115	6	21	22,2	0.50	36	6,300 – 12,500	12,500	10	43302101	RBG 11506/22,2 PIPE ST 0,50	-
			M14x2	0.50	36	6,300 – 12,500	12,500	10	43302102	RBG 11506/M14 PIPE ST 0,50	-
			X-LOCK	0.50	32	6,300 – 12,500	12,500	1	43302111	POS RBG 11506/X-LOCK PIPE ST 0,50	-
125	6	18	22,2	0.50	48	6,300 – 12,500	12,500	10	43302501	RBG 12506/22,2 PIPE ST 0,50	-
			M14x2	0.50	48	6,300 – 12,500	12,500	10	43302502	RBG 12506/M14 PIPE ST 0,50	-
			X-LOCK	0.50	38	6,300 – 12,500	12,500	1	43302521	POS RBG 12506/X-LOCK PIPE ST 0,50	-
150	6	27	22,2	0.50	56	5,000 – 10,000	10,000	10	43303501	RBG 15006/22,2 PIPE ST 0,50	-
			M14x2	0.50	56	5,000 – 10,000	10,000	10	43303502	RBG 15006/M14 PIPE ST 0,50	-
178	6	28	22,2	0.50	56	4,500 – 8,500	9,000	10	43303801	RBG 17806/22,2 PIPE ST 0,50 56Z	-

Continued on next page

Wheel brushes
Pipeline

D [mm]	W_F [mm]	L_T [mm]	D_A / D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
178	6	28	22,2	0.50	76	4,500 – 8,500	9,000	10	43303804	RBG 17806/22,2 PIPE ST 0,50 76Z	-
			M14x2	0.50	56	4,500 – 8,500	9,000	10	*43303802*	RBG 17806/M14 PIPE ST 0,50 56Z	-
					76	4,500 – 8,500	9,000	10	43303805	RBG 17806/M14 PIPE ST 0,50 76Z	-
Stainless steel wire (INOX) – All INOX brushes are degreased.											
100	6	19	16	0.50	32	8,000 – 15,000	20,000	10	43301006	RBG 10006/16,0 PIPE INOX 0,50	-
115	6	21	22,2	0.50	36	5,000 – 12,500	12,500	10	43302106	RBG 11506/22,2 PIPE INOX 0,50	-
			M14x2	0.50	36	5,000 – 12,500	12,500	10	43302107	RBG 11506/M14 PIPE INOX 0,50	-
125	6	18	22,2	0.50	48	5,000 – 12,500	12,500	10	43302506	RBG 12506/22,2 PIPE INOX 0,50	-
			M14x2	0.50	48	5,000 – 12,500	12,500	10	43302507	RBG 12506/M14 PIPE INOX 0,50	-
150	6	27	22,2	0.50	56	4,000 – 10,000	10,000	10	43303506	RBG 15006/22,2 PIPE INOX 0,50	-
			M14x2	0.50	56	4,000 – 10,000	10,000	10	43303507	RBG 15006/M14 PIPE INOX 0,50	-
178	6	28	22,2	0.50	76	3,600 – 8,500	9,000	10	43303816	RBG 17806/22,2 PIPE INOX 0,50 76Z	-
			M14x2	0.50	76	3,600 – 8,500	9,000	10	43303817	RBG 17806/M14 PIPE INOX 0,50 76Z	-







RBG PIPE CT, Pipeline COMBITWIST

Very aggressive and robust brush that is able to withstand high mechanical loads. Perfect for heavy-duty brushing in pipeline and container construction. Suitable for work on corners and edges as the knots are less likely to unravel.

Special features:

- Extra-slim design enables optimal access to hard-to-reach areas such as root weld seams.
- Maximum economic efficiency due to maximum tool life and stock removal rate. High level of comfort thanks to smooth running with no brush recoiling.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	W_F [mm]	L_T [mm]	D_A / D_T	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
125	6	18	22.2	0.50	48	6,300 – 12,500	12,500	10	43302504	RBG 12506/22,2 PIPE CT ST 0,50	-
			M14x2	0.50	48	6,300 – 12,500	12,500	10	*43302505*	RBG 12506/M14 PIPE CT ST 0,50	-
178	6	28	22.2	0.50	72	4,500 – 8,500	9,000	10	43303810	RBG 17806/22,2 PIPE CT ST 0,50 72Z	-
			M14x2	0.50	72	4,500 – 8,500	9,000	10	*43303811*	RBG 17806/M14 PIPE CT ST 0,50 72Z	-



RBG, stationary

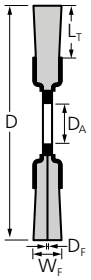
Aggressive and robust brush that is able to withstand high mechanical loads. Suitable for all heavy-duty stationary and automated brushing, e.g. deburring work.



Special features:
- Aggressive brushing effect due to the very stiff wire knots.
- Can be used with all commercially available stationary drive systems and bench grinders thanks to the variable hole diameter.

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
200	16	44	50.8	0.35	34	4,000 – 6,500	8,500	1	*43310010*	RBG 20016/50,8 ST 0,35	-
				0.50	34	4,000 – 6,500	8,500	1	43310015	RBG 20016/50,8 ST 0,50	-
250	16	41	50.8	0.35	54	2,000 – 3,400	4,500	1	43310510	RBG 25016/50,8 ST 0,35	-
				0.50	54	2,000 – 3,400	4,500	1	43310515	RBG 25016/50,8 ST 0,50	-





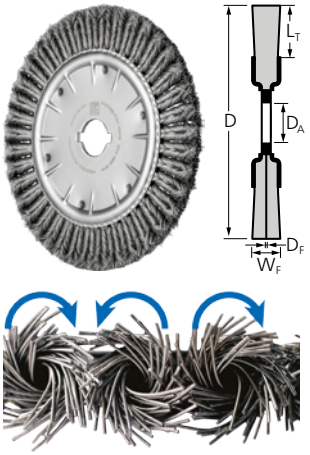
RBG, stationary DIA

Brushes with stainless steel wire (INOX) diamond (DIA) filament material are suitable for applications that place particular demands on the aggressiveness of the brush. They are primarily used on materials with high material strength.

Special features:
- The knots of the brush are knotted to 50% of the length, ensuring an optimal ratio of aggressiveness and flexibility.
- The brush achieves a better surface quality on uneven surfaces than conventional knotted brushes.

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Stainless steel wire (INOX) diamond (DIA)											
190	30	50	22.2	0.50	24	1,000 – 2,000	8,000	1	*43702031*	POS RBG 19030/22,2 INOX 0,50 DIA 270	-
									43702032	POS RBG 19030/22,2 INOX 0,50 DIA 400	-

Wheel brushes
knotted, with hole



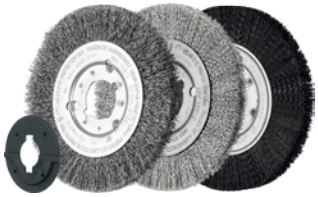
RBG, CT, COMBITWIST stationary

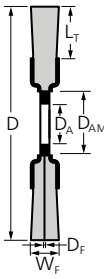
Aggressive and robust brush that is able to withstand high mechanical loads. Suitable for all heavy-duty stationary and automated brushing, e.g. deburring work. Suitable for work on corners and edges as the knots are less likely to unravel.

Special features:
- Maximum economic efficiency due to maximum tool life and stock removal rate. High level of comfort thanks to smooth running with no brush recoiling.
- Aggressive brushing effect due to the very stiff wire knots.
- Can be used with all commercially available stationary drive systems and bench grinders thanks to the variable hole diameter.

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
350	20	56	50.8	0.50	80	700 – 3,000	3,600	1	79182019	RBG 35020/50,8 CT ST 0,50	-
380	20	67	50.8	0.50	80	700 – 3,000	3,600	1	79182020	RBG 38020/50,8 CT ST 0,50	-

crimped, with hole





RBU, slim

Excellent for medium-duty hand-held or automated brushing of workpieces with large surfaces.

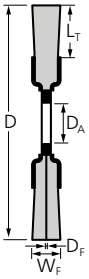
Special features:
- Can be used with all commercially available stationary drive systems and bench grinders thanks to the variable hole diameter.
- The special design enables bunching to create wide gapless rollers. This enables a uniform surface finish to be achieved.
- Highly flexible, enabling optimal adjustment to the workpiece contour.

D [mm]	W_F [mm]	L_T [mm]	D_A	D_{AM} [mm]	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
100	12	24	14	-	0.15	4,000 – 6,000	8,000	2	43502005	RBU 10012/14,0 ST 0,15	-
					0.30	4,000 – 6,000	8,000	2	43502009	RBU 10012/14,0 ST 0,30	-
125	12	32	14	-	0.30	4,000 – 6,000	8,000	2	43503001	RBU 12512/14,0 ST 0,30	-
150	12	28	22.2	31.8	0.25	3,000 – 4,500	6,000	2	43505005	RBU 15012/22,2 ST 0,25	-
180	12	43	22.2	31.8	0.30	3,000 – 4,500	6,000	2	43505201	RBU 18012/22,2 ST 0,30	-
200	16	44	22.2	31.8	0.25	3,000 – 4,500	6,000	2	43506005	RBU 20016/22,2 ST 0,25	-
250	20	70	22.2	31.8	0.25	1,800 – 2,700	3,600	2	43506505	RBU 25020/22,2 ST 0,25	-
Stainless steel wire (INOX) – All INOX brushes are degreased.											
125	12	32	14	-	0.30	3,200 – 5,200	8,000	2	43503003	RBU 12512/14,0 INOX 0,30	-
150	12	28	22.2	31.8	0.30	2,400 – 3,900	6,000	2	43505006	RBU 15012/22,2 INOX 0,30	-
180	12	43	22.2	31.8	0.30	2,400 – 3,900	6,000	2	43505202	RBU 18012/22,2 INOX 0,30	-
200	16	44	22.2	31.8	0.30	2,400 – 3,900	6,000	2	43506010	RBU 20016/22,2 INOX 0,30	-
250	20	70	22.2	31.8	0.30	1,400 – 2,300	3,600	2	43506506	RBU 25020/22,2 INOX 0,30	-
Silicon carbide (SiC) plastic filament											
100	12	22	12	-	1.10	3,200 – 5,200	8,000	2	43502012	RBU 10012/12,0 SiC 80 1,00	-
					0.90	3,200 – 5,200	8,000	2	43502004	RBU 10012/12,0 SiC 180 0,90	-
150	16	32	12	31.8	1.10	2,400 – 3,900	8,000	2	43505008	RBU 15016/12,0 SiC 80 1,00	-

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D [mm]	W_F [mm]	L_T [mm]	D_A	D_{AM} [mm]	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
150	16	32	12	31.8	0.90	2,400 – 3,900	8,000	2	43505004	RBU 15016/12,0 SiC 180 0,90	-
200	16	32	22.2	31.8	1.10	1,800 – 2,900	4,500	2	43506007	RBU 20016/22,2 SiC 80 1,00	-
					0.90	1,800 – 2,900	4,500	2	43506004	RBU 20016/22,2 SiC 180 0,90	-
250	16	38	22.2	31.8	1.10	1,400 – 2,300	3,600	2	43506508	RBU 25016/22,2 SiC 80 1,00	-
					0.90	1,400 – 2,300	3,600	2	43506504	RBU 25016/22,2 SiC 180 0,90	-
Ceramic oxide grain (CO) plastic filament											
150	16	28	12	31.8	1.10	2,400 – 3,900	6,000	2	43505009	RBU 15016/12,0 CO 120 1,10	-
200	16	38	22.2	31.8	1.10	1,800 – 2,900	4,500	2	43506011	RBU 20016/22,2 CO 120 1,10	-
Nylon plastic filament											
100	12	22	12	-	0.40	3,200 – 5,200	8,000	2	43502027	RBU 10012/12,0 Nylon 0,40	-
200	16	32	22.2	31.8	0.40	2,400 – 3,900	6,000	2	*43506027*	RBU 20016/22,2 Nylon 0,40	-



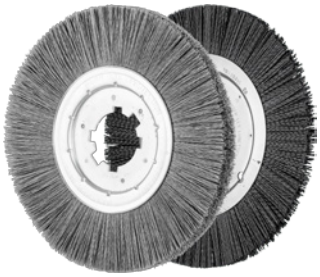


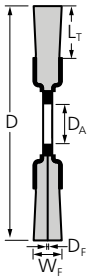
RBU, slim DIA

Brushes with diamond (DIA) filament material are suitable for applications that place particular demands on the aggressiveness of the brush. Excellent for hand-held or automated brushing of workpieces with large surfaces.

Special features:
- Can be used with all commercially available stationary drive systems and bench grinders thanks to the variable hole diameter.
- The special design enables bunching to create wide gapless rollers. This enables a uniform surface finish to be achieved.
- Highly flexible, enabling optimal adjustment to the workpiece contour.

D [mm]	W_F [mm]	L_T [mm]	D_A	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Diamond (DIA) plastic filament										
100	12	19	16	0.35	2,000 – 5,000	12,000	1	43317017	RBU 10012/16,0 DIA 600 0,35	-
150	13	28	31.8	0.35	1,000 – 3,500	6,000	1	79184323	RBU 15012/31,8 DIA 600 0,35	-
200	13	38	50.8	0.35	900 – 1,500	4,500	1	79184322	RBU 20012/50,8 DIA 600 0,35	-





RBU, slim, stationary

Ideal for processing aluminium due to the longer trim length and higher degree of flexibility. Suitable for use on stationary machines, automated centres and robots.



Special features:
- The special design enables bunching to create wide gapless rollers. This enables a uniform surface finish to be achieved.
- Highly flexible, enabling optimal adjustment to the workpiece contour.

D [mm]	W_F [mm]	L_T [mm]	Grit size	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Silicon carbide (SiC) plastic filament										
200	13	43	120	0.55	2,400 – 3,900	6,000	1	43505904	RBU 20013/50,8 SiC 120 0,55	-
			180	0.90	2,400 – 3,900	6,000	1	43505914	RBU 20013/50,8 SiC 180 0,90	-
			320	0.55	2,400 – 3,900	6,000	1	43505924	RBU 20013/50,8 SiC 320 0,55	-
250	15	55	120	0.55	1,400 – 2,300	3,600	1	43506514	RBU 25015/50,8 SiC 120 0,55	-
			180	0.90	1,400 – 2,300	3,600	1	43506524	RBU 25015/50,8 SiC 180 0,90	-
			320	0.55	1,400 – 2,300	3,600	1	43506534	RBU 25015/50,8 SiC 320 0,55	-

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Wheel brushes
crimped, with hole

D [mm]	W_F [mm]	L_T [mm]	Grit size	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Ceramic oxide grain (CO) plastic filament										
200	13	46	120	1.10	2,400 – 3,900	6,000	1	43505930	RBU 20013/50,8 CO 120 1,10	-
250	15	63	120	1.10	1,400 – 2,300	3,600	1	43506540	RBU 25015/50,8 CO 120 1,10	-



RBU, wide, universal use

Excellent for medium-duty hand-held or automated brushing of workpieces with large surfaces. Developed for general use in the workshop.



Contents:
Brushes with diameter 150–200 mm are supplied together with adapter set AK 32-2. Brushes with diameter 80 mm are supplied with a variable arbor hole (10/12/14 mm). Brushes with diameter 100–125 mm are supplied with a variable arbor hole (12/14/18/22.2/25.4 mm).

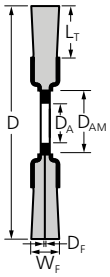
Special features:
- Can be used with all commercially available stationary drive systems and bench grinders thanks to the variable hole diameter.
- Highly flexible, enabling optimal adjustment to the workpiece contour.

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_{AM} [mm]	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
80	20	20	10/12/14	20	0.15	5,000 – 7,500	10,000	1	43701103	POS RBU 8020/20 ST 0,15	-
					0.20	5,000 – 7,500	10,000	1	43701104	POS RBU 8020/20 ST 0,20	-
100	20	25	12–25.4	30	0.30	4,000 – 6,000	8,000	1	43701105	POS RBU 10020/14,0 ST 0,30	-
	28	25	12–25.4	30	0.30	4,000 – 6,000	8,000	1	43701109	POS RBU 10028/14,0 ST 0,30	-
125	20	30	12–25.4	30	0.30	3,000 – 4,500	6,000	1	43701115	POS RBU 12520/14,0 ST 0,30	-
	28	30	12–25.4	30	0.30	3,000 – 4,500	6,000	1	43701119	POS RBU 12528/14,0 ST 0,30	-
150	25	25	AK 32-2	50.8	0.20	3,000 – 4,500	6,000	1	43701205	POS RBU 15025/AK32-2 ST 0,20	-
					0.30	3,000 – 4,500	6,000	1	43701209	POS RBU 15025/AK32-2 ST 0,30	-
	38	25	AK 32-2	50.8	0.20	3,000 – 4,500	6,000	1	43701213	POS RBU 15038/AK32-2 ST 0,20	-
					0.30	3,000 – 4,500	6,000	1	43701217	POS RBU 15038/AK32-2 ST 0,30	-
180	25	40	AK 32-2	50.8	0.20	3,000 – 4,500	6,000	1	43701235	POS RBU 18025/AK32-2 ST 0,20	-
					0.30	3,000 – 4,500	6,000	1	43701239	POS RBU 18025/AK32-2 ST 0,30	-
	38	40	AK 32-2	50.8	0.30	3,000 – 4,500	6,000	1	43701245	POS RBU 18038/AK32-2 ST 0,30	-
200	25	50	AK 32-2	50.8	0.20	2,300 – 3,400	4,500	1	43701255	POS RBU 20025/AK32-2 ST 0,20	-
					0.30	2,300 – 3,400	4,500	1	43701259	POS RBU 20025/AK32-2 ST 0,30	-
	38	50	AK 32-2	50.8	0.30	2,300 – 3,400	4,500	1	43701265	POS RBU 20038/AK32-2 ST 0,30	-
250	30	46	AK 32-2	50.8	0.20	1,400 – 2,300	3,600	1	43740130	POS RBU 25030/AK32-2 ST 0,20	-
					0.30	1,400 – 2,300	3,600	1	43740131	POS RBU 25030/AK32-2 ST 0,30	-
Stainless steel wire (INOX)											
80	20	20	10/12/14	20	0.15	4,000 – 6,500	10,000	1	43701107	POS RBU 8020/20 INOX 0,15	-
					0.20	4,000 – 6,500	10,000	1	43701108	POS RBU 8020/20 INOX 0,20	-
100	20	25	12–25.4	30	0.30	3,200 – 5,200	8,000	1	43701106	POS RBU 10020/14,0 INOX 0,30	-
	28	25	12–25.4	30	0.30	3,200 – 5,200	8,000	1	43701110	POS RBU 10028/14,0 INOX 0,30	-
125	20	30	12–25.4	30	0.30	2,400 – 3,900	6,000	1	43701116	POS RBU 12520/14,0 INOX 0,30	-
	28	30	12–25.4	30	0.30	2,400 – 3,900	6,000	1	43701120	POS RBU 12528/14,0 INOX 0,30	-
150	25	25	AK 32-2	50.8	0.20	2,400 – 3,900	6,000	1	43701206	POS RBU 15025/AK32-2 INOX 0,20	-
					0.30	2,400 – 3,900	6,000	1	43701210	POS RBU 15025/AK32-2 INOX 0,30	-
	38	25	AK 32-2	50.8	0.20	2,400 – 3,900	6,000	1	43701214	POS RBU 15038/AK32-2 INOX 0,20	-

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D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_{AM} [mm]	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
150	38	25	AK 32-2	50.8	0.30	2,400 – 3,900	6,000	1	43701218	POS RBU 15038/AK32-2 INOX 0,30	-
180	25	40	AK 32-2	50.8	0.20	2,400 – 3,900	6,000	1	43701236	POS RBU 18025/AK32-2 INOX 0,20	-
					0.30	2,400 – 3,900	6,000	1	43701240	POS RBU 18025/AK32-2 INOX 0,30	-
	38	40	AK 32-2	50.8	0.30	2,400 – 3,900	6,000	1	43701246	POS RBU 18038/AK32-2 INOX 0,30	-
200	25	50	AK 32-2	50.8	0.20	1,800 – 2,900	4,500	1	43701256	POS RBU 20025/AK32-2 INOX 0,20	-
					0.30	1,800 – 2,900	4,500	1	43701260	POS RBU 20025/AK32-2 INOX 0,30	-
	38	50	AK 32-2	50.8	0.30	1,800 – 2,900	4,500	1	43701266	POS RBU 20038/AK32-2 INOX 0,30	-
250	30	46	AK 32-2	50.8	0.20	1,400 – 2,300	3,600	1	43740132	POS RBU 25030/AK32-2 INOX 0,20	-
					0.30	1,400 – 2,300	3,600	1	43740133	POS RBU 25030/AK32-2 INOX 0,30	-
Silicon carbide (SiC) plastic filament											
150	25	25	AK 32-2	50.8	0.55	2,400 – 3,900	6,000	1	43701181	POS RBU 15025/AK32-2 SiC 120 0,55	-
					1.10	2,400 – 3,900	6,000	1	43701182	POS RBU 15025/AK32-2 SiC 120 1,10	-
					0.55	2,400 – 3,900	6,000	1	43701183	POS RBU 15025/AK32-2 SiC 320 0,55	-
200	25	50	AK 32-2	50.8	1.10	2,400 – 3,900	6,000	1	43701257	POS RBU 20025/AK32-2 SiC 120 1,10	-
250	30	46	AK 32-2	50.8	1.10	1,400 – 2,300	3,600	1	43740134	POS RBU 25030/AK32-2 SiC 120 1,10	-





RBU, wide, industrial use

Excellent for medium-duty hand-held or automated brushing of workpieces with large surfaces. Developed specially for industrial use. The brush impresses with its very long tool life, which ensures high economic efficiency.



Contents:
Brushes with diameter 150–250 mm are supplied together with adapter set AK 32-2. Brushes with diameter 100 mm are supplied with a variable arbor hole.

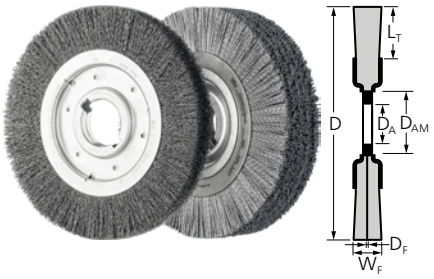
Special features:
- Can be used with all commercially available stationary drive systems and bench grinders thanks to the variable hole diameter.
- The special design enables bunching to create wide gapless rollers. This enables a uniform surface finish to be achieved.
- Highly flexible, enabling optimal adjustment to the workpiece contour.

D [mm]	W_F [mm]	L_T [mm]	D_A	D_{AM} [mm]	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
100	20	19	14,0/18,0/22,2	25.4	0.30	4,000 – 6,000	8,000	1	43502101	RBU 10020/14,0 ST 0,30	-
	28	19	14,0/18,0/22,2	25.4	0.30	4,000 – 6,000	8,000	1	43502001	RBU 10028/14,0 ST 0,30	-
150	25	25	AK 32-2	50.8	0.30	3,000 – 4,500	6,000	1	43505101	RBU 15025/AK32-2 ST 0,30	-
	38	25	AK 32-2	50.8	0.30	3,000 – 4,500	6,000	1	43505001	RBU 15038/AK32-2 ST 0,30	-
180	25	40	AK 32-2	50.8	0.30	3,000 – 4,500	6,000	1	43505210	RBU 18025/AK32-2 ST 0,30	-
200	25	38	AK 32-2	50.8	0.30	2,300 – 3,400	4,500	1	43506101	RBU 20025/AK32-2 ST 0,30	-
	38	38	AK 32-2	50.8	0.30	2,300 – 3,400	4,500	1	43506001	RBU 20038/AK32-2 ST 0,30	-
250	30	50	AK 32-2	50.8	0.30	1,800 – 2,700	3,600	1	43506601	RBU 25030/AK32-2 ST 0,30	-
	48	50	AK 32-2	50.8	0.30	1,800 – 2,700	3,600	1	43506501	RBU 25048/AK32-2 ST 0,30	-
300	40	40	50.8	117.5	0.30	1,500 – 2,500	3,000	1	43507027	RBU 30040/50,8 ST 0,30	-
Stainless steel wire (INOX) – All INOX brushes are degreased.											
150	25	25	AK 32-2	50.8	0.30	2,400 – 3,900	6,000	1	43505102	RBU 15025/AK32-2 INOX 0,30	-
	38	25	AK 32-2	50.8	0.30	2,400 – 3,900	6,000	1	43505003	RBU 15038/AK32-2 INOX 0,30	-
180	25	40	AK 32-2	50.8	0.30	2,400 – 3,900	6,000	1	43505212	RBU 18025/AK32-2 INOX 0,30	-
200	25	38	AK 32-2	50.8	0.30	1,800 – 2,900	4,500	1	43506102	RBU 20025/AK32-2 INOX 0,30	-

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Wheel brushes
crimped, with hole

D [mm]	W_F [mm]	L_T [mm]	D_A	D_{AM} [mm]	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
200	38	38	AK 32-2	50.8	0.30	1,800 – 2,900	4,500	1	43506003	RBU 20038/AK32-2 INOX 0,30	-
250	30	50	AK 32-2	50.8	0.30	1,400 – 2,300	3,600	1	43506603	RBU 25030/AK32-2 INOX 0,30	-
	48	50	AK 32-2	50.8	0.30	1,400 – 2,300	3,600	1	43506503	RBU 25048/AK32-2 INOX 0,30	-



RBU, deburring brushes

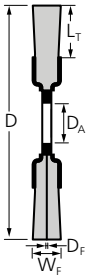
Particularly suitable for deburring pipes, cut edges and small parts on stationary machines.



Special features:
- Individual check for imbalance guarantees smooth running.
- Maximum tool life thanks to high filament density.
- Highly flexible, enabling optimal adjustment to the workpiece contour.

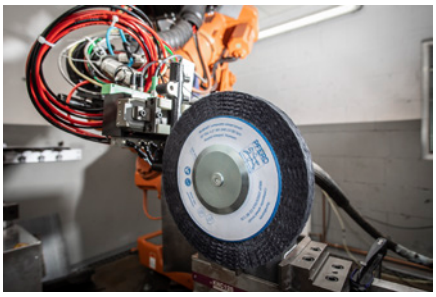
D [mm]	W_F [mm]	L_T [mm]	D_A	D_{AM} [mm]	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
250	60	50	50.8	100	0.20	1,800 – 2,700	3,600	1	43506701	RBU 25060/50,8 ST 0,20	-
					0.35	1,800 – 2,700	3,600	1	43506711	RBU 25060/50,8 ST 0,35	-
					0.50	1,800 – 2,700	3,600	1	43506721	RBU 25060/50,8 ST 0,50	-
	80	50	50.8	100	0.35	1,800 – 2,700	3,600	1	43506741	RBU 25080/50,8 ST 0,35	-
	100	50	50.8	100	0.35	1,800 – 2,700	3,600	1	43506811	RBU 250100/50,8 ST 0,35	-
					0.50	1,800 – 2,700	3,600	1	43506821	RBU 250100/50,8 ST 0,50	-
Steel wire (ST) LIT ST = stranded, brass-plated steel wire											
250	60	50	50.8	100	0.35	1,800 – 2,700	3,600	1	43506716	RBU 25060/50,8 LIT ST 0,35	-
Stainless steel wire (INOX)											
250	60	50	50.8	100	0.20	1,400 – 2,300	3,600	1	43506702	RBU 25060/50,8 INOX 0,20	-
					0.35	1,400 – 2,300	3,600	1	43506712	RBU 25060/50,8 INOX 0,35	-
					0.50	1,400 – 2,300	3,600	1	43506722	RBU 25060/50,8 INOX 0,50	-
	100	50	50.8	100	0.35	1,400 – 2,300	3,600	1	43506812	RBU 250100/50,8 INOX 0,35	-
					0.50	1,400 – 2,300	3,600	1	*43506822*	RBU 250100/50,8 INOX 0,50	-
Stainless steel wire (INOX) LIT INOX = stranded INOX wire											
250	60	50	50.8	100	0.35	1,400 – 2,300	3,600	1	*43506717*	RBU 25060/50,8 LIT INOX 0,35	-
Silicon carbide (SiC) plastic filament											
250	60	45	50.8	100	1.10	1,400 – 2,300	3,600	1	43506724	RBU 25060/50,8 SiC 120 1,10	-





RBUP

Particularly aggressive brush. Its plastic filament makes this product particularly suitable for deburring complicated components such as cylinder heads or gear toothing, as well as for working on surfaces. Developed specially for industrial use.



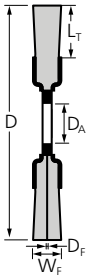
Special features:

- Long tool life and aggressive brushing effect due to a very high filament density.
- Extremely smooth operation due to even distribution of the filament material.

D [mm]	W_F [mm]	L_T [mm]	D_A	Grit size	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Silicon carbide (SiC) plastic filament											
150	25	32	50.8	80	1.10	900 – 1,500	3,600	1	79183720	RBUP 15025/50,8 SiC 80 1,10	-
					1.14	900 – 1,500	3,600	1	79183721	RBUP 15025/50,8 REC SiC 80 1,14	-
				120	1.10	900 – 1,500	3,600	1	79183722	RBUP 15025/50,8 SiC 120 1,10	-
				320	0.55	900 – 1,500	3,600	1	79183723	RBUP 15025/50,8 SiC 320 0,55	-
200	25	32	50.8	80	1.10	900 – 1,500	3,600	1	79183726	RBUP 20025/50,8 SiC 80 1,10	-
					1.14	900 – 1,500	3,600	1	*79183727*	RBUP 20025/50,8 REC SiC 80 1,14	-
				120	1.10	900 – 1,500	3,600	1	79183728	RBUP 20025/50,8 SiC 120 1,10	-
				320	0.55	900 – 1,500	3,600	1	79183729	RBUP 20025/50,8 SiC 320 0,55	-
250	25	38	50.8	80	1.10	900 – 1,500	3,600	1	79183738	RBUP 25025/50,8 SiC 80 1,10	-
					1.14	900 – 1,500	3,600	1	*79183739*	RBUP 25025/50,8 REC SiC 80 1,14	-
				120	0.55	900 – 1,500	3,600	1	79183742	RBUP 25025/50,8 SiC 120 0,55	-
					1.10	900 – 1,500	3,600	1	79183740	RBUP 25025/50,8 SiC 120 1,10	-
				320	0.55	900 – 1,500	3,600	1	79183741	RBUP 25025/50,8 SiC 320 0,55	-
Ceramic oxide grain (CO) plastic filament											
150	13	32	50.8	80	1.10	900 – 1,500	3,600	1	79184118	RBUP 15013/50,8 CO 80 1,10	-
				120	1.10	900 – 1,500	3,600	1	79184119	RBUP 15013/50,8 CO 120 1,10	-
	25	32	50.8	80	1.10	900 – 1,500	3,600	1	79184165	RBUP 15025/50,8 CO 80 1,10	-
200	13	32	50.8	80	1.10	900 – 1,500	3,600	1	79184127	RBUP 20013/50,8 CO 80 1,10	-
				120	1.10	900 – 1,500	3,600	1	79184132	RBUP 20013/50,8 CO 120 1,10	-
	25	32	50.8	80	1.10	900 – 1,500	3,600	1	79184169	RBUP 20025/50,8 CO 80 1,10	-
250	25	38	50.8	80	1.10	500 – 800	1,800	1	79184173	RBUP 25025/50,8 CO 80 1,10	-

Composite brushes
Wheel brushes, crimped





RBUP, FLEX

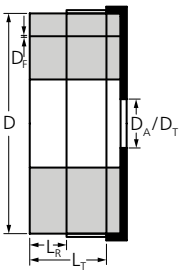
Particularly flexible brush. Its plastic filament makes this product particularly suitable for deburring complicated components such as cylinder heads or gear toothing. Developed specially for industrial use.



Special features:
- Long tool life and aggressive brushing effect due to a very high filament density.
- Extremely smooth operation due to even distribution of the filament material.
- Highly flexible, enabling optimal adjustment to the workpiece contour and less heat build-up.

D [mm]	W_F [mm]	L_T [mm]	D_A	Grit size	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Silicon carbide (SiC) plastic filament											
200	25	57	50.8	80	1.10	900 – 1,500	3,600	1	79183732	RBUP 20025/50,8 SiC 80 1,10 FLEX	-
					1.14	900 – 1,500	3,600	1	79183733	RBUP 20025/50,8 REC SiC 80 1,14 FLEX	-
				120	1.10	900 – 1,500	3,600	1	79183734	RBUP 20025/50,8 SiC 120 1,10 FLEX	-
				320	0.55	900 – 1,500	3,600	1	79183735	RBUP 20025/50,8 SiC 320 0,55 FLEX	-
250	25	83	50.8	80	1.10	900 – 1,500	3,600	1	79183744	RBUP 25025/50,8 SiC 80 1,10 FLEX	-
					1.14	900 – 1,500	3,600	1	79183745	RBUP 25025/50,8 REC SiC 80 1,14 FLEX	-
				120	1.10	900 – 1,500	3,600	1	79183746	RBUP 25025/50,8 SiC 120 1,10 FLEX	-
		70	50.8	180	0.90	900 – 1,500	3,600	1	79183657	RBUP 25025/50,8 SiC 180 0,90 FLEX	-
		83	50.8	320	0.55	900 – 1,500	3,600	1	79183747	RBUP 25025/50,8 SiC 320 0,55 FLEX	-
300	13	60	50.8	320	0.55	500 – 800	1,800	1	79184150	RBUP 30013/50,8 SiC 320 0,55 FLEX	-
	25	60	50.8	80	1.10	500 – 800	1,800	1	79183659	RBUP 30025/50,8 SiC 80 1,10 FLEX	-
				120	1.10	500 – 800	1,800	1	79183660	RBUP 30025/50,8 SiC 120 1,10 FLEX	-
				180	0.90	500 – 800	1,800	1	79183661	RBUP 30025/50,8 SiC 180 0,90 FLEX	-
350	25	89	50.8	80	1.10	500 – 800	1,800	1	79183663	RBUP 35025/50,8 SiC 80 1,10 FLEX	-
				180	0.90	500 – 800	1,800	1	79183665	RBUP 35025/50,8 SiC 180 0,90 FLEX	-
Ceramic oxide grain (CO) plastic filament											
200	13	57	50.8	80	1.10	900 – 1,500	3,600	1	79184124	RBUP 20013/50,8 CO 80 1,10 FLEX	-
				120	1.10	900 – 1,500	3,600	1	79184126	RBUP 20013/50,8 CO 120 1,10 FLEX	-
250	13	70	50.8	80	1.10	900 – 1,500	3,600	1	79184133	RBUP 25013/50,8 CO 80 1,10 FLEX	-
				120	0.55	900 – 1,500	3,600	1	79184138	RBUP 25013/50,8 CO 120 0,55 FLEX	-
					1.10	900 – 1,500	3,600	1	79184139	RBUP 25013/50,8 CO 120 1,10 FLEX	-
300	13	60	50.8	80	1.10	500 – 800	1,800	1	79184144	RBUP 30013/50,8 CO 80 1,10 FLEX	-
				120	1.10	500 – 800	1,800	1	79184145	RBUP 30013/50,8 CO 120 1,10 FLEX	-
	25	60	50.8	80	1.10	500 – 800	1,800	1	79184189	RBUP 30025/50,8 CO 80 1,10 FLEX	-
				120	1.10	500 – 800	1,800	1	79184190	RBUP 30025/50,8 CO 120 1,10 FLEX	-
350	13	89	50.8	80	1.10	500 – 800	1,800	1	79184151	RBUP 35013/50,8 CO 80 1,10 FLEX	-
				120	1.10	500 – 800	1,800	1	79184152	RBUP 35013/50,8 CO 120 1,10 FLEX	-
	25	89	50.8	80	1.10	500 – 800	1,800	1	79184193	RBUP 35025/50,8 CO 80 1,10 FLEX	-
				120	1.10	500 – 800	1,800	1	79184194	RBUP 35025/50,8 CO 120 1,10 FLEX	-





DBUR, with bridle

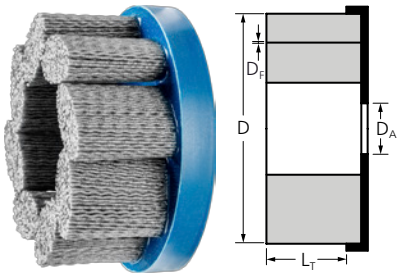
Particularly aggressive brush. Particularly suitable for deburring and work on surfaces on stationary machines. The bridle prevents the wires spreading out sideways. The bridle enables the spreading out and flexibility of the brush filament to be controlled.



Special features:

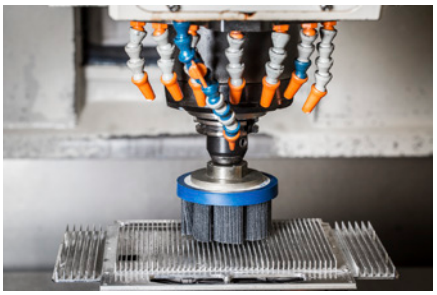
- Long tool life and aggressive brushing effect due to a very high filament density.
- Extremely smooth operation due to even distribution of the filament material.
- If the filament has worn away down to the bridle, it can be removed from the bridle for further use. This does not affect the brushing behaviour.

D [mm]	L_R [mm]	L_T [mm]	D_A / D_T	Grit size	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Silicon carbide (SiC) plastic filament											
75	19	38	22.2	80	1.10	2,400 – 3,900	4,500	1	79184120	DBUR 75/22,2 SiC 80 1,10	-
					1.14	2,400 – 3,900	4,500	1	79184121	DBUR 75/22,2 REC SiC 80 1,14	-
				120	0.55	2,400 – 3,900	4,500	1	*79184123*	DBUR 75/22,2 SiC 120 0,55	-
					1.10	2,400 – 3,900	4,500	1	79184122	DBUR 75/22,2 SiC 120 1,10	-
				320	0.55	2,400 – 3,900	4,500	1	79184125	DBUR 75/22,2 SiC 320 0,55	-
			M14x2	80	1.10	2,400 – 3,900	6,000	1	43400004	DBUR 75/M14 SiC 80 1,10	-
					1.14	2,400 – 3,900	6,000	1	43400003	DBUR 75/M14 REC SiC 80 1,14	-
100	19	38	22.2	80	1.10	1,400 – 2,300	3,500	1	79184128	DBUR 100/22,2 SiC 80 1,10	-
					1.14	1,400 – 2,300	3,500	1	79184129	DBUR 100/22,2 REC SiC 80 1,14	-
				120	1.10	1,400 – 2,300	3,500	1	79184130	DBUR 100/22,2 SiC 120 1,10	-
				320	0.55	1,400 – 2,300	3,500	1	79184131	DBUR 100/22,2 SiC 320 0,55	-
125	19	38	22.2	80	1.10	1,200 – 2,000	3,000	1	79184134	DBUR 125/22,2 SiC 80 1,10	-
					1.14	1,200 – 2,000	3,000	1	79184135	DBUR 125/22,2 REC SiC 80 1,14	-
				120	1.10	1,200 – 2,000	3,000	1	79184136	DBUR 125/22,2 SiC 120 1,10	-
				320	0.55	1,200 – 2,000	3,000	1	*79184137*	DBUR 125/22,2 SiC 320 0,55	-
150	19	38	22.2	80	1.10	1,000 – 1,600	2,500	1	79184140	DBUR 150/22,2 SiC 80 1,10	-
					1.14	1,000 – 1,600	2,500	1	79184141	DBUR 150/22,2 REC SiC 80 1,14	-
				120	1.10	1,000 – 1,600	2,500	1	79184142	DBUR 150/22,2 SiC 120 1,10	-
				320	0.55	1,000 – 1,600	2,500	1	*79184143*	DBUR 150/22,2 SiC 320 0,55	-
Ceramic oxide grain (CO) plastic filament											
75	19	38	22.2	120	1.10	2,400 – 3,900	4,500	1	79184232	DBUR 75/22,2 CO 120 1,10	-
100	19	38	22.2	120	1.10	1,400 – 2,300	3,500	1	79184237	DBUR 100/22,2 CO 120 1,10	-
125	19	38	22.2	120	1.10	1,200 – 2,000	3,000	1	43400030	DBUR 125/22,2 CO 120 1,10	-
150	19	38	22.2	120	1.10	1,000 – 1,600	2,500	1	43400040	DBUR 150/22,2 CO 120 1,10	-



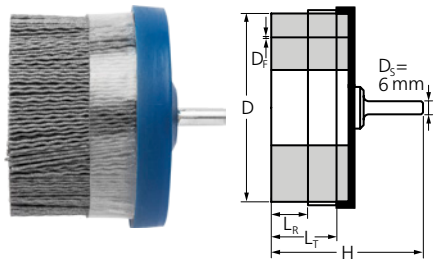
DBU, FLEX

Particularly flexible brush. Particularly suitable for deburring and work on surfaces on stationary machines.



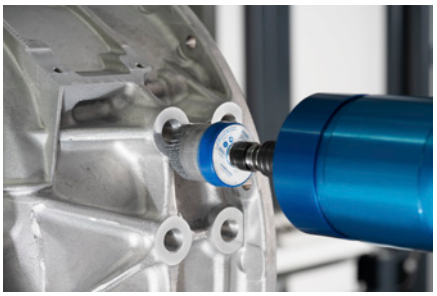
Special features:
- Long tool life and aggressive brushing effect due to a very high filament density.
- Extremely smooth operation due to even distribution of the filament material.
- Special arrangement of the filament enables optimal adjustment to the workpiece contour, less heat build-up and more efficient use of the coolant.

D [mm]	L_T [mm]	D_A [mm]	Grit size	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Silicon carbide (SiC) plastic filament										
75	38	22.2	80	1.10	2,400 – 3,900	4,500	1	79183941	DBU 75/22,2 SiC 80 1,10 FLEX	-
				1.14	2,400 – 3,900	4,500	1	79183966	DBU 75/22,2 REC SiC 80 1,14 FLEX	-
			120	1.10	2,400 – 3,900	4,500	1	79183942	DBU 75/22,2 SiC 120 1,10 FLEX	-
			320	0.55	2,400 – 3,900	4,500	1	79183944	DBU 75/22,2 SiC 320 0,55 FLEX	-
100	38	22.2	80	1.10	1,400 – 2,300	3,500	1	79183945	DBU 100/22,2 SiC 80 1,10 FLEX	-
				1.14	1,400 – 2,300	3,500	1	79183968	DBU 100/22,2 REC SiC 80 1,14 FLEX	-
			120	1.10	1,400 – 2,300	3,500	1	79183946	DBU 100/22,2 SiC 120 1,10 FLEX	-
			320	0.55	1,400 – 2,300	3,500	1	79183948	DBU 100/22,2 SiC 320 0,55 FLEX	-
150	38	22.2	80	1.10	1,000 – 1,600	2,500	1	79183949	DBU 150/22,2 SiC 80 1,10 FLEX	-
				1.14	1,000 – 1,600	2,500	1	79183970	DBU 150/22,2 REC SiC 80 1,14 FLEX	-
			120	1.10	1,000 – 1,600	2,500	1	79183950	DBU 150/22,2 SiC 120 1,10 FLEX	-
			320	0.55	1,000 – 1,600	2,500	1	79183952	DBU 150/22,2 SiC 320 0,55 FLEX	-



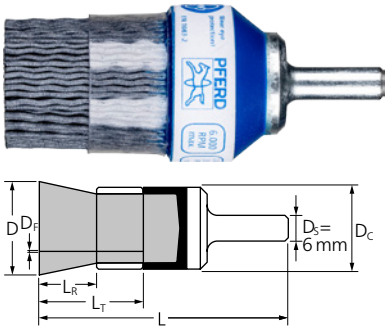
DBUR shank-mounted, with bridle

Particularly aggressive brush. Particularly suitable for deburring and work on surfaces on stationary machines. The bridle prevents the wires spreading out sideways. The bridle enables the spreading out and flexibility of the brush filament to be controlled.



Special features:
- Long tool life and aggressive brushing effect due to a very high filament density.
- Extremely smooth operation due to even distribution of the filament material.
- If the filament has worn away down to the bridle, it can be removed from the bridle for further use. This does not affect the brushing behaviour.

D [mm]	L_R [mm]	L_T [mm]	H [mm]	Grit size	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Silicon carbide (SiC) plastic filament											
50	19	38	80	120	0.55	1,500 – 3,500	5,000	1	43400041	DBUR 50/6 SiC 120 0,55	-
					1.10	1,500 – 3,500	5,000	1	43400042	DBUR 50/6 SiC 120 1,00	-
63	19	38	80	120	0.55	1,500 – 3,500	5,000	1	43400043	DBUR 63/6 SiC 120 0,55	-
					1.10	1,500 – 3,500	5,000	1	43400044	DBUR 63/6 SiC 120 1,00	-
Ceramic oxide grain (CO) plastic filament											
50	19	38	80	120	1.10	1,500 – 3,500	5,000	1	43400045	DBUR 50/6 CO 120 1,10	-
63	19	38	80	120	1.10	1,500 – 3,500	5,000	1	43400046	DBUR 63/6 CO 120 1,10	-



PBUPR, with bridle

Particularly suitable for deburring and work on surfaces on stationary machines. The bridle prevents the wires spreading out sideways. The bridle enables the spreading out and flexibility of the brush filament to be controlled.

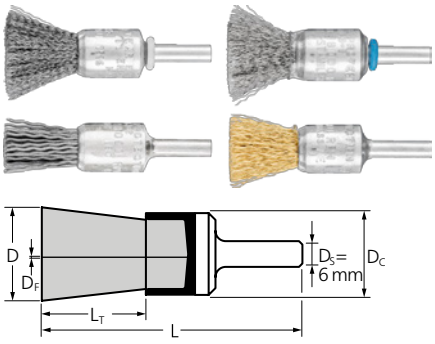


Special features:

- Long tool life and aggressive brushing effect due to a very high filament density. Extremely smooth operation due to even distribution of the filament material.
- Optimal access to hard-to-reach areas such as drilled holes and cavities as the filament spreads out upon rotation.
- If the filament has worn away down to the bridle, it can be removed from the bridle for further use. This does not affect the brushing behaviour.

D [mm]	D_C [mm]	L_R [mm]	L_T [mm]	L [mm]	Grit size	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Silicon carbide (SiC) plastic filament												
25	28	13	25	70	120	0.55	2,400 – 3,900	6,000	1	43214121	PBUPR 2528/6 SiC 120 0,55	-
						1.10	2,400 – 3,900	6,000	1	43214122	PBUPR 2528/6 SiC 120 1,00	-
38	38	13	25	77	120	0.55	2,000 – 3,200	5,000	1	43214131	PBUPR 3838/6 SiC 120 0,55	-
						1.10	2,000 – 3,200	5,000	1	43214132	PBUPR 3838/6 SiC 120 1,00	-
Ceramic oxide grain (CO) plastic filament												
25	28	13	25	70	120	1.10	2,400 – 3,900	6,000	1	43214111	PBUPR 2528/6 CO 120 1,00	-
38	38	13	25	77	120	1.10	2,000 – 3,200	5,000	1	43214112	PBUPR 3838/6 CO 120 1,00	-

Shank-mounted end brushes
crimped



PBU

Suitable for light brushing such as deburring, cleaning and derusting.

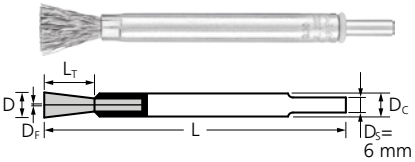


Special features:
- Optimal access to hard-to-reach areas such as drilled holes and cavities as the wires spread out upon rotation.
- Creates fine surfaces.

D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
10	10	20	0.20	65	10,000 – 15,000	20,000	10	43204005	PBU 1010/6 ST 0,20	-
			0.35	65	10,000 – 15,000	20,000	10	43204001	PBU 1010/6 ST 0,35	-
13	12	20	0.20	65	10,000 – 15,000	20,000	10	43204105	PBU 1312/6 ST 0,20	-
			0.35	65	10,000 – 15,000	20,000	10	43204101	PBU 1312/6 ST 0,35	-
15	16	22	0.20	65	9,000 – 13,500	18,000	10	43203005	PBU 1516/6 ST 0,20	-
			0.35	65	9,000 – 13,500	18,000	10	43203001	PBU 1516/6 ST 0,35	-
								43704001	POS PBU 1516/6 ST 0,35	-
20	22	25	0.20	70	9,000 – 13,500	18,000	10	43202005	PBU 2022/6 ST 0,20	-
								43704013	POS PBU 2022/6 ST 0,20	-
			0.50	70	9,000 – 13,500	18,000	10	43202001	PBU 2022/6 ST 0,50	-
								43704005	POS PBU 2022/6 ST 0,50	-
30	29	25	0.20	70	7,500 – 11,300	15,000	10	43201005	PBU 3029/6 ST 0,20	-
			0.50	70	7,500 – 11,300	15,000	10	43201001	PBU 3029/6 ST 0,50	-
Stainless steel wire (INOX) – Supplied with plastic-covered brush body. All INOX brushes are degreased.										
10	10	20	0.15	65	8,000 – 13,000	20,000	10	43204010	PBU 1010/6 INOX 0,15	-
			0.20	65	8,000 – 13,000	20,000	10	43204007	PBU 1010/6 INOX 0,20	-
			0.35	65	8,000 – 13,000	20,000	10	43204003	PBU 1010/6 INOX 0,35	-
13	12	20	0.15	65	8,000 – 13,000	20,000	10	43204109	PBU 1312/6 INOX 0,15	-
			0.20	65	8,000 – 13,000	20,000	10	43204107	PBU 1312/6 INOX 0,20	-
			0.35	65	8,000 – 13,000	20,000	10	43204103	PBU 1312/6 INOX 0,35	-
15	16	22	0.15	65	7,200 – 11,700	18,000	10	43203011	PBU 1516/6 INOX 0,15	-
			0.20	65	7,200 – 11,700	18,000	10	43203007	PBU 1516/6 INOX 0,20	-
								43704014	POS PBU 1516/6 INOX 0,20	-
			0.35	65	7,200 – 11,700	18,000	10	43203003	PBU 1516/6 INOX 0,35	-
								43704002	POS PBU 1516/6 INOX 0,35	-
20	22	25	0.15	70	7,200 – 11,700	18,000	10	43202011	PBU 2022/6 INOX 0,15	-
			0.20	70	7,200 – 11,700	18,000	10	43202007	PBU 2022/6 INOX 0,20	-
								43704015	POS PBU 2022/6 INOX 0,20	-
			0.50	70	7,200 – 11,700	18,000	10	43202003	PBU 2022/6 INOX 0,50	-
								43704006	POS PBU 2022/6 INOX 0,50	-
30	29	25	0.15	70	6,000 – 9,800	15,000	10	43201011	PBU 3029/6 INOX 0,15	-
			0.20	70	6,000 – 9,800	15,000	10	43201007	PBU 3029/6 INOX 0,20	-
			0.50	70	6,000 – 9,800	15,000	10	43201003	PBU 3029/6 INOX 0,50	-
Silicon carbide (SiC) plastic filament										
10	10	20	0.90	65	8,000 – 13,000	20,000	10	43204004	PBU 1010/6 SiC 180 0,90	-
13	12	20	0.90	65	8,000 – 13,000	20,000	10	43204104	PBU 1312/6 SiC 180 0,90	-
15	16	22	0.90	65	7,200 – 11,700	18,000	10	43203004	PBU 1516/6 SiC 180 0,90	-
20	22	25	0.90	70	7,200 – 11,700	18,000	10	43202004	PBU 2022/6 SiC 180 0,90	-
								43704008	POS PBU 2022/6 SiC 180 0,90	-
30	29	25	0.90	70	6,000 – 9,800	15,000	10	43201004	PBU 3029/6 SiC 180 0,90	-

Continued on next page

D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Brass wire (MES)										
10	10	20	0.30	65	8,000 – 13,000	20,000	10	43204002	PBU 1010/6 MES 0,30	-
13	12	20	0.30	65	8,000 – 13,000	20,000	10	43204102	PBU 1312/6 MES 0,30	-
15	16	22	0.30	65	7,200 – 11,700	18,000	10	43203002	PBU 1516/6 MES 0,30	-
20	22	25	0.50	70	7,200 – 11,700	18,000	10	43202002	PBU 2022/6 MES 0,50	-
30	29	25	0.50	70	6,000 – 9,800	15,000	10	43201002	PBU 3029/6 MES 0,50	-

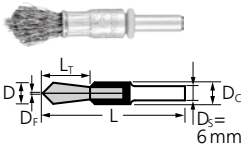


PBUL, long

Suitable for light brushing such as deburring, cleaning and derusting. Particularly long version to access deep areas.

Special features:
- Optimal access to hard-to-reach areas.
- Creates fine surfaces.

D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
10	10	20	0.20	120	4,000 – 9,500	20,000	10	43216001	PBUL 1010/6 ST 0,20	-
			0.30	120	4,000 – 9,500	20,000	10	43216002	PBUL 1010/6 ST 0,30	-
Stainless steel wire (INOX) – Supplied with plastic-covered brush body. All INOX brushes are degreased.										
10	10	20	0.20	120	3,500 – 9,000	20,000	10	43216005	PBUL 1010/6 INOX 0,20	-
			0.30	120	3,500 – 9,000	20,000	10	43216006	PBUL 1010/6 INOX 0,30	-



PBUS, pointed

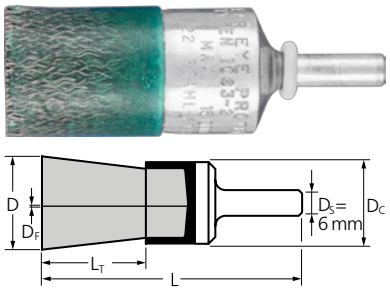
Suitable for light brushing such as deburring, cleaning and derusting. Tapered tip for superb accuracy.



Special features:
- Optimal access to hard-to-reach areas.
- Creates fine surfaces.

D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
10	10	20	0.30	60	10,000 – 15,000	20,000	10	43217002	PBUS 1010/6 ST 0,30	-
Stainless steel wire (INOX) – Supplied with plastic-covered brush body. All INOX brushes are degreased.										
10	10	20	0.30	60	8,000 – 13,000	20,000	10	43217006	PBUS 1010/6 INOX 0,30	-

Shank-mounted end brushes
crimped

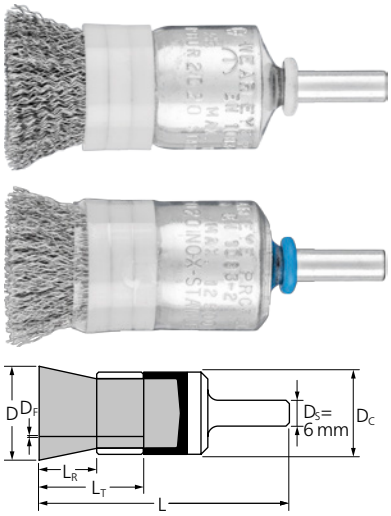


PBV, encapsulated

Particularly aggressive brushing effect for heavy-duty brushing.

Special features:
- Focused working thanks to high dimensional stability.
- Maximum tool life as premature wire breakage is prevented.

D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
22	22	25	0.25	70	6,500 – 9,800	13,000	10	43208001	PBV 2222/6 ST 0,25	-
30	29	25	0.35	70	6,500 – 9,800	13,000	10	43208005	PBV 3029/6 ST 0,35	-



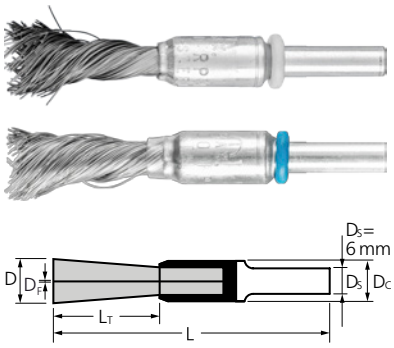
PBUR, with bridle

Suitable for light brushing such as deburring, cleaning and derusting. The bridle prevents the wires spreading out sideways. The bridle enables the spreading out and flexibility of the brush filament to be strictly controlled.



Special features:
- Optimal access to hard-to-reach areas such as recesses and drilled holes.
- If the filament has worn away down to the bridle, it can be removed from the bridle for further use. This does not affect the brushing behaviour.
- Creates fine surfaces.

D [mm]	D_C [mm]	L_R [mm]	L_T [mm]	L [mm]	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
13	16	13	25	70	0.20	7,500 – 11,300	15,000	10	43212001	PBUR 1316/6 ST 0,20	-
					0.35	7,500 – 11,300	15,000	10	43215001	PBUR 1316/6 ST 0,35	-
20	22	13	25	70	0.20	6,300 – 9,400	12,500	10	43213001	PBUR 2022/6 ST 0,20	-
					0.35	6,300 – 9,400	12,500	10	43213002	PBUR 2022/6 ST 0,35	-
25	30	13	25	70	0.20	6,300 – 9,400	12,500	10	43214001	PBUR 2530/6 ST 0,20	-
					0.35	6,300 – 9,400	12,500	10	43214002	PBUR 2530/6 ST 0,35	-
Stainless steel wire (INOX) – Supplied with plastic-covered brush body. All INOX brushes are degreased.											
13	16	13	25	70	0.20	6,000 – 9,800	15,000	10	43212003	PBUR 1316/6 INOX 0,20	-
20	22	13	25	70	0.20	5,000 – 8,100	12,500	10	43213004	PBUR 2022/6 INOX 0,20	-
25	30	13	25	70	0.20	5,000 – 8,100	12,500	10	43214004	PBUR 2530/6 INOX 0,20	-



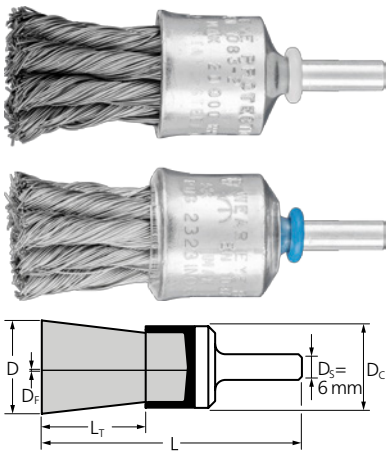
PBGS, SINGLETWIST

Particularly flexible single-knot brush for special applications.



Special features:
- Optimal access to hard-to-reach areas such as inside corners, as the knot is less likely to unravel.

D [mm]	D_C [mm]	L_T [mm]	L [mm]	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
10	10	25	65	0.20	5,000 – 7,500	10,000	10	43218001	PBGS 1010/6 ST 0,20	-
				0.35	5,000 – 7,500	10,000	10	43218002	PBGS 1010/6 ST 0,35	-
				0.50	5,000 – 7,500	10,000	10	43218003	PBGS 1010/6 ST 0,50	-
12	10	28	71	0.20	5,000 – 7,500	10,000	10	43218011	PBGS 1210/6 ST 0,20	-
Stainless steel wire (INOX) – Supplied with plastic-covered brush body. All INOX brushes are degreased.										
10	10	25	65	0.20	4,000 – 6,500	10,000	10	43218005	PBGS 1010/6 INOX 0,20	-
				0.35	4,000 – 6,500	10,000	10	43218006	PBGS 1010/6 INOX 0,35	-
				0.50	4,000 – 6,500	10,000	10	43218007	PBGS 1010/6 INOX 0,50	-
12	10	28	71	0.20	4,000 – 6,500	10,000	10	43218015	PBGS 1210/6 INOX 0,20	-



PBG

Aggressive brush. Suitable for medium-duty brushing such as deburring, cleaning, derusting and descaling, as well as removing spatter.



Special features:
- Optimal access to hard-to-reach areas such as recesses and drilled holes.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
19	19	28	0.25	68	6	10,000 – 15,000	20,000	10	43207012	PBG 1919/6 ST 0,25	-
			0.35	68	6	10,000 – 15,000	20,000	10	43207001	PBG 1919/6 ST 0,35	-
									43706001	POS PBG 1919/6 ST 0,35	-
			0.50	68	6	10,000 – 15,000	20,000	10	43207005	PBG 1919/6 ST 0,50	-
									43706003	POS PBG 1919/6 ST 0,50	-
23	23	28	0.25	68	8	10,000 – 15,000	20,000	10	43208021	PBG 2323/6 ST 0,25	-
			0.35	68	8	10,000 – 15,000	20,000	10	43208026	PBG 2323/6 ST 0,35	-
			0.50	68	8	10,000 – 15,000	20,000	10	43208031	PBG 2323/6 ST 0,50	-
30	28	25	0.25	68	12	8,000 – 11,300	20,000	10	43209011	PBG 3028/6 ST 0,25	-
			0.35	68	12	8,000 – 11,300	20,000	10	43209001	PBG 3028/6 ST 0,35	-
									43706005	POS PBG 3028/6 ST 0,35	-

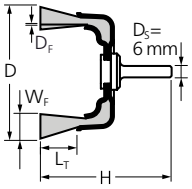
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Shank-mounted end brushes
knotted

D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
30	28	25	0.50	68	12	8,000 – 11,300	20,000	10	43209002	PBG 3028/6 ST 0,50	-
									43706007	POS PBG 3028/6 ST 0,50	-
Stainless steel wire (INOX) – Supplied with plastic-covered brush body. All INOX brushes are degreased.											
19	19	28	0.15	68	6	8,000 – 13,000	20,000	10	43207011	PBG 1919/6 INOX 0,15	-
			0.25	68	6	8,000 – 13,000	20,000	10	43207013	PBG 1919/6 INOX 0,25	-
			0.35	68	6	8,000 – 13,000	20,000	10	43207003	PBG 1919/6 INOX 0,35	-
									43706002	POS PBG 1919/6 INOX 0,35	-
			0.60	68	6	8,000 – 13,000	20,000	10	43207007	PBG 1919/6 INOX 0,60	-
23	23	28	0.15	68	8	8,000 – 13,000	20,000	10	43208012	PBG 2323/6 INOX 0,15	-
			0.25	68	8	8,000 – 13,000	20,000	10	43208022	PBG 2323/6 INOX 0,25	-
			0.35	68	8	8,000 – 13,000	20,000	10	43208027	PBG 2323/6 INOX 0,35	-
			0.60	68	8	8,000 – 13,000	20,000	10	43208032	PBG 2323/6 INOX 0,60	-
30	28	25	0.15	68	12	6,000 – 9,800	20,000	10	43209007	PBG 3028/6 INOX 0,15	-
			0.25	68	12	6,000 – 9,800	20,000	10	43209012	PBG 3028/6 INOX 0,25	-
			0.35	68	12	6,000 – 9,800	20,000	10	43209004	PBG 3028/6 INOX 0,35	-
									43706006	POS PBG 3028/6 INOX 0,35	-
			0.60	68	12	6,000 – 9,800	20,000	10	43209005	PBG 3028/6 INOX 0,60	-

Shank-mounted cup brushes
crimped





TBU

Generally suitable for cleaning, derusting and smoothing, as well as removal of corrosion and paint. Particularly suitable for brushing on large, flat and easily accessible surfaces due to face-down use with the entire brush face applied to the workpiece.

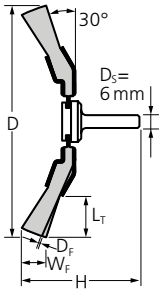


Special features:
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
30	10	15	0.20	60	5,300 – 7,900	10,500	10	43209701	TBU 3010/6 ST 0,20	-
40	15	20	0.20	70	5,300 – 7,900	10,500	10	43209711	TBU 4015/6 ST 0,20	-
50	10	20	0.30	75	5,300 – 7,900	10,500	10	43210001	TBU 5010/6 ST 0,30	-
							5	43703001	POS TBU 5010/6 ST 0,30	-
60	15	20	0.30	85	2,200 – 3,400	4,500	10	43211001	TBU 6015/6 ST 0,30	-
70	15	22	0.20	80	3,000 – 4,500	6,000	10	43211201	TBU 7015/6 ST 0,20	-
			0.30	80	3,000 – 4,500	6,000	10	43211202	TBU 7015/6 ST 0,30	-
Stainless steel wire (INOX) – Supplied with plastic-covered brush body.										
30	10	15	0.20	60	4,200 – 6,800	10,500	10	43209704	TBU 3010/6 INOX 0,20	-
40	15	20	0.20	70	4,200 – 6,800	10,500	10	43209714	TBU 4015/6 INOX 0,20	-
50	10	20	0.30	75	4,200 – 6,800	10,500	10	43210003	TBU 5010/6 INOX 0,30	-
							5	43703002	POS TBU 5010/6 INOX 0,30	-
60	15	20	0.30	85	1,800 – 2,900	4,500	10	43211003	TBU 6015/6 INOX 0,30	-
70	15	22	0.20	80	2,400 – 4,000	6,000	10	43211204	TBU 7015/6 INOX 0,20	-
			0.30	80	2,400 – 4,000	6,000	10	43211205	TBU 7015/6 INOX 0,30	-
Silicon carbide (SiC) plastic filament										
50	10	20	0.90	75	4,200 – 6,800	10,500	10	43210004	TBU 5010/6 SiC 180 0,90	-
							5	43703003	POS TBU 5010/6 SiC 180 0,90	-
60	15	20	0.90	85	1,800 – 2,900	4,500	10	43211004	TBU 6015/6 SiC 180 0,90	-
Ceramic oxide grain (CO) plastic filament										
50	15	22	1.10	75	4,200 – 6,800	10,500	10	43210025	TBU 5015/6 CO 120 1,10	-

Shank-mounted bevel brushes
crimped





KBU

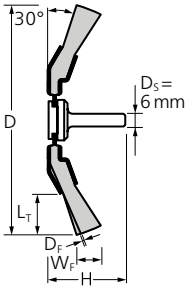
Excellent for medium-duty brushing such as deburring, cleaning and derusting.



Special features:
- Optimal access to hard-to-reach areas such as inner edges, grooves and keyways.
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
50	10	10	0.20	49	7,500 – 11,300	15,000	10	43220016	KBU 5010/6 ST 0,20	-
70	10	15	0.30	58	7,500 – 11,300	15,000	10	43220061	KBU 7010/6 ST 0,30	-
80	10	20	0.30	62	6,000 – 9,000	12,000	10	43220081	KBU 8010/6 ST 0,30	-
95	10	25	0.30	62	6,000 – 9,000	12,000	10	43312501	KBU 9510/6 ST 0,30	-
Stainless steel wire (INOX) – All INOX brushes are degreased.										
50	10	10	0.20	49	6,000 – 9,800	15,000	10	43220017	KBU 5010/6 INOX 0,20	-
70	10	15	0.15	58	6,000 – 9,800	15,000	10	43220052	KBU 7010/6 INOX 0,15	-
			0.20	58	6,000 – 9,800	15,000	10	43220057	KBU 7010/6 INOX 0,20	-
80	10	20	0.30	62	4,800 – 7,800	12,000	10	43220082	KBU 8010/6 INOX 0,30	-
95	10	25	0.30	62	4,800 – 7,800	12,000	10	43312503	KBU 9510/6 INOX 0,30	-
Silicon carbide (SiC) plastic filament										
70	10	15	0.55	58	6,000 – 9,800	15,000	10	43220070	KBU 7010/6 SiC 120 0,55	-
80	10	20	0.55	62	4,800 – 7,800	12,000	10	43220090	KBU 8010/6 SiC 120 0,55	-
95	10	25	1.10	62	4,800 – 7,800	12,000	10	43220110	KBU 9510/6 SiC 120 1,10	-
Ceramic oxide grain (CO) plastic filament										
70	10	15	0.55	58	6,000 – 9,800	15,000	10	43220075	KBU 7010/6 CO 120 0,55	-
80	10	20	0.55	62	4,800 – 7,800	12,000	10	43220095	KBU 8010/6 CO 120 0,55	-
95	10	25	1.10	62	4,800 – 7,800	12,000	10	43220115	KBU 9510/6 CO 120 1,10	-





KBU RS

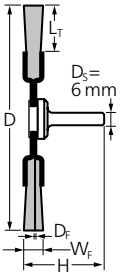
Excellent for medium-duty brushing such as deburring, cleaning and derusting. Type with backwards shank for convenient and safe backwards working.

Special features:
- Optimal access to hard-to-reach areas such as inner edges, grooves and keyways.
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
70	10	15	0.55	50	6,000 – 9,800	15,000	10	43220080	KBU 7010/6 SiC 120 0,55 RS	-
								43220085	KBU 7010/6 CO 120 0,55 RS	-

Shank-mounted wheel brushes
crimped





RBU

Generally suitable for cleaning, derusting, smoothing, cleaning of weld seams, light deburring, and removal of corrosion and paint.



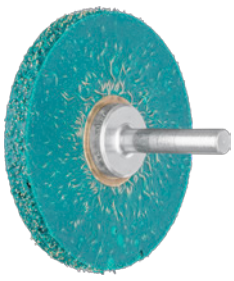
Special features:
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

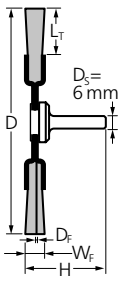
D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)										
20	4	3	0.20	37	10,000 – 15,000	20,000	10	43101001	RBU 2004/6 ST 0,20	-
30	6	7	0.20	40	10,000 – 15,000	20,000	10	43102001	RBU 3006/6 ST 0,20	-
								43701005	POS RBU 3006/6 ST 0,20	-
	9	7	0.20	42	10,000 – 15,000	20,000	10	43102021	RBU 3009/6 ST 0,20	-
40	9	9	0.20	46	9,000 – 13,500	18,000	10	43103001	RBU 4009/6 ST 0,20	-
50	4	9	0.20	41	7,500 – 11,300	15,000	10	43103021	RBU 5004/6 ST 0,20	-
	10	13	0.20	50	7,500 – 11,300	15,000	10	43103102	RBU 5010/6 ST 0,20	-
	15	13	0.20	50	7,500 – 11,300	15,000	10	43104001	RBU 5015/6 ST 0,20	-
								43701013	POS RBU 5015/6 ST 0,20	-
60	10	15	0.20	50	7,500 – 11,300	15,000	10	43104009	RBU 6010/6 ST 0,20	-
	15	15	0.20	50	7,500 – 11,300	15,000	10	43104011	RBU 6015/6 ST 0,20	-
70	4	9	0.20	41	7,500 – 11,300	15,000	10	43104051	RBU 7004/6 ST 0,20	-
	10	19	0.30	50	7,500 – 11,300	15,000	10	43104101	RBU 7010/6 ST 0,30	-
	15	19	0.30	50	7,500 – 11,300	15,000	10	43105001	RBU 7015/6 ST 0,30	-
								43701017	POS RBU 7015/6 ST 0,30	-
80	4	10	0.20	41	6,000 – 9,000	12,000	10	43105021	RBU 8004/6 ST 0,20	-
	15	19	0.30	50	6,000 – 9,000	12,000	10	43106001	RBU 8015/6 ST 0,30	-
100	10	25	0.30	50	6,000 – 9,000	12,000	10	43109001	RBU 10010/6 ST 0,30	-
								43701018	POS RBU 10010/6 ST 0,30	-
	15	25	0.20	51	6,000 – 9,000	12,000	10	43109005	RBU 10015/6 ST 0,20	-
			0.30	51	6,000 – 9,000	12,000	10	43109004	RBU 10015/6 ST 0,30	-
	20	25	0.20	54	6,000 – 9,000	12,000	10	43109007	RBU 10020/6 ST 0,20	-
			0.30	54	6,000 – 9,000	12,000	10	43109006	RBU 10020/6 ST 0,30	-
Stainless steel wire (INOX)										
20	4	3	0.20	37	8,000 – 13,000	20,000	10	43101003	RBU 2004/6 INOX 0,20	-
30	6	7	0.20	40	8,000 – 13,000	20,000	10	43102003	RBU 3006/6 INOX 0,20	-
								43701006	POS RBU 3006/6 INOX 0,20	-
	9	7	0.20	42	8,000 – 13,000	20,000	10	43102023	RBU 3009/6 INOX 0,20	-
40	9	9	0.20	46	7,200 – 11,700	18,000	10	43103003	RBU 4009/6 INOX 0,20	-
50	4	9	0.20	41	6,000 – 9,800	15,000	10	43103023	RBU 5004/6 INOX 0,20	-
	10	13	0.20	50	6,000 – 9,800	15,000	10	43103103	RBU 5010/6 INOX 0,20	-
	15	13	0.20	50	6,000 – 9,800	15,000	10	43104003	RBU 5015/6 INOX 0,20	-
								43701014	POS RBU 5015/6 INOX 0,20	-
60	10	15	0.20	50	6,000 – 9,800	15,000	10	43104010	RBU 6010/6 INOX 0,20	-
	15	15	0.20	50	6,000 – 9,800	15,000	10	43104033	RBU 6015/6 INOX 0,20	-
70	4	9	0.20	41	6,000 – 9,800	15,000	10	43104053	RBU 7004/6 INOX 0,20	-
	10	19	0.20	50	6,000 – 9,800	15,000	10	43104102	RBU 7010/6 INOX 0,20	-
	15	19	0.15	50	6,000 – 9,800	15,000	10	43104106	RBU 7015/6 INOX 0,15	-
			0.30	50	6,000 – 9,800	15,000	10	43105003	RBU 7015/6 INOX 0,30	-

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Shank-mounted wheel brushes
crimped

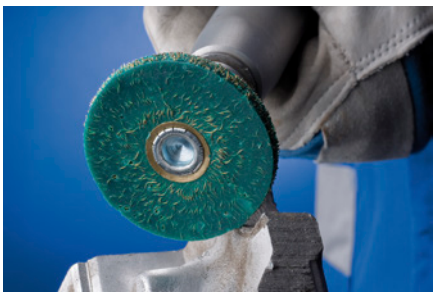
D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
70	15	19	0.30	50	6,000 – 9,800	15,000	10	43701019	POS RBU 7015/6 INOX 0,30	-
80	4	10	0.20	41	4,800 – 7,800	12,000	10	43105023	RBU 8004/6 INOX 0,20	-
	10	19	0.20	50	4,800 – 7,800	12,000	10	43105103	RBU 8010/6 INOX 0,20	-
	15	19	0.15	50	4,800 – 7,800	12,000	10	43106102	RBU 8015/6 INOX 0,15	-
			0.30	50	4,800 – 7,800	12,000	10	43106003	RBU 8015/6 INOX 0,30	-
100	10	25	0.30	50	4,800 – 7,800	12,000	10	43109003	RBU 10010/6 INOX 0,30	-
								43701020	POS RBU 10010/6 INOX 0,30	-
	15	25	0.20	51	4,800 – 7,800	12,000	10	43109009	RBU 10015/6 INOX 0,20	-
			0.30	51	4,800 – 7,800	12,000	10	43109008	RBU 10015/6 INOX 0,30	-
	20	25	0.20	54	4,800 – 7,800	12,000	10	43109011	RBU 10020/6 INOX 0,20	-
			0.30	54	4,800 – 7,800	12,000	10	43109010	RBU 10020/6 INOX 0,30	-
Brass wire (MES)										
20	4	3	0.20	37	8,000 – 13,000	20,000	10	43101002	RBU 2004/6 MES 0,20	-
30	6	7	0.20	40	8,000 – 13,000	20,000	10	43102002	RBU 3006/6 MES 0,20	-
40	9	9	0.20	46	7,200 – 11,700	18,000	10	43103002	RBU 4009/6 MES 0,20	-
50	15	13	0.20	50	6,000 – 9,800	15,000	10	43104002	RBU 5015/6 MES 0,20	-
70	15	19	0.30	50	6,000 – 9,800	15,000	10	43105002	RBU 7015/6 MES 0,30	-
80	15	19	0.30	50	4,800 – 7,800	12,000	10	43106002	RBU 8015/6 MES 0,30	-
Silicon carbide (SiC) plastic filament										
50	4	10	0.55	50	6,000 – 9,800	15,000	10	43103025	RBU 5004/6 SiC 120 0,55	-
	10	13	0.90	50	6,000 – 9,800	15,000	10	43103101	RBU 5010/6 SiC 180 0,90	-
	15	13	0.90	50	6,000 – 9,800	15,000	10	43104004	RBU 5015/6 SiC 180 0,90	-
								43701016	POS RBU 5015/6 SiC 180 0,90	-
70	8	19	0.55	50	6,000 – 9,800	15,000	10	43104075	RBU 7008/6 SiC 120 0,55	-
	15	19	0.90	50	6,000 – 9,800	15,000	10	43105004	RBU 7015/6 SiC 180 0,90	-
								43701025	POS RBU 7015/6 SiC 180 0,90	-
80	8	19	0.55	50	4,800 – 7,800	12,000	10	43105075	RBU 8008/6 SiC 120 0,55	-
	15	19	0.90	50	4,800 – 7,800	12,000	10	43106004	RBU 8015/6 SiC 180 0,90	-
Ceramic oxide grain (CO) plastic filament										
50	4	10	0.55	50	6,000 – 9,800	15,000	10	43103028	RBU 5004/6 CO 120 0,55	-
	15	13	1.10	50	6,000 – 9,800	15,000	10	43104008	RBU 5015/6 CO 120 1,10	-
70	8	19	0.55	50	6,000 – 9,800	15,000	10	43104078	RBU 7008/6 CO 120 0,55	-
	15	19	1.10	50	6,000 – 9,800	15,000	10	43105008	RBU 7015/6 CO 120 1,10	-
80	8	19	0.55	50	4,800 – 7,800	12,000	10	43105078	RBU 8008/6 CO 120 0,55	-
	15	19	1.10	50	4,800 – 7,800	12,000	10	43106008	RBU 8015/6 CO 120 1,10	-





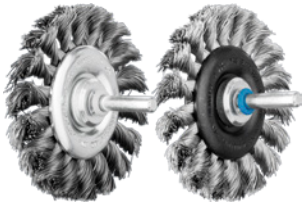
RBV, encapsulated

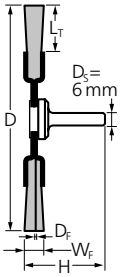
Particularly aggressive brushing effect for heavy-duty brushing.



Special features:
- Focused working thanks to high dimensional stability.
- Maximum tool life as premature wire breakage is prevented.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST), ST = brass-plated steel wire										
63	7	20	0.30	40	7,500 – 11,300	15,000	1	43507501	RBV 6307/6 ST 0,30	-





RBG

Aggressive brush for cleaning, derusting and work on weld seams.



Special features:
- Optimal access to hard-to-reach areas such as grooves and recesses.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
76	6	16	0.35	42	18	12,500 – 18,800	25,000	10	43107001	RBG 7006/6 ST 0,35	-
									43702001	POS RBG 7006/6 ST 0,35	-
			0.50	42	18	12,500 – 18,800	25,000	10	43107002	RBG 7006/6 ST 0,50	-
									43702003	POS RBG 7006/6 ST 0,50	-
	12	16	0.35	42	18	12,500 – 18,800	25,000	10	43107011	RBG 7012/6 ST 0,35	-
			0.50	42	18	12,500 – 18,800	25,000	10	43107012	RBG 7012/6 ST 0,50	-
100	12	19	0.35	42	22	10,000 – 15,000	20,000	10	43108001	RBG 10012/6 ST 0,35	-
			0.50	42	22	10,000 – 15,000	20,000	10	43108002	RBG 10012/6 ST 0,50	-
Stainless steel wire (INOX) – All INOX brushes are degreased.											
76	6	16	0.35	42	18	10,000 – 16,300	25,000	10	43107003	RBG 7006/6 INOX 0,35	-
									43702002	POS RBG 7006/6 INOX 0,35	-
			0.50	42	18	10,000 – 16,300	25,000	10	43107004	RBG 7006/6 INOX 0,50	-
	12	16	0.35	42	18	10,000 – 16,300	25,000	10	43107013	RBG 7012/6 INOX 0,35	-
			0.50	42	18	10,000 – 16,300	25,000	10	43107014	RBG 7012/6 INOX 0,50	-
100	12	19	0.35	42	22	8,000 – 13,000	20,000	10	43108005	RBG 10012/6 INOX 0,35	-
			0.50	42	22	8,000 – 13,000	20,000	10	43108006	RBG 10012/6 INOX 0,50	-



BSO

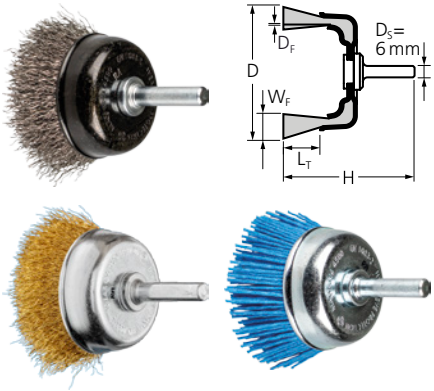
Set of different wheel, cup and end brushes with a 6 mm shank.

Contents:
Set BSO 5500 ST contains 80 pieces.
Set BSO 5600 ST contains 23 pieces.
Set BSO 5600 INOX contains 23 pieces.

Special features:
- Selection of the most common versions.
- Promotional display box.

Contents		Item no.	Designation	Price/unit EUR
TBU 5010/6 ST 0,30, PBU 1010/6 ST 0,35, PBU 1516/6 ST 0,35, PBU 2022/6 ST 0,50, RBU 3006/6 ST 0,20, RBU 4009/6 ST 0,20, RBU 5015/6 ST 0,20, RBU 7015/6 ST 0,30	1	43900001	BSO 5500 ST	-
TBU 5010/6 ST 0,30, PBU 2022/6 ST 0,50, RBU 5015/6 ST 0,20, RBG 7006/6 ST 0,35	1	*43900002*	BSO 5600 ST	-

Universal shank-mounted cup brushes
crimped



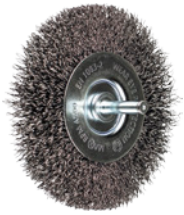
TBU, for power drills

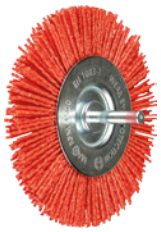
Generally suitable for cleaning, derusting and smoothing, as well as removal of corrosion and paint. Particularly suitable for brushing on large, flat and easily accessible surfaces due to face-down use with the entire brush face applied to the workpiece. Specially developed for use within a low rotational speed range on cordless drills and power drills.

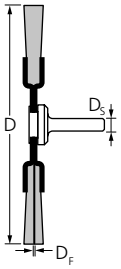
Special features:
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.
- Optimum presentation on the **PFERD-**TOOL-CENTER using hanging hole and labelling with EAN number, designation and filament material.

D [mm]	D_S [mm]	D_F [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
Steel wire (ST)							
50	6	0.30	4,500	1	43740162	POS TBU 50/6 ST 0,30 UNIVERSAL (1)	-
Stainless steel wire (INOX)							
50	6	0.30	4,500	1	43740163	POS TBU 50/6 INOX 0,30 UNIVERSAL (1)	-
Brass wire (MES)							
50	6	0.20	4,500	1	43740164	POS TBU 50/6 MES 0,20 UNIVERSAL (1)	-
Plastic filament, coarse (RED)							
50	6	1.27	4,500	1	43740165	POS TBU 50/6 RED 80 UNIVERSAL (1)	-
Plastic filament, fine (BLUE)							
50	6	1.10	4,500	1	43740166	POS TBU 50/6 BLUE 180 UNIVERSAL (1)	-

Universal shank-mounted wheel brushes
crimped







RBU, for power drills

Generally suitable for cleaning, derusting, smoothing, cleaning of weld seams, light deburring, and removal of corrosion and paint. Specially developed for use within a low rotational speed range on cordless drills and power drills.

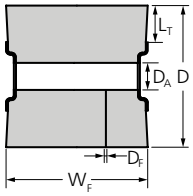
Special features:

- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.
- Optimum presentation on the **PFERD-**TOOL-CENTER using hanging hole and labelling with EAN number, designation and filament material.

D [mm]	D_S [mm]	D_F [mm]	Max. RPM		Item no.	Designation	Price/unit EUR
Steel wire (ST)							
100	6	0.30	4,500	1	43740167	POS RBU 10012/6 ST 0,30 UNIVERSAL (1)	-
Plastic filament, coarse (RED)							
100	6	1.27	4,500	1	43740168	POS RBU 10010/6 RED 80 UNIVERSAL (1)	-
Plastic filament, fine (BLUE)							
100	6	1.10	4,500	1	43740169	POS RBU 10010/6 BLUE 180 UNIVERSAL (1)	-

Wheel brushes for burnishing machines
crimped





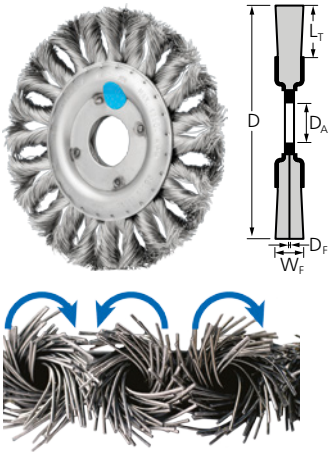
WBU, for burnishing machines

Excellent for surface structuring work on workpieces with large surfaces.



Special features:
- Can be used with all commercially available burnishing machines thanks to the hole with four keyways.
- Creates fine surfaces.

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_F [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST) – LIT ST = stranded, brass-plated steel wire										
100	100	26	19.1	0.27	3,000 – 4,500	6,000	1	43509001	WBU 100100/19,1 LIT ST 0,27	-
Stainless steel wire (INOX)										
100	100	26	19.1	0.20	2,400 – 3,900	6,000	1	43509003	WBU 100100/19,1 INOX 0,20	-
Silicon carbide (SiC) plastic filament										
100	100	26	19.1	1.27	2,400 – 3,900	6,000	1	43509005	WBU 100100/19,1 SiC 80 1,27	-



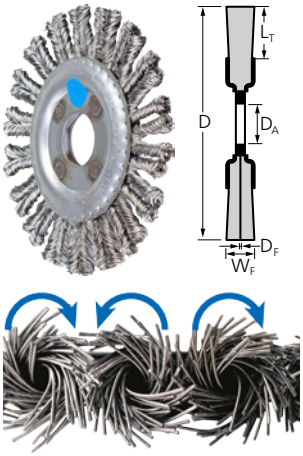
RBGIT CT, COMBITWIST

Very aggressive brush for heavy-duty brushing. Specially developed for work on stainless steel (INOX). Suitable for work on corners and edges as the knots are less likely to unravel.



Special features:
- Maximum protection against corrosion as all components are produced from stainless steel (INOX) in quality 1.4310 (V2A). Particularly well-suited to use in extremely critical environments.
- Maximum economic efficiency due to maximum tool life and stock removal rate and high level of comfort thanks to smooth running with no brush recoiling.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Stainless steel wire (INOX) – All INOX brushes are degreased.											
115	12	22	22.2	0.35	24	5,000 – 12,500	12,500	1	43300042	POS RBGIT 11512/22,2 CT INOX 0,35	-



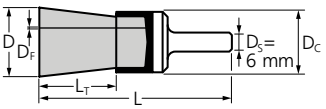
RBGIT PIPE CT, Pipeline, COMBITWIST

Brush that has been specially developed for work on stainless steel (INOX). Perfect for heavy-duty brushing in pipeline and container construction. Suitable for work on corners and edges as the knots are less likely to unravel.

Special features:
- Maximum protection against corrosion as all components are produced from stainless steel (INOX) in quality 1.4310 (V2A). Particularly well-suited to use in extremely critical environments.
- Extra-slim design enables optimal access to hard-to-reach areas such as root weld seams.
- Maximum economic efficiency due to maximum tool life and stock removal rate and high level of comfort thanks to smooth running with no brush recoiling.

D [mm]	W_F [mm]	L_T [mm]	D_A [mm]	D_F [mm]	Knots	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Stainless steel wire (INOX) – All INOX brushes are degreased.											
115	6	22	22.2	0.50	36	5,000 – 12,500	12,500	1	43300032	POS RBGIT 11506/22,2 PIPE CT INOX 0,50	-





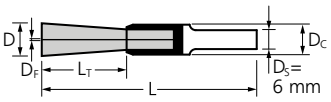
PBUIT, crimped

Suitable for light brushing such as deburring, cleaning, and removal of heat discolouration. Specially developed for work on stainless steel (INOX).

Special features:
- Maximum protection against corrosion as all components are produced from stainless steel (INOX) in quality 1.4310 (V2A). Particularly well-suited to use in extremely critical environments.
- Optimal access to hard-to-reach areas such as drilled holes and cavities as the filament spreads out upon rotation.
- Creates fine surfaces.

D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Stainless steel wire (INOX) – All INOX brushes are degreased.										
15	16	22	0.15	65	7,200 – 11,700	18,000	10	43200022	PBUIT 1516/6 INOX 0,15	-
			0.20	65	7,200 – 11,700	18,000	10	43200027	PBUIT 1516/6 INOX 0,20	-
20	22	25	0.15	70	7,200 – 11,700	18,000	10	43200032	PBUIT 2022/6 INOX 0,15	-
			0.20	70	7,200 – 11,700	18,000	10	43200037	PBUIT 2022/6 INOX 0,20	-





PBGSIT, SINGLETWIST, knotted

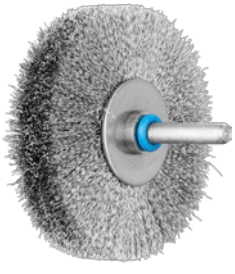
Particularly flexible single-knot brush for special applications. Specially developed for work on stainless steel (INOX).

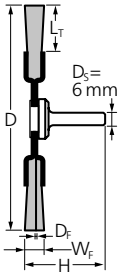


Special features:
- Maximum protection against corrosion as all components are produced from stainless steel (INOX) in quality 1.4310 (V2A). Particularly well-suited to use in extremely critical environments.
- Optimal access to hard-to-reach areas such as inside corners, as the knot is less likely to unravel.

D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Stainless steel wire (INOX) – All INOX brushes are degreased.										
10	10	25	0.20	65	4,000 – 6,500	10,000	10	43200102	PBGSIT 1010/6 INOX 0,20	-
			0.35	65	4,000 – 6,500	10,000	10	43200107	PBGSIT 1010/6 INOX 0,35	-

INOX-TOTAL
Shank-mounted wheel brushes





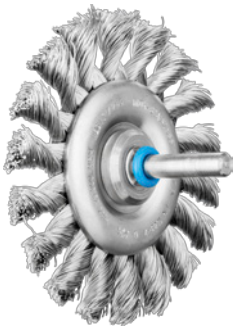
RBUIT

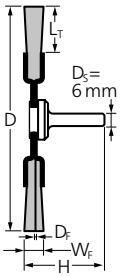
Generally suitable for cleaning, deburring and removal of heat discolouration. Specially developed for work on stainless steel (INOX).



Special features:
- Maximum protection against corrosion as all components are produced from stainless steel (INOX) in quality 1.4310 (V2A). Particularly well-suited to use in extremely critical environments.
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Stainless steel wire (INOX) – All INOX brushes are degreased.										
30	6	7	0.20	40	8,000 – 13,000	20,000	10	43100012	RBUIT 3006/6 INOX 0,20	-
50	15	13	0.20	50	6,000 – 9,800	15,000	10	43100032	RBUIT 5015/6 INOX 0,20	-
70	15	19	0.15	50	6,000 – 9,800	15,000	10	43100062	RBUIT 7015/6 INOX 0,15	-
			0.30	50	6,000 – 9,800	15,000	10	43100067	RBUIT 7015/6 INOX 0,30	-
80	15	19	0.15	50	4,800 – 7,800	12,000	10	43100072	RBUIT 8015/6 INOX 0,15	-
			0.30	50	4,800 – 7,800	12,000	10	43100077	RBUIT 8015/6 INOX 0,30	-





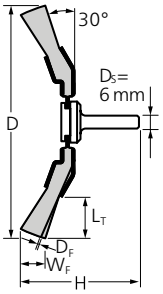
RBGIT, knotted

Generally suitable for cleaning, deburring and removal of heat discolouration. Specially developed for work on stainless steel (INOX).

Special features:
- Maximum protection against corrosion as all components are produced from stainless steel (INOX) in quality 1.4310 (V2A). Particularly well-suited to use in extremely critical environments.
- Aggressive brushing effect due to the very stiff wire knots.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	Knots	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Stainless steel wire (INOX) – All INOX brushes are degreased.											
76	6	16	0.35	18	42	10,000 – 16,300	25,000	10	43100252	RBGIT 7006/6 INOX 0,35	-





KBUIT

Excellent for medium-duty brushing such as deburring, cleaning, and removal of heat discolouration. Specially developed for work on stainless steel (INOX).

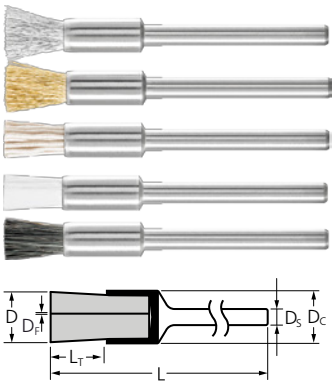


Special features:

- Maximum protection against corrosion as all components are produced from stainless steel (INOX) in quality 1.4310 (V2A). Particularly well-suited to use in extremely critical environments.
- Optimal access to hard-to-reach areas such as inner edges, grooves and keyways.
- Highly flexible, enabling optimal adjustment to the workpiece contour. Creates fine surfaces.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Stainless steel wire (INOX) – All INOX brushes are degreased.										
50	10	10	0.20	49	6,000 – 9,800	15,000	10	43225017	KBUIT 5010/6 INOX 0,20	-
70	10	15	0.15	58	6,000 – 9,800	15,000	10	43225052	KBUIT 7010/6 INOX 0,15	-
			0.20	58	6,000 – 9,800	15,000	10	43225057	KBUIT 7010/6 INOX 0,20	-
80	10	20	0.30	62	4,800 – 7,800	12,000	10	43225087	KBUIT 8010/6 INOX 0,30	-

Miniature brushes
End brushes, crimped



PBU

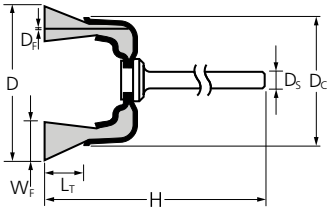
Suitable for light brushing such as deburring, cleaning and polishing. Miniature brushes can be used on flexible shaft drives, micro motors or electric grinders.



Special features:
- Maximum precision and efficiency in work on delicate workpieces.
- Optimal access to hard-to-reach areas such as drilled holes and cavities as the filament spreads out upon rotation.
- Creates fine surfaces.

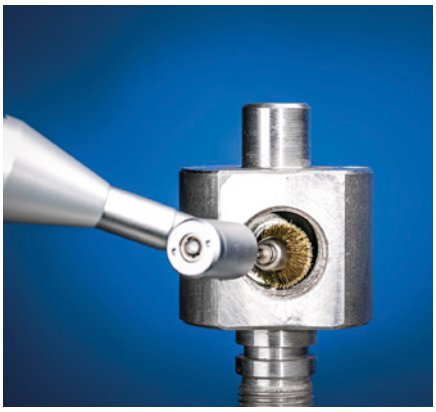
D [mm]	D_C [mm]	L_T [mm]	D_F [mm]	L [mm]	D_S [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
5	5	8	0.10	45	2.34	5,000 – 15,000	25,000	10	*43200301*	PBU 0505/2,34 ST 0,10	-
					3	5,000 – 15,000	25,000	10	43200351	PBU 0505/3 ST 0,10	-
Stainless steel wire (INOX)											
5	5	8	0.10	45	2.34	4,000 – 10,000	25,000	10	*43200302*	PBU 0505/2,34 INOX 0,10	-
					3	4,000 – 10,000	25,000	10	43200352	PBU 0505/3 INOX 0,10	-
Brass wire (MES)											
5	5	8	0.10	45	3	4,000 – 10,000	25,000	10	43200353	PBU 0505/3 MES 0,10	-
Silicon carbide (SiC) plastic filament											
5	5	8	0.55	45	2.34	1,200 – 5,000	25,000	10	*43200304*	PBU 0505/2,34 SiC 320 0,55	-
			0.25	45	2.34	1,200 – 5,000	25,000	10	*43200305*	PBU 0505/2,34 SiC 800 0,25	-
			0.55	45	3	1,200 – 5,000	25,000	10	43200354	PBU 0505/3 SiC 320 0,55	-
			0.25	45	3	1,200 – 5,000	25,000	10	43200355	PBU 0505/3 SiC 800 0,25	-
Aluminium oxide (AO) plastic filament											
5	5	8	0.50	45	2.34	1,200 – 5,000	25,000	10	*43200311*	PBU 0505/2,34 AO 320 0,50	-
			0.30	45	2.34	1,200 – 5,000	25,000	10	*43200310*	PBU 0505/2,34 AO 600 0,30	-
			0.50	45	3	1,200 – 5,000	25,000	10	43200361	PBU 0505/3 AO 320 0,50	-
			0.30	45	3	1,200 – 5,000	25,000	10	43200360	PBU 0505/3 AO 600 0,30	-
Diamond (DIA) plastic filament											
5	5	8	0.40	45	3	1,200 – 5,000	25,000	10	47701649	PBU 0505/3 DIA 400 0,40	-
Nylon plastic filament											
5	5	8	0.20	45	3	1,200 – 5,000	25,000	10	43200356	PBU 0505/3 Nylon 0,20	-
Natural bristles, white bristle (SBW)											
5	5	8	-	45	2.34	4,000 – 10,000	25,000	10	*43200307*	PBU 0505/2,34 SBW	-
					3	4,000 – 10,000	25,000	10	43200357	PBU 0505/3 SBW	-
Natural bristles, black bristle (SBS)											
5	5	8	-	45	2.34	4,000 – 10,000	25,000	10	*43200308*	PBU 0505/2,34 SBS	-
					3	4,000 – 10,000	25,000	10	43200358	PBU 0505/3 SBS	-
Natural bristles, goat hair (ZHW)											
5	5	8	-	45	2.34	4,000 – 10,000	25,000	10	*43200309*	PBU 0505/2,34 ZHW	-
					3	4,000 – 10,000	25,000	10	43200359	PBU 0505/3 ZHW	-





TBU

Suitable for light brushing such as deburring, cleaning and polishing. Particularly suitable for brushing on small surfaces due to face-down use with the entire brush face applied to the workpiece. They can be used on flexible shaft drives, micro motors or electric grinders.



Special features:
- Maximum precision and efficiency in work on delicate workpieces.
- Highly flexible, enabling optimal adjustment to the workpiece contour.
- Creates fine surfaces.

D [mm]	D_C [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	D_S [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)												
15	8	3	5	0.10	45	3	5,000 – 10,000	20,000	10	43209251	TBU 1503/3 ST 0,10	-
18	10	3	6	0.10	45	2.34	5,000 – 10,000	18,000	10	*43209401*	TBU 1803/2,34 ST 0,10	-
						3	5,000 – 10,000	18,000	10	43209451	TBU 1803/3 ST 0,10	-
Stainless steel wire (INOX)												
15	8	3	5	0.10	45	3	4,000 – 10,000	20,000	10	43209252	TBU 1503/3 INOX 0,10	-
18	10	3	6	0.10	45	3	4,000 – 10,000	18,000	10	43209452	TBU 1803/3 INOX 0,10	-
Brass wire (MES)												
15	8	3	5	0.10	45	3	4,000 – 10,000	20,000	10	43209253	TBU 1503/3 MES 0,10	-
18	10	3	6	0.10	45	3	4,000 – 10,000	18,000	10	43209453	TBU 1803/3 MES 0,10	-
Silicon carbide (SiC) plastic filament												
18	10	3	6	0.55	45	2.34	1,200 – 5,000	18,000	10	*43209404*	TBU 1803/2,34 SiC 320 0,55	-
						3	1,200 – 5,000	18,000	10	43209454	TBU 1803/3 SiC 320 0,55	-
				0.25	45	2.34	1,200 – 5,000	18,000	10	*43209405*	TBU 1803/2,34 SiC 800 0,25	-
						3	1,200 – 5,000	18,000	10	43209455	TBU 1803/3 SiC 800 0,25	-
Aluminium oxide (AO) plastic filament												
18	10	3	6	0.50	45	2.34	1,200 – 5,000	18,000	10	*43209411*	TBU 1803/2,34 AO 320 0,50	-
						3	1,200 – 5,000	18,000	10	43209461	TBU 1803/3 AO 320 0,50	-
				0.30	45	2.34	1,200 – 5,000	18,000	10	43209410	TBU 1803/2,34 AO 600 0,30	-
						3	1,200 – 5,000	18,000	10	43209460	TBU 1803/3 AO 600 0,30	-
Diamond (DIA) plastic filament												
18	10	3	6	0.40	45	3	4,000 – 10,000	18,000	10	47701648	TBU 1803/3 DIA 400 0,40	-
Nylon plastic filament												
15	8	3	5	0.15	45	2.34	1,200 – 5,000	20,000	10	*43209206*	TBU 1503/2,34 Nylon 0,15	-
						3	1,200 – 5,000	20,000	10	43209256	TBU 1503/3 Nylon 0,15	-
18	10	3	6	0.15	45	2.34	1,200 – 5,000	18,000	10	*43209406*	TBU 1803/2,34 Nylon 0,15	-
						3	1,200 – 5,000	18,000	10	43209456	TBU 1803/3 Nylon 0,15	-
Natural bristles, white bristle (SBW)												
15	8	3	5	-	45	2.34	4,000 – 10,000	20,000	10	*43209207*	TBU 1503/2,34 SBW	-
						3	4,000 – 10,000	20,000	10	43209257	TBU 1503/3 SBW	-
18	10	3	6	-	45	2.34	4,000 – 10,000	18,000	10	*43209407*	TBU 1803/2,34 SBW	-
						3	4,000 – 10,000	18,000	10	43209457	TBU 1803/3 SBW	-

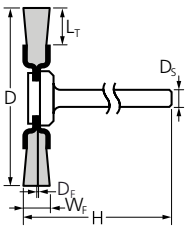
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Miniature brushes
Cup brushes, crimped

D [mm]	D_C [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	D_S [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Natural bristles, black bristle (SBS)												
15	8	3	5	-	45	3	4,000 – 10,000	20,000	10	43209258	TBU 1503/3 SBS	-
18	10	3	6	-	45	2.34	4,000 – 10,000	18,000	10	*43209408*	TBU 1803/2,34 SBS	-
						3	4,000 – 10,000	18,000	10	43209458	TBU 1803/3 SBS	-
Natural bristles, goat hair (ZHW)												
15	8	3	5	-	45	2.34	4,000 – 10,000	20,000	10	*43209209*	TBU 1503/2,34 ZHW	-
						3	4,000 – 10,000	20,000	10	43209259	TBU 1503/3 ZHW	-
18	10	3	6	-	45	2.34	4,000 – 10,000	18,000	10	*43209409*	TBU 1803/2,34 ZHW	-
						3	4,000 – 10,000	18,000	10	43209459	TBU 1803/3 ZHW	-

Wheel brushes, crimped





RBU

Suitable for light brushing such as deburring, cleaning and polishing. Miniature brushes can be used on flexible shaft drives, micro motors or electric grinders.

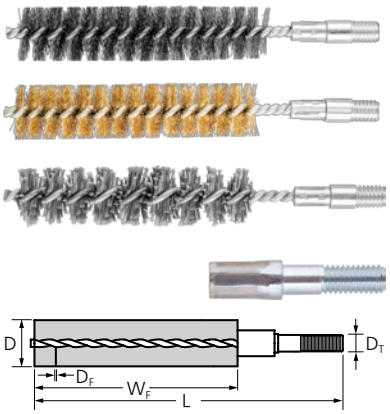


Special features:
- Maximum precision and efficiency in work on delicate workpieces.
- Enables focused working in hard-to-reach areas.
- Creates fine surfaces.

D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	D_S [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)											
16	2	3	0.10	46	2.34	5,000 – 10,000	12,000	10	*43100301*	RBU 1602/2,34 ST 0,10	-
					3	5,000 – 10,000	12,000	10	43100351	RBU 1602/3 ST 0,10	-
19	2	5	0.10	46	2.34	5,000 – 10,000	12,000	10	*43100501*	RBU 1902/2,34 ST 0,10	-
					3	5,000 – 10,000	12,000	10	43100551	RBU 1902/3 ST 0,10	-
22	2	6	0.10	46	3	5,000 – 10,000	12,000	10	43100751	RBU 2202/3 ST 0,10	-
32	2	10	0.10	46	3	5,000 – 10,000	12,000	10	43102051	RBU 3202/3 ST 0,10	-
Stainless steel wire (INOX)											
16	2	3	0.10	46	2.34	4,000 – 10,000	12,000	10	*43100302*	RBU 1602/2,34 INOX 0,10	-
					3	4,000 – 10,000	12,000	10	43100352	RBU 1602/3 INOX 0,10	-
19	2	5	0.10	46	3	4,000 – 10,000	12,000	10	43100552	RBU 1902/3 INOX 0,10	-
22	2	6	0.10	46	3	4,000 – 10,000	12,000	10	43100752	RBU 2202/3 INOX 0,10	-
32	2	10	0.10	46	3	4,000 – 10,000	12,000	10	43102053	RBU 3202/3 INOX 0,10	-
Brass wire (MES)											
16	2	3	0.10	46	2.34	4,000 – 10,000	12,000	10	*43100303*	RBU 1602/2,34 MES 0,10	-
					3	4,000 – 10,000	12,000	10	43100353	RBU 1602/3 MES 0,10	-

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D [mm]	W_F [mm]	L_T [mm]	D_F [mm]	H [mm]	D_S [mm]	Opt. RPM	Max. RPM		Item no.	Designation	Price/ unit EUR
19	2	5	0.10	46	3	4,000 – 10,000	12,000	10	43100553	RBU 1902/3 MES 0,10	-
22	2	6	0.10	46	2.34	4,000 – 10,000	12,000	10	*43100703*	RBU 2202/2,34 MES 0,10	-
					3	4,000 – 10,000	12,000	10	43100753	RBU 2202/3 MES 0,10	-
Silicon carbide (SiC) plastic filament											
22	2	6	0.55	46	3	1,200 – 5,000	12,000	10	43100754	RBU 2202/3 SiC 320 0,55	-
			0.25	46	2.34	1,200 – 5,000	12,000	10	*43100705*	RBU 2202/2,34 SiC 800 0,25	-
					3	1,200 – 5,000	12,000	10	43100755	RBU 2202/3 SiC 800 0,25	-
Aluminium oxide (AO) plastic filament											
22	2	6	0.50	46	2.34	1,200 – 5,000	12,000	10	*43100710*	RBU 2202/2,34 AO 320 0,50	-
					3	1,200 – 5,000	12,000	10	43100760	RBU 2202/3 AO 320 0,50	-
			0.30	46	2.34	1,200 – 5,000	12,000	10	*43100711*	RBU 2202/2,34 AO 600 0,30	-
					3	1,200 – 5,000	12,000	10	43100761	RBU 2202/3 AO 600 0,30	-
Diamond (DIA) plastic filament											
22	2	6	0.40	46	3	1,200 – 5,000	12,000	10	47701642	RBU 2202/3 DIA 400 0,40	-
Nylon plastic filament											
22	2	6	0.15	46	3	1,200 – 5,000	12,000	10	43100756	RBU 2202/3 Nylon 0,15	-
					2.34	1,200 – 5,000	12,000	10	*43100706*	RBU 2202/2,34 Nylon 0,15	-
Natural bristles, white bristle (SBW)											
16	2	3	-	46	2.34	4,000 – 10,000	12,000	10	43100307	RBU 1602/2,34 SBW	-
					3	4,000 – 10,000	12,000	10	43100357	RBU 1602/3 SBW	-
19	2	5	-	46	2.34	4,000 – 10,000	12,000	10	43100507	RBU 1902/2,34 SBW	-
					3	4,000 – 10,000	12,000	10	43100557	RBU 1902/3 SBW	-
22	2	6	-	46	2.34	4,000 – 10,000	12,000	10	*43100707*	RBU 2202/2,34 SBW	-
					3	4,000 – 10,000	12,000	10	43100757	RBU 2202/3 SBW	-
Natural bristles, black bristle (SBS)											
16	2	3	-	46	2.34	4,000 – 10,000	12,000	10	*43100308*	RBU 1602/2,34 SBS	-
					3	4,000 – 10,000	12,000	10	43100358	RBU 1602/3 SBS	-
19	2	5	-	46	2.34	4,000 – 10,000	12,000	10	*43100508*	RBU 1902/2,34 SBS	-
					3	4,000 – 10,000	12,000	10	43100558	RBU 1902/3 SBS	-
22	2	6	-	46	2.34	4,000 – 10,000	12,000	10	*43100708*	RBU 2202/2,34 SBS	-
					3	4,000 – 10,000	12,000	10	43100758	RBU 2202/3 SBS	-
Natural bristles, goat hair (ZHW)											
16	2	3	-	46	2.34	4,000 – 10,000	12,000	10	*43100309*	RBU 1602/2,34 ZHW	-
					3	4,000 – 10,000	12,000	10	43100359	RBU 1602/3 ZHW	-
22	2	6	-	46	2.34	4,000 – 10,000	12,000	10	*43100709*	RBU 2202/2,34 ZHW	-
					3	4,000 – 10,000	12,000	10	43100759	RBU 2202/3 ZHW	-



IBU, with thread

Particularly suitable for deburring and cleaning pipes, threads, coupling sleeves and cylinders.

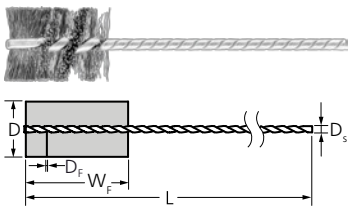


Special features:
- Can be clamped in collets thanks to integrated shank (M6 = 6 mm and 3/8 = 10 mm).
- Creates fine surfaces.

D [mm]	W_F [mm]	D_T [mm]	D_F [mm]	L [mm]	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)									
8	80	M6	0.15	120	1,000	10	43679001	IBU 0880/M6 ST 0,15	-
10	80	M6	0.15	120	1,000	10	43679011	IBU 1080/M6 ST 0,15	-
12	80	M6	0.15	120	1,000	10	43679021	IBU 1280/M6 ST 0,15	-
13	80	M6	0.20	120	1,000	10	43679031	IBU 1380/M6 ST 0,20	-
15	80	M6	0.20	120	1,000	10	43679041	IBU 1580/M6 ST 0,20	-
16	80	M6	0.20	120	1,000	10	43679051	IBU 1680/M6 ST 0,20	-
18	80	M6	0.20	120	1,000	10	43679061	IBU 1880/M6 ST 0,20	-
20	80	M6	0.20	120	1,000	10	43679071	IBU 2080/M6 ST 0,20	-
22	100	3/8 BSW	0.20	170	1,000	10	43679081	IBU 22100/3/8 BSW ST 0,20	-
25	100	3/8 BSW	0.20	170	1,000	10	43679091	IBU 25100/3/8 BSW ST 0,20	-
30	100	3/8 BSW	0.20	170	1,000	10	43679101	IBU 30100/3/8 BSW ST 0,20	-
32	100	1/2 BSW	0.25	170	1,000	10	43679111	IBU 32100/1/2 BSW ST 0,25	-
38	100	1/2 BSW	0.30	170	1,000	10	43679121	IBU 38100/1/2 BSW ST 0,30	-
40	100	1/2 BSW	0.30	170	1,000	10	43679131	IBU 40100/1/2 BSW ST 0,30	-
44	100	1/2 BSW	0.30	170	1,000	10	43679141	IBU 44100/1/2 BSW ST 0,30	-
50	100	1/2 BSW	0.35	170	1,000	5	43679151	IBU 50100/1/2 BSW ST 0,35	-
57	100	1/2 BSW	0.35	170	1,000	5	43679161	IBU 57100/1/2 BSW ST 0,35	-
63	100	1/2 BSW	0.35	170	1,000	5	43679171	IBU 63100/1/2 BSW ST 0,35	-
69	100	1/2 BSW	0.35	170	1,000	5	43679181	IBU 69100/1/2 BSW ST 0,35	-
75	100	1/2 BSW	0.35	170	1,000	1	43679191	IBU 75100/1/2 BSW ST 0,35	-
82	100	1/2 BSW	0.35	170	1,000	1	43679301	IBU 82100/1/2 BSW ST 0,35	-
101	100	1/2 BSW	0.50	170	1,000	1	43679311	IBU 101100/1/2 BSW ST 0,50	-
Stainless steel wire (INOX)									
8	80	M6	0.15	120	1,000	10	43679003	IBU 0880/M6 INOX 0,15	-
10	80	M6	0.15	120	1,000	10	43679013	IBU 1080/M6 INOX 0,15	-
12	80	M6	0.15	120	1,000	10	43679023	IBU 1280/M6 INOX 0,15	-
13	80	M6	0.20	120	1,000	10	43679033	IBU 1380/M6 INOX 0,20	-
15	80	M6	0.20	120	1,000	10	43679043	IBU 1580/M6 INOX 0,20	-
16	80	M6	0.20	120	1,000	10	43679053	IBU 1680/M6 INOX 0,20	-
18	80	M6	0.20	120	1,000	10	43679063	IBU 1880/M6 INOX 0,20	-
20	80	M6	0.20	120	1,000	10	43679073	IBU 2080/M6 INOX 0,20	-
22	100	3/8 BSW	0.20	170	1,000	10	43679083	IBU 22100/3/8 BSW INOX 0,20	-
25	100	3/8 BSW	0.20	170	1,000	10	43679093	IBU 25100/3/8 BSW INOX 0,20	-
30	100	3/8 BSW	0.20	170	1,000	10	43679103	IBU 30100/3/8 BSW INOX 0,20	-
32	100	1/2 BSW	0.25	170	1,000	10	43679113	IBU 32100/1/2 BSW INOX 0,25	-
38	100	1/2 BSW	0.30	170	1,000	10	43679123	IBU 38100/1/2 BSW INOX 0,30	-
40	100	1/2 BSW	0.30	170	1,000	10	43679133	IBU 40100/1/2 BSW INOX 0,30	-
44	100	1/2 BSW	0.30	170	1,000	10	43679143	IBU 44100/1/2 BSW INOX 0,30	-

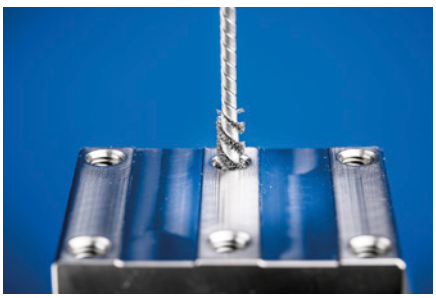
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D [mm]	W_F [mm]	D_T [mm]	D_F [mm]	L [mm]	Max. RPM		Item no.	Designation	Price/ unit EUR
Brass wire (MES)									
8	80	M6	0.15	120	1,000	10	43679002	IBU 0880/M6 MES 0,15	-
10	80	M6	0.15	120	1,000	10	43679012	IBU 1080/M6 MES 0,15	-
12	80	M6	0.15	120	1,000	10	43679022	IBU 1280/M6 MES 0,15	-
13	80	M6	0.20	120	1,000	10	43679032	IBU 1380/M6 MES 0,20	-
15	80	M6	0.20	120	1,000	10	43679042	IBU 1580/M6 MES 0,20	-
16	80	M6	0.20	120	1,000	10	43679052	IBU 1680/M6 MES 0,20	-
18	80	M6	0.20	120	1,000	10	43679062	IBU 1880/M6 MES 0,20	-
20	80	M6	0.20	120	1,000	10	43679072	IBU 2080/M6 MES 0,20	-
22	100	3/8 BSW	0.20	170	1,000	10	43679082	IBU 22100/3/8 BSW MES 0,20	-
25	100	3/8 BSW	0.20	170	1,000	10	43679092	IBU 25100/3/8 BSW MES 0,20	-
30	100	3/8 BSW	0.20	170	1,000	10	43679102	IBU 30100/3/8 BSW MES 0,20	-
32	100	1/2 BSW	0.25	170	1,000	10	43679112	IBU 32100/1/2 BSW MES 0,25	-
38	100	1/2 BSW	0.30	170	1,000	10	43679122	IBU 38100/1/2 BSW MES 0,30	-
40	100	1/2 BSW	0.30	170	1,000	10	43679132	IBU 40100/1/2 BSW MES 0,30	-
44	100	1/2 BSW	0.30	170	1,000	10	43679142	IBU 44100/1/2 BSW MES 0,30	-
Silicon carbide (SiC) 180 plastic filament									
8	80	M6	0.10	120	1,000	10	43679004	IBU 0880/M6 SiC 180 1,00	-
10	80	M6	0.10	120	1,000	10	43679014	IBU 1080/M6 SiC 180 1,00	-
12	80	M6	0.10	120	1,000	10	43679024	IBU 1280/M6 SiC 180 1,00	-
13	80	M6	0.10	120	1,000	10	43679034	IBU 1380/M6 SiC 180 1,00	-
15	80	M6	0.10	120	1,000	10	43679044	IBU 1580/M6 SiC 180 1,00	-
16	80	M6	0.10	120	1,000	10	43679054	IBU 1680/M6 SiC 180 1,00	-
18	80	M6	0.10	120	1,000	10	43679064	IBU 1880/M6 SiC 180 1,00	-
20	80	M6	0.10	120	1,000	10	43679074	IBU 2080/M6 SiC 180 1,00	-
22	100	3/8 BSW	0.10	170	1,000	10	43679084	IBU 22100/3/8 BSW SiC 180 1,00	-
25	100	3/8 BSW	0.10	170	1,000	10	43679094	IBU 25100/3/8 BSW SiC 180 1,00	-
30	100	3/8 BSW	0.10	170	1,000	10	43679104	IBU 30100/3/8 BSW SiC 180 1,00	-



IBU, shank-mounted

For light cleaning and deburring work on threaded holes or recesses, e.g. keyways. With tube brushes with a short eyelet, the filament reaches up to the tip of the brush.



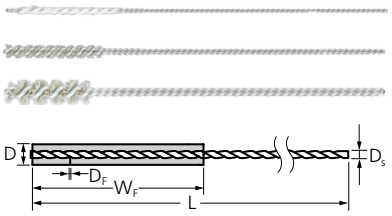
Special features:

- Highly flexible, enabling optimal adjustment to the workpiece contour. Creates fine surfaces.
- Longer tool life due to the design of the stem.
- The bent end of the wire does not have any sharp edges, which prevents delicate surfaces from getting scratched.

D [mm]	W_F [mm]	D_S [mm]	D_F [mm]	L [mm]	Max. RPM		Item no.	Designation	Price/ unit EUR
Steel wire (ST)									
6	25	3.2	0.12	90	3,500	10	43679601	IBU 0625/3,2 ST 0,12	-
8	25	3.2	0.12	90	3,500	10	43679611	IBU 0825/3,2 ST 0,12	-
10	25	3.2	0.12	90	3,500	10	43679621	IBU 1025/3,2 ST 0,12	-
			0.20	90	3,500	10	43679631	IBU 1025/3,2 ST 0,20	-
13	25	3.2	0.12	90	3,500	10	43679641	IBU 1325/3,2 ST 0,12	-
			0.20	90	3,500	10	43679651	IBU 1325/3,2 ST 0,20	-
16	25	3.2	0.12	90	3,000	10	43679661	IBU 1625/3,2 ST 0,12	-

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D [mm]	W_F [mm]	D_S [mm]	D_F [mm]	L [mm]	Max. RPM		Item no.	Designation	Price/ unit EUR
16	25	3.2	0.20	90	3,000	10	43679671	IBU 1625/3,2 ST 0,20	-
19	25	3.2	0.12	90	3,000	10	43679681	IBU 1925/3,2 ST 0,12	-
			0.20	90	3,000	10	43679691	IBU 1925/3,2 ST 0,20	-
22	25	3.8	0.12	90	3,000	10	43679701	IBU 2225/3,8 ST 0,12	-
			0.20	90	3,000	10	43679711	IBU 2225/3,8 ST 0,20	-
25	25	3.8	0.12	90	3,000	10	43679721	IBU 2525/3,8 ST 0,12	-
			0.20	90	3,000	10	43679731	IBU 2525/3,8 ST 0,20	-
29	25	3.8	0.20	90	3,000	10	43679741	IBU 2925/3,8 ST 0,20	-
32	25	3.8	0.20	90	3,000	10	43679751	IBU 3225/3,8 ST 0,20	-
Stainless steel wire (INOX)									
6	25	3.2	0.12	90	3,500	10	43679602	IBU 0625/3,2 INOX 0,12	-
10	25	3.2	0.12	90	3,500	10	43679622	IBU 1025/3,2 INOX 0,12	-
13	25	3.2	0.12	90	3,500	10	43679642	IBU 1325/3,2 INOX 0,12	-
16	25	3.2	0.12	90	3,000	10	43679662	IBU 1625/3,2 INOX 0,12	-
			0.20	90	3,000	10	43679672	IBU 1625/3,2 INOX 0,20	-
19	25	3.2	0.12	90	3,000	10	43679682	IBU 1925/3,2 INOX 0,12	-
			0.20	90	3,000	10	43679692	IBU 1925/3,2 INOX 0,20	-
22	25	3.8	0.12	90	3,000	10	43679712	IBU 2225/3,8 INOX 0,12	-
25	25	3.8	0.12	90	3,000	10	43679722	IBU 2525/3,8 INOX 0,12	-
			0.20	90	3,000	10	43679732	IBU 2525/3,8 INOX 0,20	-
32	25	3.8	0.20	90	3,000	10	43679752	IBU 3225/3,8 INOX 0,20	-



IBU, shank-mounted

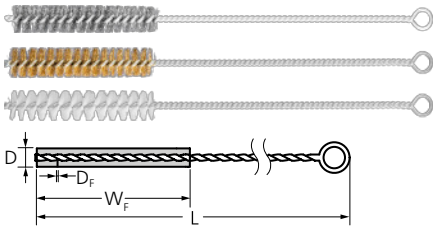
For light deburring and cleaning of holes and cross holes and for work on surfaces. With tube brushes with a short eyelet, the filament reaches up to the tip of the brush.

Special features:
- Highly flexible, enabling optimal adjustment to the workpiece contour. Creates fine surfaces.
- Enable maximum precision and efficiency in work on delicate workpieces. The dimensional accuracy of the workpieces remains unchanged.
- The bent end of the wire does not have any sharp edges, which prevents delicate surfaces from getting scratched.

D [mm]	W_F [mm]	D_S [mm]	D_F [mm]	L [mm]	Max. RPM		Item no.	Designation	Price/ unit EUR
Aluminium oxide (AO) 2000 plastic filament									
0.7	12	0.4	0.20	100	1,000	10	43679504	IBU 0,712/0,4 AO 2000 0,20	-
Silicon carbide (SiC) 1000 plastic filament									
1.2	12	0.5	0.25	100	1,000	10	43679514	IBU 1,212/0,5 SiC 1000 0,25	-
1.9	18	0.7	0.25	100	1,000	10	43679524	IBU 1,918/0,7 SiC 1000 0,25	-
2.2	18	0.9	0.25	100	1,000	10	43679534	IBU 2,218/0,9 SiC 1000 0,25	-
2.6	25	1	0.25	100	1,000	10	43679544	IBU 2,625/1,0 SiC 1000 0,25	-
3.2	25	1.7	0.25	100	1,000	10	43679554	IBU 3,225/1,7 SiC 1000 0,25	-
3.5	25	1.7	0.25	100	1,000	10	43679564	IBU 3,525/1,7 SiC 1000 0,25	-
Aluminium oxide (AO) 600 plastic filament									
4.2	25	2.2	0.30	125	1,000	10	43679575	IBU 4,225/2,2 AO 600 0,30	-
4.8	25	2.2	0.30	125	1,000	10	43679585	IBU 4,825/2,2 AO 600 0,30	-
5.5	25	2.2	0.30	125	1,000	10	43679595	IBU 5,525/2,2 AO 600 0,30	-
6.6	25	2.9	0.30	125	1,000	10	43679605	IBU 6,625/2,9 AO 600 0,30	-
8.2	25	2.9	0.30	125	2,000	10	43679618	IBU 8,225/2,9 AO 600 0,30	-
9.8	25	3.2	0.30	125	2,000	10	43679619	IBU 9,825/3,2 AO 600 0,30	-
11.5	25	3.2	0.30	125	2,000	10	43679638	IBU 11,525/3,2 AO 600 0,30	-
13	25	3.7	0.30	125	2,000	10	43679639	IBU 1325/3,7 AO 600 0,30	-

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D [mm]	W_F [mm]	D_S [mm]	D_F [mm]	L [mm]	Max. RPM		Item no.	Designation	Price/ unit EUR
16	25	3.7	0.30	125	2,000	10	43679658	IBU 1625/3,7 AO 600 0,30	-
20	25	4.7	0.30	125	2,000	10	43679698	IBU 2025/4,7 AO 600 0,30	-
25	25	4.7	0.30	125	2,000	10	43679738	IBU 2525/4,7 AO 600 0,30	-



IBU, with eyelet

For light cleaning and deburring work on threaded holes or recesses, e.g. keyways. Specially suited to brushing in manual applications.



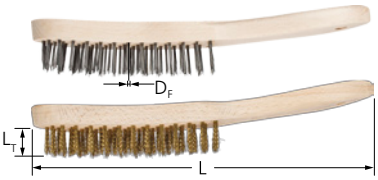
Special features:

- Enable maximum precision and efficiency in work on delicate workpieces.
- Optimal access to hard-to-reach areas such as the inner surfaces of pipes and drilled holes.
- Creates fine surfaces.

D [mm]	W_F [mm]	L [mm]	D_F [mm]		Item no.	Designation	Price/unit EUR
Steel wire (ST)							
3	100	300	0.10	10	43679401	IBU 03100 ST 0,10	-
4	100	300	0.15	10	43679411	IBU 04100 ST 0,15	-
5	100	300	0.15	10	43679421	IBU 05100 ST 0,15	-
6	100	300	0.15	10	43679201	IBU 06100 ST 0,15	-
8	100	300	0.15	10	43679211	IBU 08100 ST 0,15	-
10	100	300	0.15	10	43679221	IBU 10100 ST 0,15	-
12	100	300	0.15	10	43679231	IBU 12100 ST 0,15	-
15	100	300	0.15	10	43679241	IBU 15100 ST 0,15	-
18	100	300	0.15	10	43679481	IBU 18100 ST 0,15	-
20	100	300	0.15	10	43679251	IBU 20100 ST 0,15	-
25	100	300	0.15	10	43679261	IBU 25100 ST 0,15	-
30	100	300	0.15	10	43679271	IBU 30100 ST 0,15	-
Stainless steel wire (INOX)							
3	100	300	0.10	10	43679402	IBU 03100 INOX 0,10	-
4	100	300	0.15	10	43679412	IBU 04100 INOX 0,15	-
5	100	300	0.15	10	43679422	IBU 05100 INOX 0,15	-
6	100	300	0.15	10	43679203	IBU 06100 INOX 0,15	-
8	100	300	0.15	10	43679213	IBU 08100 INOX 0,15	-
10	100	300	0.15	10	43679223	IBU 10100 INOX 0,15	-
12	100	300	0.15	10	43679233	IBU 12100 INOX 0,15	-
15	100	300	0.15	10	43679243	IBU 15100 INOX 0,15	-
18	100	300	0.15	10	43679482	IBU 18100 INOX 0,15	-
20	100	300	0.15	10	43679253	IBU 20100 INOX 0,15	-
25	100	300	0.15	10	43679263	IBU 25100 INOX 0,15	-
30	100	300	0.15	10	43679273	IBU 30100 INOX 0,15	-
Brass wire (MES)							
3	100	300	0.10	10	43679403	IBU 03100 MES 0,10	-
4	100	300	0.15	10	43679413	IBU 04100 MES 0,15	-
5	100	300	0.15	10	43679423	IBU 05100 MES 0,15	-
6	100	300	0.15	10	43679202	IBU 06100 MES 0,15	-
8	100	300	0.15	10	43679212	IBU 08100 MES 0,15	-
10	100	300	0.15	10	43679222	IBU 10100 MES 0,15	-

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D [mm]	W_F [mm]	L [mm]	D_F [mm]		Item no.	Designation	Price/unit EUR
12	100	300	0.15	10	43679232	IBU 12100 MES 0,15	-
15	100	300	0.15	10	43679242	IBU 15100 MES 0,15	-
18	100	300	0.15	10	43679483	IBU 18100 MES 0,15	-
20	100	300	0.15	10	43679252	IBU 20100 MES 0,15	-
25	100	300	0.15	10	43679262	IBU 25100 MES 0,15	-
30	100	300	0.15	10	43679272	IBU 30100 MES 0,15	-
Nylon plastic filament							
3	100	300	0.10	10	43679404	IBU 03100 Nylon 0,10	-
4	100	300	0.15	10	43679414	IBU 04100 Nylon 0,15	-
5	100	300	0.15	10	43679424	IBU 05100 Nylon 0,15	-
6	100	300	0.15	10	43679206	IBU 06100 Nylon 0,20	-
8	100	300	0.15	10	43679216	IBU 08100 Nylon 0,20	-
10	100	300	0.15	10	43679226	IBU 10100 Nylon 0,20	-
12	100	300	0.15	10	43679236	IBU 12100 Nylon 0,30	-
15	100	300	0.15	10	43679246	IBU 15100 Nylon 0,30	-
18	100	300	0.30	10	43679484	IBU 18100 Nylon 0,30	-
20	100	300	0.15	10	43679256	IBU 20100 Nylon 0,30	-
25	100	300	0.15	10	43679266	IBU 25100 Nylon 0,30	-
30	100	300	0.15	10	43679276	IBU 30100 Nylon 0,30	-



HBU, universal use

Generally suitable for all light cleaning and derusting work.



Special features:

- Optimum presentation on the **PFERD-**TOOL-CENTER using hanging hole and labelling with EAN number, designation and filament material.

Rows	L_T [mm]	L [mm]	D_F [mm]		Item no.	Designation	Price/unit EUR
Steel wire (ST)							
1	25	290	0.35	10	43670011	HBU 10 ST 0,35	-
2	25	290	0.35	10	43671001	HBU 20 ST 0,35	-
3	25	290	0.35	50	43672004	HBU 30 GP ST 0,35	-
				10	43672001	HBU 30 ST 0,35	-
4	25	290	0.35	50	43673004	HBU 40 GP ST 0,35	-
				10	43673001	HBU 40 ST 0,35	-
5	25	290	0.35	50	43670004	HBU 50 GP ST 0,35	-
				10	43670001	HBU 50 ST 0,35	-
6	25	290	0.35	10	43673111	HBU 60 ST 0,35	-
Stainless steel wire (INOX)							
1	25	290	0.30	10	43670013	HBU 10 INOX 0,30	-
2	25	290	0.30	10	43671003	HBU 20 INOX 0,30	-
3	25	290	0.30	10	43672003	HBU 30 INOX 0,30	-
4	25	290	0.30	50	43673005	HBU 40 GP INOX 0,30	-
				10	43673003	HBU 40 INOX 0,30	-
5	25	290	0.30	10	43670003	HBU 50 INOX 0,30	-
6	25	290	0.35	10	43673113	HBU 60 INOX 0,30	-
Brass wire (MES)							
2	25	290	0.30	10	43671002	HBU 20 MES 0,30	-
3	25	290	0.30	10	43672002	HBU 30 MES 0,30	-
4	25	290	0.30	10	43673002	HBU 40 MES 0,30	-
5	25	290	0.30	10	43670002	HBU 50 MES 0,30	-



HBU LH, Long Handle

Suitable for cleaning, derusting, and cleaning of weld seams and surfaces. Extra-long handle.

Special features:

- Optimum presentation on the **PFERD-**TOOL-CENTER using hanging hole and labelling with EAN number, designation and filament material.

Rows	L_T [mm]	L [mm]	D_F [mm]		Item no.	Designation	Price/unit EUR
Steel wire (ST)							
3	25	350	0.35	10	43672011	HBU LH 30 ST 0,35	-
4	25	350	0.35	10	43673011	HBU LH 40 ST 0,35	-



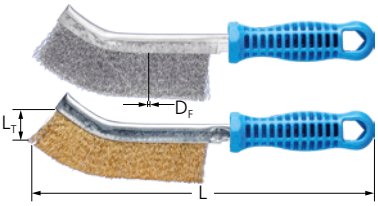
HBK, for fillet welds

Suitable for cleaning and derusting fillet welds and V-shaped welds thanks to the V shape.



Special features:
- Optimum presentation on the **PFERD-TOOL-CENTER** using hanging hole and labelling with EAN number, designation and filament material.

Rows	L_T [mm]	L [mm]	D_F [mm]		Item no.	Designation	Price/unit EUR
Steel wire (ST)							
3	35	290	0.35	10	43676001	HBK 30 ST 0,35	-
Stainless steel wire (INOX)							
3	35	290	0.35	10	43676003	HBK 30 INOX 0,35	-



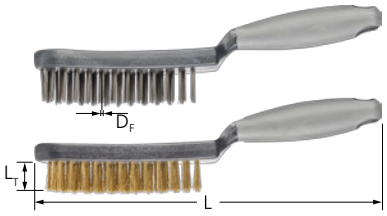
HBG, curved

Excellent for cleaning work in hard-to-reach areas, e.g. angles, corners and pipes.



Special features:
- Optimum presentation on the **PFERD-TOOL-CENTER** using hanging hole and labelling with EAN number, designation and filament material.

Rows	L_T [mm]	L [mm]	D_F [mm]		Item no.	Designation	Price/unit EUR
Steel wire (ST) – ST = brass-plated steel wire							
1	25	265	0.30	10	43660001	HBG 10 ST 0,30	-
Stainless steel wire (INOX)							
1	25	265	0.30	10	43662003	HBG 10 INOX 0,30	-
Brass wire (MES)							
1	25	265	0.30	10	43662002	HBG 10 MES 0,30	-



HBUP, plastic body

Generally suitable for all light cleaning and derusting work.

Special features:
- Safe and ergonomic working thanks to curved two-component handle.
- Optimum presentation on the **PFERD-TOOL-CENTER** using hanging hole and labelling with EAN number, designation and filament material.

Rows	L_T [mm]	L [mm]	D_F [mm]		Item no.	Designation	Price/unit EUR
Steel wire (ST)							
3	25	290	0.40	10	43674503	HBUP 30 ST 0,40	-
4	25	290	0.40	10	43674504	HBUP 40 ST 0,40	-
5	25	290	0.40	10	*43674505*	HBUP 50 ST 0,40	-
Stainless steel wire (INOX)							
2	25	290	0.40	10	43674510	HBUP 20 INOX 0,40	-
3	25	290	0.40	10	43674511	HBUP 30 INOX 0,40	-
4	25	290	0.40	10	43674512	HBUP 40 INOX 0,40	-
Brass wire (MES)							
3	25	290	0.30	10	43674507	HBUP 30 MES 0,30	-
4	25	290	0.30	10	43674508	HBUP 40 MES 0,30	-

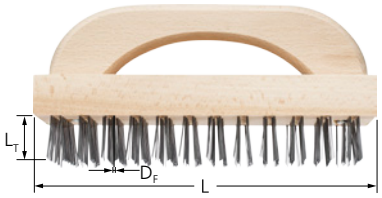


HBZ, for spark plugs

Particularly well suited to cleaning spark plugs, small workpieces and tools.

Special features:
- Excellent for the precise cleaning of small weld seams.
- Optimum presentation on the **PFERD-TOOL-CENTER** using hanging hole and labelling with EAN number, designation and filament material.

Rows	L_T [mm]	L [mm]	D_F [mm]		Item no.	Designation	Price/unit EUR
Brass wire (MES)							
3	15	145	0.15	10	43677002	HBZ 30 MES 0,15	-

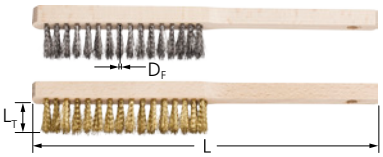


HBB, block brushes with a handle

Robust block brush made from wood for heavy-duty cleaning work.

Special features:
- Excellent for cleaning concrete mouldings.
- Ergonomic working thanks to curved handle.

Rows	L_T [mm]	L [mm]	D_F [mm]		Item no.	Designation	Price/unit EUR
Steel wire (ST)							
8	35	235	0.45	12	43678003	HBB 80 ST 0,45	-



HBFM, for precision mechanics

Excellent for light brushing on fine surfaces.



Special features:
- Optimum presentation on the **PFERD-**TOOL-CENTER using hanging hole and labelling with EAN number, designation and filament material.

Rows	L_T [mm]	L [mm]	D_F [mm]		Item no.	Designation	Price/unit EUR
Steel wire (ST)							
4	20	220	0.15	10	43674001	HBFM 40 ST 0,15	-
Stainless steel wire (INOX)							
4	20	220	0.15	10	43674003	HBFM 40 INOX 0,15	-
Brass wire (MES)							
4	20	220	0.15	10	43674002	HBFM 40 MES 0,15	-

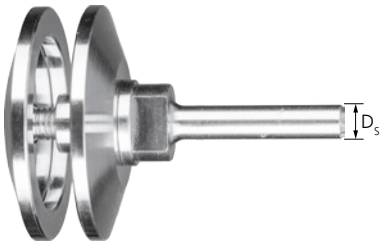


HBF, for files

The file brush effortlessly cleans chips from a clogged file.

Special features:
- Optimum presentation on the **PFERD-**TOOL-CENTER using hanging hole and labelling with EAN number, designation and filament material.

Rows	L_T [mm]	L [mm]	D_F [mm]		Item no.	Designation	Price/unit EUR
Steel wire (ST)							
1	7	232	0.15	5	12601000	HBF 10 ST 0,15	-

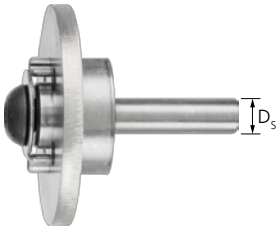


Arbor for wheel brushes

Enable use of wheel brushes with arbor hole on tool drives with collet, e.g. electric straight grinders and flexible shaft drives.

Special features:
- Secure hold of the brush thanks to highly accurate fit.

D_S [mm]	Suitable for brush diameter [mm]	Suitable for hole diameter D_A / D_M [mm]	Suitable for		Item no.	Designation	Price/unit EUR
8	100, 115, 125	12, 14	Wheel brushes RBU	1	43595061	BO 8/12-14 100-125	-
		22,2	Wheel brushes RBG	1	43595051	BO 8/22,2 100-125	-
12	150, 180	22,2	Wheel brushes RBU and RBG	1	43595062	BO 12/22,2 150-180	-
	200	22,2	Wheel brushes RBU and RBG	1	43595063	BO 12/22,2 200	-

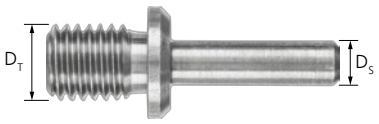


Arbor for composite disc brushes

Enable use of composite disc brushes with arbor hole on tool drives with collet, e.g. electric straight grinders and flexible shaft drives.

Special features:
- Secure hold of the brush thanks to highly accurate fit.

D_S [mm]	Suitable for brush diameter [mm]	Suitable for hole diameter D_A / D_M [mm]	Suitable for		Item no.	Designation	Price/unit EUR
12	75–100	22,2	Composite disc brushes DBU	1	43595104	BO 12/22,2 75-100	-
	125–150	22,2	Composite disc brushes DBU	1	43595105	BO 12/22,2 125-150	-



Arbor for POLISCRATCH, BO

For mounting POLISCRATCH brushes on straight grinders, flexible shafts or power drills.

Special features:
- Secure hold of the brush thanks to highly accurate fit.

D_T	D_S [mm]	Suitable for		Item no.	Designation	Price/unit EUR
M14x2	8	Wheel brushes RBU, POLISCRATCH	1	43595014	BO 8/M14	-

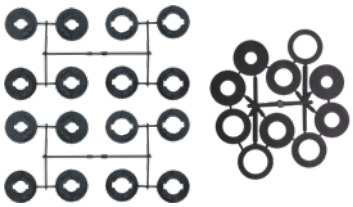


Arbor for cup brushes

Enable the use of cup brushes on tool drives with a collet. Also suitable for stationary applications with threaded cup brushes on CNC machines, automated centres and robots.

Special features:
- Secure hold of the brush thanks to highly accurate fit.

D_S [mm]	Suitable for brush diameter [mm]	Suitable for		Item no.	Designation	Price/unit EUR
12	65–80	Cup brushes TBG and TBU	1	79183976	BO 12/SW22 65-80	-
20	100	Cup brushes TBG and TBU	1	79183977	BO 20/SW27 100	-



Adapter set AK 32 and AK 32-2

The adapter set AK 32 is suitable for wheel brushes with a brush diameter from 150 mm in the narrow version. The adapter set AK 32-2 is suitable for wheel brushes with a brush diameter from 150 mm in the wide version.

Special features:
- Enable the use of brushes on all tool drives as the hole diameter is adjusted to the required dimension.
- Secure hold of the brush thanks to highly accurate fit.

Suitable for	Centre hole dia. D_A included [mm/inch]		Item no.	Designation	Price/unit EUR
RBU, slim type ≥ dia. 150 mm	20/18/14/12/25,4 (1)/22,2 (7/8)/ 16 (5/8)/12,7 (1/2)	1	43690100	AS AK 32	-
RBU, wide type ≥ dia. 150 mm	31.75/20/18/14/12/25.4 (1)/22.2 (7/8)/ 19.2 (3/4)/16 (5/8)/12.7 (1/2)	1	43690102	AS AK 32-2	-



Adapter pairs AM 50.8 and APM 50.8

The adapter pair AM 50.8 is suitable for wheel brushes with a brush diameter from 150 mm in the wide and composite versions. The adapter pair APM 50.8 is suitable for knotted wheel brushes with diameter 200–250 mm and crimped wheel brushes designed as deburring brushes.

Contents:
An AM 50.8 set contains 1 adapter pair.
An APM 50.8 set contains 3 adapter pairs.

Special features:
- Enable the use of brushes on all tool drives as the hole diameter is adjusted to the required dimension.
- Secure hold of the brush thanks to highly accurate fit.

Suitable for	Centre hole dia. D_A included [mm/inch]		Item no.	Designation	Price/unit EUR
RBU, wide type ≥ dia. 150 mm, RBUP, composite type ≥ dia. 150 mm	14	1	43690014	AP AM 50,8/14,0	-
	16,0	1	43690016	AP AM 50,8/16,0	-
	20,0	1	43690020	AP AM 50,8/20,0	-
	22,2	1	43690022	AP AM 50,8/22,2	-
	25,4	1	43690025	AP AM 50,8/25,4	-
	30	1	43690030	AP AM 50,8/30,0	-
	32,0	1	43690032	AP AM 50,8/32,0	-
	35	1	43690033	AP AM 50,8/35,0	-
RBG, knotted wheel brushes, dia. 200–250 mm, RBU, deburring brush type dia. 200–250 mm	16/18/20	1	43690035	APM 50,8/16-20	-
	22,2/25,4/30	1	43690036	APM 50,8/22,2-30	-
	32/35/40	1	43690037	APM 50,8/32-40	-



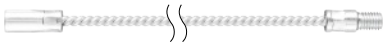
Quick-change handle SWG

Suitable for manual work with tube brushes.



Special features:
- Comfortable to use thanks to ergonomic shape.
- Combine with the IBUV extensions in order to access hard-to-reach areas.

L [mm]	Thread		Item no.	Designation	Price/unit EUR
135	M6	1	43690208	SWG-M6	-
	3/8 BSW	1	43690209	SWG-3/8 BSW	-
	1/2 BSW	1	43690207	SWG-1/2 BSW	-
150	Collet 6 mm	1	43690210	SWG-6	-

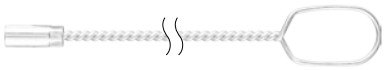


IBUV extension

Suitable for work with tube brushes with a thread.

Special features:
- Optimal access to hard-to-reach areas.
- To achieve a longer overall length, combine the IBUV extensions with the IBUS wire stems or with the SWG quick-change handles.

L [mm]	Thread	Outer dia. of screw socket [mm]		Item no.	Designation	Price/unit EUR
300	M6	12	1	43690211	IBUV M6 300	-
	3/8 BSW	12	1	43690212	IBUV 3/8 BSW 300	-
	1/2 BSW	16	1	43690203	IBUV 1/2 BSW 300	-
1,000	M6	12	1	43690200	IBUV M6 1000	-
	3/8 BSW	12	1	43690201	IBUV 3/8 BSW 1000	-
	1/2 BSW	16	1	43690202	IBUV 1/2 BSW 1000	-



IBUS wire stem

Suitable for work with tube brushes with a thread.

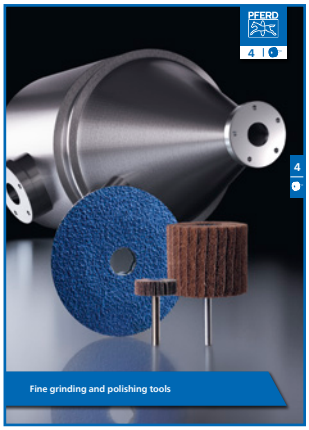
Special features:
- Optimal access to hard-to-reach areas.
- To achieve a longer overall length, combine the IBUS wire stem with the IBUV extensions.

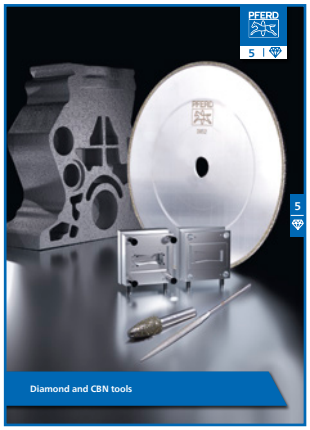
L [mm]	Thread	Outer dia. of screw socket [mm]		Item no.	Designation	Price/unit EUR
300	M6	12	1	43690213	IBUS M6 300	-
	3/8 BSW	12	1	43690214	IBUS 3/8 BSW 300	-
	1/2 BSW	16	1	43690215	IBUS 1/2 BSW 300	-
1,000	M6	12	1	43690204	IBUS M6 1000	-
	3/8 BSW	12	1	43690205	IBUS 3/8 BSW 1000	-
	1/2 BSW	16	1	43690216	IBUS 1/2 BSW 1000	-





















New additions to the PFERD product range

Stay up to date and discover our new products digitally and online. Our new products have **blue** item numbers in the Tool Manual.



PFERD

9

Tool drives

9

Tool drives
Table of contents

Tool drives

- Highlights from the PFERD range 3
- General information 4
- What the machine designations mean 6



Robot spindles for stationary applications

- Straight grinder 8
- Angle grinder with collet 11
- Angle grinder with threaded spindle 12



Air grinders

- Straight grinder 13
- Angle grinder with collet 27
- Angle grinder with threaded spindle 29
- Belt grinders and belt arms 31
- Filing machines 34
- Marking pens 35
- Fittings 36



Electric grinders

- Micro motor system 38
- Micro motor handpieces 38
- Accessories for micro motor systems 39
- Straight grinder 39
- Angle grinder 40
- EDGE FINISH system for work on edges 41
- Burnishing machine 42
- Belt grinders and belt arms 42
- Pipe belt grinder 43



Drive systems with DIN 10/DIN 15

- Flexible shaft drives – EL motors for flexible shafts and accessories 46
- Flexible shaft drives for Record Universal Motor and accessories 47
- Flexible shaft drives for Mini-Mammoth Electronic and accessories 47
- Flexible shaft drives for Mammoth Electronic and accessories 48
- Flexible shaft drives for Maxi-Mammoth Electronic and accessories 50
- Flexible shaft 4 and handpieces 51
- Flexible shaft 6 and handpieces 52
- Flexible shaft 6 Z and handpieces 52
- Flexible shaft 7 and handpieces 53
- Flexible shaft 10 and handpieces 54
- Flexible shaft 12 and handpieces 55
- Remote switch for flexible shafts and accessories 56
- Special flexible shafts for inner grinding of pipes and accessories 57
- Handpieces and accessories 58
- Angle drives and accessories 59
- Belt sanders 60
- Handpieces for rigid extensions 61
- Rigid extensions STV 62
- Flexible shaft adapter 63
- DL motors DIN 10 for rigid extensions 63
- EL motors DIN 10 for rigid extensions 64



Accessories for tool drives

- Extensions 65
- Collets 66
- Reducing collets and adapter 69
- Arbor 69
- Key 70
- Maintenance accessories 71
- Clamping flanges 71
- Frequency damper 72

Robot spindle PGAS 4/52 RS

PFERD robot spindles are manufactured according to the most stringent quality criteria and the latest technological standards, and are ideal for stationary applications in robot cells and machine tools and for installation in transfer lines. Scan the QR code to find out more about PFERD's range of robot spindles.

Advantages:
- High torque due to planetary gear.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer tool life.



Air grinder PGAS 3/380 E-HV

With the PGAS 3/380 E-HV, PFERD offers an air grinder with an elastically mounted spindle for low-vibration working. It also guarantees a longer tool life, especially when using tungsten carbide burrs. Scan the QR code to find out more about PFERD's range of air grinders.

Advantages:
- The compact design enables good accessibility.
- Dead man's switch using safety lever valve.



Micro motor system MIM STG3S 3/800 with handpiece

The micro motor control device is suitable for stepless rotational speed regulation of handpieces (max. 80,000 RPM clockwise and max. 30,000 RPM anti-clockwise). The stepless rotational speed control can be provided by hand or via foot switch. The control device has 2 switchable connection sockets for micro motor handpieces. There are 4 rotational speed storage spaces available per connected handpiece. Scan the QR code to find out more about PFERD's range of micro motor systems.

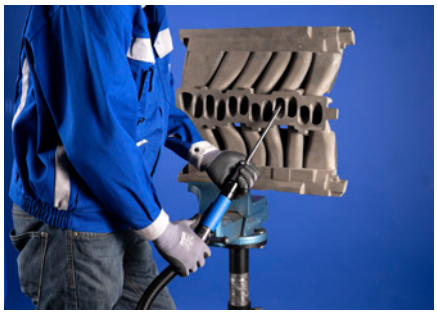
Advantages:
- High power stability.



Air-power motor PMA 4/220 HV with DIN 10 for rigid extensions

The air grinder with DIN 10 connection can be used for all manner of applications with different rigid extensions. Scan the QR code to find out more about PFERD's range of air grinders with a DIN 10 connection.

Advantages:
- Very powerful with a compact shape.
- Safe working using dead man's switch.



Tool drives
General information

The PFERD range includes tool drives for grinding, milling, brushing, cutting and polishing in manual applications as well as in robotic and semi-stationary applications. PFERD is one of only a few manufacturers that can offer a wide range of tools for work on surfaces and cutting of materials, as well as drives designed specifically for these tools, all from a single source.

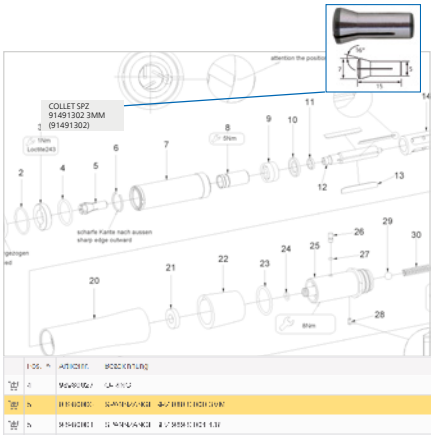
The wide product range includes air and electric grinders as well as drive systems with DIN 10/ DIN 15 and thus offers the best solution for almost any working environment.

PFERD tool drives are characterized by their performance and durability. They are less prone to faults and comply with the latest technological standards.



Spare parts catalogue

In our online spare parts catalogue, we have compiled all the information about every PFERD drive. Here you will find exploded drawings and other sketches as well as photos and ordering data for each individual spare part for our drives. With just a few clicks, you can select the required spare parts or spare parts kits, add them to your shopping cart and order them online directly from PFERD.



If you ever misplace the operating instructions, you can find them in our spare parts catalogue for download along with other documents such as CE declarations of conformity and illustrated DIY instructions for minor repairs.

Our clearly organized online spare parts catalogue can be found at **spareparts.pferd.com**.

In the information area you can see which documents are available for download.

Move your mouse over the different spare parts for your PFERD tool drive to see the exact product specifications. Clicking on the relevant code displays more information and a product image. In the lower section of the image, you have the option of adding the selected spare parts directly to the shopping cart and ordering them. Scan the QR code to access the online spare parts catalogue.

Explanation of pictograms used

General

80.000 RPM	Rotational speed
5 - 11 m/s	Belt speed
500 W	Power output
14 mm	Matching open-ended wrenches
5 mm	Matching hexagon socket wrenches
25 mm	Matching face pin spanners
4 mm	Matching Allen keys

Tool mounting

	Clamping range
6 mm	Collet
M14	Stud bolt
22,23 mm	Centre hole
36 mm	Guard
I 125 mm I	Suitable for disc diameter
19 x 100 mm	Suitable for grinding drum fitting
520/610 x 9 - 12 mm	Belt dimensions

Air grinders

3 Oil /min	Information on use – oil
Oil	Can be used without oil
max. 6,3 bar	Air pressure
12 mm	Air supply hose diameter

Electric grinders and flexible shaft drives

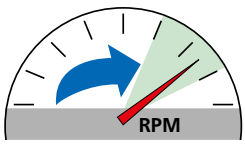
230 V 1~	Voltage
50 Hz	Frequency
	Protectively insulated in accordance with protection class II
	Protectively earthed in accordance with protection class I
	Safety transformer
	Safety extra-low voltage in accordance with protection class III

Flexible shafts

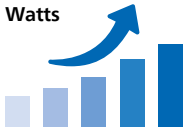
DIN 10	Drive-side shaft connection
G22	Handpiece-side sliding coupling

Criteria for selecting the optimum drive

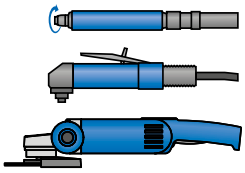
An important prerequisite for cost-effective work is selecting the optimum tool. The appropriate drive is selected taking the following criteria into consideration:



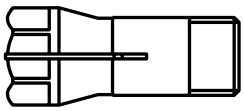
1. Rotational speed
The drive should always be selected according to the rotational speed and cutting speed recommendations for the tool. Refer to catalogue sections 2 to 8 and 10 for these recommendations.



2. Power output
The drive's power output is the decisive factor for maintaining the rotational speed under load. The load is determined by the material to be machined, the cutting characteristics of the tool and the contact pressure.



3. Design, shape and size
Each type of application places specific demands on the design and size of the tool drive. The different designs can be used for various applications,



4. Tool mounting
Depending on the PFERD tool selected, different tool mountings are available, e.g. collets or threaded spindles. Matching collets are allocated to every drive. Please refer to the accessories for tool drives in this catalogue for an overview of collets and spindle extensions. If you have any further questions, your personal PFERD sales representative will be happy to help you.

Tool drives
What the machine designations mean

The PFERD machine designations are structured to provide information about the drive type, as well as designs, throttle types and tool mountings. They also enable you to quickly and easily select the right rotational speed and performance classes for the various machine types.

The following overview provides a concise summary:

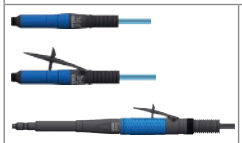
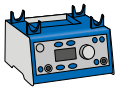
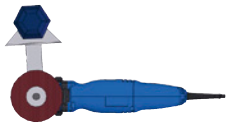
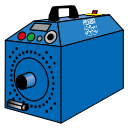
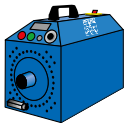
Figure	Description				Performance group	Rotational speed	Designs, throttle types, tool mountings
Robot spindles							
	**P** Pneumatic	**G** Straight grinder	**T** Turbine motor	**S** Collet	**1** x 100 watts	**1000** x 100 RPM	**RS** Robot spindle
	**P** Pneumatic	**G** Straight grinder	**A** Rear exhaust	**S** Collet	**3** x 100 watts	**370** x 100 RPM	**RS** Robot spindle **LL** Anti-clockwise
	**P** Pneumatic	**W** Angle grinder	**A** Rear exhaust	**S** Collet	**4** x 100 watts	**180** x 100 RPM	**RS** Robot spindle
Air grinders							
	**P** Pneumatic	**G** Straight grinder	**A** Rear exhaust	**S** Collet	**2** x 100 watts	**800** x 100 RPM	**E** Elastic bearing **Z** Two-handed **M** Medium length **V** Extended **DV** Ring throttle **HV** Lever throttle **DS** Instant start
	**P** Pneumatic	**W** Angle grinder	**A** Rear exhaust	**S** Collet	**1** x 100 watts	**800** x 100 RPM	**DV** Ring throttle **HV** Lever throttle
	**P** Pneumatic	**B** Belt grinder	**A** Rear exhaust		**2** x 100 watts	**200** x 100 RPM	**HV** Lever throttle
	**P** Pneumatic	**F** Filing machine			**4** Stroke length mm	**84** x 100 strokes per minute	**SV** Push-pull throttle **HV** Lever throttle
	**MST** Marking pen				**32** x 1000 strokes per minute		**DV** Ring throttle **F** Needle gauge: fine

Figure	Description				Performance group	Rotational speed	Designs, throttle types, tool mountings
Electric grinders							
	**MIM** Micro motor	**STG** Control device	**3** Version	**S** with switch	**3** x 100 watts	**800** x 100 RPM	**230 V** Volts
	**E** Electric	**G** Straight grinder	**ER** Electronically regulated		**8** x 100 watts	**280** x 100 RPM	
	**E** Electric	**B** Belt grinder	**ER** Electronically regulated		**8** x 100 watts	**280** x 100 RPM	
	**E** Electric	**B** Belt grinder	**ER** Electronically regulated		**12** x 100 watts	**25** x 100 RPM	**R** Pipe belt grinder
	**E** Electric	**W** Angle grinder	**ER** Electronically regulated		**17** x 100 watts	**75** x 100 RPM	
	**E** Electric	**S** Burnishing machine	**ER** Electronically regulated		**12** x 100 watts	**25** x 100 RPM	
DIN 10/DIN 15 drive systems							
	**E** Electric	**M** Motor	**ER** Electronically regulated		**8** x 100 watts	**280** x 100 RPM	**BW** Flexible shaft
	**R** Record	**U** Universal motor	**ER** Electronically regulated		**8** x 100 watts	**180** x 100 RPM	
	**MME** Mini-Mammoth electronic		**W** Alternating current		**11** x 100 watts	**120** x 100 RPM	
	**ME** Mammoth electronic		**W** Alternating current		**18** x 100 watts	**240** x 100 RPM	
	**MME** Maxi-Mammoth electronic				**40** x 100 watts	**150** x 100 RPM	
	**P** Pneumatic	**M** Motor	**A** Rear exhaust		**10** x 100 watts	**120** x 100 RPM	**HV** Lever throttle
	**E** Electric	**M** Motor	**ER** Electronically regulated		**8** x 100 watts	**280** x 100 RPM	

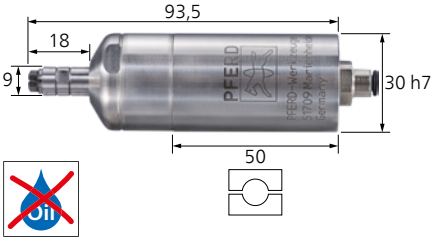
Robot spindles for stationary applications
General information

Custom-made products

If you cannot find the solution for your particular application in our comprehensive product range, we are happy to produce robot spindles to meet your preferences and requirements. Our sales representatives and technical advisers will be happy to assist you in analyzing your task. Simply contact us to arrange an appointment. You can find our worldwide sales office addresses at **www.pferd.com**.

On request, robot spindles can be supplied with deflection, in a reversible design, with clockwise or anti-clockwise rotation and with a tool change system.

Straight grinder



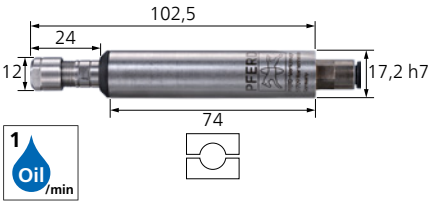
PGTS 1/1000 RS

Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the front. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.

Contents:
Quick coupling (BK 4 mm - 1/4"), 3 mm collet (collet group 15), 2 keys (DM SW 6/8 mm).

Special features:
- Stainless steel collet mounting.
- Very high concentricity in continuous use.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
100,000	100	0.32	0.32	2.7 / 4	0.296	80115012	PGTS 1/1000 RS	-



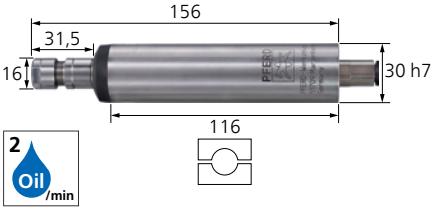
PGAS 2/800 RS

Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the rear. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.

Contents:
Quick coupling (BK 6 mm - 1/4"), 3 mm collet (collet group 23), 2 keys (1x EM SW 9 mm, 1x EM SW 10 mm).

Special features:
- High rotational speeds in a compact design.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer tool life.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
80,000	110	0.2	0.18	4 / 6	0.110	80115010	PGAS 2/800 RS	-



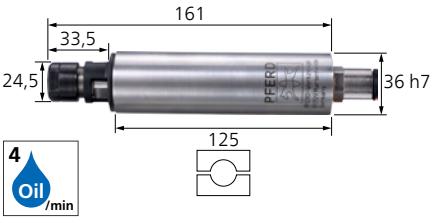
PGAS 3/370 RS | PGAS 3/370 RS LL

Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation (LL: anti-clockwise) and exhaust directed to the rear. For stationary applications in robot cells and machine tools, and for installation in transfer lines.

Contents:
Quick coupling (BK 8 mm - 1/4"), 6 mm collet (collet group 21), 2 keys (EM SW 14 mm).

Special features:
- Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer tool life.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
37,000	320	0.7	0.5	6 / 8	0.456	80115011	PGAS 3/370 RS	-
		0.8	0.6	6 / 8	0.456	80115013	PGAS 3/370 RS LL	-



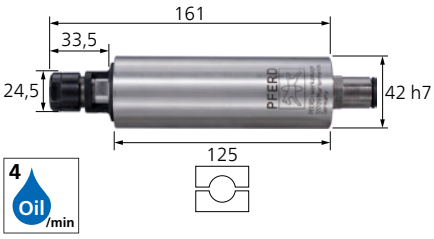
PGAS 4/280 RS

Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the rear. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.

Contents:
Quick coupling (BK 12 mm - 1/4"),
6 mm collet (collet group 16), 2 keys
(1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer tool life.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
28,000	380	0.89	0.69	10 / 12	0.750	80115014	PGAS 4/280 RS	-



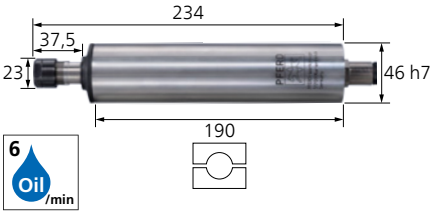
PGAS 4/220 RS

Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the rear. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.

Contents:
Quick coupling (BK 12 mm - 1/4"),
6 mm collet (collet group 16), 2 keys
(1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer tool life.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
22,000	400	0.71	0.51	10 / 12	0.974	80106002	PGAS 4/220 RS	-



PGAS 8/170 RS

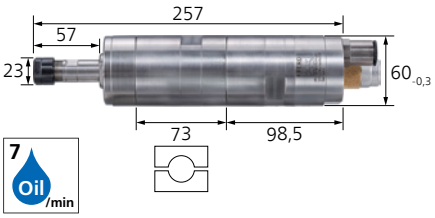
Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the rear. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.

Contents:
Quick coupling (BK 12 mm - 1/4"),
6 mm collet (collet group 16), 2 keys
(1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- Stainless steel collet mounting.
- Very high concentricity in continuous use.
- Double spindle bearing for a longer tool life.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
17,000	800	1.15	0.95	10 / 12	1.668	80115015	PGAS 8/170 RS	-

Robot spindles for stationary applications
Straight grinder



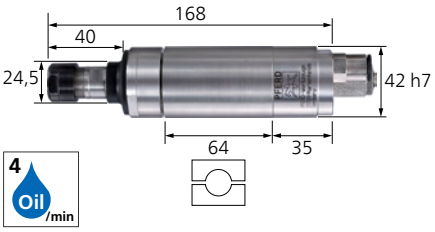
PGAS 11/58 RS

Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the rear. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.

Contents:
Quick coupling (BK14 mm - 1/2"), speed throttle, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- High torque due to planetary gear.
- Very high concentricity in continuous use.
- With stainless steel collet mounting and double spindle bearing for a longer tool life.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Exhaust hose internal dia. [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
5,800	1,100	1.58	1.38	11 / 14	16	3.355	80115016	PGAS 11/58 RS	-



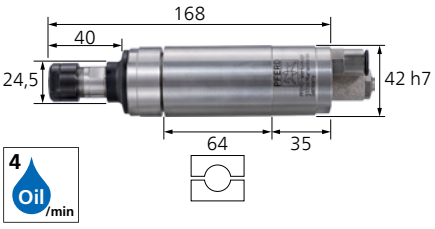
PGAS 4/52 RS

Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the rear. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.

Contents:
Quick coupling (BK 10 mm - 1/4"), speed throttle, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- High torque due to planetary gear.
- Very high concentricity in continuous use.
- With stainless steel collet mounting and double spindle bearing for a longer tool life.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Exhaust hose internal dia. [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
5,200	380	0.71	0.51	8 / 10	12	1.140	80115017	PGAS 4/52 RS	-



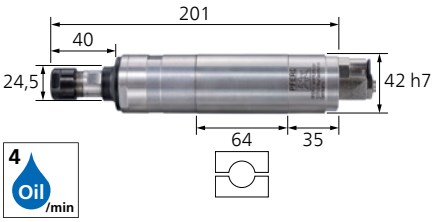
PGAS 4/24 RS

Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the rear. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.

Contents:
Quick coupling (BK 10 mm - 1/4"), speed throttle, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- High torque due to planetary gear.
- Very high concentricity in continuous use.
- With stainless steel collet mounting and double spindle bearing for a longer tool life.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Exhaust hose internal dia. [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
2,400	380	0.71	0.51	8 / 10	12	1.140	80115018	PGAS 4/24 RS	-



PGAS 4/12 RS

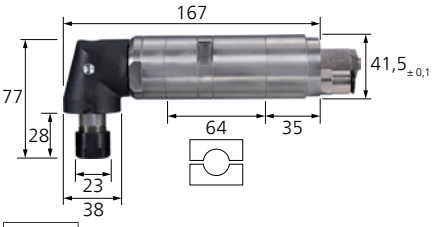
Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the rear. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.

Contents:
Quick coupling (BK 10 mm - 1/4"), speed throttle, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- High torque due to planetary gear.
- Very high concentricity in continuous use.
- With stainless steel collet mounting and double spindle bearing for a longer tool life.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Exhaust hose internal dia. [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
1,200	380	0.71	0.51	8 / 10	12	1.415	80115019	PGAS 4/12 RS	-

Angle grinder with collet



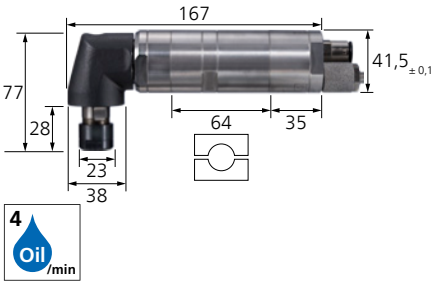
PWAS 4/180 RS

Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the rear. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.

Contents:
Quick coupling (BK 10 mm - 1/4"), speed throttle, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- Very high concentricity in continuous use.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Exhaust hose internal dia. [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
18,000	380	0.71	0.51	8 / 10	12	1.410	80115021	PWAS 4/180 RS	-



PWAS 4/52 RS

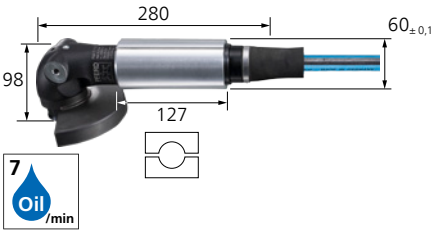
Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the rear. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.

Contents:
Quick coupling (BK 10 mm - 1/4"), speed throttle, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- Very high concentricity in continuous use.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Inner dia./ outer dia. of air supply hose [mm]	Exhaust hose internal dia. [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
5,200	380	0.71	0.51	8 / 10	12	1.410	80115022	PWAS 4/52 RS	-

Robot spindles for stationary applications
Angle grinder with threaded spindle



PWA 11/120 RS

Robot spindle manufactured according to the most stringent quality criteria and the latest technological standards with clockwise rotation and exhaust directed to the rear. Suitable for stationary applications in robot cells and machine tools and for installation in transfer lines.



Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 1 clamping nut, 2 flange screws, 2 spacer sleeves, 2 keys (1x STL SW 35 x 5 mm, 1x SKS SW 4 mm), guard.

Special features:
- With maximum **tool diameter up to 125 mm**.
- Autobalancer on the drive spindle and constant power delivery due to the centrifugal governor.
- Spindle lock pin for tool change with one key.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Spindle thread	Air supply hose internal dia. [mm]	Tool mounting [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
12,000	1,100	0.5	1	M14	13	22.23	2.430	80115023	PWA 11/120 RS	-



PGTS 1/1100 DV

Sophisticated air-powered straight grinder with turbine motor, exhaust directed to the front and ring throttle version. Offers maximum cutting speed for TC burrs and mounted points.

Contents:
1.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet (collet group 15), 2 keys (DM SW 6/8 mm).

Special features:
- No oil residues on the workpiece.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
110,000	75	0.32	0.15	6	140 x 30 x 30	0.188	80107320	PGTS 1/1100 DV	-



PGAS 2/800 E-DV | PGAS 2/800 E-HV

Sophisticated air-powered straight grinder with elastically mounted spindle, exhaust directed to the rear, ring throttle version (HV: lever). HV type has dead man's switch using safety lever valve. Minimizes vibrations when working.

Contents:
0.75 m exhaust hose and 1.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet (collet group 15), 2 keys (DM SW 6/8 mm).

Special features:
- Offers high cutting speed for TC burrs and mounted points.
- The removable spindle sleeve enables narrower and harder-to-reach areas to be accessed more easily.
- Easy guidance thanks to slim, lightweight design.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
80,000	110	0.27	0.26	4.8	145 x 23 x 23	0.136	80105021	PGAS 2/800 E-DV	-
						0.170	80105022	PGAS 2/800 E-HV	-



PGAS 1/750

Sophisticated air-powered straight grinder with exhaust directed to the rear and ring throttle version. Offers high cutting speed for TC burrs and mounted points.

Contents:
0.6 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet (collet group 1), 2 keys (EM SW 7 mm).

Special features:
- Easy guidance thanks to slim, lightweight design.
- The removable spindle sleeve enables narrower and harder-to-reach areas to be accessed more easily.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
75,000	110	0.35	0.2	5	159 x 20 x 20	0.142	80700026	PGAS 1/750	-



1 Oil /min

PGAS 1/700 | PGAS 1/700 HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and ring throttle version. Offers high cutting speed for TC burrs and mounted points. HV: with dead man's switch using safety lever valve.



Contents:
0.75 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet (collet group 15), 2 keys (DM SW 6/8 mm).

Special features:
- Light and easy to handle.
- Easy guidance thanks to slim, lightweight design.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
70,000	100	0.25	0.12	4.8	145 x 21 x 21	0.090	80105090	PGAS 1/700	-
						0.128	80105095	PGAS 1/700 HV	-



1 Oil /min

PGAS 1/600

Sophisticated air-powered straight grinder with exhaust directed to the rear and ring throttle version. Offers high cutting speed for TC burrs and mounted points.

Contents:
0.6 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet (collet group 1), 2 keys (EM SW 7 mm).

Special features:
- Easy guidance thanks to slim, lightweight design.
- The removable spindle sleeve enables narrower and harder-to-reach areas to be accessed more easily.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
60,000	110	0.28	0.2	5	159 x 20 x 20	0.142	80700025	PGAS 1/600	-



1 Oil /min

PGAS 2/600 E-DV | PGAS 2/600 E-HV

Sophisticated air-powered straight grinder with elastically mounted spindle, exhaust directed to the rear and ring throttle version. High cutting speed for TC burrs and mounted points. HV: with dead man's switch using safety lever valve.

Contents:
0.75 m exhaust hose and 1.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet (collet group 15), 2 keys (DM SW 6/8 mm).

Special features:
- Light and easy to handle and enables low vibrations when working.
- The removable spindle sleeve enables narrower and harder-to-reach areas to be accessed more easily.
- Easy guidance thanks to slim, lightweight design.

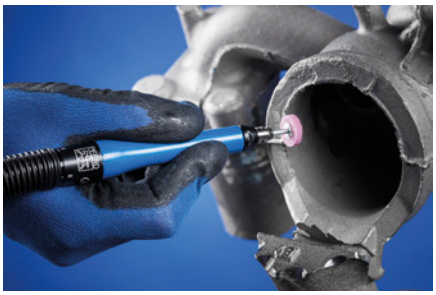
RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
60,000	100	0.26	0.24	4.8	145 x 23 x 23	0.137	80105096	PGAS 2/600 E-DV	-
						0.171	80105097	PGAS 2/600 E-HV	-



1 Oil /min

PGAS 1/550

Sophisticated air-powered straight grinder with exhaust directed to the rear and ring throttle version. Offers high cutting speed for TC burrs and mounted points.



Contents:
0.75 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet (collet group 15), 2 keys (DM SW 6/8 mm).

Special features:
- Easy guidance thanks to slim, lightweight design.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
55,000	100	0.25	0.12	4.8	153 x 21 x 21	0.091	80105100	PGAS 1/550	-



3 Oil /min

PG 3/500 S | PGAS 3/500 HV

Sophisticated air-powered straight grinder with exhaust directed to the front (version PGAS: to the rear). HV: with dead man's switch using safety lever valve. S: with push-pull throttle version suitable for continuous use.

Contents:
PG 3/500 S: 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 5), 2 keys (1x EM SW 7/16", 1x EM SW 9/16").

PGAS 3/500 HV: including 1 m exhaust hose.

Special features:
- Light and easy to handle.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
50,000	200	0.45	0.24	8.5	162 x 32 x 32	0.370	80107050	PG 3/500 S	-
					157 x 32 x 32	0.460	80107055	PGAS 3/500 HV	-



2 Oil /min

PGAS 3/380 E-DV | PGAS 3/380 E-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear. DV: with ring throttle version, HV: with dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Elastically mounted spindle guarantees a longer tool life, especially when using TC burrs.
- Low vibrations when working.
- The compact design enables good accessibility.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
38,000	290	0.7	0.6	8	220 x 39 x 39	0.472	80105153	PGAS 3/380 E-DV	-
						0.512	80105151	PGAS 3/380 E-HV	-



2 Oil /min

PGAS 3/350 DV | PGAS 3/350 HV

Sophisticated air-powered straight grinder with exhaust directed to the rear. DV: with ring throttle version, HV: with dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Very easy to handle and guide thanks to the slim, lightweight design.
- High power output with compact design.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
35,000	290	0.6	0.5	6	220 x 30 x 30	0.401	80105152	PGAS 3/350 DV	-
						0.441	80105053	PGAS 3/350 HV	-



2 Oil /min

PGAS 3/350 V-DV | PGAS 3/350 V-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear. DV: with ring throttle version, HV: with dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Very easy to handle and guide.
- Extended design, ideal for working in hard-to-reach areas.
- High power output with compact design.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
35,000	290	0.6	0.5	6	335 x 30 x 30	0.740	80105160	PGAS 3/350 V-DV	-
						0.780	80105155	PGAS 3/350 V-HV	-



2 Oil /min

PGS 3/300 DV | PGS 3/300 HV

Sophisticated air-powered straight grinder with exhaust directed to the front. DV: with ring throttle version, HV: with dead man's switch using safety lever valve.

Contents:
2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 10), 2 keys (1x EM SW 9 mm, 1x EM SW 10 mm).

Special features:
- Easy to handle and guide.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
30,000	240	0.6	0.5	8	160 x 30 x 30	0.348	80106028	PGS 3/300 DV	-
						0.384	80106029	PGS 3/300 HV	-



2 Oil /min

PGS 3/300 Z-DV | PGS 3/300 Z-HV

Sophisticated air-powered straight grinder with exhaust directed to the front. DV: with ring throttle version, HV: with dead man's switch using safety lever valve.

Contents:
2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 10), 2 keys (1x EM SW 9 mm, 1x EM SW 10 mm).

Special features:
- Precise guidance thanks to extended slim housing.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
30,000	290	0.6	0.5	8	197 x 30 x 30	0.433	80106023	PGS 3/300 Z-DV	-
						0.469	80106024	PGS 3/300 Z-HV	-



4 Oil /min

PGAS 4/300 HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 20), 2 keys (1x EM SW 12 mm, 1x EM SW 17 mm).

Special features:
- Very powerful with a compact design.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
30,000	440	0.88	0.84	8	245 x 39 x 39	0.830	80106021	PGAS 4/300 HV	-



4 Oil /min

PGAS 4/300 M-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Medium-length design for use when access is restricted.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
30,000	440	0.88	0.84	8	335 x 39 x 39	1.198	80106027	PGAS 4/300 M-HV	-



4 Oil /min

PGAS 4/300 V-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Extended design, ideal for working in hard-to-reach areas.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
30,000	440	0.88	0.84	8	445 x 39 x 39	1.421	80106022	PGAS 4/300 V-HV	-



3 Oil /min

PG 3/250 S

Sophisticated air-powered straight grinder with exhaust directed to the front. Suitable for continuous use thanks to push-pull throttle version. Provides constant power delivery due to the centrifugal governor.

Contents:
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 5), 2 keys (1x EM SW 7/16", 1x EM SW 9/16").

Special features:
- Small design.
- Good accessibility thanks to compact design.
- Light and easy to handle.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
25,000	225	0.21	0.49	8.5	162 x 32 x 32	0.370	80107060	PG 3/250 S	-



4 Oil /min

PGAS 4/250 E-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve. Can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- The elastically mounted spindle enables vibration-low working.
- Particularly suitable for use with TC burrs.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
25,000	440	0.98	0.87	8	220 x 46 x 46	0.870	80107181	PGAS 4/250 E-HV	-



4 Oil /min

PGAS 4/250 HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve. Can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 20), 2 keys (1x EM SW 12 mm, 1x EM SW 17 mm).

Special features:
- Very powerful with a compact design.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
25,000	440	0.98	0.87	8	245 x 39 x 39	0.830	80106026	PGAS 4/250 HV	-



4 Oil /min

PGAS 4/250 M-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve. Can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Medium-length design for use when access is restricted.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
25,000	440	0.98	0.87	8	335 x 39 x 39	1.198	80106007	PGAS 4/250 M-HV	-



4 Oil /min

PGAS 4/250 V-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve. Can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Extended design, ideal for working in hard-to-reach areas.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
25,000	440	0.98	0.87	8	445 x 39 x 39	1.421	80106006	PGAS 4/250 V-HV	-



4 Oil /min

PGAS 4/220 Z-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve. Can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 20), 2 keys (1x EM SW 12 mm, 1x EM SW 17 mm).

Special features:
- Very powerful with a compact design.
- Can be guided precisely thanks to comfortable two-handed operation.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
22,000	400	0.98	0.87	8	320 x 39 x 39	1.221	80106005	PGAS 4/220 Z-HV	-



5 Oil /min

PG 8/220 HV | PGAS 8/220 HV

Sophisticated air-powered straight grinder with exhaust directed to the front (PGAS: to the rear) and with dead man's switch using safety lever valve.

Contents:
PG 8/220 HV: 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 7), 2 keys (1x EM SW 9/16", 1x EM SW 3/4").
PGAS 8/220 HV including 1 m exhaust hose.

Special features:
- Compact design.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
22,000	600	0.95	0.85	8.5	184 x 46 x 46	0.950	80107081	PG 8/220 HV	-
					205 x 46 x 46	1.000	80107085	PGAS 8/220 HV	-



5 Oil /min

PG 8/220 V-HV | PGAS 8/220 VS-HV

Sophisticated air-powered straight grinder with exhaust directed to the front (VS-HV: to the rear) and with dead man's switch using safety lever valve.

Contents:
PG 8/220 V-HV: 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 7), 2 keys (1x EM SW 9/16", 1x EM SW 3/4"). PGAS 8/220 VS-HV: 1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 5), 2 keys (1x EM SW 7/16", 1x EM SW 9/16").

Special features:
- VS-HV type has exceptionally slim drive extension.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
22,000	600	0.95	0.85	8.5	310 x 46 x 46	1.400	80700012	PG 8/220 V-HV	-
					335 x 46 x 46	1.170	80706060	PGAS 8/220 VS-HV	-



7 Oil /min

PGAS 10/200 HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- Powerful drive for heavy-duty use.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
20,000	1,000	1.38	1.1	13	263 x 46 x 46	1.234	80101046	PGAS 10/200 HV	-



7 Oil /min

PGAS 10/200 V-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- Very long design, particularly well suited to working in hard-to-reach areas.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
20,000	1,000	1.38	1.1	13	503 x 46 x 46	2.047	80101045	PGAS 10/200 V-HV	-



4 Oil /min

PGAS 4/190 HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve. Can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 20), 2 keys (1x EM SW 12 mm, 1x EM SW 17 mm).

Special features:
- Very powerful with a compact design.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
19,000	370	0.78	0.72	8	245 x 39 x 39	0.830	80105180	PGAS 4/190 HV	-



4 Oil /min

PGAS 4/190 M-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve. Can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Medium-length design for use when access is restricted.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
19,000	370	0.78	0.72	8	335 x 39 x 39	1.198	80105171	PGAS 4/190 M-HV	-



4 Oil /min

PGAS 4/190 V-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve. Can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Extended design, ideal for working in hard-to-reach areas.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
19,000	370	0.78	0.72	8	445 x 39 x 39	1.421	80105170	PGAS 4/190 V-HV	-



5 Oil /min

PG 8/160 HV | PGAS 8/160 VM-HV

Sophisticated air-powered straight grinder with exhaust directed to the front (VM-HV: to the rear) and dead man's switch using safety lever valve. HV type has compact shape. VM-HV type has slim drive extension.

Contents:
PG 8/160 HV: 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 7), 2 keys (1x EM SW 9/16", 1x EM SW 3/4").

PGAS 8/160 VM-HV including 1 m exhaust hose.

Special features:
- Constant power delivery due to the centrifugal governor.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
16,000	600	0.34	0.85	8.5	184 x 46 x 46	0.950	80107041	PG 8/160 HV	-
					338 x 46	1.200	80706075	PGAS 8/160 VM-HV	-



7 Oil /min

PGAS 10/160 HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- Constant power delivery due to the centrifugal governor.
- Powerful drive for heavy-duty use.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
16,000	1,000	0.7	0.9	13	263 x 46 x 46	1.234	80101051	PGAS 10/160 HV	-



7 Oil /min

PGAS 10/160 V-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- Very long design, particularly well suited to working in hard-to-reach areas.
- Constant power delivery due to the centrifugal governor.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
16,000	1,000	0.7	0.9	13	503 x 46 x 46	2.047	80101050	PGAS 10/160 V-HV	-



4 Oil /min

PGAS 4/120 E-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve. Can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed and power output.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- The elastically mounted spindle enables vibration-low working.
- Constant power delivery due to the centrifugal governor.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
12,000	440	0.7	0.98	8	250 x 46 x 46	1.035	80107191	PGAS 4/120 E-HV	-



7 Oil /min

PGAS 10/120 HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- Constant power delivery due to the centrifugal governor.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
12,000	950	0.5	0.9	13	263 x 46 x 46	1.234	80101061	PGAS 10/120 HV	-



7 Oil /min

PGAS 10/120 V-HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 6 mm collet (collet group 16), 2 keys (1x EM SW 17 mm, 1x DM SW 20/22 mm).

Special features:
- Very long design, particularly well suited to working in hard-to-reach areas.
- Constant power delivery due to the centrifugal governor.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
12,000	950	0.5	0.9	13	503 x 46 x 46	2.047	80101060	PGAS 10/120 V-HV	-



5 Oil /min

PG 8/100 HV | PGAS 8/100 HV

Sophisticated air-powered straight grinder with exhaust directed to the front (PGAS: to the rear) and dead man's switch using safety lever valve.



Contents:
PG 8/100 HV: 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 7), 2 keys (1x EM SW 9/16", 1x EM SW 3/4").
PGAS 8/100 HV including 1 m exhaust hose.

Special features:
- Constant power delivery due to the centrifugal governor.
- Compact design.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
10,000	600	0.17	0.85	8.5	184 x 46 x 46	0.950	80107011	PG 8/100 HV	-
					205 x 46 x 46	1.000	80107015	PGAS 8/100 HV	-



5 Oil /min

PG 8/100 V-HV | PGAS 8/100 V-HV | PGAS 8/100 VM-HV

Sophisticated air-powered straight grinder with exhaust directed to the front (PGAS: to the rear) and dead man's switch using safety lever valve. VM-HV type has slim drive extension. Good size/weight to output ratio.

Contents:
Air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 7), 2 keys (1x EM SW 9/16", 1x EM SW 3/4").
PG 8/100 V-HV with 3 m air supply hose.
PGAS 8/100 V-HV and PGAS 8/100 VM-HV: including 1 m exhaust hose and 3 m air supply hose.

Special features:
- Extended version for work in hard-to-reach areas.
- Constant power delivery due to the centrifugal governor.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
10,000	600	0.17	0.85	8.5	310 x 46 x 46	1.400	80107003	PG 8/100 V-HV	-
							80107020	PGAS 8/100 V-HV	-
					338 x 46 x 46	1.200	80706085	PGAS 8/100 VM-HV	-



3 Oil /min

PGAS 3/70 HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- High torque due to planetary gear.
- Compact, easy-to-handle grinder.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
7,000	320	0.6	0.5	8	224 x 38 x 38	0.850	80106050	PGAS 3/70 HV	-



5 Oil /min

PG 8/50 V-HV

Sophisticated air-powered straight grinder with exhaust directed to the front and dead man's switch using safety lever valve. The extended version is for work in hard-to-reach areas.

Contents:
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 7), 2 keys (1x EM SW 9/16", 1x EM SW 3/4").

Special features:
- Particularly high torque due to reduction gear.
- Can be guided precisely thanks to comfortable two-handed operation.
- Robust design for heavy-duty use.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
5,000	600	0.85	0.34	8.5	350 x 46 x 46	1.600	80106075	PG 8/50 V-HV	-



3 Oil /min

PGAS 3/35 HV

Sophisticated air-powered straight grinder with exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- High torque due to planetary gear.
- Compact, easy-to-handle grinder.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
3,500	320	0.6	0.5	8	224 x 38 x 38	0.850	80106055	PGAS 3/35 HV	-



2 Oil /min

PGAS 2/5 DS

Sophisticated air-powered straight grinder with exhaust directed to the rear, instant-start throttle type and easy-to-handle drive for use of countersinks.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 1 overhead trolley, 6 mm collet (collet group 20), 2 keys (1x EM SW 12 mm, 1x EM SW 17 mm).

Special features:
- Instant start enables fast, reliable working.
- Rotational speed regulation for optimum results.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
500	160	0.4	0.3	6	235 x 30 x 30	0.564	80106056	PGAS 2/5 DS	-



PWAS 1/800 DV | PWAS 1/800 HV

Sophisticated compressed-air angle grinder with exhaust directed to the rear and collet. DV: with ring throttle version, HV: with dead man's switch using safety lever valve. Held like a pen.

Contents:
0.75 m exhaust hose and 1.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet (collet group 2), 2 keys (DM SW 6/8 mm).

Special features:
- Robust, without angular gear.
- Light and easy to handle.
- Smallest, high-revving angle grinder.

1 Oil /min

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
80,000	75	0.15	0.14	4.8	139 x 21 x 40	0.094	80205010	PWAS 1/800 DV	-
						0.134	80205015	PWAS 1/800 HV	-



PWSA 1/250

2 Oil /min

Sophisticated compressed-air angle grinder with exhaust directed to the rear and collet. The drive with a ring throttle can be used for continuous use. Compact design and ideal for working in hard-to-reach areas.



Contents:
0.6 m exhaust hose and 2 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 3 mm collet (collet group 3), 2 keys (1x EM SW 10 mm, 1x EM SW 13/64").

Special features:
- Low angle head height.
- Slim angle head.
- Light and easy to handle.

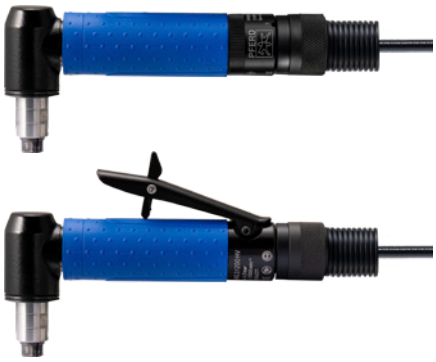
RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
25,000	110	0.3	0.2	5	149 x 20 x 39	0.217	80205025	PWSA 1/250	-



Arbor

The arbor replaces the collet. It is used for direct mounting of COMBIDISC tools.

Net weight [kg]	Item no.	Designation	Price/unit EUR
0.006	80810015	ASD 20 CD 1/4-20 G	-



PWAS 2/200 DV | PWAS 2/200 HV

Sophisticated compressed-air angle grinder with exhaust directed to the rear and collet. DV: with ring throttle version, HV: with dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Slim angle head for work in hard-to-reach areas.
- Easy to handle, compact shape.

2 Oil /min

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
20,000	230	0.55	0.45	6	167 x 30 x 70	0.420	80205038	PWAS 2/200 DV	-
						0.460	80205036	PWAS 2/200 HV	-



PWSA 4/200 HV

Sophisticated compressed-air angle grinder with exhaust directed to the rear, dead man's switch using safety lever valve and collet. Features a low angle head height and high spindle concentricity.

Contents:
1 m exhaust hose and 3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 5), 2 keys (1x EM SW 7/16", 1x EM SW 9/16").

Special features:
- Compact design.
- Good size/weight to output ratio.
- Dead man's switch using safety lever valve.

3 Oil /min

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
20,000	300	0.57	0.42	8.5	150 x 37 x 69	0.520	80700277	PWSA 4/200 HV	-



PWAS 4/200 HV

Sophisticated compressed-air angle grinder with exhaust directed to the rear, dead man's switch using safety lever valve and collet. Ideal for work in hard-to-reach areas.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Low angle head height.
- Dead man's switch using safety lever valve.

3 Oil /min

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
20,000	370	0.7	0.6	8	205 x 39 x 67	0.920	80209011	PWAS 4/200 HV	-



3 Oil /min

PWAS 4/160 HV

Sophisticated compressed-air angle grinder with exhaust directed to the rear, dead man's switch using safety lever valve and collet. Ideal for work in hard-to-reach areas.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Low angle head height.
- Constant power delivery due to the centrifugal governor.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
16,000	370	0.55	0.6	8	228 x 39 x 67	1.004	80209016	PWAS 4/160 HV	-



3 Oil /min

PWAS 4/120 HV

Sophisticated compressed-air angle grinder with exhaust directed to the rear, dead man's switch using safety lever valve and collet. Ideal for work in hard-to-reach areas.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 6 mm collet (collet group 6), 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Special features:
- Low angle head height.
- Constant power delivery due to the centrifugal governor.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
12,000	370	0.5	0.6	8	228 x 39 x 67	1.004	80209006	PWAS 4/120 HV	-

Angle grinder with threaded spindle



2 Oil /min

PWA 2/120 DV | PWA 2/120 HV

Sophisticated compressed-air angle grinder with 1/4-20 UNC threaded spindle and exhaust directed to the rear. DV: with ring throttle version, HV: with dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 1 key (EM SW 11 mm).

Special features:
- Special spindle for holding all COMBIDISC tools (use a backing pad without shank).
- Flat angle head for work in hard-to-reach areas.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
12,000	230	0.55	0.45	6	175 x 30 x 36	0.476	80205039	PWA 2/120 DV	-
						0.516	80205037	PWA 2/120 HV	-



Extensions for drive spindles

The shank of the abrasive disc holders can be replaced by suitable adapters. This enables the abrasive disc holder to be mounted directly to the drive spindle of the tool drive. Suitable for drives with spindle 1/4-20 UNC.

Net weight [kg]	Item no.	Designation	Price/unit EUR
0.010	87100727	SPV20 CD 1/4-20 UNC	-



7 Oil /min

PWA 11/120 HV

Sophisticated compressed-air angle grinder with M14 threaded spindle and 22.23 mm tool mounting, exhaust directed to the rear and dead man's switch using safety lever valve. With maximum **tool diameter up to 125 mm**.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 1 clamping nut, 2 flange screws, 2 spacer sleeves, 2 keys (1x STL SW 35 x 5 mm, 1x SKS SW 4 mm), guard, anti-vibration handle.

Special features:
- Robust design for heavy-duty use.
- Constant power delivery due to the centrifugal governor.
- Spindle lock pin for tool change with one key.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
12,000	1,100	0.5	1.2	13	285 x 47 x 98	2.100	80204081	PWA 11/120 HV	-



Oil

PWT 26/120 HV M14

Sophisticated compressed-air angle grinder with M14 threaded spindle and 22.23 mm tool mounting, exhaust directed to the bottom and dead man's switch using safety lever valve. With maximum **tool diameter of up to 125 mm** and very powerful turbine motor.



Contents:
1/2" female connecting thread, 2 keys (1x STL SW 35 x 5 mm, 1x SKS SW 5 mm), 1 clamping nut, 1 clamping flange, 1 spacer, guard, anti-vibration handle.

Special features:
- M14 threaded spindle for convenient mounting of various tools.
- Constant power delivery due to the centrifugal governor and with spindle lock pin for tool change with one key.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
12,000	2,600	0.9	2.25	16	295 x 40 x 97	2.200	80201010	PWT 26/120 HV M14	-



PWT 26/100 HV M14

Sophisticated compressed-air angle grinder with M14 threaded spindle and 22.23 mm tool mounting, exhaust directed to the bottom and dead man's switch using safety lever valve. With maximum **tool diameter of up to 150 mm** and very powerful turbine motor.

Contents:
1/2" female connecting thread, 2 keys (1x STL SW 35 x 5 mm, 1x SKS SW 5 mm), 2 clamping nuts, 3 clamping flanges, guard, anti-vibration handle.

Special features:
- M14 threaded spindle for convenient mounting of various tools.
- Constant power delivery due to the centrifugal governor and with spindle lock pin for tool change with one key.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
10,000	2,600	0.9	2.25	16	295 x 40 x 97	2.580	80201020	PWT 26/100 HV M14	-



PWT 26/85 HV M14

Sophisticated compressed-air angle grinder with M14 threaded spindle and 22.23 mm tool mounting, exhaust directed to the bottom and dead man's switch using safety lever valve. With maximum **tool diameter of up to 180 mm** and very powerful turbine motor.



Contents:
1/2" female connecting thread, 2 keys (1x STL SW 35 x 5 mm, 1x SKS SW 5 mm), 2 clamping nuts, 3 clamping flanges, guard, anti-vibration handle.

Special features:
- M14 threaded spindle for convenient mounting of various tools.
- Constant power delivery due to the centrifugal governor and with spindle lock pin for tool change with one key.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
8,500	2,600	0.9	2.25	16	295 x 40 x 97	2.800	80201030	PWT 26/85 HV M14	-

Belt grinders and belt arms



PBA 2/200 HV

Sophisticated compressed-air belt grinder with a **belt length of 305 mm x belt width 3 – 16 mm**, exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 1 key (1x SKS SW 4 mm), protective cover.

Special features:
- **Incl. belt grinder attachment arm BSVAK 9/9 x 305.**
- Easy to handle, compact shape.

Belt speed [m/s]	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
22	230	0.55	0.45	6	290 x 30 x 75	0.687	80705051	PBA 2/200 HV	-



BSVAK 9/25



BSVAK 9/25-1



BSVAK 4/16



BSVAK 9/9



BSVAK 9/16

Belt grinder attachment arms for PBA 2/200 HV

Belt grinder attachment arms in robust design and extremely slim fixing lug on the facing roller. With asymmetrical arms for flush lateral grinding and belt arm guide that can be fixed.

Special features:
- Use of the full roller width.
- BSVAK 9/25-1 with conical guide roller (range 1 mm).
- BSVAK 4/16, BSVAK 9/9 and BSVAK 9/16 with pad for stabilisation/support.

Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
9 x 25	3, 6, 9, 12, 16	305	0.083	84200318	BSVAK 9/25 x 305	-
	3, 6, 9, 12	305	0.082	84200319	BSVAK 9/25-1 x 305	-
4 x 16	3, 6, 9	305	0.052	84200315	BSVAK 4/16 x 305	-
9 x 9	9, 12	305	0.075	84200316	BSVAK 9/9 x 305	-
9 x 16	9, 12	305	0.088	84200317	BSVAK 9/16 x 305	-



3 Oil /min

PBA 4/160 HV

Sophisticated compressed-air belt grinder with a **belt length of 520 mm (*610 mm) x belt width 3 – 20 mm**, exhaust directed to the rear and dead man's switch using safety lever valve.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), protective cover, 2 keys (1x SKS SW 2.5 mm, 1x SKS SW 4 mm).

Special features:
- ***With adapter BSAD 41/36 x 610.**
- The belt grinder attachment can be pivoted on the drive system.
- Incl. belt grinder attachment arm.

Belt speed [m/s]	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
19.3	370	0.55	0.6	8	460 x 39 x 75	1.286	80705011	PBA 4/160 HV	-



Adapter for belt grinder attachment arms

Adapter for belt grinder attachment arm. Enables the use of belts with a belt length of 610 mm and a belt width of 3 – 20 mm.

Suitable belt length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
610	0.080	84200230	BSAD 41/36 x 610	-


BSVA 9/25


BSVA 9/25-1


BSVA 4/16


BSVA 9/16


BSVA 12/19


BSVA 18/23

Belt grinder attachment arms for PBA 4/160 HV

Belt grinder attachment arms in robust design and extremely slim fixing lug on the facing roller. With asymmetrical arms for flush lateral grinding and belt arm guide that can be fixed.

Special features:
- Use of the full roller width.
- BSVA 9/25-1 with conical guide roller (range 1 mm).
- BSVA 18/23 with metal roller and pad for stabilisation/support.

Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
9 x 25	3, 6, 9, 12, 16	520, 610	0.095	84200070	BSVA 9/25 x 520	-
	3, 6, 9, 12	520, 610	0.095	84200072	BSVA 9/25-1 x 520	-
4 x 16	3, 6, 9	520, 610	0.060	84200050	BSVA 4/16 x 520	-
9 x 16	9, 12	520, 610	0.096	84200060	BSVA 9/16 x 520	-
12 x 19	12, 16	520, 610	0.107	84200080	BSVA 12/19 x 520	-
18 x 23	20	520, 610	0.150	84200085	BSVA 18/23 x 520	-



4 Oil /min

PBS 5/155 HV 824 | PBS 5/155 HV 1924 | PBS 5/155 HV 2324

Sophisticated compressed-air belt grinder with a **belt length of 480 mm (*610 mm) x belt width 6 – 25 mm**, attachment arm, exhaust directed to the front and dead man's switch using safety lever valve.

Contents:
3 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 2 keys (1x SKS SW 3 mm, 1x SKS SW 5/32").

Special features:
- ***Belt length 610 mm x width 6 – 12 mm** with **belt grinder attachment arm BSVA 5/155-4/16** or **9/16**.
- The belt grinder attachment can be pivoted on the drive system.
- Balanced handling.

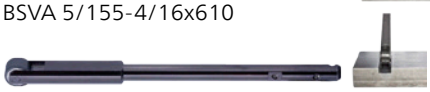
Belt speed [m/s]	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
21	370	0.6	0.4	8.5	397 x 37 x 115	1.390	80704010	PBS 5/155 HV 824	-
							80704020	PBS 5/155 HV 1924	-
							80704025	PBS 5/155 HV 2324	-


BSVA 5/155-8/24x480


BSVA 5/155-19/24x480


BSVA 5/155-23/24x480


BSVA 5/155-4/16x610


BSVA 5/155-9/16x610

Belt grinder attachment arms for PBS 5/155 HV

Belt grinder attachment arms in robust steel design and extremely slim fixing lug on the facing roller.

Special features:
- Use of the full roller width.
- With asymmetrical arms for flush lateral grinding and belt arm guide that can be fixed.

Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
8 x 24	6, 10, 12	480	0.070	90002116	BSVA 5/155-8/24x480	-
19 x 24	16, 20	480	0.086	90002115	BSVA 5/155-19/24x480	-
23 x 24	25	480	0.088	90002117	BSVA 5/155-23/24x480	-
4 x 16	6	610	0.070	90002152	BSVA 5/155-4/16x610	-
9 x 16	6, 10, 12	610	0.132	90002151	BSVA 5/155-9/16x610	-

Filing machines





PFGA 07/220

Air-powered filing machine with exhaust directed to the rear for work on surfaces and in hard-to-reach areas. The drive with a ring throttle can be used for continuous use.



Contents:
0.32 m exhaust hose and 1.5 m air supply hose with 1/4" female threaded connection and threaded quick coupling (STGA), 1 key (SKS SW 2.5 mm), arbor.

Special features:
- Light and easy to handle.
- Tool mountings: Round shank dia. 3 mm slot mounting (L x W x D) 10 x 1.5 x 10 mm for ceramic fibre files.

Frequency [strokes/min]	Stroke length [mm]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
22,000	0.7	0.05	0.03	4	220 x 28 x 28	0.180	80600200	PFGA 07/220	-



1 Oil /min

PF 8/90 HV

Sophisticated air-powered filing machine with exhaust directed to the front and dead man's switch using lever throttle. Suitable for files with a round shank.

Contents:
1.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 1 key (SF 24 STG-IG 1/4).

Special features:
- **Tool mounting dia. 4 mm to 6 mm.**
- Smooth running and very precise.
- Very low vibrations.

Frequency [strokes/min]	Stroke length [mm]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
9,000	8	0.078	0.078	4.8	180 x 40 x 40	1.038	80600205	PF 8/90 HV	-



1 Oil /min

PF 4/84 SV

Sophisticated air-powered filing machine with exhaust directed to the front and push-pull throttle for convenient continuous use. Suitable for files with a round shank, ceramic fibre files and grinding stones.

Contents:
1.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), 1 key (SKS SW 3 mm).

Special features:
- **Tool mounting dia. 3 mm to 4 mm.**
- Smooth running and very precise.
- Very low vibrations.

Frequency [strokes/min]	Stroke length [mm]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
8,400	4	0.03	0.03	3	200 x 30 x 30	0.300	80600210	PF 4/84 SV	-

Marking pens



1 Oil /min

MST 32 DV

Compressed-air marking pen with exhaust directed to the front, ring throttle version and very high stroke frequency. For applying markings and labels on metal, glass, plastics. Easy guidance thanks to slim design.



Contents:
2.5 m air supply hose with 1/4" male threaded connection and threaded quick coupling (STGI), TC engraving needle.

Special features:
- F type with fine engraving needle suitable for applying markings and labels on hardened tool steel.
- M type with medium engraving needle.
- G type with coarse engraving needle.

Frequency [strokes/min]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
32,000	0.03	0.02	4	162 x 17 x 17	0.152	80600130	MST 32 DV F	-
						80600150	MST 32 DV G	-
						80600140	MST 32 DV M	-



Replacement TC engraving needles for marking pens

Tungsten carbide engraving needles for marking pens. For applying markings and labels on metal, glass, plastics and on hardened tool steel.

Needle tip	Net weight [kg]	Item no.	Designation	Price/unit EUR
F (fine)	0.003	98980364	HM-GN MST32 F	-
G (coarse)	0.003	98980366	HM-GN MST32 G	-
M (medium)	0.003	98980365	HM-GN MST32 M	-

Fittings


DNA...


R 1/2 x 1/4

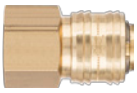

GWI 1/2-1/2


DR...


STGA...


SVKA...


VKA...


VKI...


BK...

PLS...


SF...


ONGA...


FF...


DGT...

Fittings for air grinders

PFERD offers different connecting fittings for air grinders.

Net weight [kg]	Item no.	Designation	Price/unit EUR
Double nipple			
0.063	80801150	DNA 1/2-1/2	-
0.019	80801145	DNA 1/4-1/4	-
Reducing nipple			
0.008	80801163	RNI 1/2 x 1/4	-
Threaded nut			
0.076	80801154	GWI 1/2-1/2	-
Sealing ring			
0.001	90000512	DR 1/2"	-
	90000510	DR 1/4"	-
	90000509	DR 1/8"	-
Threaded quick coupling			
0.105	80900004	STGA 1/2 NW12	-
0.040	80900801	STGA 1/2-16/AC	-
Self-closing valve couplings with male thread			
0.150	80801049	SVKA 1/2 DK	-
0.123	80801048	SVKA 1/4 DK	-
0.072	80801070	VKA 1/2	-

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Net weight [kg]	Item no.	Designation	Price/unit EUR
0.313	80801066	VKA 1/2 NW12	-
0.062	80801065	VKA 1/4	-
Self-closing valve couplings with female thread			
0.083	80801085	VKI 1/2	-
0.077	80801080	VKI 1/4	-
Accessory for robot spindle – quick coupling			
0.098	80900433	BK 14 mm - 1/2"	-
0.022	80900429	BK 12 mm - 1/4"	-
0.016	80900432	BK 10 mm - 1/4"	-
0.011	80900428	BK 8 mm - 1/4"	-
Accessory for robot spindle – air supply hose			
0.098	98980383	PLS 14 RS	-
	98980382	PLS 12 RS	-
	98980381	PLS 10 RS	-
	98980380	PLS 8 RS	-
In-line fine filter			
0.098	80807055	SF 30 STG-IG 1/2	-
0.125	80807060	SF 35 IG1/2-IG1/2	-
Maintenance unit			
0.944	80803005	ONG-A 1/2	-
2.302	80802010	ONG-A 1/4	-
Accessory for robot spindle – bottom flange			
1.686	98980646	FF 60	-
1.036	98980645	FF 46	-
0.378	98980644	FF 42	-
0.383	98980643	FF 41,5	-
0.438	98980642	FF 36	-
0.239	98980641	FF 30	-
Revolving nozzle			
0.125	80800050	DGT 1/2	-

Electric grinders
Micro motor system



MIM STG3S 3/800

Micro motor control device with high power stability for steplessly controlling the rotational speed of micro motor handpieces. The rotational speed control can be provided by hand or via foot switch.

Contents:
2 m power cable, 2 handpiece supports.

Special features:
- Max. 80,000 RPM clockwise rotation, max. 30,000 RPM anti-clockwise rotation.
- 2 switchable connection sockets for micro motor handpieces.
- 4 free rotational speed storage spaces per connected handpiece.

For micro motor handpieces [RPM]	Power output [watts]	Voltage [volts] 50–60 Hz	Output voltage [volts]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
80,000 – 1,000	350	230	50	250 x 215 x 130	2.980	83000025	MIM STG3S 3/800	-



MIM STG2S 3/600

Micro motor control device with high power stability for controlling the rotational speed of micro motor handpieces. Stepless rotational speed control can be provided by hand or via foot switch.

Contents:
2 m power cable, 2 handpiece supports.

Special features:
- Max. 60,000 RPM clockwise rotation, max. 30,000 RPM anti-clockwise rotation.

For micro motor handpieces [RPM]	Power output [watts]	Voltage [volts] 50–60 Hz	Output voltage [volts]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
60,000 – 1,000	260	230	36	215 x 180 x 100	2.338	83000020	MIM STG2S 3/600	-

Micro motor handpieces



MIM HAS 3/800 SP3



MIM HAS 2/600 SP3



MIM HAS 3/600 SP3



MIM HAS 3/600 S3



MIM HAS 3/500 VS-SP3



MIM WZS 3/300 90° S3



MIM WZS 3/300 45° S3

Compatible with the micro motor control devices

Micro motor handpieces with high power stability, very high rotation accuracy and brushless motor.

Contents:
2 keys (1x MIM SPS DK D 7,
1x MIM ARS HA D 23.5), 3 mm collet, 1.8 m handpiece cable.

Special features:
- Automatic speed limitation.
- Start interlock without clamped tool.
- Extremely energy-efficient and quiet in comparison to air grinders.

Rotational speed [RPM]	Power consumption [watts]	Power output [watts]	Low voltage [volts]	Collet group	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Compatible with STG3S									
80,000 – 1,000	350	180	50	17	175 x 30 x 30	0.330	83000120	MIM HAS 3/800 SP3	-
Compatible with STG3S and STG2S									
60,000 – 1,000	260	150	36 / 50	17	160 x 30 x 30	0.260	83000102	MIM HAS 2/600 SP3	-
						0.315	83000103	MIM HAS 3/600 SP3	-
				19	170 x 30 x 30	0.393	83000110	MIM HAS 3/600 S3	-
50,000 – 1,000	260	150	36 / 50	17	190 x 30 x 30	0.325	83000105	MIM HAS 3/500 VS-SP3	-
30,000 – 1,000	260	120	36 / 50	18	180 x 24 x 24	0.238	83000150	MIM WZS 3/300 90° S3	-
					185 x 24 x 24	0.185	83000160	MIM WZS 3/300 45° S3	-



MIM FU-R



MIM FU-E/A



MIM VLK HAS/WZS 3M

Accessories for micro motor system

PFERD offers a Vario micro motor foot switch for stepless rotational speed control, a micro motor foot switch for switching on and off, and a 3 m micro motor extension cable for handpieces as accessories for micro motor systems.

Net weight [kg]	Item no.	Designation	Price/unit EUR
Vario foot switch MIM FU-R			
0.845	83000070	MIM FU-R	-
On/off foot switch MIM FU-E/A			
0.310	83000080	MIM FU-E/A	-
Extension cable MIM VLK HAS/WZS 3 m			
0.152	90014007	MIM VLK HAS/WZS 3M	-

Straight grinder



EGER 8/280

Electric straight grinder which meets the highest technical standards and incorporates the latest ergonomic findings and requirements. The digital electronics enable a constant rotational speed to be maintained.

Contents:
4 m power cable, 6 mm collet (collet group 22), 2 keys (1x EM SW 13 mm, 1x EM SW 17 mm).

Special features:
- Stepless rotational speed regulation.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.

RPM	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
28,000 – 8,500	750	410	230	410 x 77 x 77	1.800	83108280	EGER 8/280	-



EGER 8/90

Electric straight grinder which meets the highest technical standards and incorporates the latest ergonomic findings and requirements. The digital electronics enable a constant rotational speed to be maintained.

Contents:
4 m power cable, 6 mm collet (collet group 22), 2 keys (1x EM SW 13 mm, 1x EM SW 17 mm).

Special features:
- Stepless rotational speed regulation.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.

RPM	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
9,000 – 2,500	710	410	230	410 x 77 x 77	1.800	83108090	EGER 8/90	-



UWER 18/120 SI | UWER 18/110 SI

Electric angle grinder with M14 drive spindle thread and tool mounting hole dia. 22.23 mm. Max. **tool diameter up to 115 mm** for 18/120 SI type and **up up to 125 mm** for 18/110 SI type.

Contents:
4 m power cable, 1 clamping flange, 1 quick-mounting nut, surface guard, anti-vibration handle.

Special features:
- With robust design for heavy-duty use, spindle lock pin, stepless rotational speed control and digital electronics for a constant rotational speed.
- With overload protection with anti-kick-back function and lateral anti-vibration handle.
- Smooth start-up to protect people, tools and the drive and lockable on/off switch.

RPM	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
11,500 – 2,800	1,750	1,150	230	400 x 70 x 80	2.800	83500200	UWER 18/120 SI	-
11,000 – 2,700	1,750	1,150	230	400 x 70 x 80	2.800	83500250	UWER 18/110 SI	-



Guards

PFERD offers various guards for safe cutting (HT) and grinding (FL).

Net weight [kg]		Item no.	Designation	Price/unit EUR
0.160	1	98970072	H45-115 FL-SV	-
0.325	1	98970071	H45-115 HT-SV	-
0.164	1	84108010	H45-125 FL-SV	-
0.351	1	84108000	H45-125 HT-SV	-



UWER 18/95 SI

Electric angle grinder with M14 drive spindle thread and tool mounting hole dia. 22.23 mm. Max. **tool diameter up to 150 mm**.

Contents:
4 m power cable, 1 clamping flange, 1 quick-mounting nut, surface guard, anti-vibration handle.

Special features:
- With robust design for heavy-duty use, spindle lock pin, stepless rotational speed control and digital electronics for a constant rotational speed.
- With overload protection with anti-kick-back function and lateral anti-vibration handle.
- Smooth start-up to protect people, tools and the drive and lockable on/off switch.

RPM	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
9,500 – 2,300	1,750	1,150	230	400 x 70 x 90	3.000	83500300	UWER 18/95 SI	-



Guards

PFERD offers various guards for safe cutting (HT) and grinding (FL).

Net weight [kg]		Item no.	Designation	Price/unit EUR
0.450	1	84108020	H51-150 FL-SV	-
0.491	1	84108030	H51-150 HT-SV	-



EWER 17/75

Electric angle grinder with M14 drive spindle thread and tool mounting hole dia. 22.23 mm. Max. **tool diameter up to 125 mm**.

Contents:
4 m power cable, 1 clamping flange, 1 clamping nut, 1 key (STL SW 35 x 5.3 mm), surface guard, anti-vibration handle.

Special features:
- With spindle lock pin, stepless rotational speed control and digital electronics for a constant rotational speed.
- Adjusted rotational speed range for tools with low cutting speeds.
- With smooth start-up to protect people, tools and the drive as well as overload protection.

RPM	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
7,500 – 2,700	1,700	1,000	230	415 x 77 x 84	2.810	83500350	EWER 17/75	-

EDGE FINISH system for work on edges



UWER 18/110 EF

Electric grinder which meets the highest technical standards and incorporates the latest ergonomic findings and requirements. With M14 drive spindle thread. Max. chamfer height of 6 mm.

Contents:
4 m power cable, 3 keys (1x SKS SW 5 mm, 1x HS 40-42, 1x SDR TX 15K).

Special features:
- With spindle lock pin, stepless rotational speed control and digital electronics for a constant rotational speed.
- With anti-vibration handle.
- Smooth start-up to protect people, tools and the drive and lockable on/off switch.

RPM	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Incl. cutting insert holder								
11,000 – 2,750	1,750	1,150	230	500 x 70 x 150	7.360	83500990	EDGE FINISH UWER 18/110 EF-30° TK	-
						83500980	EDGE FINISH UWER 18/110 EF-R3/45° TK	-
Excl. cutting insert holder								
11,000 – 2,750	1,750	1,150	230	500 x 70 x 150	3.640	83501000	EDGE FINISH UWER 18/110 EF	-



ESER 17/75

Electric burnishing machine with two keyways for increased power transmission on drum tools. With stepless rotational speed control and drive spindle with CD-R mounting for felt discs diameter 50 mm to protect the tool. With **tool mounting dia. x width 19 x 100 mm**.



Contents:
4 m power cable, hand guard, anti-vibration handle, detachable drive spindle.

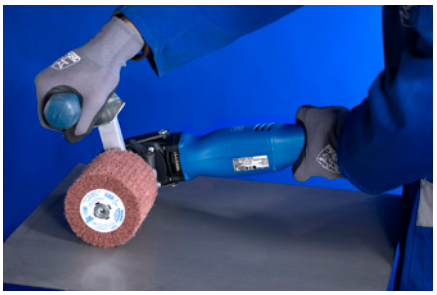
Special features:
- With spindle lock pin, stepless rotational speed control and digital electronics for a constant rotational speed.
- M14 drive spindle for mounting drum tools with female thread.
- With smooth start-up to protect people, tools and the drive as well as overload protection.

RPM	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
7,500 – 2,700	1,700	1,000	230	415 x 77 x 207	3.065	83300260	ESER 17/75	-



ESER 12/25

Low-speed electric burnishing machine with high torque and stepless rotational speed control. Has a drive spindle with CD-R mounting for felt discs diameter 50 mm to protect the tool. With **tool mounting dia. x width 19 x 100 mm**.



Contents:
4 m power cable, hand guard, anti-vibration handle, detachable drive spindle.

Special features:
- With spindle lock pin and digital electronics for a constant rotational speed as well as two keyways for increased power transmission on drum tools.
- M14 drive spindle for mounting drum tools with female thread.
- With smooth start-up to protect people, tools and the drive as well as overload protection.

RPM	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
2,500 – 900	1,200	750	230	369 x 72 x 227	3.340	83300270	ESER 12/25	-

Belt grinders and belt arms



EBER 8/280

Electric belt grinder with a **belt length of 520 mm (*610 mm) x width 3 – 20 mm**. The belt arm can be changed without a key. With stepless rotational speed control.

Contents:
4 m power cable, 1 belt arm BSVA 9/24x520, protective cover SDVH.

Special features:
- *Possible with an **EBSA 610** adapter.
- Digital electronics for constant rotational speed and overload protection.
- Smooth start-up to protect people, tools and the drive.

Belt speed [m/s]	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
32 – 12	800	550	230	522 x 77 x 118	2.100	83208280	EBER 8/280	-



Adapter for belt grinder attachment arms

Enables the use of belts with a **belt length of 610 mm and a belt width of 3 – 20 mm**.

Suitable belt length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
610	0.075	84200700	EBSA 610	-



BSVA 9/24



BSVA 4/18



BSVA 16/19

Belt grinder attachment arms for EBER 8/280

Belt grinder attachment arms allowing easy, quick belt replacement due to spring clamping. The belt grinder attachment can be pivoted on the respective drive system or handpiece and therefore allows flexible adaptation to each individual work situation.

Special features:
- Robust design.
- Use of the full roller width.
- Extremely slim fixing lugs on the facing roller.

Width x roll dia. [mm]	Suitable belt width [mm]	Suitable belt length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
9 x 24	3, 6, 9, 12, 16	520, 610	0.073	84200701	BSVA 9/24x520	-
4 x 18	3, 6, 9	520, 610	0.060	84200702	BSVA 4/18x520	-
16 x 19	12, 16	520, 610	0.100	84200703	BSVA 16/19x520	-



Protective cover for EBER 8/280

PFERD offers protective covers for the EBER 8/280.

Net weight [kg]		Item no.	Designation	Price/unit EUR
0.051	1	98960081	SDVH	-

Pipe belt grinder



EBER 17/75 R

Electric pipe belt grinder with a **belt length of 610 – 820 mm x width 12 – 40 mm**. The lockable guide roller ensures greater contact pressure or a large surface contact angle.



Contents:
4 m power cable, 1 key (SKHS SW 5 mm), 4 rolls.

Special features:
- With spindle lock pin, overload protection, stepless rotational speed control and digital electronics for a constant rotational speed.
- With telescopic arm for using different belt lengths and fixed side plates to protect the workpiece.
- Smooth start-up to protect people, tools and the drive.

Belt speed [m/s]	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
22.8 – 8.2	1,700	1,000	230	595 x 77 x 190	4.027	83200250	EBER 17/75 R	-



EBER 12/25 R

Low-speed electric pipe belt grinder with a **belt length of 610 – 820 mm x width 12 – 40 mm**. With stepless rotational speed control and lockable guide roller for greater contact pressure or a large surface contact angle.



Contents:
4 m power cable, 1 key (SKHS SW 5 mm), 4 rolls.

Special features:
- With spindle lock pin and digital electronics for a constant rotational speed.
- Fixed side plates on the rolls to protect the workpiece.
- With smooth start-up to protect people, tools and the drive as well as overload protection.

Belt speed [m/s]	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
7.6 – 2.7	1,200	750	230	440 x 77 x 190	4.212	83200260	EBER 12/25 R	-

How to find the matching flexible shaft to your drive



Here you will find a selection of flexible shafts for the individual drives in line with the explanation below.

Flexible shafts and handpieces/attachments must always be selected according to the required rotational speed and power output. Maximum cost-effectiveness is achieved through the combination of a high-performance tool and an optimal drive.

① **Drive**
Alternative drives with DIN 10 connection. (Exceptions DIN 15).

② **Flexible shaft (BW)**
Possible flexible shafts.

③ **Rotational speed [RPM]**
Rotational speed range of the drive system.

④ Rotational speed range for flexible shafts and handpieces

⑤ **Connection**
Drive-side connection DIN 10 / DIN 15 and handpiece-side connections (G16 to G28 and DPF, SRF).

⑥ **Suitable flexible shaft**
● ideally suitable
○ suitable
– unsuitable

① Drive motor ▶		EMER 8/280 BW 	EMER 8/90 BW 	RUER 8/180 SI 	MMEW 11/120 	MEW 18/240 ME 22/240 	MEW 18/150 ME 22/150 	MME 40/150 DIN 15 
③ Rotational speed range [RPM]: ▶		28,000–8,500	9,000–2,500	18,000–500	12,000–800	24,000–100	15,000–100	15,000–100
② Flexible shafts ▼	④ Drive [RPM] ▼							
BW 4 DIN 10/G16	40,000–15,000	⑥ ○	–	○	–	○	○	–
BW 4 PST-T DIN 10 ⑤	7,650– 1,500	–	●	●	●	○	○	–
BW 6 DIN 10/G16	25,000–11,000	●	–	●	○	●	○	–
BW 6 DIN 10/DPF BW 6 DIN 10/SRF	18,000– 9,000	○	–	●	○	○	○	–
BW 7 DIN 10/G22	25,000–11,000	●	–	○	○	●	○	–
BW 7 PST-T DIN 10	4,250– 1,500	–	○	○	●	○	○	–
BW 10 SE 11 DIN 10/G28	18,000– 750	○	○	–	○	●	●	–
BW 10 SE 11 DIN 15/G28	18,000– 750	○	○	–	–	–	–	●
BW 12 DIN 10/G28	12,000– 850	–	–	–	–	●	●	–
BW 12 DIN 15/G28	12,000– 850	–	–	–	–	–	–	●
FS-BW 7 DIN 10/G22	25,000–11,000	●	–	○	○	●	○	–
FS-BW 10 DIN 10/G28	18,000– 750	○	○	–	○	●	●	–
FS-BW 12 DIN 10/G28	12,000– 850	–	–	–	–	●	●	–

● = ideally suitable ○ = suitable – = unsuitable

All data is also valid for flexible shaft versions without handpieces and 2-metre versions.



EMER 8/280 BW

Electronic flexible shaft drive with stepless rotational speed control and DIN 10 flexible shaft connection. With digital electronics for constant rotational speed.



Contents:
4 m power cable, 2 keys (STS D 4 mm).

Special features:
- A pipe stand protects the drive.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.

Rotational speed [RPM]	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
28,000 – 8,500	750	410	230	455 x 120 x 120	2.500	85206400	EMER 8/280 BW	-



EMER 8/90 BW

Electronic flexible shaft drive with stepless rotational speed control and DIN 10 flexible shaft connection. With digital electronics for constant rotational speed.



Contents:
4 m power cable, 2 keys (STS D 4 mm).

Special features:
- A pipe stand protects the drive.
- Overload protection.
- Smooth start-up to protect people, tools and the drive.

Rotational speed [RPM]	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
9,000 – 2,500	710	410	230	455 x 120 x 120	2.500	85206410	EMER 8/90 BW	-



RUER 8/180 SI

Electronic flexible shaft drive with DIN 10 flexible shaft connection and robust design for heavy-duty use and stepless rotational speed control. Particularly suitable for use in tool and mould construction.

Contents:
2.5 m power cable, 2.25 m connecting cable,
2 keys (STS D 4 mm).

Special features:
- Electronics for constant rotational speed.
- Overload protection.
- Very little noise generated.

Rotational speed [RPM]	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
18,000 – 500	1,020	600	230	222 x 98 x 98	1.650	85205710	RUER 8/180 SI	-



TSA L 1400

TS L 1400

Accessories for tool drives RUER

Table stand TS L 1400 for attachment to bench tops up to 65 mm thick with screw clamp. The support TSA L 1400 matches the table stand and allows optimum placement of the various handpieces, ready for use.

Description	Net weight [kg]	Item no.	Designation	Price/unit EUR
Table stand	2.170	86320001	TS L 1400	-
Handpiece support	0.450	86320005	TSA L 1400	-

Flexible shaft drives for Mini-Mammoth Electronic and accessories



MMEW 11/120

Electronic flexible shaft drive with DIN 10 flexible shaft connection and robust design for heavy-duty use, stepless rotational speed control and very little noise generated.

Contents:
2.5 m power cable, 2 keys (STS D 4 mm).

Special features:
- Most powerful and stable torque with stepless rotational speed control.
- Mounted grinding and polishing tools with diameter ≥ 60 mm are not suitable for continuous use with the Mini-Mammoth Electronic.
- With smooth start-up to protect people, tools and the drive as well as overload protection.

Rotational speed [RPM]	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
12,000 – 800	1,100	800	230	270 x 160 x 180	7.900	85205800	MMEW 11/120	-



MEW 18/240 | ME 22/240

Electronic flexible shaft drive with DIN 10 flexible shaft connection, generates very little noise and has high torque, even at low rotational speeds. Achieves a maximum rotational speed of 24,000 RPM.

Contents:
MEW 18/240 with 1-phase AC: 4 m power cable with plug, 2 Allen keys.
ME 22/240 with 3-phase AC: 4 m power cable without plug, 2 keys (STS D 4 mm).

Special features:
- Most powerful and stable torque with stepless rotational speed control.
- Removable operating console with possibility of extension, e.g. hanging design for work in boilers.
- With smooth start-up to protect people, tools and the drive as well as overload protection.

Rotational speed	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
24,000 – 100	2,000	1,500	200 – 240	445 x 200 x 320	24.500	85202037	MEW 18/240	-
	2,700	2,200	380 – 480	445 x 200 x 320	24.500	85202041	ME 22/240 400 V	-



MEW 18/150 | ME 22/150

Electronic flexible shaft drive with DIN 10 flexible shaft connection and high torque over the entire rotational speed range.

Contents:
MEW 18/150 with 1-phase AC: 4 m power cable with plug, 2 keys (STS D 4 mm).
ME 22/150 with 3-phase AC: 4 m power cable without plug, 2 keys (STS D 4 mm).

Special features:
- Most powerful and stable torque with overload protection and stepless rotational speed control (with overdrive ST 103 DIN 10 up to max. 40,000 RPM).
- Removable operating console with possibility of extension, e.g. hanging design for work in boilers.
- Frequency inverter for maintaining constant rotational speed.

Rotational speed	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
15,000 – 100	2,000	1,500	200 – 240	445 x 200 x 320	24.500	85202036	MEW 18/150	-
	2,700	2,200	380 – 480	445 x 200 x 320	24.500	85202040	ME 22/150 400 V	-



FSTK 22



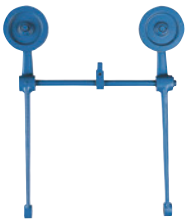
FSE 22 2-POLIG



FME



B1 ME



B2 ME



WA D ME



WAL 4-12

Accessories for Mammoth Electronic

Remote control cable FSTK 22 for extending the operating console.

Foot switch FSE 22 for switching the drive on and off.

Base FME with pivot device.

Overhead trolley B1 ME and **B2 ME**.

Trolley WA D ME with tool tray.

Shaft support WAL 4-12 for flexible shaft.

Description	Net weight [kg]	Item no.	Designation	Price/unit EUR
Remote control cable	0.635	85202165	FSTK 22	-
Foot switch	1.000	85202105	FSE 22 2-POLIG	-
Base	2.000	85202130	FME	-
Overhead trolley	1.200	85202110	B1 ME	-
Overhead trolley on castors	1.800	85202120	B2 ME	-
Trolley	14.200	85202140	WA D ME	-
Shaft support	0.460	85202150	WAL 4-12	-



MME 40/150

Electronic flexible shaft drive with DIN 15 flexible shaft connection, generates very little noise and with 3-phase alternating current. High torque over the entire rotational speed range. Generates very little noise.

Contents:
4 m power cable without plug, 2 keys (STS D 6 mm).

Special features:
- Most powerful and stable torque with overload protection and stepless rotational speed control 100 to 15,000 RPM.
- Removable operating console with possibility of extension.
- With smooth start-up to protect people, tools and the drive as well as a frequency inverter for maintaining a constant rotational speed.

Rotational speed	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
15,000 – 100	6,100	4,000	340 – 480	470 x 220 x 490	36.160	85202060	MME 40/150 400 V	-



FSTK 40



FSE 22 2-POLIG

Accessories for Maxi-Mammoth Electronic

Remote control cable FSTK 40 for extending the removable operating console with cover plate to protect the motor.

Foot switch FSE 22 for switching the drive on and off via the remote control interface.

Trolley WA D ME with tool tray.



WA D ME

Description	Net weight [kg]	Item no.	Designation	Price/unit EUR
Remote control cable	0.635	85202170	FSTK 40	-
Foot switch	1.000	85202105	FSE 22 2-POLIG	-
Trolley	14.200	85202140	WA D ME	-



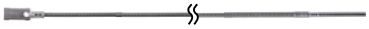
BW 4



BW 4 oHA



SCH 4



SE 4

Flexible shaft 4

With low power output requirements, it is possible to fall below the rotational speed range. **The radius of curvature must not be less than 100 mm**. After approximately 100 operating hours, the core of the flexible shaft must be re-lubricated.

Special features:
- Special lengths available on request.
- Cores and hoses with double-sided sliding coupling on request.

Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Flexible shaft inc. handpiece (HA 4 G16)							
40,000 – 24,000	10 / 30	16 / 16	13 x 1,400	0.630	86100505	BW 4 DIN10/G16	-
Flexible shaft without handpiece							
40,000 – 24,000	10 / 30	16 / 16	13 x 1,329	0.450	86200505	BW 4 DIN10/G16 oHA	-
Replacement casing							
-	10 / 30	16 / 16	13 x 1,300	0.330	86200605	SCH 4 DIN10/G16	-
Replacement core							
40,000 – 24,000	10 / M10	16 / 3,5/2,45	4 x 1,329	0.120	86200305	SE 4 DIN10/G16	-



HA 4 G16



WHA 4 90° G16

Handpieces

Handpieces with significantly better ergonomics.

Contents:
HA 4 G16: 1 collet 6 mm, 3 keys (1x EM SW 11 mm, 1x EM SW 12 mm, 1x EM SW 14 mm).

WHA 4 90° G16: 1 collet 6 mm, 3 keys (1x EM SW 11 mm, 1x EM SW 12 mm, 1x EM SW 14 mm).

Max. RPM	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Transmission ratio	Net weight [kg]	Item no.	Designation	Price/unit EUR
40,000	16 / 16	24 x 120	-	0.180	86200035	HA 4 G16	-
20,000	16 / 16	70 x 120	1,8:1	0.304	86300121	WHA 4 90° G16	-

Drive systems with DIN 10/DIN 15
Flexible shaft 6 and handpieces


BW 6


BW 6 oHA


SCH 6


SE 6

Flexible shaft 6

With low power output requirements, it is possible to fall below the rotational speed range. The radius of curvature must not be less than 140 mm. After approximately 100 operating hours, the core of the flexible shaft must be re-lubricated.

Special features:
- Special lengths available on request.

Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Flexible shaft inc. handpiece (HA 4 G16)							
25,000 – 11,000	10 / 30	16 / 16	16 x 1,650	1.190	86210051	BW 6 DIN10/G16	-
Flexible shaft without handpiece							
25,000 – 11,000	10 / 30	16 / 16	16 x 1,583	1.100	86210060	BW 6 DIN10/G16 oHA	-
Replacement casing							
-	10 / 30	16 / 16	16 x 1,553	0.740	86210080	SCH 6 DIN10/G16	-
Replacement core							
25,000 – 11,000	10 / M10	16 / 3,5/2,45	6 x 1,583	0.270	86210070	SE 6 DIN10/G16	-


HA 4 G16


WHA 4 90° G16

Handpieces

Handpieces with significantly better ergonomics.

Contents:
HA 4 **G16:** 1 collet 6 mm, 3 keys (1x EM SW 11 mm, 1x EM SW 12 mm, 1x EM SW 14 mm).

WHA 4 90° G16: 1 collet 6 mm, 3 keys (1x EM SW 11 mm, 1x EM SW 12 mm, 1x EM SW 14 mm).

Max. RPM	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Transmission ratio	Net weight [kg]	Item no.	Designation	Price/unit EUR
40,000	16 / 16	24 x 120	-	0.180	86200035	HA 4 G16	-
20,000	16 / 16	70 x 120	1,8:1	0.304	86300121	WHA 4 90° G16	-

Flexible shaft 6 Z and handpieces


BW 6 Z

DPF


BW 6 Z

SRF

Flexible shaft 6 Z

With low power output requirements, it is possible to fall below the rotational speed range. **The radius of curvature must not be less than 140 mm**. After approximately 100 operating hours, the core of the flexible shaft must be re-lubricated.

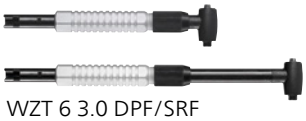
Special features:
- Special lengths available on request.

Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Flexible shaft (without handpiece having duplex spring coupling DPF)							
18,000 – 9,000	10 / 30	DPF / 10	12 x 1,250	0.800	86210010	BW 6 Z DIN 10/DPF oHA	-
Flexible shaft (without handpiece having expansion ring coupling SRF)							
18,000 – 9,000	10 / 30	SRF / 10	12 x 1,250	0.800	86210020	BW 6 Z DIN 10/SRF oHA	-


HA 6 Z DPF/SRF


HA 6 Z SP 3.0 DPF/SRF


WZ 6 DPF/SRF


WZT 6 3.0 DPF/SRF


WZT 6 45° 6.0 DPF/SRF

Handpieces

All handpieces have a handpiece-side coupling DPF/SRF. Type WZT comes with a telescopic system.

Contents:
HA 6 Z DPF/SRF: 1 collet 6 mm, 2 keys (1x EM SW 9 mm, 1x STS D 2.5 mm).
HA 6 Z SP 3.0 DPF/SRF: 1 collet 3 mm.
WZ 6 DPF/SRF: 1 collet 6 mm, 2 keys (1x EM SW 9 mm, 1x SKS SW 4 mm).
WZT 6 3.0 DPF/SRF: 1 collet 3 mm, 2 keys (EM SW 7 mm).
WZT 6 45° 6.0 DPF/SRF: 1 collet 6 mm, 2 keys (1x EM SW 9 mm, 1x EM SW 14 mm).

Max. RPM	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Transmission ratio	Net weight [kg]	Item no.	Designation	Price/unit EUR
18,000	DPF/SRF / 10	24 x 140	-	0.131	86210100	HA 6 Z DPF/SRF	-
		22 x 139	-	0.109	86210110	HA 6 Z SP 3.0 DPF/SRF	-
		50 x 170	1,25:1	0.225	86210120	WZ 6 DPF/SRF	-
		35 x 170	1,38:1	0.170	86210130	WZT 6 3.0 DPF/SRF	-
		45 x 200	1,53:1	0.210	86210140	WZT 6 45Â° 6.0 DPF/SRF	-

Flexible shaft 7 and handpieces


BW 7


BW 7 oHA


SCH 7


SE 7

Flexible shaft 7

With low power output requirements, it is possible to fall below the rotational speed range. **The radius of curvature must not be less than 140 mm**. After approximately 100 operating hours, the core of the flexible shaft must be re-lubricated.

Special features:
- Special lengths available on request.
- Cores and hoses with double-sided sliding coupling on request.

Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Flexible shaft inc. handpiece (HA 7 G22)							
25,000 – 11,000	10 / 30	22 / 22	18 x 1,654	1.536	86100509	BW 7 DIN10/G22	-
			18 x 2,154	1.986	86100529	BW 7 DIN10/G22 2M	-
Flexible shaft without handpiece							
25,000 – 11,000	10 / 30	22 / 22	18 x 1,589	1.250	86200509	BW 7 DIN10/G22 oHA	-
			18 x 2,089	1.700	86200529	BW 7 DIN10/G22 2M oHA	-
Replacement casing							
-	10 / 30	22 / 22	18 x 1,553	0.850	86200609	SCH 7 DIN10/G22	-
			18 x 2,053	1.100	86200629	SCH 7 DIN10/G22 2M	-
Replacement core							
25,000 – 11,000	10 / M10	22 / 5/3,85	7 x 1,589	0.400	86200309	SE 7 DIN10/G22	-
			7 x 2,089	0.600	86200329	SE 7 DIN10/G22 2M	-

Drive systems with DIN 10/DIN 15
Flexible shaft 7 and handpieces



HA 7 G22



WHA 7 90° G22

Handpieces

Handpieces with significantly better ergonomics.

Contents:
1 6 mm collet, 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Max. RPM	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Transmission ratio	Net weight [kg]	Item no.	Designation	Price/unit EUR
25,000	22 / 22	30 x 130	-	0.286	86200036	HA 7 G22	-
17,100	22 / 22	67 x 165	1:1	0.650	86300122	WHA 7 90° G22	-

Flexible shaft 10 and handpieces



BW 10



BW 10 oHA



SCH 10



SE 11

Flexible shaft 10 SE 11

The rotational speed should not fall below or exceed the specified range. **The radius of curvature must not be less than 170 mm**. After approximately 100 operating hours, the core of the flexible shaft must be re-lubricated.

Special features:
- Special lengths available on request.
- Cores and hoses with double-sided sliding coupling on request.

Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Flexible shaft inc. handpiece (HA 10 G28)							
18,000 – 750	10 / 30	28 / 28	22 x 1,673	2.663	86101510	BW 10 SE 11 DIN10/G28	-
			22 x 2,173	3.113	86101511	BW 10 SE 11 DIN10/G28 2	-
	15 / 40	28 / 28	22 x 1,684	2.713	86100714	BW 10 SE 11 DIN 15/G28	-
Flexible shaft without handpiece							
18,000 – 750	10 / 30	28 / 28	22 x 1,600	2.232	86200516	BW 10 SE 11 DIN10/G28 oHA	-
			22 x 2,100	2.682	86200517	BW 10 SE 11 DIN10/G28 2M oHA	-
	15 / 40	28 / 28	22 x 1,611	2.282	86200714	BW 10 SE 11 DIN 15/G28 oHA	-
Replacement casing							
-	10 / 30	28 / 28	22 x 1,553	1.430	86200630	SCH 10 DIN10/G28	-
			22 x 2,053	1.580	86200631	SCH 10 DIN10/G28 2M	-
	15 / 40	28 / 28	22 x 1,570	1.430	86200614	SCH 10 DIN 15/G28	-
Replacement core							
18,000 – 750	10 / M10	28 / 7,5/5,85	11 x 1,600	0.802	87100951	SE 11 DIN10/G28	-
			11 x 2,100	1.102	87100133	SE 11 DIN10/G28 2M	-
	15 / M14	28 / 7,5/5,85	11 x 1,611	0.852	86200314	SE 11 DIN 15/G28	-


HA 10 G28


HA 12 G28


WHA 10 90° G28

Handpieces

Handpieces with significantly better ergonomics. Type HA 12 G 28 with clamping nut for maximum clamping force and collets up to 12 mm available.

Contents:
HA 10 G28: 1 collet 6 mm, 2 keys (1x EM SW 11 mm, 1x EM SW 15 mm).
HA 12 G28: 1 collet 6 mm, 2 keys (1x DM SW 20/22 mm, 1x EM SW 14 mm).
WHA 10 90° G28: 1 collet 6 mm, 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Max. RPM	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Transmission ratio	Net weight [kg]	Item no.	Designation	Price/unit EUR
18,000	28 / 28	35 x 160	-	0.431	86200037	HA 10 G28	-
		35 x 170	-	0.545	86200038	HA 12 G28	-
17,100	28 / 28	67 x 165	1:1	0.640	86300123	WHA 10 90° G28	-

Flexible shaft 12 and handpieces


BW 12


BW 12 oHA


SCH 12


SE 12

Flexible shaft 12

The rotational speed should not fall below or exceed the specified range. **The radius of curvature must not be less than 240 mm**. After approximately 100 operating hours, the core of the flexible shaft must be re-lubricated.

Special features:
- Special lengths available on request.
- Cores and hoses with double-sided sliding coupling on request.

Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Flexible shaft inc. handpiece (HA 12 G28)							
12,000 – 850	10 / 30	28 / 28	25 x 2,173	4.295	86101512	BW 12 DIN10/G28	-
	15 / 40	28 / 28	25 x 2,183	4.345	86101513	BW 12 DIN15/G28	-
Flexible shaft without handpiece							
12,000 – 850	10 / 30	28 / 28	25 x 2,102	3.750	86200518	BW 12 DIN10/G28 oHA	-
	15 / 40	28 / 28	25 x 2,112	3.800	86200519	BW 12 DIN15/G28 oHA	-
Replacement casing							
-	10 / 30	28 / 28	25 x 2,045	2.450	86200633	SCH 12 DIN10/G28	-
	15 / 40	28 / 28	25 x 2,059	2.500	86200634	SCH 12 DIN15/G28	-
Replacement core							
12,000 – 850	10 / M10	28 / 7,5/5,85	12 x 2,102	1.300	86200333	SE 12 DIN10/G28	-
	15 / M14	28 / 7,5/5,85	12 x 2,112	1.300	86200334	SE 12 DIN15/G28	-

Drive systems with DIN 10/DIN 15
Flexible shaft 12 and handpieces


HA 10 G28


HA 12 G28


WHA 10 90° G28

Handpieces

Handpieces with significantly better ergonomics. Type HA 12 G 28 with clamping nut for maximum clamping force and collets up to 12 mm available.

Contents:
HA 10 G28: 1 collet 6 mm, 2 keys (1x EM SW 11 mm, 1x EM SW 15 mm).
HA 12 G28: 1 collet 6 mm, 2 keys (1x DM SW 20/22 mm, 1x EM SW 14 mm).
WHA 10 90° G28: 1 collet 6 mm, 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Max. RPM	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Transmission ratio	Net weight [kg]	Item no.	Designation	Price/unit EUR
18,000	28 / 28	35 x 160	-	0.431	86200037	HA 10 G28	-
		35 x 170	-	0.545	86200038	HA 12 G28	-
17,100	28 / 28	67 x 165	1:1	0.640	86300123	WHA 10 90° G28	-

Remote switch for flexible shafts and accessories


FS-BW oHA


FS-SCH


SE

Remote switch for flexible shafts

Convenient operation from the workstation. Alternative to the foot switch. After approximately 100 operating hours, the core of the flexible shaft must be re-lubricated.

Special features:
- Switch on and off directly on the handpiece.
- Quick handpiece changing possible.
- Enhanced safety thanks to fast switch-off.

Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Flexible shaft 7							
25,000 – 11,000	10 / 30	22 / 22	18 x 2,089	2.000	86200657	FS-BW 7 DIN10/G22 2M oHA	-
-	10 / 30	22 / 22	18 x 2,053	1.400	86200658	FS-SCH 7 DIN10/G22 2M	-
25,000 – 11,000	10 / M10	22 / 5/3,85	7 x 2,089	0.600	86200329	SE 7 DIN10/G22 2M	-
Flexible shaft 10							
18,000 – 750	10 / 30	28 / 28	22 x 2,100	3.012	86200659	FS-BW 10 SE 11 DIN10/G28 2M oHA	-
-	10 / 30	28 / 28	22 x 2,053	1.910	86200660	FS-SCH 10 DIN10/G28 2M	-
18,000 – 750	10 / M10	28 / 7,5/5,85	11 x 2,100	1.102	87100133	SE 11 DIN10/G28 2M	-
Flexible shaft 12							
12,000 – 850	10 / 30	28 / 28	25 x 2,102	4.080	86200661	FS-BW 12 DIN10/G28 2M oHA	-
-	10 / 30	28 / 28	25 x 2,045	2.780	86200662	FS-SCH 12 DIN10/G28 2M	-
12,000 – 850	10 / M10	28 / 7,5/5,85	12 x 2,102	1.300	86200333	SE 12 DIN10/G28	-

Drive systems with DIN 10/DIN 15

Special flexible shafts for inner grinding of pipes and accessories



BW 4 PST-T
BW 7 PST-T



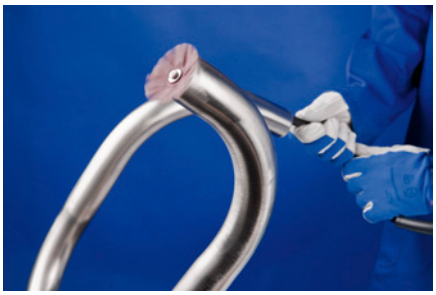
SE 4 PST-T
SE 7 PST-T



SCH 4 PST-T
SCH 7 PST-T

Flexible shaft 4 PST-T | Flexible shaft 7 PST-T

The POLISTAR-TUBE grinding tools are attached directly to the core of the special flexible shaft. After approximately 100 operating hours, the core of the flexible shaft must be re-lubricated.



Special features:

- Excellent for gradual fine grinding and cleaning of inner surfaces of pipes and pipe bends.
- Both pipe bend ends can be deburred from the entry side.
- The special flexible shafts do not have a handpiece for tool mounting and are particularly flexible in the front section.

Rotational speed range [RPM]	Drive-side coupling DIN / dia. [mm]	Dimensions dia. x length [mm]	Fastening thread	Tool mounting [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Flexible shaft								
7,650 – 1,500	10 / 30	13 x 1,537	M4	4	0.480	87101801	BW 4 PST-T DIN 10/M4 1,5 m	-
4,250 – 1,500	10 / 30	18 x 2,032	M5	5	1.320	87101804	BW 7 PST-T DIN 10/M5 2 m	-
Pre-assembled replacement core								
7,650 – 1,500	10 / M10	4 x 1,528	M4	4	0.124	87101802	SE 4 PST-T DIN10/M4 1,5 m	-
4,250 – 1,500	10 / M10	7 x 2,031	M5	5	0.447	87101805	SE 7 PST-T DIN 10/M5 2 m	-
Pre-assembled replacement casing								
-	10 / 30	13 x 1,537	-	-	0.353	87101803	SCH 4 PST-T DIN 10/M4 1.5 m	-
		18 x 2,032	-	-	0.871	87101806	SCH 7 PST-T DIN 10/M5 2 m	-



AD M4/8-32 UNC
AD M5/8-32 UNC



FLS M4
FLS M5

Accessories for flexible shafts BW 4 PST-T, 7 PST-T

Thread adapters AD M4/8-32 UNC and AD M5/8-32 UNC, flange screws FLS M4 and FLS M5 and keys EM SW 7 mm and EM SW 8 mm.



EM SW 7 mm
EM SW 8 mm

Tool mounting [mm]	Net weight [kg]		Item no.	Designation	Price/unit EUR
Suitable for BW 4 PST-T					
8-32 UNC	0.002	1	87101500	AD M4/8-32 UNC	-
4	0.002	1	87200221	FLS M4	-
-	0.008	1	90001914	EM SW 7 mm	-
Suitable for BW 7 PST-T					
8-32 UNC	0.003	1	87101501	AD M5/8-32 UNC	-
5	0.003	1	87200222	FLS M5	-
-	0.014	1	93785706	EM SW 8 mm G	-


HA 4 G16


HA 7 G22


HA 10 G28


HA 12 G28


WHA 4 90° G16


WHA 7 90° G22


WHA 10 90° G28

Handpieces

Straight handpieces and angle handpieces with much better ergonomics. Type HA 12 G28 with clamping nut for maximum clamping force and collets up to 12 mm available.

Contents:
HA 4 G16: 1 collet 6 mm, 2 keys (1x EM SW 11 mm, 1x EM SW 12 mm).
HA 7 G22: 1 collet 6 mm, 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).
HA 10 G28: 1 collet 6 mm, 2 keys (1x EM SW 11 mm, 1x EM SW 15 mm).
HA 12 G28: 1 collet 6 mm, 2 keys (1x DM SW 20/22 mm, 1x EM SW 14 mm).
WHA 4 90° G16: 1 collet 6 mm, 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).
WHA 7 90° G22: 1 collet 6 mm, 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).
WHA 10 90° G28: 1 collet 6 mm, 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm).

Max. RPM	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Transmission ratio	Net weight [kg]	Item no.	Designation	Price/unit EUR
Straight handpieces							
40,000	16 / 16	24 x 120	-	0.180	86200035	HA 4 G16	-
25,000	22 / 22	30 x 130	-	0.286	86200036	HA 7 G22	-
18,000	28 / 28	35 x 160	-	0.431	86200037	HA 10 G28	-
		35 x 170	-	0.545	86200038	HA 12 G28	-
Angle handpieces							
20,000	16 / 16	70 x 120	1,8:1	0.304	86300121	WHA 4 90˚ G16	-
17,100	22 / 22	67 x 165	1:1	0.650	86300122	WHA 7 90° G22	-
	28 / 28	67 x 165	1:1	0.640	86300123	WHA 10 90˚ G28	-

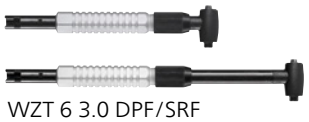

HA 6 Z DPF/SRF

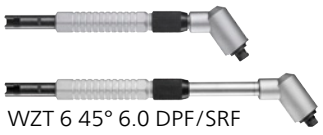

HA 6 Z SP 3.0 DPF/SRF

Handpieces DPF/SRF

All handpieces have a handpiece-side coupling DPF/SRF. Type WZT comes with a telescopic system.


WZ 6 DPF/SRF


WZT 6 3.0 DPF/SRF


WZT 6 45° 6.0 DPF/SRF

Max. RPM	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Transmission ratio	Net weight [kg]	Item no.	Designation	Price/unit EUR
Straight handpieces							
18,000	DPF/SRF / 10	24 x 140	-	0.131	86210100	HA 6 Z DPF/SRF	-
		22 x 139	-	0.109	86210110	HA 6 Z SP 3.0 DPF/SRF	-
Angle handpieces							
18,000	DPF/SRF / 10	50 x 170	1,25:1	0.225	86210120	WZ 6 DPF/SRF	-
Angle handpieces with telescopic system							
18,000	DPF/SRF / 10	35 x 170	1,38:1	0.170	86210130	WZT 6 3.0 DPF/SRF	-
		45 x 200	1,53:1	0.210	86210140	WZT 6 45Â° 6.0 DPF/SRF	-



Angle drive WT 10 G28

Can be connected to all flexible shafts with G28 connection (instead of the handpiece). Connection to flexible shaft can be pivoted 360°. With M14 spindle thread and 22.23 mm tool mounting.

Contents:
1 clamping nut, 2 flange screws, 2 spacer sleeves, 2 keys (1x SKS SW 4 mm, 1x STL SW 35 x 5 mm), anti-vibration handle, guard dia. 125 mm.

Special features:
- Enables flexible shaft drives to be used as angle grinders.

Drive operating speed n max. [RPM]	Transmission ratio	Output speed at n max. [RPM]	Net weight [kg]	Item no.	Designation	Price/unit EUR
18,000	1,53:1	12,000	1.438	86300621	WT 10 G28	-



Burnishing angle drive SWT 10 G28

Can be connected to all flexible shafts with G28 connection (instead of the handpiece). Connection to flexible shaft can be pivoted 360°. With M14 spindle thread and **tool mounting dia. x width 19 x 100 mm**.

Contents:
Hand guard, anti-vibration handle, detachable drive spindle.

Special features:
- Enables flexible shaft drives to be used as burnishing machines.

Drive operating speed n max. [RPM]	Transmission ratio	Output speed at n max. [RPM]	Net weight [kg]	Item no.	Designation	Price/unit EUR
18,000	1,53:1	12,000	1.901	87101531	SWT 10 G28	-


BSG 10/35 E G28


BSG 10/50 E G28

BSG 10/35 E G28 | BSG 10/50 E G28

Belt sander with a **belt length of 450 mm x width 35 mm** as type BSG 10/35 E G28 and **width 50 mm** as type BSG 10/50 E G28.

Contents:
1 key (SKST SW 17 mm).

Special features:
- Elastically mounted spindle.
- Can be connected to flexible shafts without handpiece.
- Matching belts for BSG 10/35 E G28: BA 35/450, VB 35/450; Matching belts for BSG 10/50 E G28: BA 50/450, VB 50/450

Max. RPM	Matches flexible shafts of types	Matches handpiece-side flexible shaft coupling G/ dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
7,000	BW 10, BW 12	28 / 28	180 x 35 x 180	1.500	86400160	BSG 10/35 E G28	-
			180 x 50 x 195	1.580	86400156	BSG 10/50 E G28	-


ATR


ULR

Replacement rollers for belt sanders

Guide rollers ULR BSG 10/35 E and ULR BSG 10/50 E, drive rollers ATR BSG 10/35 E and AT BSG 10/50 E and soft drive rollers ATR-W BSG 10/35 E and ATR-W BSG 10/50 E.

Description	D [mm]	T [mm]	Suitable for belt sanders	Net weight [kg]	Item no.	Designation	Price/unit EUR
Guide roller	50	30	BSG 10/35 E G28	0.125	86400161	ULR BSG 10/35 E	-
Drive roller	100	30	BSG 10/35 E G28	0.250	86400162	ATR BSG 10/35 E	-
Drive roller, soft	100	30	BSG 10/35 E G28	0.250	86400170	ATR-W BSG 10/35 E	-
Guide roller	50	40	BSG 10/50 E G28	0.145	86400157	ULR BSG 10/50 E	-
Drive roller	100	40	BSG 10/50 E G28	0.300	86400146	ATR BSG 10/50 E	-
Drive roller, soft	100	40	BSG 10/50 E G28	0.300	86400171	ATR-W BSG 10/50 E	-


HA 4 G16/G22 STV


HA 7 G22 STV


HA 10 G28 STV

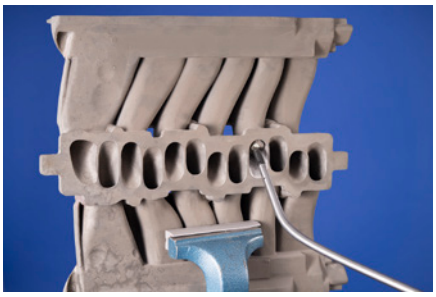

HA 12 G28 STV


WHA 7 90° G22 STV


WHA 10 90° G28 STV

Handpieces for rigid extensions

When combined with air-power and steplessly speed-adjustable electric motors, the ideal solution for applications in hard-to-access workpieces, e.g. during cleaning or milling work. Can be adapted to the workpiece geometry.



Contents:
HA 4 G16/G22 STV: 2 keys (1x EM SW 11 mm, 1x EM SW 12 mm), 1 collet 6 mm.

HA 7 G22 STV: 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm), 1 collet 6 mm.
HA 10 G28 STV: 2 keys (1x EM SW 11 mm, 1x EM SW 15 mm), 1 collet 6 mm.
HA 12 G28 STV: 2 keys (DM SW 20/22 mm), 1 collet 6 mm.
WHA 7 90° G22 STV: 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm), 1 collet 6 mm.
WHA 10 90° G28 STV: 2 keys (1x EM SW 11 mm, 1x EM SW 14 mm), 1 collet 6 mm.

Special features:
- New generation of handpieces with significantly better ergonomics.

Max. RPM	Handpiece-side coupling G / dia. [mm]	Dimensions dia. x length [mm]	Transmission ratio	Collet group	Net weight [kg]	Item no.	Designation	Price/unit EUR
Straight handpieces								
25,000	16 / 22	20 x 120	-	6	0.135	86200039	HA 4 G16/G22 STV	-
	22 / 22	27 x 130	-	6	0.259	86200040	HA 7 G22 STV	-
18,000	28 / 28	33 x 160	-	6	0.396	86200041	HA 10 G28 STV	-
		33 x 170	-	12	0.512	86200042	HA 12 G28 STV	-
Angle handpieces								
17,100	22 / 22	67 x 165	1:1	6	0.520	86300131	WHA 7 90° G22 STV	-
	28 / 28	67 x 165	1:1	6	0.579	86300132	WHA 10 90° G28 STV	-



STV9
STV13

STV20



STV27
STV33



DA 27
DA 33



SE DA 27
SE DA 33

Rigid extensions DIN 10

Rigid extensions **with max. 25,000 RPM** (types STV9 and STV13) for hard-to-reach areas. No risk of overloading the drive motor when used in conjunction with DL motors. Types DA 27 and DA 33 with shortest extension.

Contents:
STV9: 3 mm collet, 3 keys (2x DM SW 6/7 mm, 1x SKS 4 mm).
STV13: 6 mm collet, 3 keys (2x DM SW 9/11 mm, 1x SKS 4 mm).
STV20 incl. HA 4 G16/G22 STV: 6 mm collet, 2 keys (1x EM SW 11 mm, 1x EM SW 12 mm).

Special features:
- Special lengths and options for workpiece adaptation available on request.
- The potential bending point and the bending radius depend on the STV type and the desired bend.
- Bent types available as from a minimum length of 500 mm (see 1st and 5th figure).

Sliding coupling [G]	Dimensions dia. x length [mm]	max. bending radius [mm]	Matching tool mounting/ handpiece	Net weight [kg]	Item no.	Designation	Price/unit EUR
Rigid extensions							
-	9 x 300	150	Collet group 2	0.430	80900330	STV9 L300	-
	9 x 500	150	Collet group 2	0.520	80900335	STV9 L500	-
	9 x 800	150	Collet group 2	0.640	80900340	STV9 L800	-
	9 x 1,000	150	Collet group 2	0.720	80900345	STV9 L1000	-
	13 x 300	150	Collet group 10	0.520	80900218	STV13 L300	-
	13 x 500	150	Collet group 10	0.670	80900232	STV13 L500	-
	13 x 800	150	Collet group 10	0.890	80900305	STV13 L800	-
	13 x 1,000	150	Collet group 10	1.040	80900310	STV13 L1000	-
16/22	20 x 200	-	HA 4 G16/G22 STV	0.400	80900351	STV20 L 200	-
	20 x 400	-	HA 4 G16/G22 STV	0.630	80900352	STV20 L 400	-
	20 x 600	150	HA 4 G16/G22 STV	0.890	80900353	STV20 L 600	-
22	27 x 250	-	HA 7 G22 STV, WHA 7 G22 STV	0.550	80900354	STV27 L 250	-
	27 x 500	250	HA 7 G22 STV, WHA 7 G22 STV	0.930	80900355	STV27 L 500	-
28	33 x 250	-	HA 10 G28 STV, HA 12 G28 STV, WHA 10 G28 STV	1.025	80900356	STV33 L 250	-
	33 x 500	300	HA 10 G28 STV, HA 12 G28 STV, WHA 10 G28 STV	2.100	80900357	STV33 L 500	-
	33 x 1,000	300	HA 10 G28 STV, HA 12 G28 STV, WHA 10 G28 STV	3.250	80900358	STV33 L 1000	-
Direct connection and replacement core							
22	30 x 90	-	HA 7 G22 STV, WHA 7 G22 STV	0.204	87100623	DA 27 DIN10/G22	-
28	30 x 100	-	HA 10 G28 STV, HA 12 G28 STV, WHA 10 G28 STV	0.305	80900029	DA 33 DIN10/G28	-
22	7 x 125	-	-	0.035	80900244	SE DA 27 DIN10/G22	-
28	12 x 153	-	-	0.107	80900088	SE DA 33 DIN10/G28	-


BWA G22/DIN 10


BWA G28/DIN10

Flexible shaft adapter

The flexible shaft adapter conveniently connects rigid extensions and flexible shafts.

Net weight [kg]		Item no.	Designation	Price/unit EUR
0.285	1	86300307	BWA G22/DIN 10	-
0.563	1	86300308	BWA G28/DIN10	-

DL motors DIN 10 for rigid extensions



PMA 4/220 HV | PMA 4/120 HV

Air-power motor with exhaust directed to the rear and dead man's switch using safety lever valve for rigid extensions with DIN 10 motor connection. 4/120 HV type with constant power delivery due to the centrifugal governor.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/4" male threaded connection, threaded quick coupling (STGI), 2 keys (STS D 4 mm).

Special features:
- Very powerful with a compact design.
- This grinder can also be operated without oil; however, this will lead to a shorter service life and reduced rotational speed.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Connection coupling [DIN]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
22,000	440	0.98	0.87	10	8	215 x 39 x 39	0.913	80703306	PMA 4/220 HV	-
12,000	370	0.5	0.87	10	8	240 x 39 x 39	0.995	80703307	PMA 4/120 HV	-



PMA 10/200 HV | PMA 10/160 HV | PMA 10/120 HV

Powerful air-power motor with exhaust directed to the rear and dead man's switch using safety lever valve for rigid extensions with motor connection DIN 10.

Contents:
1 m exhaust hose and 2.5 m air supply hose with 1/2" male threaded connection, 2 keys (STS D 4 mm).

Special features:
- 10/160 HV and 10/120 HV types with constant power delivery due to the centrifugal governor.

RPM	Power output [watts]	Air consumption at idle [m³/min]	Air consumption under load [m³/min]	Connection coupling [DIN]	Air supply hose internal dia. [mm]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
20,000	1,000	1.38	1.1	10	13	283 x 46 x 46	1.200	80703135	PMA 10/200 HV	-
16,000	1,000	0.7	0.9	10	13	283 x 46 x 46	1.200	80703140	PMA 10/160 HV	-
12,000	950	0.5	0.9	10	13	283 x 46 x 46	1.200	80703150	PMA 10/120 HV	-

Drive systems with DIN 10/DIN 15

EL motors DIN 10 for rigid extensions



EMER 8/280 | EMER 8/90

Electric motor for rigid extensions with DIN 10 motor connection. With stepless rotational speed control and digital electronics for constant rotational speed.

Contents:
4 m power cable, 2 keys (STS D 4 mm).

Special features:
- Overload protection.
- Smooth start-up to protect people, tools and the drive.

Rotational speed [RPM]	Power consumption [watts]	Power output [watts]	Voltage [volts] 50–60 Hz	Connection [DIN]	Dimensions L x W x H [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
28,000 – 8,500	750	410	230	10	430 x 77 x 77	2.030	83700330	EMER 8/280	-
9,000 – 2,500	710	410	230	10	430 x 77 x 77	2.030	83700340	EMER 8/90	-


SPV 50-3 S / SPV 50-3 S8


SPV 75-6 SPG6


SPV 36-6 S6 / SPV 50-6 S8 / SPV 75-6 S8


SPV 100-6 SPG6


SPV 100-6 S8


SPV 150-3 S6


SPV 150-6 S8


SPV 150-8 S8

Extensions for drive spindles, metric version

Allow access to difficult-to-reach areas and are clamped into the collet of the machine (air or electric grinder) or into the flexible shaft handpiece.

Special features:
- Cost-effective alternative to customized burrs and mounted points with long shanks.

Max. RPM	Shank mounting dia. S [mm]	Tool mounting [mm]	Total length L_1 [mm]	Mounting pin length L_2 [mm]	Max. spindle dia. D [mm]	Incl. collet dia. [mm]	Collet group	Net weight [kg]	Item no.	Designation	Price/ unit EUR
44,000	6	3	76	30	9.5	3	14	0.028	87100359	SPV 50-3 S6	-
	8	3	78	30	9.5	3	14	0.035	87100356	SPV 50-3 S8	-
20,000	SPG6	6	104	Special	12	6	10	0.073	87100728	SPV 75-6 SPG6	-
	6	6	58	18	12	6	10	0.025	87100069	SPV 36-6 S6	-
	8	6	95	30	12	6	10	0.055	87100365	SPV 50-6 S8	-
			120	30	12	6	10	0.076	87100358	SPV 75-6 S8	-
	SPG6		129	Special	12	6	10	0.096	87101237	SPV 100-6 SPG6	-
	8	6	144	30	12	6	10	0.100	87100357	SPV 100-6 S8	-
10,000	6	3	150	30	11.5	-	-	0.055	87100362	SPV 150-3 S6	-
	8	6	150	30	13.5	-	-	0.082	87100363	SPV 150-6 S8	-
		8	150	30	15.9	-	-	0.110	87100134	SPV 150-8 S8	-


SPV 50-1/8 S1/4


SPV 75-1/4 SPG6 / SPV 75-1/4 S3/8


SPV 100-1/4 SPG6


SPV 100-1/4 S3/8


SPV 150-1/8 S1/4


SPV 150-1/4 S3/8

Extensions for drive spindles, imperial version

Allow access to difficult-to-reach areas and are clamped into the collet of the machine (air or electric grinder) or into the flexible shaft handpiece.

Special features:
- Cost-effective alternative to customized burrs and mounted points with long shanks.

Max. RPM	Shank mounting dia. S [inch]	Tool mounting [inch]	Total length L_1 [inch]	Mounting pin length L_2 [inch]	Max. spindle dia. D [inch]	Incl. collet dia. [mm]	Collet group	Net weight [kg]	Item no.	Designation	Price/ unit EUR
44,000	1/4	1/8	3,07	1,18	0.37	1/8	14	0.028	89912000	SPV 50-1/8 S1/4	-
20,000	SPG6	1/4	4,09	Spezial	0.47	1/4	10	0.073	89912001	SPV 75-1/4 SPG6	-
	3/8	1/4	4,72	1,18	0.47	1/4	10	0.077	89912002	SPV 75-1/4 S3/8	-
	SPG6	1/4	5,08	Spezial	0.47	1/4	10	0.096	89912003	SPV 100-1/4 SPG6	-

Continued on next page

Accessories for tool drives
Extensions

Max. RPM	Shank mounting dia. S [inch]	Tool mounting [inch]	Total length L_1 [inch]	Mounting pin length L_2 [inch]	Max. spindle dia. D [inch]	Incl. collet dia. [mm]	Collet group	Net weight [kg]	Item no.	Designation	Price/ unit EUR
20,000	3/8	1/4	5,67	1,18	0.47	1/4	10	0.100	89912004	SPV 100-1/4 S3/8	-
10,000	1/4	1/8	5,91	1,18	0.45	-	-	0.055	89912005	SPV 150-1/8 S1/4	-
	3/8	1/4	5,91	1,18	0.53	-	-	0.082	89912006	SPV 150-1/4 S3/8	-



Extensions for drive spindles

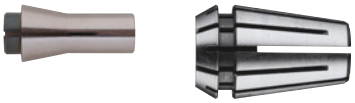
Allows access to difficult-to-reach areas and particularly deep cores. They are clamped into the collet of the machine (air or electric grinder) or into the flexible shaft handpiece. They must also be guided by hand.

Contents:
Included in delivery: 2 keys
(2x DM SW 6/7 mm or 2x DM SW 9/11 mm).

Special features:
- The extension is only suitable for manual applications.
- Cost-effective alternative to customized burrs and mounted points with long shanks.

Max. RPM	Shank mounting dia. S [mm]	Tool mounting [mm]	Total length L_1 [mm]	Mounting pin length L_2 [mm]	Max. spindle dia. D [mm]	Incl. collet dia. [mm]	Collet group	Net weight [kg]	Item no.	Designation	Price/ unit EUR
25,000	6	3	406		9	3	2	0.130	87101310	SPVH9 L300-3 S6	-
			606		9	3	2	0.340	87101457	SPVH9 L500-3 S6	-
			906		9	3	2	0.520	87101502	SPVH9 L800-3 S6	-
			1,106		9	3	2	0.640	87101504	SPVH9 L1000-3 S6	-
		6	406		13	6	10	0.320	87101503	SPVH13 L300-6 S6	-
	8	6	606		13	6	10	0.502	87101280	SPVH13 L500-6 S8	-
	6	6	906		13	6	10	0.770	87101506	SPVH13 L800-6 S6	-
			1,106		13	6	10	0.950	87101309	SPVH13 L1000-6 S6	-
	8	6	406		13	6	10	0.322	87101289	SPVH13 L300-6 S8	-
	6	6	606		13	6	10	0.500	87101429	SPVH13 L500-6 S6	-
	8	6	906		13	6	10	0.772	87101290	SPVH13 L800-6 S8	-
			1,106		13	6	10	0.952	87101372	SPVH13 L1000-6 S8	-

Collets



Collets

Depending on the PFERD tool selected, different collets are available. Matching collets are allocated to every drive.

Diameter [mm]	Diameter [inch]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Collet group 1					
2.34	-	0.002	91491301	SPZ 914.913.01 (2,34 mm)	-
3	-	0.002	91491302	SPZ 914.913.02 (3 mm)	-
-	3/32	0.002	91491307	SPZ 914.913.07 (3/32")	-
	1/8	0.002	91491303	SPZ 914.913.03 (1/8")	-
Collet group 2					
2.34	-	0.001	94701604	SPZ 947.016.04 (2,34 mm)	-
3	-	0.001	94701601	SPZ 947.016.01 (3 mm)	-
-	3/32	0.001	94701603	SPZ 947.016.03 (3/32")	-
	1/8	0.001	94701602	SPZ 947.016.02 (1/8")	-

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Diameter [mm]	Diameter [inch]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Collet group 3					
3	-	0.003	90000273	SPZ 900.002.73 (3 mm)	-
-	1/8	0.003	90000282	SPZ 900.002.82 (1/8")	-
Collet group 4					
3	-	0.005	95771703	SPZ 957.717.03 (3 mm)	-
6	-	0.003	95771701	SPZ 957.717.01 (6 mm)	-
-	1/8	0.005	95771704	SPZ 957.717.04 (1/8")	-
	1/4	0.003	95771702	SPZ 957.717.02 (1/4")	-
Collet group 5					
3	1/8		90000339	SPZ 900.003.39 (3 mm, 1/8")	-
6	-	0.003	90000340	SPZ 900.003.40 (6 mm)	-
-	1/4	0.004	90000301	SPZ 900.003.01 (1/4")	-
Collet group 6					
3	-	0.014	95032503	SPZ 950.325.03 (3 mm)	-
5	-	0.012	95032506	SPZ 950.325.06 (5 mm)	-
6	-	0.012	95032501	SPZ 950.325.01 (6 mm)	-
8	-	0.007	95032517	SPZ 950.325.17 (8 mm)	-
-	3/32	0.007	95032516	SPZ 950.325.16 (3/32")	-
	1/8	0.013	95032504	SPZ 950.325.04 (1/8")	-
	1/4	0.012	95032502	SPZ 950.325.02 (1/4")	-
Collet group 7					
3	1/8	0.015	90000145	SPZ 900.001.45 (3 mm, 1/8")	-
6	-	0.015	90000123	SPZ 900.001.23 (6 mm)	-
8	-	0.015	90000143	SPZ 900.001.43 (8 mm)	-
-	1/4	0.015	90000144	SPZ 900.001.44 (1/4")	-
	3/8	0.015	90000100	SPZ 900.001.00 (3/8")	-
Collet group 8					
6	-	0.026	95203402	SPZ 952.034.02 (6 mm)	-
8	-	0.026	95203405	SPZ 952.034.05 (8 mm)	-
10	-	0.026	95203407	SPZ 952.034.07 (10 mm)	-
-	1/4	0.026	95203403	SPZ 952.034.03 (1/4")	-
	3/8	0.021	95203409	SPZ 952.034.09 (3/8")	-
Collet group 9					
2.34	3/32	0.010	91490009	SPZ 914.900.09 (2,34 mm, 3/32")	-
3	-	0.010	91490011	SPZ 914.900.11 (3 mm)	-
5	-	0.008	91490016	SPZ 914.900.16 (5 mm)	-
6	-	0.008	91490018	SPZ 914.900.18 (6 mm)	-
-	1/8	0.010	91490019	SPZ 914.900.19 (1/8")	-
	1/4	0.008	91490020	SPZ 914.900.20 (1/4")	-
Collet group 10					
3	-	0.006	95766301	SPZ 957.663.01 (3 mm)	-
5	-	0.006	95766304	SPZ 957.663.04 (5 mm)	-
6	-	0.006	95766303	SPZ 957.663.03 (6 mm)	-
-	1/8	0.006	95766302	SPZ 957.663.02 (1/8")	-
	1/4	0.006	95766351	SPZ 957.663.51 (1/4")	-
Collet group 11					
2.34	3/32	0.017	91490909	SPZ 914.909.09 (2,34 mm, 3/32")	-
3	-	0.017	91490912	SPZ 914.909.12 (3 mm)	-
5	-	0.017	91490917	SPZ 914.909.17 (5 mm)	-
6	-	0.015	91490919	SPZ 914.909.19 (6 mm)	-
8	-	0.010	91490923	SPZ 914.909.23 (8 mm)	-
-	1/8	0.017	91490927	SPZ 914.909.27 (1/8")	-

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Accessories for tool drives
Collets

Diameter [mm]	Diameter [inch]	Net weight [kg]	Item no.	Designation	Price/unit EUR
-	1/4	0.013	91490926	SPZ 914.909.26 (1/4")	-
Collet group 12					
5	-	0.035	91490203	SPZ 914.902.03 (5 mm)	-
6	-	0.036	91490204	SPZ 914.902.04 (6 mm)	-
8	-	0.034	91490206	SPZ 914.902.06 (8 mm)	-
10	-	0.028	91490208	SPZ 914.902.08 (10 mm)	-
12	-	0.024	91490209	SPZ 914.902.09 (12 mm)	-
-	1/4	0.037	91490210	SPZ 914.902.10 (1/4")	-
	3/8	0.030	91490211	SPZ 914.902.11 (3/8")	-
Collet group 13					
2.34	3/32	0.006	90101823	SPZ 901.018.23 (2,34 mm, 3/32")	-
3	-	0.006	90101830	SPZ 901.018.30 (3 mm)	-
5	-	0.006	90101850	SPZ 901.018.50 (5 mm)	-
6	-	0.006	90101860	SPZ 901.018.60 (6 mm)	-
-	1/8	0.006	90101818	SPZ 901.018.18 (1/8")	-
	1/4	0.006	90101814	SPZ 901.018.14 (1/4")	-
Collet group 14					
2.34	3/32	0.003	90110423	SPZ 901.104.23 (2,34 mm, 3/32")	-
3	-	0.003	90110430	SPZ 901.104.30 (3 mm)	-
-	1/8	0.003	90110418	SPZ 901.104.18 (1/8")	-
Collet group 15					
3	-	0.018	98980000	SPZ 989.800.00 (3 mm)	-
-	3/32	0.002	98980002	SPZ 989.800.02 (3/32")	-
	1/8	0.002	98980001	SPZ 989.800.01 (1/8")	-
Collet group 16					
3	-	0.010	98980268	SPZ 98980268 (3 mm)	-
6	-	0.018	98980163	SPZ 989.801.63 (6 mm)	-
8	-	0.018	98980164	SPZ 989.801.64 (8 mm)	-
10	-	0.018	98980165	SPZ 989.801.65 (10 mm)	-
12	-	0.034	98980269	SPZ 98980269 (12)	-
-	1/4	0.018	98980166	SPZ 989.801.66 (1/4")	-
Collet group 20					
3	-	0.008	98980262	SPZ 98980262 (3 mm)	-
6	-	0.018	98980261	SPZ 98980261 (6 mm)	-
8	-	0.021	98980263	SPZ 98980263 (8 mm)	-
10	-	0.028	98980264	SPZ 98980264 (10 mm)	-
-	1/4	0.018	98980265	SPZ 98980265 (1/4")	-
Collet group 21					
3	-	0.010	98980311	SPZ 98980311 (3 mm)	-
6	-	0.020	98980310	SPZ 98980310 (6 mm)	-
-	1/8	-	98980398	SPZ 98980398 (1/8")	-
	1/4	-	98980399	SPZ 98980399 (1/4")	-
Collet group 22					
3	-	0.024	98960171	SPZ 98960171 (3 mm)	-
6	-	0.024	98960172	SPZ 98960172 (6 mm)	-
8	-	0.021	98960173	SPZ 98960173 (8 mm)	-
-	1/4	0.024	98960170	SPZ 98960170 (1/4")	-
Collet group 23					
3	-	0.018	98980660	SPZ 98980660 (3 mm)	-
-	3/32	0.018	98980661	SPZ 98980661 (3/32")	-
	1/8	0.018	98980662	SPZ 98980662 (1/8")	-

Continued on next page

Diameter [mm]	Diameter [inch]	Net weight [kg]	Item no.	Designation	Price/unit EUR
Collet group 17					
2.35	-	0.002	90014051	SPZ 900.140.51 (2,35 mm)	-
3	-	0.002	90014050	SPZ 900.140.50 (3 mm)	-
-	1/8	0.002	90014052	SPZ 900.140.52 (1/8")	-
Collet group 18					
2.35	-	0.001	90014061	SPZ 900.140.61 (2,35 mm)	-
3	-	0.001	90014060	SPZ 900.140.60 (3 mm)	-
-	1/8	0.001	90014062	SPZ 900.140.62 (1/8")	-
Collet group 19					
2.35	-	0.011	90014073	SPZ 900.140.73 (2,35 mm)	-
3	-	0.011	90014071	SPZ 900.140.71 (3 mm)	-
6	-	0.007	90014070	SPZ 900.140.70 (6 mm)	-
-	1/8	0.011	90014072	SPZ 900.140.72 (1/8")	-
	1/4	0.008	90014074	SPZ 900.140.74 (1/4")	-

Reducing collets and adapter



RZH 63
RZH 6234
RZH 64



AF M5 CD 1/4-20UNC

Reducing collets and adapter

These reducing collets fit into an existing collet for 6 mm shank tools and are used as adapters for 2.34 mm, 3 mm or 4 mm shank tools.

Reducing shank holder	Suitable for	Net weight [kg]	Item no.	Designation	Price/unit EUR
from 6 mm to 2.34 mm diameter	-	0.004	87100153	RZH 6234	-
from 6 mm to 3 mm diameter	-	0.004	87100162	RZH 63	-
Dia. from 6 mm to 4 mm	-	0.004	87101375	RZH 64	-
-	Cordless angle grinder with SBH/SBHR 20, 25, 38, 50	0.006	84205030	AF M5 CD 1/4-20 UNC	-

Arbor



BO SPG 6/6 0-10



BO SPG 6/10 0-10

Arbor

Arbor BO SPG 6/6 0-10 and BO SPG 6/10 0-10. Please refer to catalogue section 4 and catalogue section 8 for more versions.

Shank holder	Tool mounting dia. [mm]	Suitable for [mm]	Net weight [kg]	Item no.	Designation	Price/unit EUR
SPG6	Dia. 10 x 0 –10	All drives with SPG6	0.035	80810012	BO SPG 6/10 0-10	-
	Dia. 6 x 0 –10	All drives with SPG6	0.035	80810011	BO SPG 6/6 0-10	-

Accessories for tool drives
Key



Key

PFERD offers different keys with different widths across flats (SW).

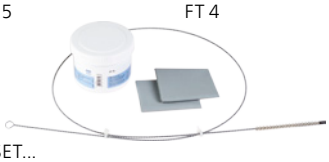
Net weight [kg]		Item no.	Designation	Price/unit EUR
0.003	1	98980670	SKS size 2,5 mm	-
0.004	1	90200021	SKS SW 2,5 mm	-
0.005	1	92785501	SKS SW 3 mm	-
0.006	1	92785502	SKS SW 4 mm	-
0.018	1	92785503	SKS SW 5 mm	-
0.008	1	90001869	SKS SW 5/32"	-
0.059	1	87200313	SKHS size 5 mm	-
0.073	1	91243601	SKST size 17 mm	-
0.008	1	90001914	EM SW 7 mm	-
0.014	1	93785706	EM SW 8 mm G	-
0.023	1	95770101	EM SW 9 mm	-
0.026	1	90000299	EM SW 10 mm	-
0.025	1	93785701	EM SW 11 mm	-
0.027	1	98980322	EM SW 12 mm	-
0.061	1	98960042	EM SW 13 mm	-
0.038	1	93785703	EM SW 14 mm	-
0.048	1	98980561	EM size 15 mm	-
0.062	1	92785611	EM SW 17 mm	-
0.102	1	93785705	EM SW 22 mm	-
0.015	1	90000122	EM SW 3/4"	-
0.040	1	90000377	EM SW 7/16"	-
0.010	1	90000121	EM SW 9/16"	-
0.022	1	90000274	EM SW 13/64"	-
0.005	1	90014010	DM SW 4/4 mm	-
0.025	1	98980010	DM SW 6/8 mm	-
0.020	1	90014004	DM SW 10/10 mm	-
0.149	1	98980190	DM SW 20/22 mm	-
0.122	1	91244601	STL SW 35x5 mm	-
0.048	1	98960182	STL SW 35x5,3 mm	-
0.095	1	87200281	HS 40-42	-
0.006	1	92792301	STS D 2,5 mm	-
0.015	1	92792302	STS D 4 mm	-
0.034	1	92792303	STS D 6 mm	-
0.053	1	87200263	SDR TX 15K	-
0.032	1	90014003	MIM ARH	-
0.022	1	90014008	MIM SPS DK D 7	-
0.040	1	90014009	MIM ARS HA D 23,5	-
0.004	1	90014011	MIM DSTS SW 11xD 2,4 mm	-


5 L ONG OEL


1 L ONG OEL

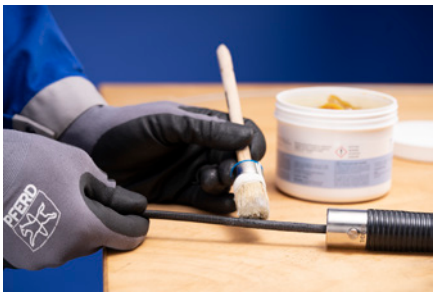

FT 5


FT 4


P-SET...

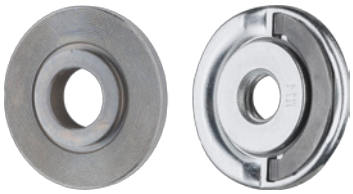
Lubricants and maintenance sets

Special lubricating oil for air-powered devices with oil mist lubrication. Special grease FT 5 for re-greasing angle heads. Flexible shaft grease FT 4 for flexible shafts. Maintenance set P-Set with 1 hose brush and 2 non-linting cleaning cloths.



Contents	Use for	Net weight [kg]	Item no.	Designation	Price/unit EUR
Special lubricating oil 5 L	Oil mist device	4.900	80900013	5 L ONG OEL	-
Special lubricating oil 1 L	Oil mist device	0.990	80900014	1 L ONG OEL	-
Special grease 100 g	Ball bearing, angle head	0.100	84900498	FT 5	-
Flexible shaft grease 450 g	Flexible shafts	0.450	86396010	FT 4	-
2 cloths, flexible shaft grease FT 4, hose brush BW 4/6	BW 4, BW 6	0.770	86396005	P-Set BW 4/6	-
2 cloths, flexible shaft grease FT 4, hose brush BW 7	BW 7	0.770	86396007	P-Set BW 7	-
2 cloths, flexible shaft grease FT 4, hose brush BW 10/12	BW 10, BW 12	0.770	86396006	P-Set BW 10/12	-

Clamping flanges



Clamping flanges

PFERD offers different clamping flanges for tool drives.

Net weight [kg]		Item no.	Designation	Price/unit EUR
0.059	1	90011455	SPF 90011455	-
0.098	1	98960180	SPF 98960180	-
0.051	1	98970043	SPF 98970043	-
0.069	1	90011450	SPM 90011450 M14	-
0.098	1	98960181	SPM 98960181	-
0.066	1	98980036	SPM 98980036 M14	-
0.610	1	98970042	SSM 98970042	-
0.008	1	98980039	DHFL 98980039	-
0.010	1	98980040	DHTR 98980040	-
0.018	1	90011460	DS 90011460	-
0.003	1	98980037	FLS 98980037	-
0.010	1	98980038	FLS-CC 98980038	-



Frequency damper

PFERD offers different frequency dampers to make use much easier on the ears.

Net weight [kg]		Item no.	Designation	Price/unit EUR
	1	87200216	FD 47-8-28 ID	-

PFERD

10



Cutting tools for stationary applications

Cutting tools for stationary applications
Table of contents

Cutting tools for stationary applications

- General information 3
- Material suitability overview 4
- Explanation of pictograms used 5
- Formulae for cut data calculation 5
- Explanation of item designation 6



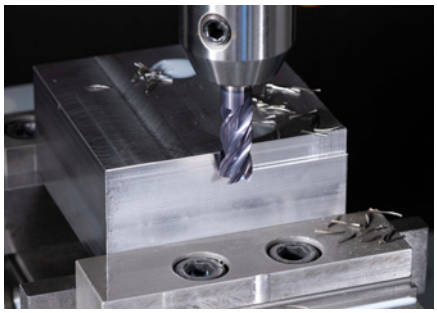
Universal solid tungsten carbide end mills

- Universal end mill with two blades UC2 9
- Universal end mill with three blades UC3 12
- Universal end mill with four blades UC4 15
- Universal end mill with six/eight blades UC6/8 18
- Universal deburring end mill UD 20
- Universal full radius end mill UB 23

Cutting tools for stationary applications from PFERD

PFERD supplies cutting tools for all of the most common stationary applications.

PFERD solid carbide mills are suitable for a wide range of milling operations on lathes and milling machines, and in automated centres. The tools' optimum stock removal rate ensures high productivity.



Technical customer support

If you have any questions about optimizing your stock removal applications, our sales representatives and technical advisers will be happy to help or visit you. PFERD works alongside you to provide application engineering solutions for working with diverse materials.

Please do not hesitate to contact us for further information. You can find our worldwide sales office addresses at: **www.pferd.com.**

PFERD quality

PFERD solid carbide mills are made from tungsten carbide optimized for specific applications and with very low manufacturing tolerances, and achieve the very highest quality standards. The quality of PFERD tools has been certified according to ISO 9001.



Custom-made products

If you cannot find the solution for your particular application in our catalogue range, we are happy to produce milling tools to meet your wishes and requirements. Our sales representatives and technical advisers will be happy to assist you in analyzing your task.

Find your ideal tool solution in just three steps:

- **1. Process analysis**
  Make an appointment with our experienced sales representatives and technical advisers. You can find our worldwide sales office addresses at **www.pferd.com**.
- **2. Production**
  Our production teams subsequently create a technical drawing with which your made-to-order product will be produced.
- **3. Use**
  See the quality, performance and economic value of PFERD tools for yourself!

Resharpening

All PFERD cutting tools for stationary applications can be reground. Please contact us for further information.

Cutting tools for stationary applications
Material suitability overview

Material group			Universal full radius end mill UB	Universal deburring end mill UD	Universal end mill with two blades UC2	Universal end mill with three blades UC3	Universal end mill with four blades UC4	Universal end mill with six/ eight blades UC6/8
P	Steel	All types of steel and cast steel up to 1,400 N/mm²	●	●	●	●	●	●
M	Stainless steel	Ferritic and martensitic	●	●	●	●	○	●
		Austenitic	●	●	●	●	○	●
		High-temperature-resistant and ferritic-austenitic (duplex)	○	●	○	○	○	○
K	Cast iron	Cast iron with flake graphite (GJL, GG, grey cast iron)	●	●	●	●	●	●
		Cast iron with nodular graphite (GJS, GGG)	●	●	●	●	●	●
N	Non-ferrous metals	Aluminium	○	●	○	○	○	○
		Copper, brass, bronze, red brass	●	●	○	○	○	○
S	Super and titanium alloys	Heat-resistant super alloys based on Fe, Ni and Co		○		○	○	●
		Pure titanium		○		○	○	●
		Titanium alloys		○		○	○	●
H	Hard steels and chilled castings	Heat-treated and hardened steels up to 50 HRC	●	○	○	○	○	○
		Hardened steels up to 58 HRC	○					
		Hardened steels over 58 HRC						
O	Other	Thermoplastics	○	○	○	○	○	○
		Duroplastics						
		GRP/CRP reinforced plastics, graphite						

● = highly suitable ○ = suitable

Cutting tools for stationary applications
Explanation of pictograms used

Geometry – Type

45° corner chamfer

Sharp

Radius

60° conical shape

90° conical shape

Full radius

Geometry – Number of blades

Number of blades

Geometry – Torsion

Torsion angle

Norm

Company standard

DIN 6527L

Shank type

Smooth cylindrical shank HA in accordance with DIN 6535

Weldon shank HB in accordance with DIN 6535 with lateral driving surface

Feed direction

Feed xy

Feed xy(z)

Feed xyz

Unequal pitch

Unequal cutting pitch

Applications

Side milling

Slot cutting

Ramping

Drilling

Chamfering/deburring

Profile milling

Profile milling – use of shoulder

Profile milling – use of tip

Formulae for cut data calculation

$$n = \frac{V_c \times 1.000}{DC \times \pi} \ min^{-1}$$

Rotational speed

$$V_c = \frac{DC \times \pi \times n}{1.000} \ m/min$$

Cutting speed

$$V_f = f_z \times ZEFP \times n \ \ mm/min$$

Feeding speed

Explanation of the abbreviations

- a_p = cutting depth
- a_e = contact width
- DC = milling cutter diameter in [mm]
- f_z = Feed per tooth in [mm/tooth]
- n = spindle rotational speed in [rev/min]
- V_c = Cutting speed in [m/min]
- V_f = Feeding speed in [mm/min]
- ZEFP = Effective no. of teeth

Cutting tools for stationary applications
Explanation of item designation

SCM-UC4-M100C-M72HB AL40
① ② ③ ④ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑭

① Tool group
SCM = Solid carbide mill

② Product line
U = Universal Line

③ Shape
B = Full radius end mill (ball nose)
D = Deburring end mill (deburring/ chamfering)
C = Cylindrical end mill with centre cut

④ Number of cutting edges

⑤ Material group
ISO groups P, M, K, N, S, H.
Blank, unless specified.

⑥ Units
M = Metric

⑦ Cutting diameter
Metric: mm x 10
Example: D 10.5 mm = 105

⑧ Corner design
A = Angled
Example: A90°
C = Chamfer
R = radius with size
Example: R40 for 4.0 mm
S = Sharp

⑨ Cut length class

XS:	APMX 3 x DC
S:	APMX 1-2 x DC
M:	APMX 2-2.5 x DC
L:	APMX 2.5-3 x DC
XL:	APMX >3 x DC

⑩ Total length
Metric: total length LF in mm.
Not specified for deburring end mills.

⑪ Shank type
HA = Cylindrical
HB = Weldon shank (in accordance with DIN 6535)
Additional shank diameter for design with DC < 6 mm and DCON = 6 mm

⑫ *

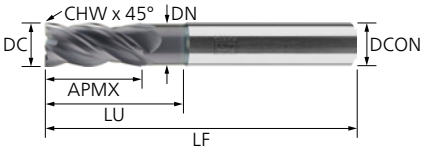
⑬ *

⑭ Blade material

*Optional

Explanation of short names in accordance with ISO 13399

APMX	= Maximum cutting depth
CHW	= Chamfer width
DC	= Cutting diameter
DCON	= Shank diameter
DN	= Neck diameter
KAPR	= Tool cutting edge angle
LF	= Total length
LU	= Working length
RE	= Corner radius
ZEFP	= No. of teeth



Recommended cutting speeds [m/min]

Material group			Specification/ example material	Suitability	Full slot milling a_p = 1 x DC; a_e = 1 x DC 								
					Cutting speed v_c [m/min]	Tooth feed f_z [mm/tooth] for cutting diameter DC [mm]							
						4	5	6	8	10	12	16	20
P	Steel	All types of steel and cast steel up to 1,400 N/mm²	up to 500 N/mm²	•	90	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
			500 to 700 N/mm²	•	85	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
			700 to 1,000 N/mm²	•	80	0.02	0.02	0.02	0.03	0.04	0.045	0.055	0.07
			1,000 to 1,400 N/mm²	•	70	0.02	0.02	0.02	0.03	0.04	0.045	0.055	0.07
M	Stainless steel	Ferritic and martensitic	e.g. 1.4105,1.4122	•	55	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
		Austenitic	e.g. 1.4301,1.4571	•	55	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
		High-temperature-resistant and ferritic-austenitic (duplex)	e.g. 1.4362,1.4462	○	45	0.018	0.018	0.02	0.025	0.03	0.04	0.05	0.065
K	Cast iron	Cast iron with flake graphite (GJL, GG, grey cast iron)	up to 180 HB	•	80	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
		Cast iron with nodular graphite (GJS, GGG)	160 to 260 HB	•	65	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
N	Non-ferrous metals	Aluminium	Al up to 10% Si	○	135	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
			Al > 10% Si	○	110	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
		Copper, brass, bronze and red brass		○	90	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
S	Super and titanium alloys	Heat-resistant super alloys	Based on Fe, Ni and Co										
		Pure titanium											
		Titanium alloys											
H	Hard steels and chilled castings	Heat-treated and hardened steels	up to 50 HRC	○	60	0.02	0.02	0.02	0.03	0.04	0.055	0.06	0.07
			up to 58 HRC										
			> 58 HRC										
O	Other	Thermoplastics		○	90	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
		Duroplastics											
		GRP/CRP reinforced plastics, graphite											

• = highly suitable ○ = suitable

Cutting tools for stationary applications
Universal end mill with two blades UC2

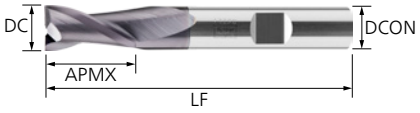
Recommended cutting speeds [m/min]

Material group			Specification/ example material	Suitability	Side milling a_p = 1 x DC; a_e = 0.1 x DC								
					Cutting speed v_c [m/min]	Tooth feed f_z [mm/tooth] for cutting diameter DC [mm]							
						4	5	6	8	10	12	16	20
P	Steel	All types of steel and cast steel up to 1,400 N/mm²	up to 500 N/mm²	•	210	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
			500 to 700 N/mm²	•	190	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
			700 to 1,000 N/mm²	•	170	0.025	0.025	0.035	0.045	0.06	0.07	0.08	0.1
			1,000 to 1,400 N/mm²	•	150	0.025	0.025	0.035	0.045	0.06	0.07	0.08	0.1
M	Stainless steel	Ferritic and martensitic	e.g. 1.4105,1.4122	•	120	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
		Austenitic	e.g. 1.4301,1.4571	•	120	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
		High-temperature-resistant and ferritic-austenitic (duplex)	e.g. 1.4362,1.4462	○	90	0.025	0.025	0.033	0.038	0.045	0.06	0.08	0.1
K	Cast iron	Cast iron with flake graphite (GJL, GG, grey cast iron)	up to 180 HB	•	180	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
		Cast iron with nodular graphite (GJS, GGG)	160 to 260 HB	•	140	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
N	Non-ferrous metals	Aluminium	Al up to 10% Si	○	250	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
			Al > 10% Si	○	200	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
		Copper, brass, bronze and red brass		○	200	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
S	Super and titanium alloys	Heat-resistant super alloys	Based on Fe, Ni and Co										
		Pure titanium											
		Titanium alloys											
H	Hard steels and chilled castings	Heat-treated and hardened steels	up to 50 HRC	○	75	0.025	0.025	0.035	0.045	0.06	0.07	0.08	0.1
			up to 58 HRC										
			> 58 HRC										
O	Other	Thermoplastics		○	200	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
		Duroplastics											
		GRP/CRP reinforced plastics, graphite											

• = highly suitable ○ = suitable

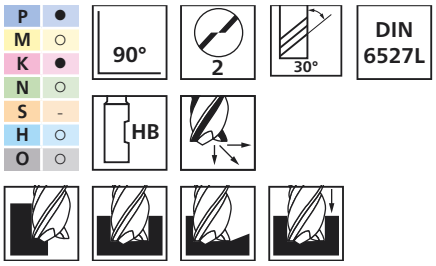
Universal solid tungsten carbide end mills

Universal end mill with two blades UC2



Sharp corner design

End mills for full slot milling, drill slot milling and for roughing with high contact widths. The solid tungsten carbide end mills are suitable for universal use on a variety of materials.



Special features:

- High productivity due to optimum stock removal rate.
- Long tool life due to modern tool coating.
- Good chip removal due to very large chip space.

DC [mm]	DCON [mm]	APMX [mm]	LF [mm]	ZEFP		Item no.	Designation	Price/unit EUR
Long HB			HB					
4	6	8	57	2	1	23000124	SCM-UC2-M040S-S57HB6 AL40	-
5	6	10	57	2	1	23000125	SCM-UC2-M050S-S57HB6 AL40	-
6	6	10	57	2	1	23000126	SCM-UC2-M060S-S57HB AL40	-
8	8	16	63	2	1	23000127	SCM-UC2-M080S-S63HB AL40	-
10	10	19	72	2	1	23000128	SCM-UC2-M100S-S72HB AL40	-
12	12	22	83	2	1	23000129	SCM-UC2-M120S-S83HB AL40	-
16	16	26	92	2	1	23000130	SCM-UC2-M160S-S92HB AL40	-

Recommended cutting speeds [m/min]

Material group			Specification/ example material	Suitability	Full slot milling a_p = 1 x DC; a_e = 1 x DC									
					Cutting speed v_c [m/min]	Tooth feed f_z [mm/tooth] for cutting diameter DC [mm]								
						3	4	5	6	8	10	12	16	20
P	Steel	All types of steel and cast steel up to 1,400 N/mm²	up to 500 N/mm²	•	130	0.01	0.016	0.03	0.03	0.04	0.06	0.06	0.085	0.1
			500 to 700 N/mm²	•	120	0.01	0.016	0.03	0.03	0.04	0.06	0.06	0.085	0.1
			700 to 1,000 N/mm²	•	100	0.01	0.016	0.02	0.02	0.03	0.045	0.045	0.06	0.07
			1,000 to 1,400 N/mm²	•	80	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
M	Stainless steel	Ferritic and martensitic	e.g. 1.4105,1.4122	•	45	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
		Austenitic	e.g. 1.4301,1.4571	•	50	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
		High-temperature-resistant and ferritic-austenitic (duplex)	e.g. 1.4362,1.4462	○	40	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
K	Cast iron	Cast iron with flake graphite (GJL, GG, grey cast iron)	up to 180 HB	•	130	0.01	0.016	0.03	0.03	0.04	0.06	0.06	0.085	0.1
		Cast iron with nodular graphite (GJS, GGG)	160 to 260 HB	•	100	0.01	0.016	0.03	0.03	0.04	0.06	0.06	0.085	0.1
N	Non-ferrous metals	Aluminium	Al up to 10% Si	○	200	0.03	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
			Al > 10% Si	○	180	0.03	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
		Copper, brass, bronze and red brass		○	200	0.03	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
S	Super and titanium alloys	Heat-resistant super alloys	Based on Fe, Ni and Co	○	35	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
		Pure titanium		○	100	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
		Titanium alloys		○	50	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
H	Hard steels and chilled castings	Heat-treated and hardened steels	up to 50 HRC	○	60	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
			up to 58 HRC											
			> 58 HRC											
O	Other	Thermoplastics		○	110	0.025	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
		Duroplastics												
		GRP/CRP reinforced plastics, graphite												

• = highly suitable ○ = suitable

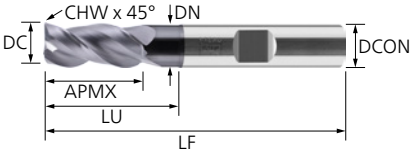
Recommended cutting speeds [m/min]

Material group			Specification/ example material	Suitability	Side milling a_p = 1 x DC; a_e = 0.4 x DC									
					Cutting speed v_c [m/min]	Tooth feed f_z [mm/tooth] for cutting diameter DC [mm]								
						3	4	5	6	8	10	12	16	20
P	Steel	All types of steel and cast steel up to 1,400 N/mm²	up to 500 N/mm²	•	180	0.01	0.016	0.035	0.035	0.045	0.075	0.075	0.1	0.12
			500 to 700 N/mm²	•	160	0.01	0.016	0.035	0.035	0.045	0.075	0.075	0.1	0.12
			700 to 1,000 N/mm²	•	150	0.01	0.016	0.025	0.025	0.035	0.055	0.055	0.07	0.085
			1,000 to 1,400 N/mm²	•	110	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
M	Stainless steel	Ferritic and martensitic	e.g. 1.4105,1.4122	•	70	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
		Austenitic	e.g. 1.4301,1.4571	•	75	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
		High-temperature-resistant and ferritic-austenitic (duplex)	e.g. 1.4362,1.4462	○	60	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
K	Cast iron	Cast iron with flake graphite (GJL, GG, grey cast iron)	up to 180 HB	•	180	0.01	0.016	0.035	0.035	0.045	0.075	0.075	0.1	0.12
		Cast iron with nodular graphite (GJS, GGG)	160 to 260 HB	•	140	0.01	0.016	0.035	0.035	0.045	0.075	0.075	0.1	0.12
N	Non-ferrous metals	Aluminium	Al up to 10% Si	○	250	0.04	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
			Al > 10% Si	○	200	0.04	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
		Copper, brass, bronze and red brass		○	200	0.04	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
S	Super and titanium alloys	Heat-resistant super alloys	Based on Fe, Ni and Co	○	45	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
		Pure titanium		○	110	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
		Titanium alloys		○	60	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
H	Hard steels and chilled castings	Heat-treated and hardened steels	up to 50 HRC	○	75	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
			up to 58 HRC											
			> 58 HRC											
O	Other	Thermoplastics		○	200	0.04	0.05	0.05	0.065	0.075	0.09	0.12	0.16	0.2
		Duroplastics												
		GRP/CRP reinforced plastics, graphite												

• = highly suitable ○ = suitable

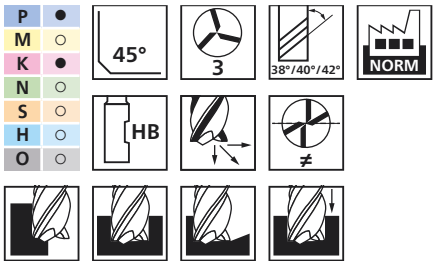
Universal solid tungsten carbide end mills

Universal end mill with three blades UC3



Chamfer corner design

End mills for full slot milling, drill slot milling and for a wide range of roughing tasks. The solid tungsten carbide end mills are suitable for universal use on a variety of materials.



Special features:

- High productivity due to optimum stock removal rate.
- Long tool life due to modern tool coating.
- Design with neck chip channel.

DC [mm]	DCON [mm]	DN [mm]	APMX [mm]	LF [mm]	LU [mm]	CHW [mm]	ZEFP		Item no.	Designation	Price/ unit EUR
Long HB					HB						
3	6	2.8	8	57	11	0.1	3	1	23000131	SCM-UC3-M030C-M57HB6 AL40	-
4	6	3.7	11	57	16	0.1	3	1	23000132	SCM-UC3-M040C-M57HB6 AL40	-
5	6	4.7	13	57	18	0.15	3	1	23000133	SCM-UC3-M050C-M57HB6 AL40	-
6	6	5.6	13	57	18	0.2	3	1	23000134	SCM-UC3-M060C-M57HB AL40	-
8	8	7.5	19	63	26	0.2	3	1	23000135	SCM-UC3-M080C-M63HB AL40	-
10	10	9.5	22	72	32	0.2	3	1	23000136	SCM-UC3-M100C-M72HB AL40	-
12	12	11	26	83	36	0.3	3	1	23000137	SCM-UC3-M120C-M83HB AL40	-
16	16	15	32	92	42	0.3	3	1	23000138	SCM-UC3-M160C-M92HB AL40	-

Recommended cutting speeds [m/min]

Material group			Specification/ example material	Suitability	Full slot milling a_p = 1 x DC; a_e = 1 x DC 									
					Cutting speed v_c [m/min]	Tooth feed f_z [mm/tooth] for cutting diameter DC [mm]								
						3	4	5	6	8	10	12	16	20
P	Steel	All types of steel and cast steel up to 1,400 N/mm²	up to 500 N/mm²	•	135	0.01	0.016	0.03	0.03	0.04	0.06	0.06	0.085	0.1
			500 to 700 N/mm²	•	130	0.01	0.016	0.03	0.03	0.04	0.06	0.06	0.085	0.1
			700 to 1,000 N/mm²	•	110	0.01	0.016	0.02	0.02	0.03	0.045	0.045	0.06	0.07
			1,000 to 1,400 N/mm²	•	80	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
M	Stainless steel	Ferritic and martensitic	e.g. 1.4105,1.4122	○	70	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
		Austenitic	e.g. 1.4301,1.4571	○	60	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
		High-temperature-resistant and ferritic-austenitic (duplex)	e.g. 1.4362,1.4462	○	50	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
K	Cast iron	Cast iron with flake graphite (GJL, GG, grey cast iron)	up to 180 HB	•	130	0.01	0.016	0.03	0.03	0.04	0.06	0.06	0.085	0.1
		Cast iron with nodular graphite (GJS, GGG)	160 to 260 HB	•	100	0.01	0.016	0.03	0.03	0.04	0.06	0.06	0.085	0.1
N	Non-ferrous metals	Aluminium	Al up to 10% Si	○	200	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.1	0.11
			Al > 10% Si	○	180	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.1	0.11
		Copper, brass, bronze and red brass		○	200	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.1	0.11
S	Super and titanium alloys	Heat-resistant super alloys	Based on Fe, Ni and Co	○	35	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
		Pure titanium		○	100	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
		Titanium alloys		○	50	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
H	Hard steels and chilled castings	Heat-treated and hardened steels	up to 50 HRC	○	60	0.01	0.012	0.02	0.02	0.03	0.045	0.045	0.06	0.07
			up to 58 HRC											
			> 58 HRC											
O	Other	Thermoplastics		○	180	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.1	0.11
		Duroplastics												
		GRP/CRP reinforced plastics, graphite												

• = highly suitable ○ = suitable

Cutting tools for stationary applications
Universal end mill with four blades UC4

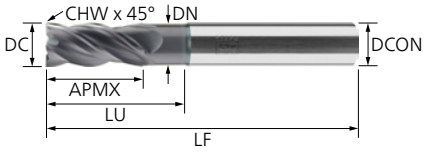
Recommended cutting speeds [m/min]

Material group			Specification/ example material	Suitability	Side milling a_p = 2 x DC; a_e = 0.4 x DC 									
					Cutting speed v_c [m/min]	Tooth feed f_z [mm/tooth] for cutting diameter DC [mm]								
						3	4	5	6	8	10	12	16	20
P	Steel	All types of steel and cast steel up to 1,400 N/mm²	up to 500 N/mm²	•	180	0.01	0.016	0.035	0.035	0.045	0.075	0.075	0.1	0.12
			500 to 700 N/mm²	•	160	0.01	0.016	0.035	0.035	0.045	0.075	0.075	0.1	0.12
			700 to 1,000 N/mm²	•	150	0.01	0.016	0.025	0.025	0.035	0.055	0.055	0.07	0.085
			1,000 to 1,400 N/mm²	•	110	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
M	Stainless steel	Ferritic and martensitic	e.g. 1.4105,1.4122	○	85	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
		Austenitic	e.g. 1.4301,1.4571	○	75	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
		High-temperature-resistant and ferritic-austenitic (duplex)	e.g. 1.4362,1.4462	○	65	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
K	Cast iron	Cast iron with flake graphite (GJL, GG, grey cast iron)	up to 180 HB	•	180	0.01	0.016	0.035	0.035	0.045	0.075	0.075	0.1	0.12
		Cast iron with nodular graphite (GJS, GGG)	160 to 260 HB	•	140	0.01	0.016	0.035	0.035	0.045	0.075	0.075	0.1	0.12
N	Non-ferrous metals	Aluminium	Al up to 10% Si	○	230	0.03	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
			Al > 10% Si	○	210	0.03	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
		Copper, brass, bronze and red brass		○	230	0.03	0.035	0.035	0.04	0.05	0.06	0.08	0.1	0.13
S	Super and titanium alloys	Heat-resistant super alloys	Based on Fe, Ni and Co	○	45	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
		Pure titanium		○	120	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
		Titanium alloys		○	70	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
H	Hard steels and chilled castings	Heat-treated and hardened steels	up to 50 HRC	○	75	0.01	0.012	0.025	0.025	0.035	0.055	0.055	0.07	0.085
			up to 58 HRC											
			> 58 HRC											
O	Other	Thermoplastics		○	210	0.04	0.04	0.06	0.06	0.07	0.07	0.085	0.1	0.12
		Duroplastics												
		GRP/CRP reinforced plastics, graphite												

• = highly suitable ○ = suitable

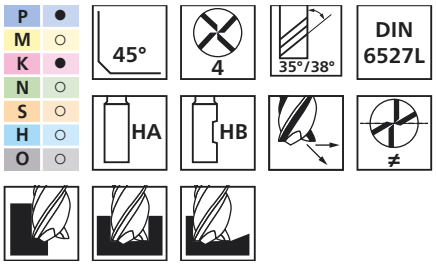
Universal solid tungsten carbide end mills

Universal end mill with four blades UC4



Chamfer corner design

End mills for various applications, from roughing through to finishing and ramping. The solid tungsten carbide end mills are suitable for universal use on a variety of materials.



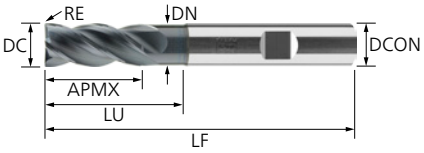
Special features:

- High productivity due to optimum stock removal rate.
- Long tool life due to modern tool coating.
- Design with neck chip channel.

DC [mm]	DCON [mm]	DN [mm]	APMX [mm]	LF [mm]	LU [mm]	CHW [mm]	ZEFP		Item no.	Designation	Price/ unit EUR
Long HA					HA						
3	6	2.8	8	57	18	0.13	4	1	23000148	SCM-UC4-M030C-M57HA6 AL40	-
4	6	3.6	11	57	21	0.13	4	1	23000149	SCM-UC4-M040C-M57HA6 AL40	-
5	6	4.6	13	57	21	0.2	4	1	23000150	SCM-UC4-M050C-M57HA6 AL40	-
6	6	5.5	13	57	21	0.2	4	1	23000151	SCM-UC4-M060C-M57HA AL40	-
8	8	7.5	19	63	27	0.2	4	1	23000152	SCM-UC4-M080C-M63HA AL40	-
10	10	9.5	22	72	32	0.2	4	1	23000153	SCM-UC4-M100C-M72HA AL40	-
12	12	11.5	26	83	38	0.3	4	1	23000154	SCM-UC4-M120C-M83HA AL40	-
16	16	15.5	32	92	44	0.3	4	1	23000155	SCM-UC4-M160C-M92HA AL40	-
20	20	19.5	38	104	54	0.4	4	1	23000156	SCM-UC4-M200C-M104HA AL40	-
Long HB					HB						
3	6	2.8	8	57	18	0.13	4	1	23000139	SCM-UC4-M030C-M57HB6 AL40	-
4	6	3.6	11	57	21	0.13	4	1	23000140	SCM-UC4-M040C-M57HB6 AL40	-
5	6	4.6	13	57	21	0.2	4	1	23000141	SCM-UC4-M050C-M57HB6 AL40	-
6	6	5.5	13	57	21	0.2	4	1	23000142	SCM-UC4-M060C-M57HB AL40	-
8	8	7.5	19	63	27	0.2	4	1	23000143	SCM-UC4-M080C-M63HB AL40	-
10	10	9.5	22	72	32	0.2	4	1	23000144	SCM-UC4-M100C-M72HB AL40	-
12	12	11.5	26	83	38	0.3	4	1	23000145	SCM-UC4-M120C-M83HB AL40	-
16	16	15.5	32	92	44	0.3	4	1	23000146	SCM-UC4-M160C-M92HB AL40	-
20	20	19.5	38	104	54	0.4	4	1	23000147	SCM-UC4-M200C-M104HB AL40	-

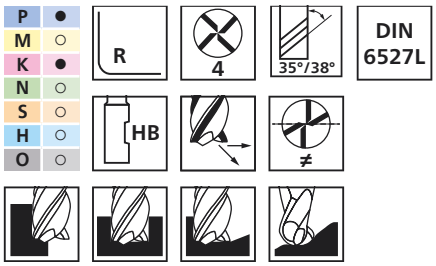
Universal solid tungsten carbide end mills

Universal end mill with four blades UC4



Radius corner design

End mills for various applications, from roughing through to finishing. The radius design is also suitable for free-form profile cutting. The solid tungsten carbide end mills can be used universally on a large number of materials.



Special features:

- High productivity due to optimum stock removal rate.
- Long tool life due to modern tool coating.
- Design with neck chip channel.

DC [mm]	DCON [mm]	DN [mm]	APMX [mm]	LF [mm]	LU [mm]	RE [mm]	ZEFP		Item no.	Designation	Price/ unit EUR
Long HB						**HB**					
8	8	7.5	19	63	27	0.5	4	1	23000157	SCM-UC4-M080R05-M63HB AL40	-
						1	4	1	23000158	SCM-UC4-M080R10-M63HB AL40	-
						1.5	4	1	23000159	SCM-UC4-M080R15-M63HB AL40	-
						2	4	1	23000160	SCM-UC4-M080R20-M63HB AL40	-
10	10	9.5	22	72	32	0.5	4	1	23000161	SCM-UC4-M100R05-M72HB AL40	-
						1	4	1	23000162	SCM-UC4-M100R10-M72HB AL40	-
						1.5	4	1	23000163	SCM-UC4-M100R15-M72HB AL40	-
						2	4	1	23000164	SCM-UC4-M100R20-M72HB AL40	-
12	12	11.5	26	83	38	0.5	4	1	23000165	SCM-UC4-M120R05-M83HB AL40	-
						1	4	1	23000166	SCM-UC4-M120R10-M83HB AL40	-
						1.5	4	1	23000167	SCM-UC4-M120R15-M83HB AL40	-
						2	4	1	23000168	SCM-UC4-M120R20-M83HB AL40	-
16	16	15.5	32	92	44	1	4	1	23000169	SCM-UC4-M160R10-M92HB AL40	-
						1.5	4	1	23000170	SCM-UC4-M160R15-M92HB AL40	-
						2	4	1	23000171	SCM-UC4-M160R20-M92HB AL40	-
20	20	19.5	38	104	54	1	4	1	23000172	SCM-UC4-M200R10-M104HB AL40	-
						2	4	1	23000173	SCM-UC4-M200R20-M104HB AL40	-

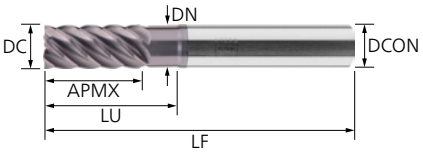
Recommended cutting speeds [m/min]

Material group			Specification/ example material	Suitability	Side milling a_p = 1.5 x DC; a_e = 0.05 x DC						
					Cutting speed v_c [m/min]	Tooth feed f_z [mm/tooth] for cutting diameter DC [mm]					
						6	8	10	12	16	20
P	Steel	All types of steel and cast steel up to 1,400 N/mm²	up to 500 N/mm²	•	200	0.035	0.04	0.055	0.065	0.08	0.1
			500 to 700 N/mm²	•	160	0.035	0.04	0.055	0.065	0.08	0.1
			700 to 1,000 N/mm²	•	120	0.035	0.04	0.055	0.065	0.08	0.1
			1,000 to 1,400 N/mm²	•	100	0.025	0.03	0.04	0.05	0.065	0.08
M	Stainless steel	Ferritic and martensitic	e.g. 1.4105,1.4122	•	100	0.025	0.025	0.04	0.05	0.065	0.08
		Austenitic	e.g. 1.4301,1.4571	•	80	0.025	0.03	0.04	0.05	0.065	0.08
		High-temperature-resistant and ferritic-austenitic (duplex)	e.g. 1.4362,1.4462	○	65	0.02	0.025	0.03	0.04	0.05	0.065
K	Cast iron	Cast iron with flake graphite (GJL, GG, grey cast iron)	up to 180 HB	•	170	0.03	0.04	0.055	0.065	0.08	0.1
		Cast iron with nodular graphite (GJS, GGG)	160 to 260 HB	•	140	0.03	0.04	0.055	0.065	0.08	0.1
N	Non-ferrous metals	Aluminium	Al up to 10% Si								
			Al > 10% Si	○	300	0.03	0.04	0.055	0.065	0.08	0.1
		Copper, brass, bronze and red brass		○	340	0.03	0.04	0.055	0.065	0.08	0.1
S	Super and titanium alloys	Heat-resistant super alloys	Based on Fe, Ni and Co	•	40	0.02	0.025	0.03	0.035	0.045	0.065
		Pure titanium		•	80	0.02	0.025	0.03	0.035	0.045	0.065
		Titanium alloys		•	70	0.02	0.025	0.03	0.035	0.045	0.065
H	Hard steels and chilled castings	Heat-treated and hardened steels	up to 50 HRC	○	60	0.025	0.03	0.03	0.035	0.045	0.065
			up to 58 HRC								
			> 58 HRC								
O	Other	Thermoplastics		○	300	0.03	0.04	0.055	0.065	0.08	0.1
		Duroplastics									
		GRP/CRP reinforced plastics, graphite									

• = highly suitable ○ = suitable

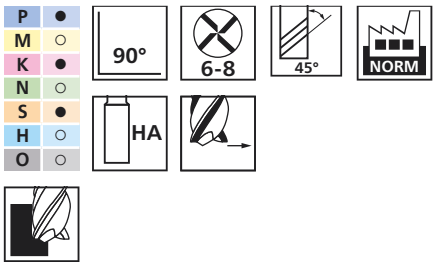
Universal solid tungsten carbide end mills

Universal end mill with six/eight blades UC6/8



Sharp corner design

End mills for finishing and for trimming of workpiece contours. The low tool deflection allows very precise working. The solid tungsten carbide end mills are suitable for universal use on a variety of materials.



Special features:

- High surface quality.
- High productivity due to optimum stock removal rate.
- Long tool life due to modern tool coating.

DC [mm]	DCON [mm]	APMX [mm]	LF [mm]	ZEFP		Item no.	Designation	Price/unit EUR
Long HA			 **HA**					
6	6	13	57	6	1	23000174	SCM-UC6-M060S-M57HA AL40	-
8	8	19	63	6	1	23000175	SCM-UC6-M080S-M63HA AL40	-
10	10	22	72	6	1	23000176	SCM-UC6-M100S-M72HA AL40	-
12	12	26	83	6	1	23000177	SCM-UC6-M120S-M83HA AL40	-
16	16	32	92	6	1	23000178	SCM-UC6-M160S-S92HA AL40	-
20	20	38	104	8	1	23000179	SCM-UC8-M200S-S104HA AL40	-

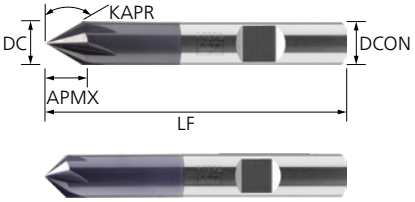
Recommended cutting speeds [m/min]

Material group			Specification/ example material	Suitability	Chamfering/deburring a_p = 0.2 x DC; a_e = 0.1 x DC				
					Cutting speed v_c [m/min]	Tooth feed f_z [mm/tooth] for cutting diameter DC [mm]			
						6	8	10	12
P	Steel	All types of steel and cast steel up to 1,400 N/mm²	up to 500 N/mm²	•	180	0.045	0.065	0.085	0.14
			500 to 700 N/mm²	•	160	0.045	0.065	0.085	0.14
			700 to 1,000 N/mm²	•	140	0.025	0.04	0.045	0.075
			1,000 to 1,400 N/mm²	•	120	0.025	0.04	0.045	0.075
M	Stainless steel	Ferritic and martensitic	e.g. 1.4105,1.4122	•	100	0.025	0.04	0.045	0.075
		Austenitic	e.g. 1.4301,1.4571	•	75	0.025	0.04	0.045	0.075
		High-temperature-resistant and ferritic-austenitic (duplex)	e.g. 1.4362,1.4462	•	60	0.025	0.04	0.045	0.075
K	Cast iron	Cast iron with flake graphite (GJL, GG, grey cast iron)	up to 180 HB	•	180	0.045	0.065	0.085	0.14
		Cast iron with nodular graphite (GJS, GGG)	160 to 260 HB	•	140	0.025	0.04	0.045	0.075
N	Non-ferrous metals	Aluminium	Al up to 10% Si	•	300	0.045	0.065	0.085	0.14
			Al > 10% Si	•	260	0.045	0.065	0.085	0.14
		Copper, brass, bronze and red brass		•	300	0.045	0.065	0.085	0.14
S	Super and titanium alloys	Heat-resistant super alloys	Based on Fe, Ni and Co	○	50	0.025	0.04	0.045	0.075
		Pure titanium		○	140	0.025	0.04	0.045	0.075
		Titanium alloys		○	70	0.025	0.04	0.045	0.075
H	Hard steels and chilled castings	Heat-treated and hardened steels	up to 50 HRC	○	70	0.025	0.04	0.045	0.075
			up to 58 HRC						
			> 58 HRC						
O	Other	Thermoplastics		○	300	0.045	0.065	0.085	0.14
		Duroplastics							
		GRP/CRP reinforced plastics, graphite							

• = highly suitable ○ = suitable

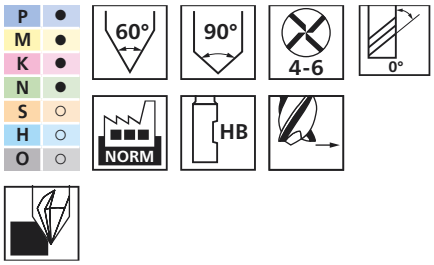
Universal solid tungsten carbide end mills

Universal deburring end mill UD



Conical shape

End mills for deburring and chamfering. The solid tungsten carbide end mills are suitable for universal use on a variety of materials.



Special features:

- High productivity due to optimum stock removal rate.
- Long tool life due to modern tool coating.

DC [mm]	DCON [mm]	APMX [mm]	LF [mm]	KAPR	ZEFP		Item no.	Designation	Price/ unit EUR
60° HB					HB				
6	6	5.2	57	60	4	1	23000116	SCM-UD4-M060A60°-HB AL40	-
8	8	6.9	63	60	5	1	23000117	SCM-UD5-M080A60°-HB AL40	-
10	10	8.7	72	60	6	1	23000118	SCM-UD6-M100A60°-HB AL40	-
12	12	10.4	83	60	6	1	23000119	SCM-UD6-M120A60°-HB AL40	-
90° HB					HB				
6	6	3	57	45	4	1	23000120	SCM-UD4-M060A90°-HB AL40	-
8	8	4	63	45	5	1	23000121	SCM-UD5-M080A90°-HB AL40	-
10	10	5	72	45	6	1	23000122	SCM-UD6-M100A90°-HB AL40	-
12	12	6	83	45	6	1	23000123	SCM-UD6-M120A90°-HB AL40	-

Recommended cutting speeds [m/min]

Material group			Specification/ example material	Suitability	Profile milling – use of tip  a_p	a_e	Cutting speed v_c [m/min]	Tooth feed f_z [mm/tooth] for cutting diameter DC [mm] 3	4	5	6	8	10	12	16
P	Steel	All types of steel and cast steel up to 1,400 N/mm²	up to 500 N/mm²	•	up to 0.1 x D	up to 0.3 x D	900	0.025	0.04	0.055	0.065	0.075	0.08	0.09	0.12
			500 to 700 N/mm²	•	up to 0.1 x D	up to 0.3 x D	700	0.025	0.04	0.055	0.065	0.075	0.08	0.09	0.12
			700 to 1,000 N/mm²	•	up to 0.1 x D	up to 0.3 x D	550	0.025	0.04	0.055	0.065	0.075	0.08	0.09	0.12
			1,000 to 1,400 N/mm²	•	up to 0.06 x D	up to 0.3 x D	400	0.015	0.025	0.03	0.04	0.045	0.055	0.065	0.08
M	Stainless steel	Ferritic and martensitic	e.g. 1.4105,1.4122	•	up to 0.06 x D	up to 0.3 x D	180	0.015	0.025	0.03	0.04	0.045	0.055	0.065	0.08
		Austenitic	e.g. 1.4301,1.4571	•	up to 0.06 x D	up to 0.3 x D	130	0.015	0.025	0.03	0.04	0.045	0.055	0.065	0.08
		High-temperature-resistant and ferritic-austenitic (duplex)	e.g. 1.4362,1.4462	○	up to 0.06 x D	up to 0.3 x D	100	0.01	0.018	0.02	0.03	0.04	0.05	0.06	0.07
K	Cast iron	Cast iron with flake graphite (GJL, GG, grey cast iron)	up to 180 HB	•	up to 0.1 x D	up to 0.3 x D	800	0.025	0.04	0.055	0.065	0.075	0.08	0.09	0.12
		Cast iron with nodular graphite (GJS, GGG)	160 to 260 HB	•	up to 0.1 x D	up to 0.3 x D	750	0.025	0.04	0.055	0.065	0.075	0.08	0.09	0.12
N	Non-ferrous metals	Aluminium	Al up to 10% Si	○	up to 0.1 x D	up to 0.3 x D	1,200	0.025	0.04	0.055	0.065	0.075	0.08	0.09	0.12
			Al > 10% Si	•	up to 0.1 x D	up to 0.3 x D	850	0.025	0.04	0.055	0.065	0.075	0.08	0.09	0.12
		Copper, brass, bronze and red brass		•	up to 0.1 x D	up to 0.3 x D	1,100	0.025	0.04	0.055	0.065	0.075	0.08	0.09	0.12
S	Super and titanium alloys	Heat-resistant super alloys	Based on Fe, Ni and Co												
		Pure titanium													
		Titanium alloys													
H	Hard steels and chilled castings	Heat-treated and hardened steels	up to 50 HRC	•	up to 0.06 x D	up to 0.3 x D	200	0.01	0.018	0.02	0.03	0.04	0.05	0.06	0.07
			up to 58 HRC	○	up to 0.06 x D	up to 0.3 x D	150	0.01	0.018	0.02	0.03	0.04	0.05	0.06	0.07
			> 58 HRC												
O	Other	Thermoplastics		○	up to 0.1 x D	up to 0.3 x D	1,200	0.025	0.04	0.055	0.065	0.075	0.08	0.09	0.12
		Duroplastics													
		GRP/CRP reinforced plastics, graphite													

• = highly suitable ○ = suitable

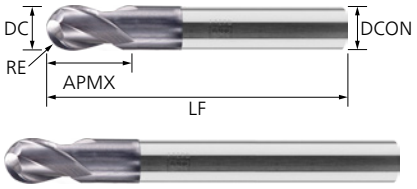
Recommended cutting speeds [m/min]

Material group			Specification/ example material	Suitability	Profile milling – use of shoulder										
					a_p	a_e	Cutting speed v_c [m/min]	Tooth feed f_z [mm/tooth] for cutting diameter DC [mm]							
								3	4	5	6	8	10	12	16
P	Steel	All types of steel and cast steel up to 1,400 N/mm²	up to 500 N/mm²	•	up to 0.1 x D	up to 0.45 x D	570	0.04	0.06	0.08	0.1	0.11	0.12	0.14	0.18
			500 to 700 N/mm²	•	up to 0.1 x D	up to 0.45 x D	450	0.04	0.06	0.08	0.1	0.11	0.12	0.14	0.18
			700 to 1,000 N/mm²	•	up to 0.1 x D	up to 0.45 x D	350	0.04	0.06	0.08	0.1	0.11	0.12	0.14	0.18
			1,000 to 1,400 N/mm²	•	up to 0.1 x D	up to 0.45 x D	250	0.02	0.04	0.05	0.06	0.07	0.08	0.1	0.12
M	Stainless steel	Ferritic and martensitic	e.g. 1.4105,1.4122	•	up to 0.1 x D	up to 0.45 x D	130	0.02	0.04	0.05	0.06	0.07	0.08	0.1	0.12
		Austenitic	e.g. 1.4301,1.4571	•	up to 0.1 x D	up to 0.45 x D	80	0.02	0.04	0.05	0.06	0.07	0.08	0.1	0.12
		High-temperature-resistant and ferritic-austenitic (duplex)	e.g. 1.4362,1.4462	○	up to 0.1 x D	up to 0.45 x D	60	0.015	0.03	0.04	0.05	0.06	0.07	0.08	0.1
K	Cast iron	Cast iron with flake graphite (GJL, GG, grey cast iron)	up to 180 HB	•	up to 0.1 x D	up to 0.45 x D	550	0.04	0.06	0.08	0.1	0.11	0.12	0.14	0.18
		Cast iron with nodular graphite (GJS, GGG)	160 to 260 HB	•	up to 0.1 x D	up to 0.45 x D	500	0.04	0.06	0.08	0.1	0.11	0.12	0.14	0.18
N	Non-ferrous metals	Aluminium	Al up to 10% Si	○	up to 0.1 x D	up to 0.45 x D	750	0.04	0.06	0.08	0.1	0.11	0.12	0.14	0.18
			Al > 10% Si	•	up to 0.1 x D	up to 0.45 x D	600	0.04	0.06	0.08	0.1	0.11	0.12	0.14	0.18
		Copper, brass, bronze and red brass		•	up to 0.1 x D	up to 0.45 x D	700	0.04	0.06	0.08	0.1	0.11	0.12	0.14	0.18
S	Super and titanium alloys	Heat-resistant super alloys	Based on Fe, Ni and Co												
		Pure titanium													
		Titanium alloys													
H	Hard steels and chilled castings	Heat-treated and hardened steels	up to 50 HRC	•	up to 0.1 x D	up to 0.45 x D	150	0.02	0.04	0.05	0.06	0.07	0.08	0.1	0.12
			up to 58 HRC	○	up to 0.1 x D	up to 0.45 x D	110	0.02	0.04	0.05	0.06	0.07	0.08	0.1	0.12
			> 58 HRC												
O	Other	Thermoplastics		○	up to 0.1 x D	up to 0.45 x D	750	0.04	0.06	0.08	0.1	0.11	0.12	0.14	0.18
		Duroplastics													
		GRP/CRP reinforced plastics, graphite													

• = highly suitable ○ = suitable

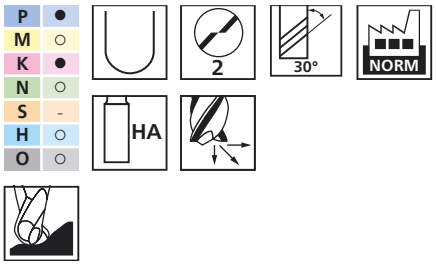
Universal solid tungsten carbide end mills

Universal full radius end mill UB



Full radius

End mills for free-form profile cutting. The solid tungsten carbide end mills are suitable for universal use on a variety of materials.



Special features:

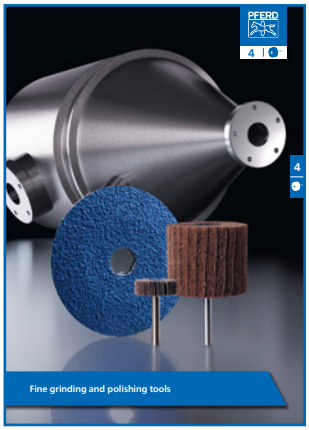
- High productivity due to optimum stock removal rate.
- Long tool life due to modern tool coating.

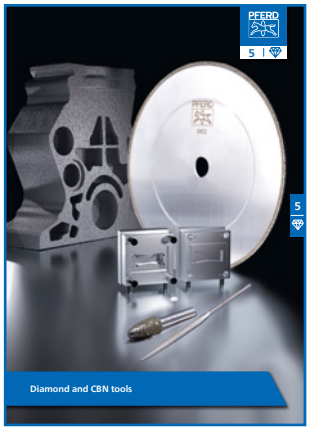
D_c [mm]	DCON [mm]	APMX [mm]	LF [mm]	RE [mm]	ZEFP		Item no.	Designation	Price/ unit EUR
Long HA				HA					
3	6	5	54	1.5	2	1	23000100	SCM-UB2-M030R-S54HA6 AL40	-
4	6	8	54	2	2	1	23000101	SCM-UB2-M040R-S54HA6 AL40	-
5	6	9	54	2.5	2	1	23000102	SCM-UB2-M050R-S54HA6 AL40	-
6	6	10	54	3	2	1	23000103	SCM-UB2-M060R-S54HA AL40	-
8	8	12	58	4	2	1	23000104	SCM-UB2-M080R-S58HA AL40	-
10	10	14	66	5	2	1	23000105	SCM-UB2-M100R-S66HA AL40	-
12	12	16	73	6	2	1	23000106	SCM-UB2-M120R-S73HA AL40	-
16	16	22	82	8	2	1	23000107	SCM-UB2-M160R-S82HA AL40	-
Extra long HA				HA					
3	6	5	80	1.5	2	1	23000108	SCM-UB2-M030R-S80HA6 AL40	-
4	6	8	80	2	2	1	23000109	SCM-UB2-M040R-S80HA6 AL40	-
5	6	9	100	2.5	2	1	23000110	SCM-UB2-M050R-S100HA6 AL40	-
6	6	10	100	3	2	1	23000111	SCM-UB2-M060R-S100HA AL40	-
8	8	12	100	4	2	1	23000112	SCM-UB2-M080R-S100HA AL40	-
10	10	14	100	5	2	1	23000113	SCM-UB2-M100R-S100HA AL40	-
12	12	16	100	6	2	1	23000114	SCM-UB2-M120R-S100HA AL40	-
16	16	22	150	8	2	1	23000115	SCM-UB2-M160R-S150HA AL40	-





















New additions to the PFERD product range

Stay up to date and discover our new products digitally and online. Our new products have **blue** item numbers in the Tool Manual.