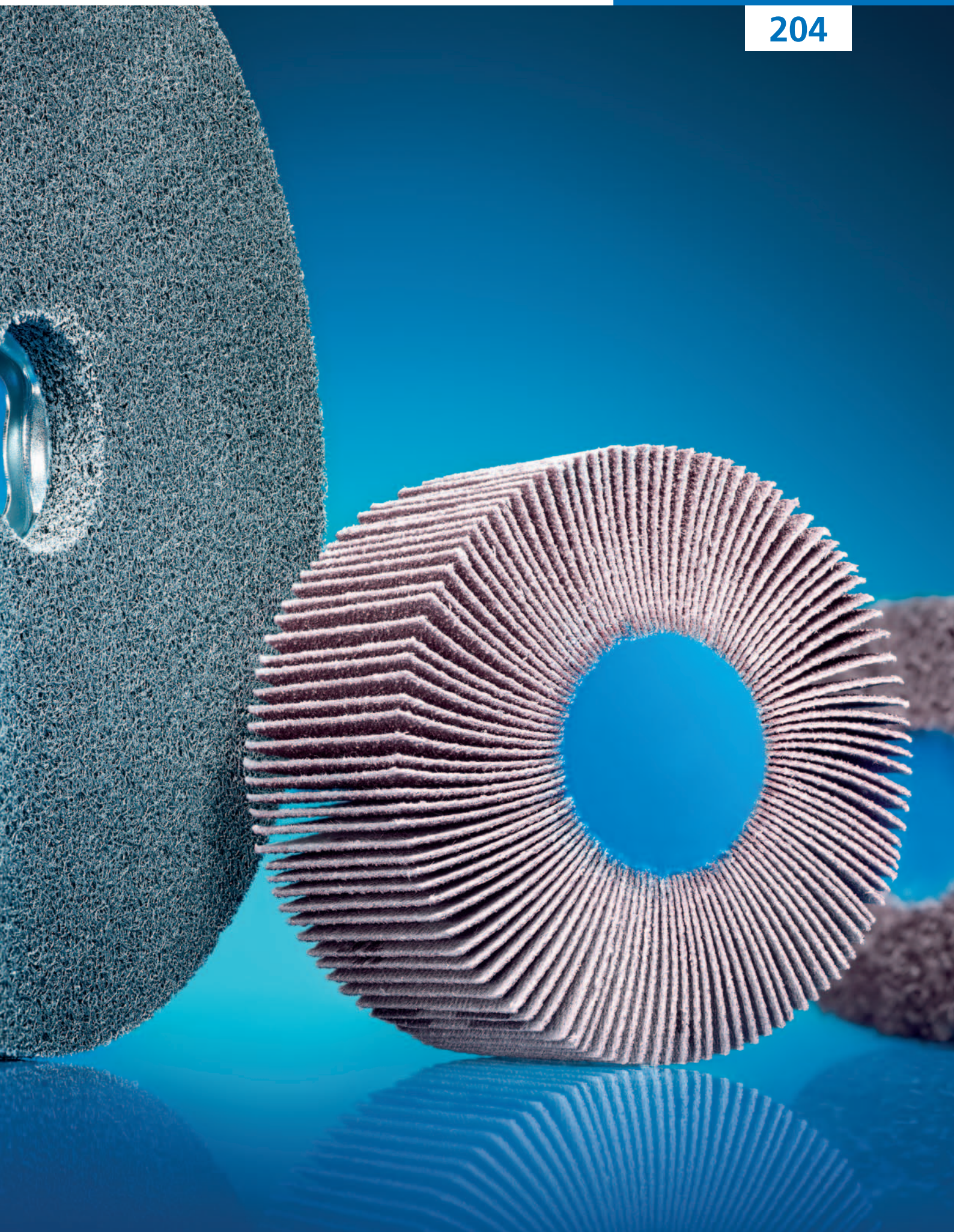
Fine grinding and polishing tools

PFERD

204



Fine grinding and polishing tools

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	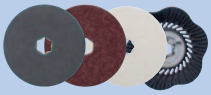	■ Fibre discs 9 ■ Non-woven discs 13 ■ Felt discs 15 ■ Backing pads 16 ■ Set 16
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	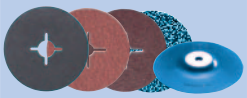	■ Fibre discs 18 ■ Backing pads 20
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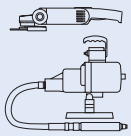	**COMBIDISC® grinding tools**	**22**
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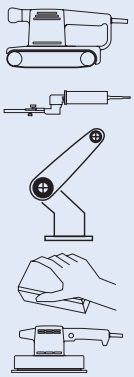
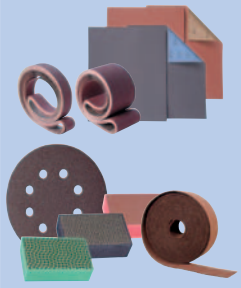
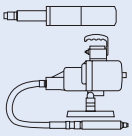
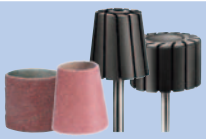
	**Flexible abrasives**	**36**
		■ Short belts 39 ■ Long belts 43 ■ Abrasive sheets 45 ■ Hand pads 46 ■ Shop rolls and holders 47 ■ Non-woven shop rolls 48 ■ Velcro-backed abrasive discs 49
	**Abrasive spiral bands and rubber drum holders**	**50**
		■ Abrasive spiral bands KSB 51 ■ Abrasive spiral bands GSB 52 ■ Rubber drum holders 54
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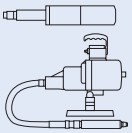
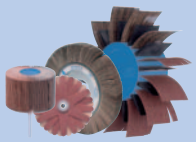
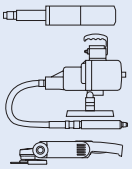
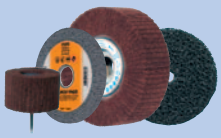
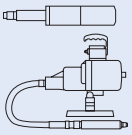
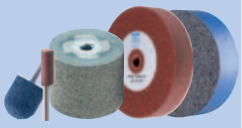
	**Flap wheels**	**64**
		■ Mounted flap wheels 64 ■ Unmounted flap wheels 68 ■ POLIFLAP® tools 71 ■ Overlap slotted discs 73 ■ POLISTAR 74
	**Non-woven tools**	**76**
		■ POLINOX® unmounted grinding wheels 77, 86 ■ POLINOX® mounted grinding wheels 83 ■ POLINOX® grinding drums 88 ■ POLINOX® grinding discs 89 ■ POLINOX® marbling tools 90 ■ POLIVLIES® discs 91 ■ POLICLEAN® tools 93
	**Poliflex® tools**	**96**
		■ PUR bond 100 ■ Texturing tools 103 ■ GR/GHR bond 105 ■ LR/LHR bond 108 ■ TX bond 110
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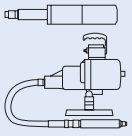
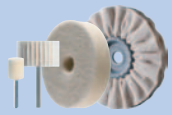
	**Polishing tools**	**113**
		■ Felt points 114 ■ Felt wheels 116 ■ Cloth rings 117
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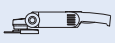
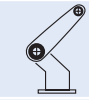
	Angle grinder		Stationary belt grinder
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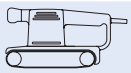
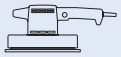
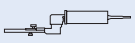
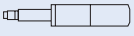
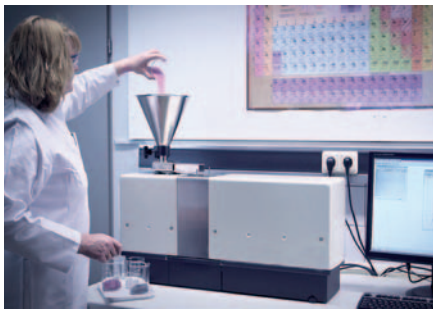
	Belt grinder		Eccentric orbital sander
	Belt grinder		Straight grinder



PFERD quality

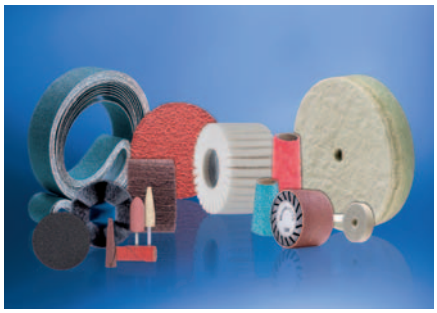
PFERD fine grinding and polishing tools are developed, manufactured and tested according to the highest quality standards.

Research and development, our own machine and plant construction, as well as the continuous testing and further development of the quality and safety standards in our own laboratories guarantee the high PFERD quality.

PFERD quality management is certified according to ISO 9001.

Technical customer support

If you have any questions about the optimization of your grinding task or about solving specific application problems, our sales representatives and technical advisors will be happy to help you. Please contact us! You can find our worldwide sales offices at: www.pferd.com



Products made to order

If you cannot find the solution for your particular application in our comprehensive product range, we produce fine grinding and polishing tools of premium PFERD quality on request, tailor-made to meet the requirements of your job.

We take account of your requirements and wishes, drawings, information on dimensions and shapes, grit sizes and grain types, grain mixes and shank diameters and lengths. Please contact our sales representatives! We will be happy to advise you.

PFERD packaging

PFERD supplies fine grinding and polishing tools in sturdy industrial packaging that protects the tools from damage. For packaging units (PU), please refer to the product tables. Important information, such as article number, description, EAN code and technical information can be found on the packaging labels.

PFERD TOOL-CENTER

On the PFERD TOOL-CENTER of your local retailer, you will find all the important information required for selecting the most appropriate tool. The PFERD information and symbol cards contain important tips about tools and applications.

If you have any questions, your local retailer or PFERD sales representative will be happy to assist you.

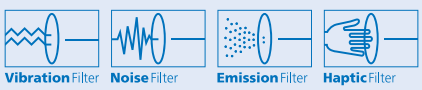
PFERD PRAXIS

PFERD PRAXIS brochures contain much valuable information on material properties, as well as tips and tricks on the use of PFERD tools.

PFERDERGONOMICS®

The **PFERD**ERGONOMICS® programme aims at the long term reduction of dust, noise and vibration levels produced by tools, and on perceptibly increasing tool haptics. The focus is on people.

Recognize straight away the areas where our tools offer you advantages. Tools with **PFERD**ERGONOMICS® properties are marked with corresponding pictograms.



For more information and appropriate PFERD tools, see the brochure "**PFERD**ERGONOMICS® – The focus is on people".

PFERDVIDEO

You will receive more information here or at www.pferd.com

Type of application / Processing step	Face-down grinding Tools with backing pad	Page		Page	Belt grinding Tools for belt grinders	Page
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	COMBIDISC® midget fibre discs	29	Fibre discs	17–20	Long abrasive belts	43–44
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Multi-step fine grinding Reducing roughness 	COMBIDISC® ■ Abrasive discs ■ Non-woven discs	25–29 31–32	Self-adhesive discs	21	Short abrasive belts	39–41
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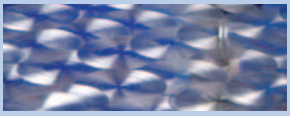
Creation of visual surface effects 	COMBIDISC® ■ Non-woven discs ■ TX discs	31–32 32	Marbling tools	90,102	Short abrasive belts, non-woven	42
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Peripheral grinding

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Manual grinding

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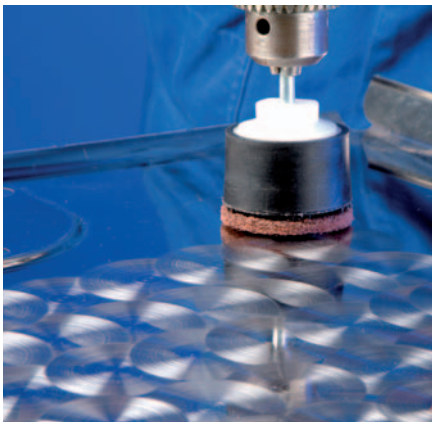
Felt wheels/ Felt wheels with metal insert	116	Cloth rings	117	Polishing paste bars	120		

Factors influencing the surface roughness:

Abrasives:
- The coarser the grit, the rougher the surface achieved
- Aluminium oxide, ceramic oxide grain and zirconia alumina achieve similar degrees of surface roughness
- Workpieces that are machined with silicon carbide display a slightly finer surface finish

Material to be machined:
- The softer the material to be machined, the coarser the surface produced when using the same grit size
- By adding grease or lubricant, a slightly finer surface finish is achieved

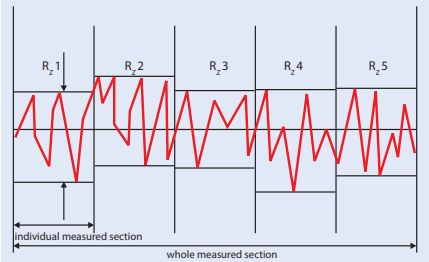
Machining parameters:
- The relationship between cutting speed and feed has the following effects:
  - By increasing the cutting speed, the surface quality is slightly improved
  - By reducing the feed speed, the surface quality becomes slightly finer
- The contact pressure has only a very slight effect on the surface roughness



A distinction is made between the following degrees of surface roughness:

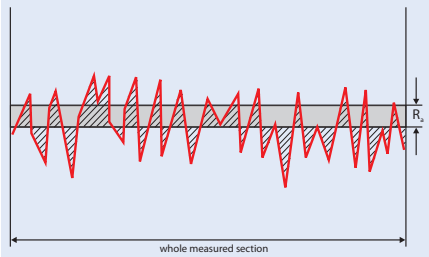
The **individual surface roughness R_{zi}** is the sum of the height of the largest profile peak and the depth of the largest profile trough within an individual measured section.

The **surface roughness R_z** is the average of the individual surface roughness figures (R_{zi}) for consecutive individual measured sections.



The **surface roughness R_{max}** is the highest individual surface roughness within the whole measured section.

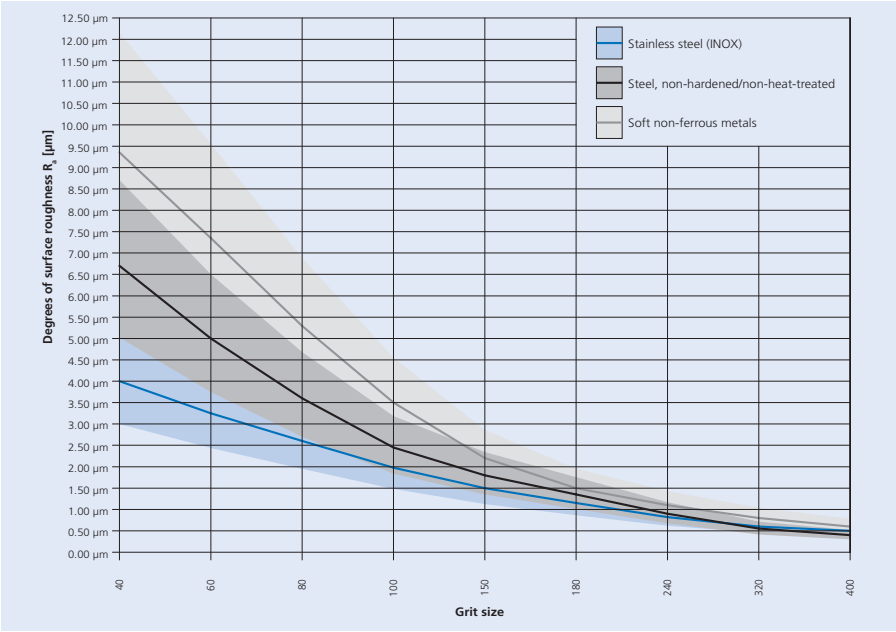
The **mean surface roughness R_a** is the arithmetic mean of the figures for all the profile values of the roughness profile.



Guide values for degrees of surface roughness with different machining applications:

Application	Surface roughness
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
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
Texturing: Surfaces 2G 80 to 2G 320	R_a = 0.20 to 0.70 µm
Satin finishing/ matt finishing: With non-woven material	R_a = 0.10 to 0.70 µm

Surface roughness of various materials following machining with tools using coated abrasives



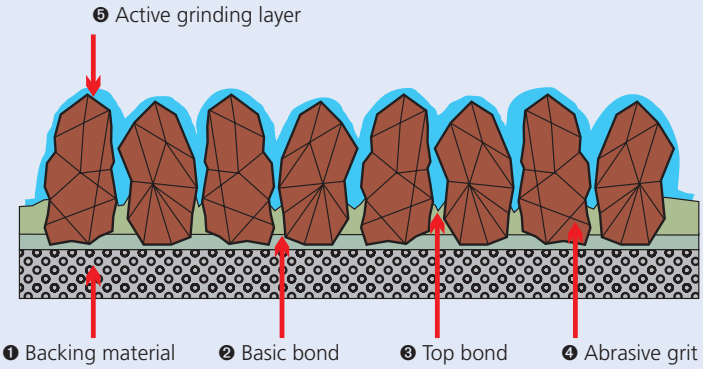
PFERD provides a wide range of tools using coated abrasives for machining different workpiece geometries and materials:

- COMBICLICK® fibre discs
- Fibre discs
- COMBIDISC® abrasive discs
- Abrasive spiral bands and abrasive belts
- Mounted and unmounted flap wheels
- Sheets and shop rolls
- POLIROLL® cartridge rolls and POLICO® abrasive cones
- Velcro-backed abrasive discs/Self-adhesive discs

Other PFERD tools made of coated abrasives can be found in Catalogue 206.

Coated abrasives can be used for wet or dry grinding.

Structure of coated abrasives



❶ Backing material

The bond and the abrasive grain are fixed to the backing material. The selection of backing materials available differs in terms of properties such as tensile strength, flexibility and wear. By selecting the appropriate backing, the grinding tool is adapted to the demands of the intended application. The PFERD range is divided into three groups:

Paper:
The main applications for coated abrasives with paper backing are in the wood-processing industry and small trade (carpenters, painters, lacquerers etc.) Coated abrasives are not widely used in industrial metal processing. Papers with a mass per unit area of 70–100 g/m² are generally used to make abrasives for manual grinding. The heavier papers are used to manufacture abrasives for narrow and wide belts used in machine applications.

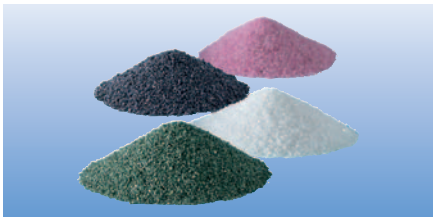
Cloth:
Coated abrasives with cloth backing are mainly used in the metal-processing industry.

Vulcanized fibre:
Vulcanized fibre in different strengths, adapted for each machining application, is mainly used in the production of fibre discs. Vulcanized fibre provides an extremely strong, robust backing and is extremely wear-resistant.

Bond

Different resin bonds are used in the manufacture of coated abrasives for anchoring the abrasive grain to the backing. First of all, the backing material is coated with the basic bond (❷). Then the abrasive grain is strewn evenly across the surface and aligned in special procedures to achieve higher aggressiveness. The abrasive grain is then anchored firmly with the top bond (❸), which also protects the abrasive grain against the forces and loads resulting from the grinding process.

❹ Abrasive grain



Choosing the correct abrasive grain strongly influences the surface quality and cost-effectiveness.
The standard materials used to make abrasive grain are:

Aluminium oxide A:
Many types of aluminium oxide are used as abrasives. They can be used in their fused or sintered forms. Their hardness and toughness (grades) can be influenced using special manufacturing methods or additives. Normal aluminium oxides with a "sharp-edged" grit shape are mainly used in the production of coated abrasives.

Ceramic oxide grain CO:
Sintered aluminium oxides are divided into sintered bauxite aluminium oxides and sol-gel aluminium oxides. Sol-gel aluminium oxides are mainly used as ceramic grit for coated abrasives. This highly modern abrasive is used in many applications due to its high level of toughness and good self-sharpening property.

Zirconia alumina Z:
Zirconia alumina is a fused mixture of aluminium oxide and zirconium oxide. While zirconia alumina is not as hard as aluminium oxides, it is tougher. The high proportion of zirconium oxide gives the zirconia alumina grain an exceptionally effective self-sharpening effect, contributing to excellent stock removal with cool grinding and a long tool life.

Silicon carbide SiC:
Silicon carbide is a synthetically produced abrasive grain, which is very sharp-edged, not particularly tough, but very hard. It is particularly suitable for work on titanium, aluminium, bronze, stone and plastic.

Diamond grain:
Diamond abrasive grain is the hardest abrasive. It consists of pure carbon in crystalline arrangement. For grinding tools, the diamonds used are generally produced synthetically at very high temperatures and under high pressure. The properties of the diamond abrasive grain can be adapted to use in the grinding tool through various synthesis conditions.

Grit sizes

The different grit sizes for coated abrasives are defined in ISO 6344 and have been adopted in the FEPA standards:

- Coarse:
  P 80 – 60 – 50 – 40 – 36 – 24 – 20 – 16 – 12
- Medium:
  P 280 –240 – 220 – 180 – 150 – 120 – 100
- Fine:
  P 600 – 500 – 400 – 360 – 320
- Superfine:
  P 1500 – 1200 – 1000 – 800

❺ Active grinding layer

The use of an active grinding layer significantly increases stock removal and reduces the workpiece temperature. This is a particular advantage in the case of materials which do not conduct heat well, such as stainless steel (INOX).
PFERD tools with an active grinding layer are identified with the addition of "COOL" in the description.

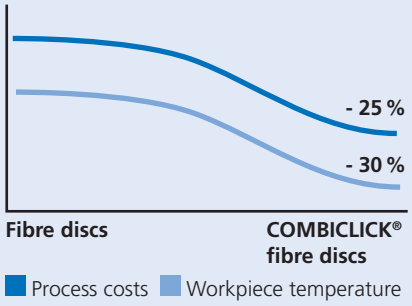
The patented cooling and quick-mounting system from PFERD is suitable for use with fibre, non-woven and felt discs.

The COMBICLICK® system consists of a specially developed backing pad and a rugged mounting system at the back of the tool. The backing pad allows COMBICLICK® tools to be used on commercially available angle grinders.

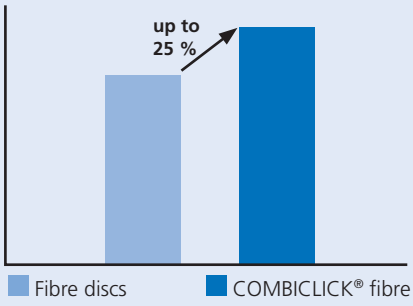
The special geometry of the cooling slots ensures a high throughput of air, thus significantly reducing the thermal load on the abrasive material and workpiece.

The quick-mounting system, rugged fixture, secure attachment of the tool and optimized cooling system help to provide
- up to 30 % lower workpiece temperature,
- up to 25 % increased stock removal,
- up to 30 % longer tool life and improved utilization of the abrasive.

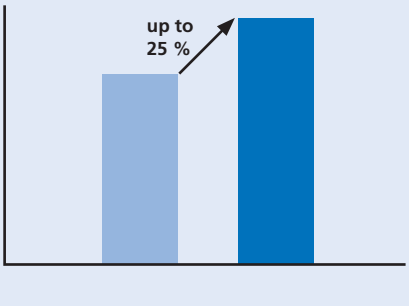
Lower process costs and workpiece temperature



Higher stock removal rate



Longer tool life



Advantages:

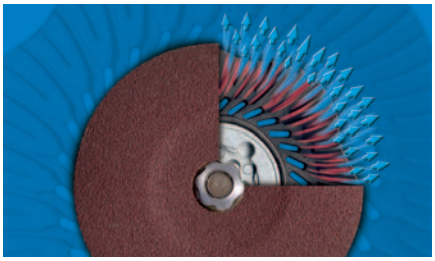
System

Very easy and comfortable to use.

Mounting principle

Extremely fast and easy tool change reduces process costs.

Cooling effect



Very good cooling of tool and workpiece.

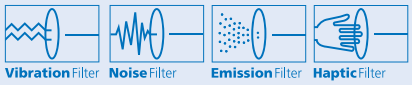
Flexible grinding

Soft and particularly flexible grinding performance in face-down grinding.

COMBICLICK® allows very flat use!

With COMBICLICK®, scratches caused by prominent clamping parts are prevented and very high utilization of the available abrasive is attained.

PFERDERGONOMICS® recommends COMBICLICK® as an innovative tool solution to sustainably reduce vibration, noise and dust levels produced by tools, and to improve working comfort.



PFERDVIDEO

You will receive more information here or at www.pferd.com

The extensive range of COMBICLICK® fibre discs provides the optimum tool for any machining application from coarse to fine grinding. PFERD provides COMBICLICK® fibre discs with various
- grit sizes,
- abrasives and
- dimensions.

Advantages:

- Long tool life
- Uniform grinding pattern
- Very high stock removal
- High flexibility
- Very good grain adhesion

Application examples:

- Working on weld seams
- Deburring of steel components
- Rough grinding work
- Fine grinding of stainless steel (INOX) components
- Removal of mill and casting skins
- Working on narrow, hard-to-reach areas (e.g. cooling ribs)

Recommendations for use:

- Use COMBICLICK® fibre discs in combination with the COMBICLICK® backing pad on commercially available angle grinders
- Use grinding oil that is suitable for the tool in order to significantly increase the tool life and the abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 120.

Safety notes:

- The maximum permitted peripheral speed is 80 m/s
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times


= Wear eye protection!


= Wear a dust mask!


= Wear hearing protection!


= Only use with backing pad!


= Please read the safety instructions!


= Not permitted for wet grinding!

Ordering note:

Please order COMBICLICK® backing pad separately. More detailed information and ordering data for backing pads can be found on page 16.

Ordering instructions:

When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

Ordering example:
EAN 4007220**722411**
CC-FS 180 A-COOL **60**

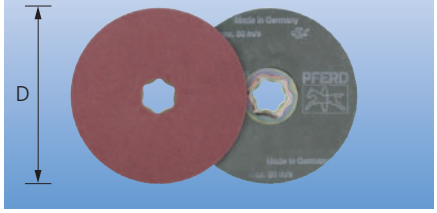
Ordering example explanation:
CC-FS = COMBICLICK® fibre discs
180 = Outer diameter D [mm]
A = Abrasive
COOL = Bond type
60 = Grit size

The fast way to the best tool

Material group ▼		Abrasives ▶	Alum. oxide A	Alum. oxide A-COOL	Zirconia alum. Z	Zirconia alum. Z-COOL	Ceramic oxide CO	Ceramic oxide 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- 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 cast iron EN-GJMB (GTS)	●		❍		●		
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint	●						●

● = highly suitable ❍ = suitable

COMBICLICK® fibre discs
Aluminium oxide A type



For general-purpose grinding work from coarse to fine grinding in industry and crafts.

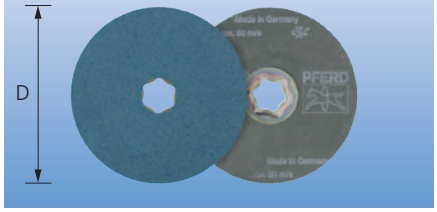
Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**722138**
CC-FS 180 A **60**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

Description	Grit size						D [mm]	Max. perm. speed [RPM]	
	24	36	50	60	80	120			
	EAN 4007220								
CC-FS 100 A	-	836095	836101	836118	836125	836132	100	15,300	25
CC-FS 115 A	763179	763186	763193	763209	763216	763223	115	13,300	25
CC-FS 125 A	721988	721995	722008	722039	722060	722077	125	12,200	25
CC-FS 180 A	722091	722107	722121	722138	722145	722152	180	8,500	25

COMBICLICK® fibre discs
Zirconia alumina Z type



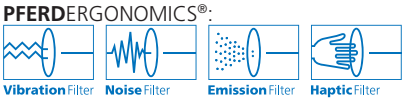
For coarse grinding with high stock removal and long tool life.

The high-performance abrasive zirconia alumina delivers best results on high-power angle grinders at increased contact pressure.

Abrasive: Zirconia alumina Z

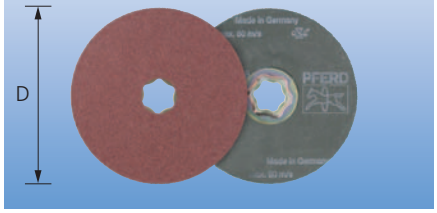
Ordering example:
EAN 4007220**722732**
CC-FS 180 Z **60**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:



Description	Grit size						D [mm]	Max. perm. speed [RPM]	
	24	36	50	60	80	120			
	EAN 4007220								
CC-FS 115 Z	-	722572	722596	763230	722619	722633	115	13,300	25
CC-FS 125 Z	722640	722657	722664	722671	722688	722695	125	12,200	25
CC-FS 180 Z	722701	722718	722725	722732	722749	722756	180	8,500	25

COMBICLICK® fibre discs
Ceramic oxide grain CO type



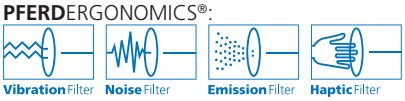
For aggressive grinding with maximum stock removal and very long tool life.

The ceramic oxide grain is especially designed for work on hard materials and layers, and delivers best results on high-power angle grinders.

Abrasive: Ceramic oxide grain CO

Ordering example:
EAN 4007220**722350**
CC-FS 180 CO **60**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:



Description	Grit size						D [mm]	Max. perm. speed [RPM]	
	24	36	50	60	80	120			
	EAN 4007220								
CC-FS 115 CO	763247	763254	763261	763278	763285	763292	115	13,300	25
CC-FS 125 CO	722084	722169	722183	722206	722237	722268	125	12,200	25
CC-FS 180 CO	722282	722305	722336	722350	722374	722428	180	8,500	25

For general-purpose grinding work from fine to very fine grinding of materials which do not conduct heat well, e.g.stainless steel (INOX).

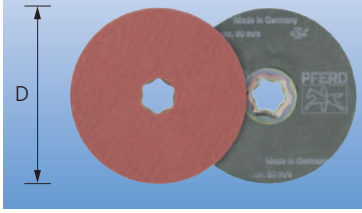
Active grinding additives in the coating significantly improve stock removal, prevent clogging and allow cooler grinding.

Abrasive: Aluminium oxide A-COOL

Ordering example:
EAN 4007220**722411**
CC-FS 180 A-COOL **60**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter **Noise** Filter **Emission** Filter **Haptic** Filter

COMBICLICK® fibre discs
Aluminium oxide A-COOL type



Description	Grit size							D [mm]	Max. perm. speed [RPM]	
	50	60	80	120	150	180	220			
	EAN 4007220									
CC-FS 115 A-COOL	-	722176	722190	722213	722220	-	722244	115	13,300	25
CC-FS 125 A-COOL	722251	722275	722299	722312	722329	722343	722367	125	12,200	25
CC-FS 180 A-COOL	722398	722411	722435	722459	722466	722527	722541	180	8,500	25

For coarse grinding work with high stock removal and cool grinding.

The high-performance abrasive zirconia alumina delivers best results on high-power angle grinders at increased contact pressure.

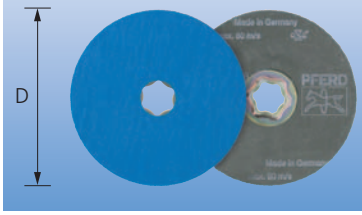
Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

Abrasive: Zirconia alumina Z-COOL

Ordering example:
EAN 4007220**722114**
CC-FS 180 Z-COOL **60**
Please complete the description with the desired grit size.

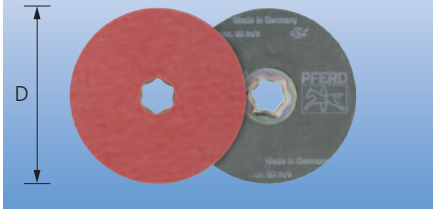
PFERDERGONOMICS®:
Vibration Filter **Noise** Filter **Emission** Filter **Haptic** Filter

COMBICLICK® fibre discs
Zirconia alumina Z-COOL type



Description	Grit size				D [mm]	Max. perm. speed [RPM]	
	36	50	60	80			
	EAN 4007220						
CC-FS 125 Z-COOL	722763	722770	722787	722015	125	12,200	25
CC-FS 180 Z-COOL	722022	722046	722114	722053	180	8,500	25

COMBICLICK® fibre discs
Ceramic oxide grain CO-COOL type



For aggresive grinding with maximum stock removal on hard materials which do not conduct heat well.

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

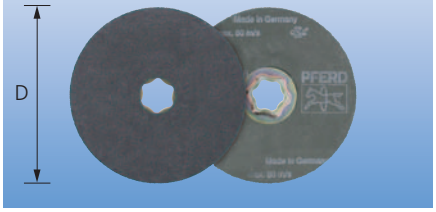
Abrasive: Ceramic oxide grain CO-COOL

Ordering example:
EAN 4007220**722589**
CC-FS 180 CO-COOL **60**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

Description	Grit size						D [mm]	Max. perm. speed [RPM]	
	24	36	50	60	80	120			
	EAN 4007220								
CC-FS 100 CO-COOL	-	836149	836163	836187	836194	892442	100	15,300	25
CC-FS 115 CO-COOL	763308	763315	763322	763339	763346	763353	115	13,300	25
CC-FS 125 CO-COOL	722442	722473	722480	722497	722503	722510	125	12,200	25
CC-FS 180 CO-COOL	722534	722558	722565	722589	722602	722626	180	8,500	25

COMBICLICK® fibre discs
Silicon carbide SiC type



Suitable for work on aluminium, copper, bronze, titanium, high-alloy steels and fibre-reinforced plastics.

Particularly recommended for use on titanium alloys.

Ideally suited for use in the aircraft industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.

Abrasive: Silicon carbide (SiC)

Ordering example:
EAN 4007220**898895**
CC-FS 115 SiC **60**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

Description	Grit size				D [mm]	Max. perm. speed [RPM]	
	36	60	80	120			
	EAN 4007220						
CC-FS 115 SiC	898888	898895	898901	898918	115	13,300	25
CC-FS 125 SiC	898925	898932	898949	898956	125	12,200	25

PFERD provides COMBICLICK® non-woven discs in the following types:
- PNER
- VRH (hard) and
- VRW (soft).

COMBICLICK® non-woven discs are used in face-down grinding on adjustable-speed angle grinders.

Recommendations for use:

- Use COMBICLICK® non-woven discs in combination with the COMBICLICK® backing pad on speed-adjustable angle grinders

Ordering note:

Please order COMBICLICK® backing pad separately. More detailed information and ordering data for backing pads can be found on page 16.

Ordering instructions:

When ordering, please state the EAN or the complete description. In the case of the VRH (hard) and VRW (soft) types, please complete the description with the desired grit size.

Ordering example:
EAN 4007220**935873**
CC-VRH 115 A **180 M**

Ordering example explanation:
CC-VRH = COMBICLICK® non-woven discs, hard type
115 = Outer dia. D [mm]
A = Abrasive
180 M = Grit size

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

= Wear eye protection!

= Wear a dust mask!

= Wear hearing protection!

= Only use with backing pad!

= Please read the safety instructions!

Achieves a very fine, uniform surface finish which, depending on requirements, is a sufficient preparation for high-gloss polishing. Especially suitable for work on large surfaces on components made of stainless steel (INOX).

Abrasive:
A = Aluminium oxide
SiC = Silicon carbide

Ordering note:
The different thicknesses/hardnesses of the non-woven material are colour-coded:
(W) soft = grey
(MW) medium-soft = light blue
(MH) medium-hard = dark blue
(H) hard = red

Recommendations for use:
- COMBICLICK® non-woven discs PNER achieve their best performance at a recommended cutting speed of 15–35 m/s

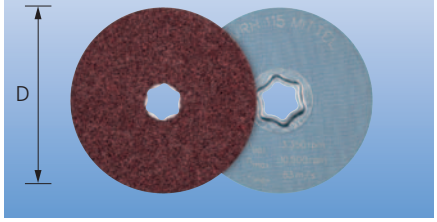
Ordering example:
EAN 4007220**935989**
CC-PNER W 115 SiC F

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

COMBICLICK® non-woven discs PNER type

Description	EAN 4007220	Type	D [mm]	Grit size	Recom. speed [RPM]	Max. perm. speed [RPM]	
CC-PNER W 100 SiC F	948187	soft	100	fine	5,700	9,550	5
CC-PNER MW 100 SiC F	948194	medium-soft	100	fine	5,700	9,550	5
CC-PNER MH 100 SiC F	948200	medium-hard	100	fine	5,700	9,550	5
CC-PNER H 100 A F	948217	hard	100	fine	5,700	9,550	5
CC-PNER W 115 SiC F	935989	soft	115	fine	5,000	8,350	5
CC-PNER MW 115 SiC F	936009	medium-soft	115	fine	5,000	8,350	5
CC-PNER MH 115 SiC F	936016	medium-hard	115	fine	5,000	8,350	5
CC-PNER H 115 A F	936023	hard	115	fine	5,000	8,350	5
CC-PNER W 125 SiC F	935996	soft	125	fine	4,500	7,650	5
CC-PNER MW 125 SiC F	936030	medium-soft	125	fine	4,500	7,650	5
CC-PNER MH 125 SiC F	936047	medium-hard	125	fine	4,500	7,650	5
CC-PNER H 125 A F	936054	hard	125	fine	4,500	7,650	5

COMBICLICK® non-woven discs
Hard type



Suitable for general work on metal surfaces e.g. removal of rough grinding traces, removal of oxidation and for light deburring work.

Abrasive: Aluminium oxide A
Available grit sizes:
100 G (coarse) = yellow-brown
180 M (medium) = red-brown
240 F (fine) = blue

Application examples:
- Removing heat discolouration on components made of stainless steel (INOX)
- Fine-grinding of large surfaces in equipment, tank and pressure vessel constructions

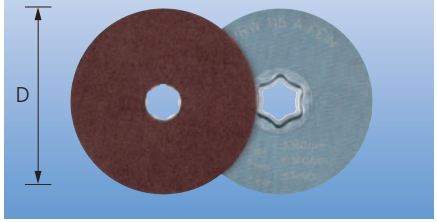
Recommendations for use:
- COMBICLICK® non-woven discs VRH achieve their best performance at a recommended cutting speed of 15–20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

Ordering example:
EAN 4007220**935873**
CC-VRH 115 A **180 M**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

Description	Grit size			D [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	100 G	180 M	240 F				
	EAN 4007220						
CC-VRH 100 A	948149	948132	948125	100	3,800	12,000	10
CC-VRH 115 A	935880	935873	935743	115	3,300	10,500	10
CC-VRH 125 A	935910	935903	935897	125	3,100	9,650	10

COMBICLICK® non-woven discs
Soft type



Suitable for very fine grinding of surfaces and contours, as well as cleaning work on metals and painted surfaces. The open structure and high flexibility of the non-woven material prevents clogging of the tool.

Abrasive: Aluminium oxide A
Available grit sizes:
100 = medium
180 = fine
280 = very fine

Application examples:
- Matt finishing or structuring of components made of stainless steel (INOX)
- Very fine grinding of brass, copper, titanium and aluminium

Recommendations for use:
- COMBICLICK® non-woven discs VRW achieve their best performance at a recommended cutting speed of 15–20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

Ordering example:
EAN 4007220**935934**
CC-VRW 115 A **180**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

Description	Grit size			D [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	100	180	280				
	EAN 4007220						
CC-VRW 100 A	948170	948163	948156	100	3,800	12,000	10
CC-VRW 115 A	935941	935934	935927	115	3,300	10,500	10
CC-VRW 125 A	935972	935965	935958	125	3,100	9,650	10

For pre-polishing and high-gloss polishing of medium- to large-sized components, PFERD provides COMBICLICK® felt discs in a range of diameters.

COMBICLICK® felt discs are used with polishing pastes in face-down grinding on speed-adjustable angle grinders.

Application examples:

- High-gloss polishing of stainless steel (INOX) components in chemical plant construction
- Mirror polishing of large press or injection moulds

Recommendations for use:

- Felt discs achieve their best performance at a recommended cutting speed of 5–10 m/s. This provides an ideal compromise between polishing performance, thermal load on the workpiece and tool wear.
- When changing the polishing paste, employ a new, unused felt disc

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times


= Wear eye protection!

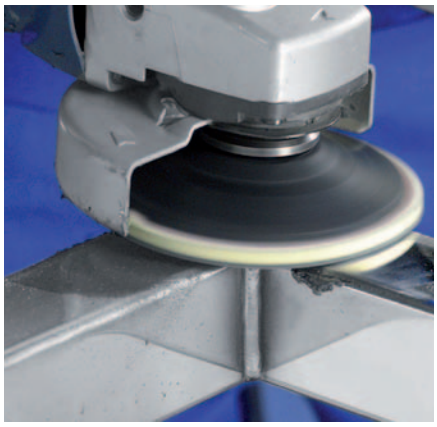

= Wear a dust mask!


= Wear hearing protection!


= Only use with backing pad!


= Please read the safety instructions!


= Not permitted for wet grinding!



Ordering note:

Please order COMBICLICK® backing pad separately. More detailed information and ordering data for backing pads can be found on page 16.

Ordering example:
EAN 4007220**936078**
CC-FR 125

Ordering example explanation:
CC-FR = COMBICLICK® felt discs
125 = Outer dia. D [mm]

PFERDERGONOMICS®:

COMBICLICK® felt discs

Description	EAN 4007220	D [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
CC-FR 100	948224	100	1,900	12,000	5
CC-FR 115	936061	115	1,650	10,500	5
CC-FR 125	936078	125	1,500	9,650	5

COMBICLICK® backing pads

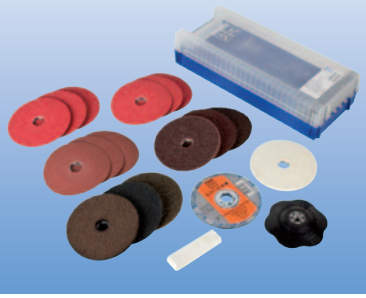
This backing pad permits the use of COMBICLICK® tools on all common angle grinders.The cooling slot geometry ensures a high throughput of air, thus significantly reducing thermal loads on the abrasive material and workpiece.
The patented COMBICLICK® mounting system minimizes tool changing times.

Safety notes:
- The maximum permitted peripheral speed is 80 m/s
- For backing pads with a diameter of 180 mm, do not apply too high a contact pressure in order to prevent overstretching of the backing pad

Description	EAN 4007220	Thread	Suitable for	Suitable for machine types	Max. perm. speed [RPM]	
CC-GT 100 M10	836200	M10	CC dia. 100	Angle grinders 100, spindle M10	15,300	1
CC-GT 115-125 M14	725764	M14	CC dia. 115, CC dia. 125	Angle grinders 115 / 125, spindle M14	13,300	1
CC-GT 115-125 5/8"	725771	5/8	CC dia. 115, CC dia. 125	Angle grinders 115 / 125, spindle 5/8"	13,300	1
CC-GT 180 M14	725788	M14	CC dia. 180	Angle grinders 180, spindle M14	8,500	1
CC-GT 180 5/8"	725795	5/8	CC dia. 180	Angle grinders 180, spindle 5/8"	8,500	1

COMBICLICK® sets

COMBICLICK® sets



Set for surface work, from coarse to mirror polished.
To get to know and to test the extensive systems available.

COMBICLICK® CC-SET 115 M14
Contents:
3 pcs. each of COMBICLICK® fibre discs:
- CC-FS 115 CO-COOL 36
- CC-FS 115 CO-COOL 120
- CC-FS 115 A-COOL 220

1 pc. each of COMBICLICK® non-woven discs:
- CC-VRH 115 A 240 F
- CC-VRH 115 A 180 M
- CC-VRH 115 A 100 G
- CC-VRW 115 A 280
- CC-VRW 115 A 180
- CC-VRW 115 A 100
- CC-PNER W 115 SiC F

1 pc. each of:
- Universal polishing paste
- COMBICLICK® felt discs CC-FR 115
- COMBICLICK® backing pad CC-GT 115-125 M14

COMBICLICK® CC-SET 125 M14
Contents:
3 pcs. each of COMBICLICK® fibre discs:
- CC-FS 125 CO-COOL 36
- CC-FS 125 CO-COOL 120
- CC-FS 125 A-COOL 220

1 pc. each of COMBICLICK® non-woven discs:
- CC-VRH 125 A 240 F
- CC-VRH 125 A 180 M
- CC-VRH 125 A 100 G
- CC-VRW 125 A 280
- CC-VRW 125 A 180
- CC-VRW 125 A 100
- CC-PNER W 125 SiC fine

1 pc. each of:
- Universal polishing paste
- COMBICLICK® felt discs CC-FR 125
- COMBICLICK® backing pad CC-GT 115-125 M14

Description	EAN 4007220	
CC-SET 115 M14	955345	1
CC-SET 125 M14	955369	1

The extensive range of fibre discs provides the optimum tool for any machining application, from coarse to fine grinding. PFERD provides fibre discs with various

- grit sizes,
- abrasives and
- dimensions.

In accordance with ISO 16057, PFERD fibre discs are manufactured in shape A1, type F, and designated "Vulcanized Fibre Discs".

Advantages:

- Long tool life
- Uniform grinding pattern
- Very high stock removal
- High flexibility
- Very good grain adhesion

Application examples:

- Machining of weld seams
- Deburring of steel components
- Coarse grinding work
- Fine grinding of stainless steel (INOX) components
- Removal of mill and casting scale

Recommendations for use:

- Use fibre discs according to ISO 15636 with backing pads on commercially available angle grinders
- Use grinding oil that is suitable for the material in order to significantly increase the tool life and the abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 120.

Safety notes:

- The maximum approved peripheral speed is 80 m/s
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times


= Wear eye protection!


= Wear a dust mask!


= Wear hearing protection!


= Only use with backing pad!


= Please read the safety instructions!


= Not permitted for wet grinding!

Ordering note:

Please order backing pad separately. More detailed information and ordering data for backing pads can be found on page 20.

Ordering instructions:

When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

Ordering example:
EAN 4007220**696354**
FS 115-22 A-COOL **60**

Ordering example explanation:

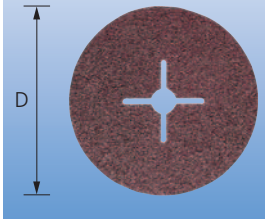
FS	= Fibre disc
115	= Outer dia. D [mm]
22	= Centre hole dia. H [mm]
A	= Abrasive
COOL	= Bond type
60	= Grit size

The fast way to the best tool

Material group ▼		Abrasives ▶	Alum. oxide A	Alum. oxide A-COOL	Zirconia alum. Z	Zirconia alum. Z-COOL	Ceramic oxide CO	Ceramic oxide CO-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- 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 cast iron EN-GJMB (GTS)	●		❍		●	
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint	●					

● = highly suitable ❍ = suitable

Fibre discs
Aluminium oxide A type



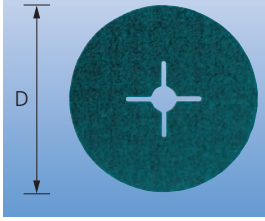
For general-purpose grinding work from coarse to fine grinding in industry and crafts.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**165089**
FS 180-22 A **60**
Please complete the description with the desired grit size.

Description	Grit size								D x H [mm]	Max. perm. speed [RPM]	
	16	24	36	50	60	80	100	120			
	EAN 4007220										
FS 115-22 A	164914	164952	165003	500910	165058	165102	165157	500934	115 x 22	13,300	25
FS 125-22 A	164921	164969	165010	696286	165065	165119	165164	500941	125 x 22	12,200	25
FS 150-22 A	-	-	165027	-	165072	165126	-	-	150 x 22	10,200	25
FS 180-22 A	164945	164983	165034	696323	165089	165133	165188	165201	180 x 22	8,500	25

Fibre discs
Zirconia alumina Z type



For coarse grinding work with high stock removal and long tool life.

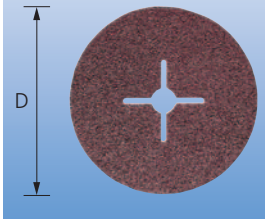
The high-performance abrasive, zirconia alumina, delivers best results on high-power angle grinders at increased contact pressure.

Abrasive: Zirconia alumina Z

Ordering example:
EAN 4007220**216699**
FS 180-22 Z **60**
Please complete the description with the desired grit size.

Description	Grit size							D x H [mm]	Max. perm. speed [RPM]	
	24	36	50	60	80	100	120			
	EAN 4007220									
FS 115-22 Z	216569	216576	216583	216590	216606	696606	696613	115 x 22	13,300	25
FS 125-22 Z	216613	216620	216637	216644	216651	696620	696637	125 x 22	12,200	25
FS 180-22 Z	216668	216675	216682	216699	216705	696644	696651	180 x 22	8,500	25

Fibre discs
Ceramic oxide grain CO type



For aggressive grinding with maximum stock removal and very long tool life.

The ceramic oxide grain is particularly well suited to work on hard materials and layers, and delivers best results on high-power angle grinders.

Abrasive: Ceramic oxide grain CO

Ordering example:
EAN 4007220**617533**
FS 180-22 CO **60**
Please complete the description with the desired grit size.

Description	Grit size						D x H [mm]	Max. perm. speed [RPM]	
	24	36	50	60	80	120			
	EAN 4007220								
FS 115-22 CO	617434	617441	696781	617458	617465	696804	115 x 22	13,300	25
FS 125-22 CO	617472	617489	696811	617496	617502	696835	125 x 22	12,200	25
FS 180-22 CO	617519	617526	696842	617533	617540	696866	180 x 22	8,500	25

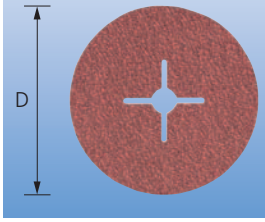
For general-purpose grinding work from fine to very fine grinding on materials which do not conduct heat well, e.g. stainless steel (INOX).

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

Abrasive: Aluminium oxide A-COOL

Ordering example:
EAN 4007220**696354**
FS 115-22 A-COOL **60**
Please complete the description with the desired grit size.

Fibre discs
Aluminium oxide A-COOL type



Description	Grit size								D x H [mm]	Max. perm. speed [RPM]	
	50	60	80	100	120	150	180	220			
	EAN 4007220										
FS 115-22 A-COOL	696347	696354	696361	696378	696385	696392	696408	696415	115 x 22	13,300	25
FS 125-22 A-COOL	696422	696439	696446	696453	696460	696477	696484	696491	125 x 22	12,200	25
FS 180-22 A-COOL	696507	696514	696521	696538	696552	696583	696569	696590	180 x 22	8,500	25

For coarse grinding with high stock removal and cool grinding.

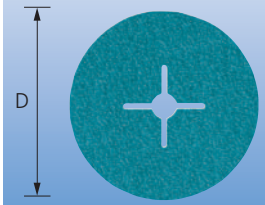
Zirconia alumina is a high-performance abrasive which delivers best results on high-power angle grinders at increased contact pressure.

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

Abrasive: Zirconia alumina Z-COOL

Ordering example:
EAN 4007220**696682**
FS 115-22 Z-COOL **60**
Please complete the description with the desired grit size.

Fibre discs
Zirconia alumina Z-COOL type



Description	Grit size				D x H [mm]	Max. perm. speed [RPM]	
	36	50	60	80			
	EAN 4007220						
FS 115-22 Z-COOL	696668	696675	696682	696699	115 x 22	13,300	25
FS 125-22 Z-COOL	696705	696712	696729	696736	125 x 22	12,200	25

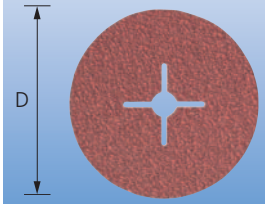
For aggressive grinding achieving maximum stock removal on hard materials which do not conduct heat well.

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

Abrasive: Ceramic oxide grain CO-COOL

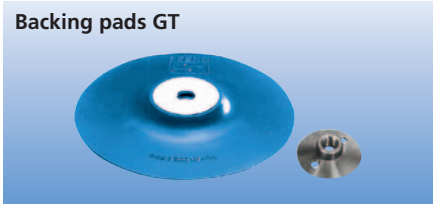
Ordering example:
EAN 4007220**697054**
FS 180-22 CO-COOL **60**
Please complete the description with the desired grit size.

Fibre discs
Ceramic oxide grain CO-COOL type



Description	Grit size							D x H [mm]	Max. perm. speed [RPM]	
	24	36	50	60	80	100	120			
	EAN 4007220									
FS 115-22 CO-COOL	696880	696897	696903	696910	696927	696934	696941	115 x 22	13,300	25
FS 125-22 CO-COOL	696958	696965	696972	696989	696996	697009	697016	125 x 22	12,200	25
FS 180-22 CO-COOL	697023	697030	697047	697054	697061	697078	697085	180 x 22	8,500	25

Backing pads GT



Flexible backing pads for use with fibre discs on commercially available angle grinders.

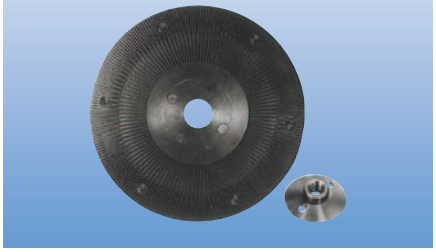
According to ISO 15636.

Safety notes:
- The maximum permitted peripheral speed is 80 m/s

Ordering note:
The matching clamping nut is included.

Description	EAN 4007220	Thread	Suitable for tool dia. [mm]	Suitable for machine types	Max. perm. speed [RPM]	
GT 115 MF M10	668047	M10	115	Angle grinders 115, spindle M10	13,300	1
GT 115 MF M14	668054	M14	115	Angle grinders 115, spindle M14	13,300	1
GT 125 MF M14	668061	M14	125	Angle grinders 125, spindle M14	12,200	1
GT 150 MF M14	668078	M14	150	Angle grinders 150, spindle M14	10,200	1
GT 180 MF M14	668085	M14	180	Angle grinders 180, spindle M14	8,500	1

High-performance backing pads for fibre discs



High-performance backing pad for use with fibre discs on commercially available angle grinders.

Advantages:
- The abrasion-resistant, glass fibre-reinforced plastic guarantees a long tool life
- Particularly suitable for cool grinding due to the radial cooling fins
- High stock removal by the fibre discs due to their strong, rigid design

Safety notes:
- The maximum permitted peripheral speed is 80 m/s

Ordering note:
The matching clamping nut is included.

Description	EAN 4007220	Thread	Suitable for tool dia. [mm]	Suitable for machine types	Max. perm. speed [RPM]	
H-GT 115 MF M14	668115	M14	115	Angle grinders 115, spindle M14	13,300	1
H-GT 125 MF M14	668122	M14	125	Angle grinders 125, spindle M14	12,200	1
H-GT 180 MF M14	668139	M14	180	Angle grinders 180, spindle M14	8,500	1

Clamping nuts for backing pads GT

Accessory for backing pads GT type.

Advantages:
- Matching centre hole distances for standard commercial face pin spanners
- Cost-effective replacement of lost clamping nuts

Description	EAN 4007220	Thread	Suitable for machine types	
FL-GT 115 M10	668146	M10	Angle grinders 115, spindle M10	1
FL-GT 80-115 M14	668153	M14	Angle grinders 80-115, spindle M14	1
FL-GT 125 M14	668160	M14	Angle grinders 125, spindle M14	1
FL-GT 150-230 M14	668177	M14	Angle grinders 150-230, spindle M14	1

Self-adhesive discs are suitable for grinding larger surfaces.

The flexible system of self-adhesive discs and self-adhesive disc holders allows them to be used on contours.

Using the self-adhesive disc holder, self-adhesive discs can be used on standard commercial angle grinders with M14 spindle, which are speed-adjustable or run at slow speeds.

Advantages:

- Quick tool change due to the self-adhesive system
- Suitable for nearly all materials
- High flexibility, adapts well to contours

Recommendations for use:

- The best grinding results are achieved with speed-adjustable angle grinders

Ordering note:

Please order self-adhesive disc holder separately.

Safety notes:

- The maximum permitted peripheral speed is 32 m/s
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times
- Mount self-adhesive discs centrally on the holder


= Wear eye protection!


= Wear a dust mask!


= Wear hearing protection!


= Only use with backing pad!


= Please read the safety instructions!

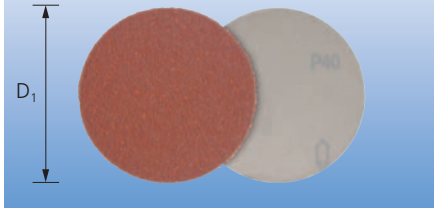

= Not permitted for wet grinding!

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**294321**
KR 115 A **120**
Please complete the description with the desired grit size.

Ordering example explanation:
KR = Self-adhesive grinding disc
115 = Outer dia. D_1 [mm]
A = Abrasive
120 = Grit size

Self-adhesive discs

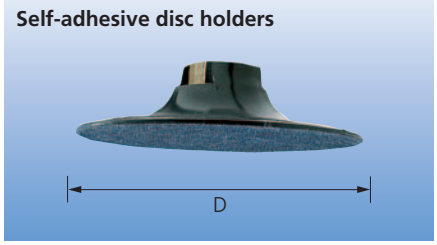


Description	Grit size						D_1 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	40	60	80	120	150	180				
	EAN 4007220									
KR 115 A	294291	294307	294314	294321	294338	294345	115	5,000	5,300	50
KR 125 A	294352	294369	294376	294383	294390	294406	125	4,600	4,850	50

Ordering example:
EAN 4007220**294413**
KRH 115 M14

Ordering example explanation:
KRH = Self-adhesive disc holders
115 = Dia. D [mm]
M14 = Thread

Self-adhesive disc holders



Description	EAN 4007220	D [mm]	Thread	Max. perm. speed [RPM]	
KRH 115 M14	294413	115	M14	5,300	1
KRH 125 M14	294420	125	M14	4,850	1

COMBIDISC® grinding tools

General information

The COMBIDISC® range covers a large selection of grinding tools for surface finishing. From coarse machining and surface texturing to face-down mirror polishing – the range provides the optimal tool, even for complicated applications.

Advantages:

- Easy to use
- Rapid tool change
- No adhesion, no slipping
- No loosening under the influence of heat
- Vibration-free operation
- Tool is always fixed centrally

Application examples:

- Tool and mould construction, modelling
- Mechanical engineering, automotive construction
- Aeronautical and aerospace industry
- Aircraft engine construction and repair
- Equipment, tank and pressure vessel construction
  (e.g. for foodstuff and chemical industry)
- Fettling of small parts

Recommendations for use:

- Use grinding oil that is suitable for the material in order to significantly increase the tool life and the abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 120.

Ordering instructions:

When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

Ordering example:
EAN 4007220**266175**
CD 38 A **180**

Ordering example explanation:

CD	= COMBIDISC® abrasive discs
38	= Outer dia. D_1 [mm]
A	= Abrasive
180	= Grit size

Safety notes:

- The maximum permitted peripheral speed is 50 m/s
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

= Wear eye protection!

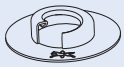
= Wear hearing protection!

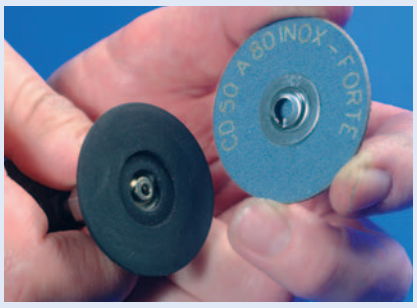
= Wear gloves!

= Please read the safety instructions!

PFERD offers two alternative mounting systems:

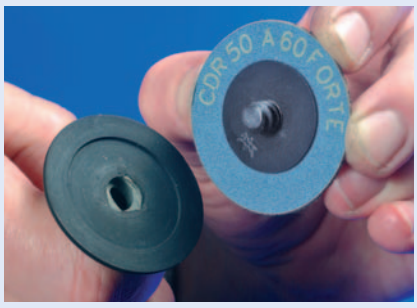
CD System





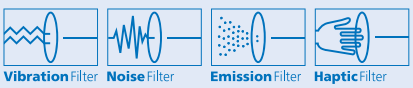
Tool side: Screw connection with female thread (metal)
Also suitable for the following systems available on the market: PSG, Power Lock Type II "turn on", SocAtt, Turn-On

CDR System



Tool side: Screw connection with male thread (plastic)
Also suitable for the following systems available on the market: Roloc™, Lockit, Speed Lok TR, Power Lock Type III, Fastlock-System B, Roll-On

PFERDERGONOMICS® recommends COMBIDISC® tools as a solution to sustainably reduce vibration, noise and dust levels produced by tools and to improve working comfort.



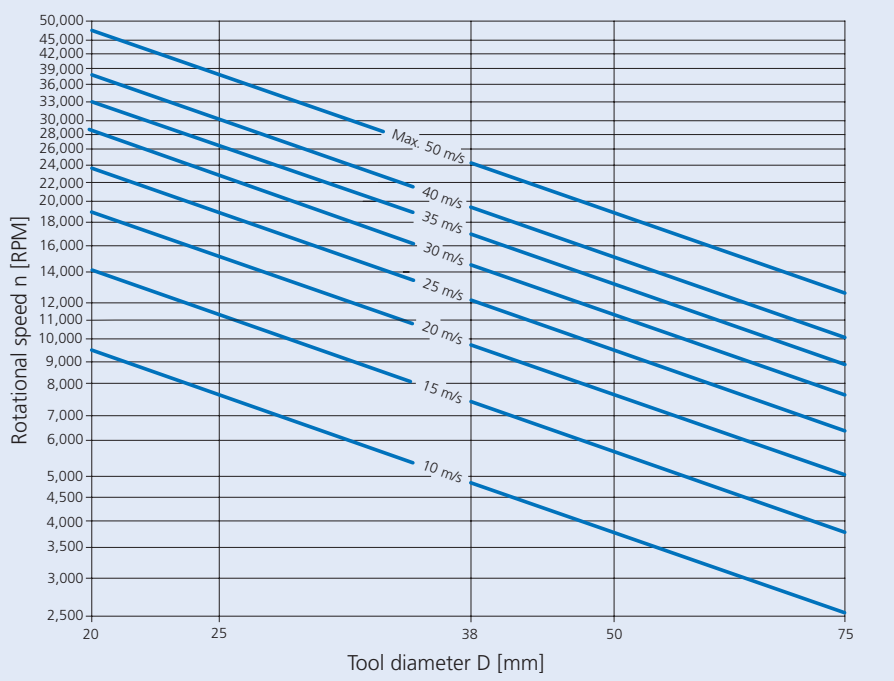
PFERDVIDEO

You will receive more information here or at www.pferd.com

Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the tool diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the COMBIDISC® tool and tool drive.

Example:
CD 50 A-COOL 60
Application:
Grinding of stainless steel (INOX)
Cutting speed: 20–25 m/s
Rotational speed: 7,600–9,600 RPM



The fast way to the best tool

Application	Recommended cutting speed [m/s]								Recommended tools
	5	10	15	20	25	30	35	40	
Grinding of steel and cast steel				20–35 m/s					Abrasive discs A, A-FLEX, A-PLUS, A-FORTE, Z
Grinding of stainless steel (INOX)				20–25 m/s					Abrasive discs A-COOL, CO-COOL, TX discs
Coarse grinding of steel and cast steel					25–40 m/s				Mini-POLIFAN®, midget fibre discs, abrasive discs Z
Grinding of high-temperature-resistant materials (nickel- and cobalt-based alloys)		10–20 m/s							Abrasive discs SiC, Z and CO-COOL
Grinding of hard non-ferrous metals, titanium, bronze, hard aluminium alloys			15–35 m/s						Abrasive discs SiC, A-COOL, TX discs, CO-COOL
Grinding of soft non-ferrous metals, brass, copper, aluminium alloys					25–40 m/s				Abrasive discs A, A-FLEX, A-PLUS, A-FORTE, A-COOL, TX discs
Grinding of hard metal, hard material coatings, hard facings, glass, GRP, CRP		10–20 m/s							Diamond abrasive discs
Cleaning, texturing		10–20 m/s							Non-woven and POLICLEAN® discs, brushes
Polishing	5–10 m/s								Felt discs

COMBIDISC® Mini-POLIFAN® Aluminium oxide A

For general-purpose coarse grinding work with good stock removal rates.

Ideal for weld dressing in hard-to-reach areas. Longer tool life and higher stock removal rate when compared to grinding discs.

Abrasive: Aluminium oxide A

Ordering note:
Alternative holders for:
CD PFF 50 –
COMBIDISC® abrasive disc holder SBH 20–50
CD PFF 75 –
COMBIDISC® abrasive disc holder SBH 75

Ordering example:
EAN 4007220**617359**
CD PFF 50 A **40**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

Description	Grit size				D_1 [mm]	Recom. speed [RPM]	Suitable arbors	
	40	60	80	120				
	EAN 4007220							
CD system								
CD PFF 50 A	617359	617366	617373	617380	50	12,000–14,000	BO PFF 50	10
CD PFF 75 A	617397	617403	617410	617625	75	8,000–10,000	BO PFF 75	10

COMBIDISC® Mini-POLIFAN® Zirconia alumina Z

For coarse grinding work with high stock removal and long tool life.

The high-performance abrasive zirconia alumina delivers the best results at increased contact pressure.

Abrasive: Zirconia alumina Z

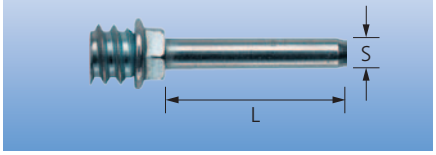
Ordering note:
Alternative holders for:
CD PFF 50 –
COMBIDISC® abrasive disc holder SBH 20–50
CD PFF 75 –
COMBIDISC® abrasive disc holder SBH 75

Ordering example:
EAN 4007220**592717**
CD PFF 50 Z **40**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

Description	Grit size				D_1 [mm]	Recom. speed [RPM]	Suitable arbors	
	40	60	80	120				
	EAN 4007220							
CD system								
CD PFF 50 Z	592717	592724	592731	592748	50	12,000–14,000	BO PFF 50	10
CD PFF 75 Z	592755	592762	592779	592786	75	8,000–10,000	BO PFF 75	10

Arbors for COMBIDISC® Mini-POLIFAN®



Suitable arbors for COMBIDISC® Mini-POLIFAN® and COMBIDISC® brushes.

Description	EAN 4007220	S x L [mm]	Suitable tool	
BO PFF 50	593196	6 x 40	CD PFF 50	1
BO PFF 75	593202	6 x 40	CD PFF 75	1

Suitable for general use on metals and other materials.

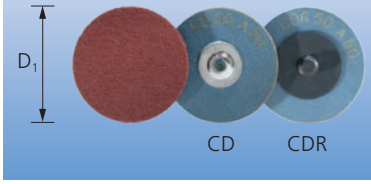
Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**266175**
CD 38 A **180**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

COMBIDISC® abrasive discs Aluminium oxide A



Description	Grit size						D_1 [mm]	Recom. speed [RPM]	
	36	60	80	120	180	320			
	EAN 4007220								
CD system									
CD 20 A	-	265864	266007	266038	266052	266069	20	20,000–35,000	100
CD 25 A	-	355718	355725	355732	266083	266151	25	15,000–26,000	100
CD 38 A	355749	355756	355763	355770	266175	266199	38	10,000–16,000	100
CD 50 A	355787	355794	355800	355817	266212	266281	50	8,000–13,000	100
CD 75 A	355824	355831	355848	355855	266328	266359	75	5,000–9,000	50
CDR system									
CDR 20 A	-	778036	778043	778050	778074	778081	20	20,000–35,000	100
CDR 25 A	-	778098	778104	778111	778128	778135	25	15,000–26,000	100
CDR 38 A	596456	596463	596470	597255	597262	596500	38	10,000–16,000	100
CDR 50 A	596517	596524	596531	596548	596555	596562	50	8,000–13,000	100
CDR 75 A	596586	596593	596609	596616	596623	596630	75	5,000–9,000	50

Suitable for general use on metals and other materials.

Higher stock removal rates due to the stable backing material. Particularly suitable for edge grinding due to their outstanding strength.

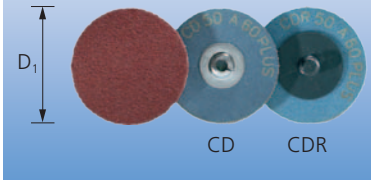
Abrasive: Aluminium oxide A-PLUS

Ordering example:
EAN 4007220**593653**
CD 50 A **120 PLUS**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

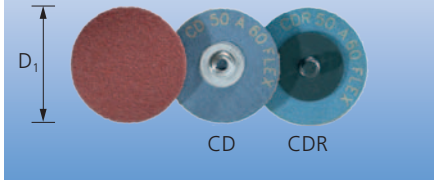
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

COMBIDISC® abrasive discs Aluminium oxide A-PLUS



Description	Grit size				D_1 [mm]	Recom. speed [RPM]	
	36 PLUS	60 PLUS	80 PLUS	120 PLUS			
	EAN 4007220						
CD system							
CD 50 A	593608	593615	593622	593653	50	8,000–13,000	100
CD 75 A	593660	593677	593684	593691	75	5,000–9,000	50
CDR system							
CDR 50 A	778302	778319	778326	778333	50	8,000–13,000	100
CDR 75 A	778340	778357	778364	778371	75	5,000–9,000	50

COMBIDISC® abrasive discs
Aluminium oxide A-FLEX



Particularly flexible abrasive discs, which are especially suitable for work on contours and concave surfaces.

For seamless transitions in the surface finish on metals. These tools are used in tool and mould construction.

Abrasive: Aluminium oxide A-FLEX

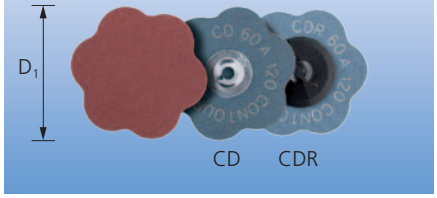
Recommendations for use:
- These discs should be used with a soft holder to support their flexibility

Ordering example:
EAN 4007220**638897**
CD 50 A **120 FLEX**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

Description	Grit size			D_1 [mm]	Recom. speed [RPM]	
	60 FLEX	80 FLEX	120 FLEX			
	EAN 4007220					
CD system						
CD 38 A	638842	638859	638866	38	10,000–16,000	100
CD 50 A	638873	638880	638897	50	8,000–13,000	100
CD 75 A	638903	638910	638927	75	5,000–9,000	50
CDR system						
CDR 38 A	778166	778159	778173	38	10,000–16,000	100
CDR 50 A	778180	778210	778227	50	8,000–13,000	100
CDR 75 A	778241	778272	778296	75	5,000–9,000	50

COMBIDISC® abrasive discs
Aluminium oxide A-CONTOUR



Very flexible and adaptive on account of their outer contour.
Cutting into the workpiece is avoided.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**898819**
CD 60 A **80 CONTOUR**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

Description	Grit size				D_1 [mm]	Recom. speed [RPM]	
	60 CONTOUR	80 CONTOUR	120 CONTOUR	180 CONTOUR			
	EAN 4007220						
CD system							
CD 60 A	898802	898819	898826	898833	60	7,500–11,000	50
CDR system							
CDR 60 A	898840	898857	898864	898871	60	7,500–11,000	50

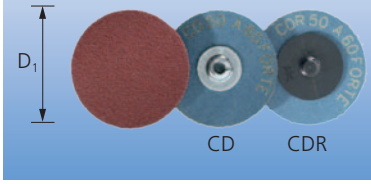
Suitable for general use on metals with high abrasive performance and long tool life.

Abrasive: Aluminium oxide A-Forte

Ordering example:
EAN 4007220**266144**
CD 50 A **80 FORTE**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter

COMBIDISC® abrasive discs Aluminium oxide A-FORTE



Description	Grit size				D_1 [mm]	Recom. speed [RPM]	
	36 FORTE	60 FORTE	80 FORTE	120 FORTE			
	EAN 4007220						
CD system							
CD 25 A	-	265833	266021	266045	25	15,000–26,000	100
CD 38 A	266076	266090	266106	266113	38	10,000–16,000	100
CD 50 A	266120	266137	266144	266168	50	8,000–13,000	100
CD 75 A	266182	266205	266229	266250	75	5,000–9,000	50
CDR system							
CDR 25 A	-	778388	778395	778401	25	15,000–26,000	100
CDR 38 A	596647	596661	596678	596685	38	10,000–16,000	100
CDR 50 A	596692	596708	596715	596722	50	8,000–13,000	100
CDR 75 A	596739	596746	596753	596760	75	5,000–9,000	50

Suitable for use on hard-to-machine materials such as stainless steel (INOX), Hastelloy® and Inconel® (nickel-based alloys).

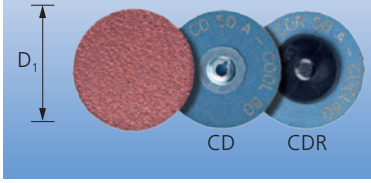
Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

Abrasive: Aluminium oxide A-COOL

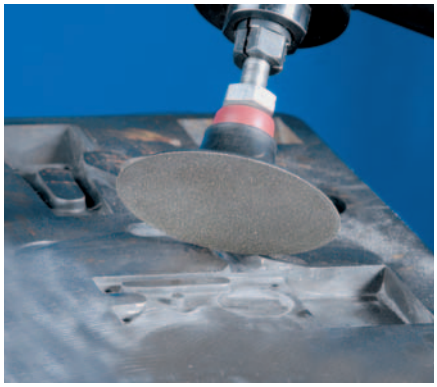
Ordering example:
EAN 4007220**266458**
CD 75 A-COOL **60**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter

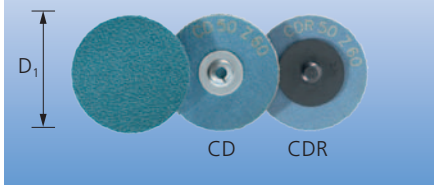
COMBIDISC® abrasive discs Aluminium oxide A-COOL



Description	Grit size			D_1 [mm]	Recom. speed [RPM]	
	36	60	80			
	EAN 4007220					
CD system						
CD 50 A-COOL	265840	266427	266434	50	8,000–13,000	100
CD 75 A-COOL	266441	266458	266465	75	5,000–9,000	50
CDR system						
CDR 50 A-COOL	596777	596784	596791	50	8,000–13,000	100
CDR 75 A-COOL	596807	596814	596821	75	5,000–9,000	50



COMBIDISC® abrasive discs
Zirconia alumina Z



Suitable for work on all hard steels.

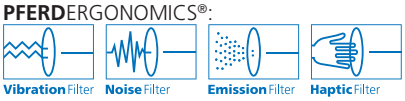
Particularly good stock removal in coarse grinding applications using grit sizes 36 and 60.

Abrasive: Zirconia alumina Z

Recommendations for use:
- Use with hard or medium-hard COMBIDISC® abrasive disc holders

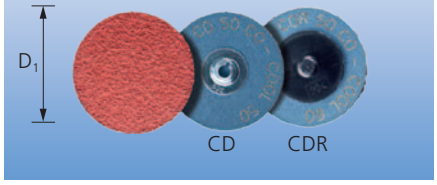
Ordering example:
EAN 4007220**265857**
CD 50 Z **36**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:



Description	Grit size			D_1 [mm]	Recom. speed [RPM]	
	36	60	80			
	EAN 4007220					
CD system						
CD 38 Z	778418	778425	778432	38	5,000–16,000	100
CD 50 Z	265857	266472	266519	50	3,800–13,000	100
CD 75 Z	266526	266533	266540	75	2,500–9,000	50
CDR system						
CDR 38 Z	778449	778456	778463	38	5,000–16,000	100
CDR 50 Z	596838	596845	596852	50	3,800–13,000	100
CDR 75 Z	596869	596876	596883	75	2,500–9,000	50

COMBIDISC® abrasive discs
Ceramic oxide grain CO-COOL



Suitable for work on non-alloyed and alloyed steels, cast iron, stainless steel (INOX), titanium, nickel-based alloys and extremely hard materials.

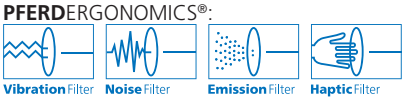
Consistently high performance due to self-sharpening ceramic oxide grain.

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

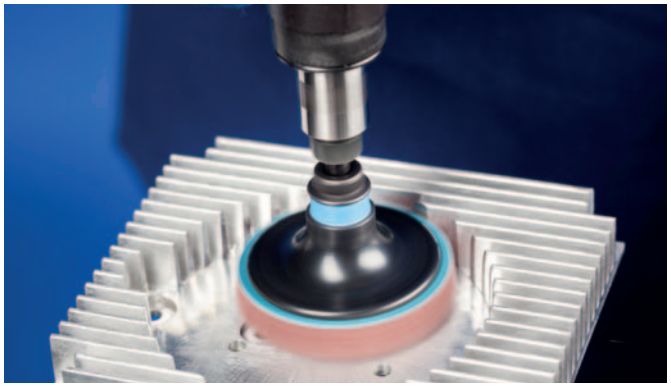
Abrasive: Ceramic oxide grain CO-COOL

Ordering example:
EAN 4007220**617922**
CD 50 CO-COOL **24**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:



Description	Grit size					D_1 [mm]	Recom. speed [RPM]	
	24	36	60	80	120			
	EAN 4007220							
CD system								
CD 38 CO-COOL	770672	770689	770696	770702	770719	38	5,000–16,000	100
CD 50 CO-COOL	617922	617298	617304	617311	771365	50	3,800–13,000	100
CD 75 CO-COOL	617939	617328	617335	617342	771372	75	2,500–9,000	50
CDR system								
CDR 38 CO-COOL	778593	778609	778616	778623	778630	38	5,000–16,000	100
CDR 50 CO-COOL	778661	778678	778685	778692	778708	50	3,800–13,000	100
CDR 75 CO-COOL	778715	778722	778739	778746	778753	75	2,500–9,000	50



Exceptionally well suited for surface and edge grinding. The fibre backing strengthens the abrasive disc and improves stock removal.

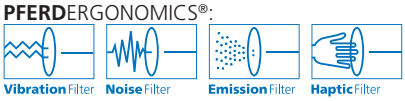
For aggressive grinding with maximum stock removal on hard materials which do not conduct heat well such as stainless steel (INOX), Hastelloy®, Inconel®, titanium and cast aluminium.

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

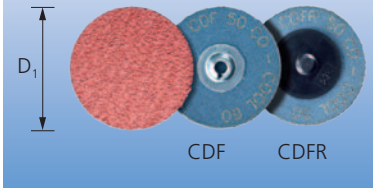
Abrasive: Ceramic oxide grain CO-COOL

Ordering example:
EAN 4007220**778876**
CDF 50 CO-COOL **36**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:



COMBIDISC® midget fibre discs Ceramic oxide grain CO-COOL



Description	Grit size				D_1 [mm]	Recom. speed [RPM]	
	36	50	80	120			
	EAN 4007220						
CD system							
CDF 50 CO-COOL	778876	778883	778890	779156	50	3,800–13,000	100
CDF 75 CO-COOL	779163	779170	779187	779194	75	2,500–9,000	50
CDR system							
CDFR 50 CO-COOL	779200	779217	779224	779231	50	3,800–13,000	100
CDFR 75 CO-COOL	779255	779262	779279	779286	75	2,500–9,000	50

Suitable for work on aluminium, copper, bronze, titanium, high-alloy steels and fibre-reinforced plastics.

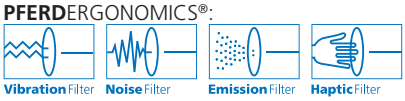
Particularly recommended for use on titanium alloys.

Ideally suited for use in the aircraft industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.

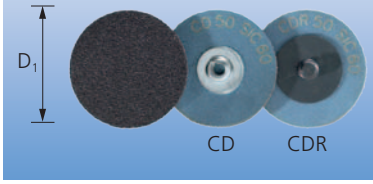
Abrasive: Silicon carbide SiC

Ordering example:
EAN 4007220**441176**
CD 50 SiC **36**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

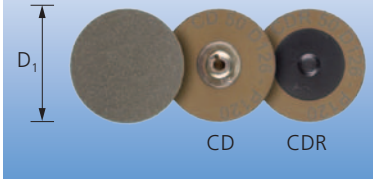


COMBIDISC® abrasive discs Silicon carbide SiC



Description	Grit size					D_1 [mm]	Recom. speed [RPM]	
	36	60	80	120	240			
	EAN 4007220							
CD system								
CD 50 SiC	441176	441183	441190	441206	441213	50	3,800–13,000	100
CD 75 SiC	441220	441237	441244	441251	441268	75	2,500–9,000	50
CDR system								
CDR 50 SiC	778470	778487	778494	778500	778517	50	3,800–13,000	100
CDR 75 SiC	778524	778548	778555	778562	778579	75	2,500–9,000	50

COMBIDISC® diamond abrasive discs



Exceptionally suitable for work on wear-resistant plattings and for hard facings made of tungsten carbide, chromium carbide, titanium carbide etc.

Particularly recommended for work on materials used for aircraft engine construction e.g. Hastelloy®, Inconel® and titanium/titanium alloys.

Also highly suitable for work on extremely hard materials such as tungsten carbide, glass, ceramics, enamel, stone and GRP/CRP.

Abrasive: Diamond
D 251 = P 60
D 126 = P 120
D 76 = P 220
(P = Grit size according to ISO 6344)

Recommendations for use:
- Diamond abrasive discs achieve their best performance at a recommended cutting speed of 10–20 m/s
- For use with hard or medium-hard COMBIDISC® abrasive disc holders

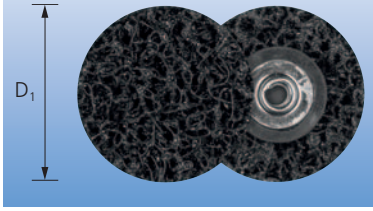
Ordering note:
Grit sizes are specified in µm. More detailed information and ordering data for diamond grinding tools can be found in Catalogue 205.

Ordering example:
EAN 4007220**750377**
CD DIA 50 D **126**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

Description	Grit size [µm]			D_1 [mm]	Recom. speed [RPM]	
	251	126	76			
	EAN 4007220					
CD system						
CD DIA 25 D	750292	750315	750322	25	7,500–15,000	10
CD DIA 38 D	750339	750346	750353	38	5,000–10,000	10
CD DIA 50 D	750360	750377	750384	50	3,800–7,500	10
CD DIA 75 D	750391	750407	750414	75	2,500–5,000	10
CDR system						
CDR DIA 25 D	750421	750438	750445	25	7,500–15,000	10
CDR DIA 38 D	750452	750469	750476	38	5,000–10,000	10
CDR DIA 50 D	750483	750490	750506	50	3,800–7,500	10
CDR DIA 75 D	750513	750520	750537	75	2,500–5,000	10

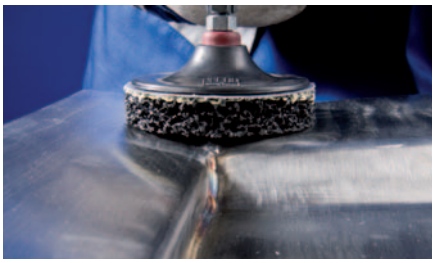
COMBIDISC® POLICLEAN® discs



For coarse cleaning work and removal of paint, scale, rust and adhesive residues in face-down grinding.

Recommendations for use:
- Use with hard or medium-hard COMBIDISC® abrasive disc holders

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter



Description	EAN 4007220	D_1 [mm]	Recom. speed [RPM]	
CD system				
CD 50 PCLR	471500	50	5,500–8,000	10
CD 75 PCLR	471517	75	3,800–5,000	10

Suitable for general work on metal surfaces e.g. removal of rough grinding traces, removal of oxidation and for light deburring work.

The flexibility of the disc during surface grinding is determined by the hardness grade of the holder.

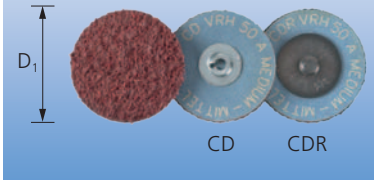
Abrasive: Aluminium oxide A
Available grit sizes:
100 G (coarse) = yellow-brown
180 M (medium) = red-brown
240 F (fine) = blue

Recommendations for use:
- The addition of oil or water during grinding results in a finer finish, cooler grinding and longer tool life

Ordering example:
EAN 4007220**266571**
CD VRH 25 A **240 F**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter Noise Filter Emission Filter Haptic Filter

COMBIDISC® non-woven discs hard type



Description	Grit size			D_1 [mm]	Recom. speed [RPM]	
	100 G	180 M	240 F			
	EAN 4007220					
CD system						
CD VRH 20 A	-	-	265871	20	14,000–19,000	50
CD VRH 25 A	268865	266564	266571	25	11,000–15,000	50
CD VRH 38 A	266588	266595	268872	38	7,000–10,000	50
CD VRH 50 A	266618	266625	266632	50	5,500–7,500	50
CD VRH 75 A	266649	266656	266663	75	3,800–5,000	25
CDR system						
CDR VRH 38 A	596906	596913	596920	38	7,000–10,000	50
CDR VRH 50 A	596937	596944	596951	50	5,500–7,500	50
CDR VRH 75 A	596968	596975	597354	75	3,800–5,000	25

Suitable for very fine surface and contour grinding and for cleaning metal or painted surfaces. Highly open structure.

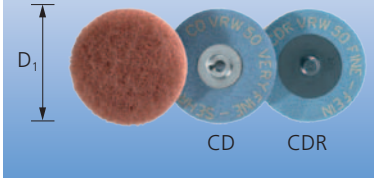
Abrasive: Aluminium oxide A
Available grit sizes:
100 = medium
180 = fine
280 = very fine

Recommendations for use:
- The addition of oil or water during grinding results in a finer finish, cooler grinding and longer tool life

Ordering example:
EAN 4007220**266687**
CD VRW 50 A **180**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter Noise Filter Emission Filter Haptic Filter

COMBIDISC® non-woven discs soft type



Description	Grit size			D_1 [mm]	Recom. speed [RPM]	
	100	180	280			
	EAN 4007220					
CD system						
CD VRW 50 A	266670	266687	266694	50	5,500–7,500	50
CD VRW 75 A	266717	266724	266731	75	3,800–5,000	25
CDR system						
CDR VRW 50 A	596999	597002	597019	50	5,500–7,500	50
CDR VRW 75 A	597026	597033	597040	75	3,800–5,000	25

COMBIDISC® non-woven discs PNER type

Suitable for use in face-down grinding on angle grinders. Particularly suitable for work on small and medium-sized surfaces of stainless steel (INOX) components.

Abrasives:
A = Aluminium oxide
SiC = Silicon carbide

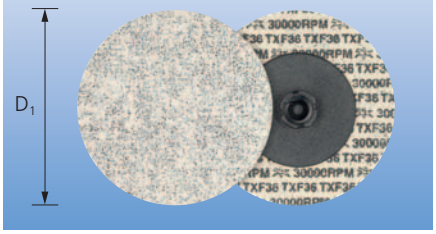
Ordering note:
The different thicknesses/hardnesses of the non-woven material are colour-coded:
W (soft) = grey
MH (medium-hard) = dark blue
H (hard) = red

Ordering example:
EAN 4007220**832776**
CD PNER-W 5006 SiC **F**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

Description	Grit size		D_1 x T [mm]	Type	Abrasives	Recom. speed [RPM]	Max. perm. speed [RPM]	
	G (coarse)	F (fine)						
	EAN 4007220							
CD system								
CD PNER-W 5006 A	832783	-	50 x 6	soft	Alum. oxide	9,500	19,100	25
CD PNER-W 5006 SiC	-	832776	50 x 6	soft	SiC	9,500	19,100	25
CD PNER-MH 5006 A	-	832806	50 x 6	medium-hard	Alum. oxide	9,500	19,100	25
CD PNER-MH 5006 SiC	-	832790	50 x 6	medium-hard	SiC	9,500	19,100	25
CD PNER-H 5006 A	832851	832813	50 x 6	hard	Alum. oxide	9,500	19,100	25
CD PNER-W 7506 A	832868	-	75 x 6	soft	Alum. oxide	6,400	12,500	25
CD PNER-W 7506 SiC	-	832837	75 x 6	soft	SiC	6,400	12,500	25
CD PNER-MH 7506 A	-	832882	75 x 6	medium-hard	Alum. oxide	6,400	12,500	25
CD PNER-MH 7506 SiC	-	832875	75 x 6	medium-hard	SiC	6,400	12,500	25
CD PNER-H 7506 A	832905	832899	75 x 6	hard	Alum. oxide	6,400	12,500	25
CDR system								
CDR PNER-W 5006 A	832660	-	50 x 6	soft	Alum. oxide	9,500	19,100	25
CDR PNER-W 5006 SiC	-	832653	50 x 6	soft	SiC	9,500	19,100	25
CDR PNER-MH 5006 A	-	832684	50 x 6	medium-hard	Alum. oxide	9,500	19,100	25
CDR PNER-MH 5006 SiC	-	832677	50 x 6	medium-hard	SiC	9,500	19,100	25
CDR PNER-H 5006 A	832707	832691	50 x 6	hard	Alum. oxide	9,500	19,100	25
CDR PNER-W 7506 A	832721	-	75 x 6	soft	Alum. oxide	6,400	12,500	25
CDR PNER-W 7506 SiC	-	832714	75 x 6	soft	SiC	6,400	12,500	25
CDR PNER-MH 7506 A	-	832745	75 x 6	medium-hard	Alum. oxide	6,400	12,500	25
CDR PNER-MH 7506 SiC	-	832738	75 x 6	medium-hard	SiC	6,400	12,500	25
CDR PNER-H 7506 A	832769	832752	75 x 6	hard	Alum. oxide	6,400	12,500	25

COMBIDISC® TX discs Aluminium oxide A



Achieve surface finishing in a single grinding operation which, in terms of quality, lies between that of coated abrasives and non-woven tools.
Particularly suitable for work on stainless steel (INOX) and aluminium.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**505731**
CD 50 A **80 TX**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

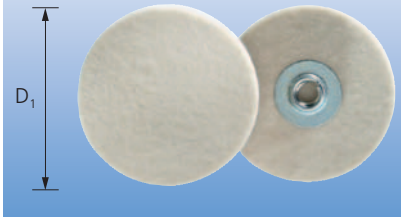
Description	Grit size				D_1 [mm]	Recom. speed [RPM]	
	36 TX	80 TX	120 TX	320 TX			
	EAN 4007220						
CD system							
CD 50 A	505724	505731	505748	505755	50	7,500–9,500	25
CD 75 A	505786	505793	505809	505816	75	5,000–6,500	25

Suitable for polishing with polishing paste bars, grinding pastes or diamond polishing pastes in face-down grinding on medium-sized surfaces.

PFERDERGONOMICS®:

Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

COMBIDISC® felt discs



Description	EAN 4007220	D_1 [mm]	Recom. speed [RPM]	
CD system				
CD FR 50	440490	50	2,000–4,000	10
CD FR 75	440506	75	1,200–2,500	10

Suitable for removal of soft materials such as adhesives and underbody coatings and for cleaning contours and edges.

Filament material: Steel

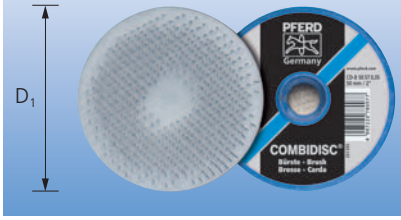
Recommendations for use:
- Use with either abrasive disc holder SBH 50 or arbor BO PFF 50
- COMBIDISC® brushes achieve their best performance at a recommended cutting speed of 10–15 m/s

Ordering note:
More detailed information and ordering data for other industrial power brushes can be found in Catalogue 208.

PFERDERGONOMICS®:

Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

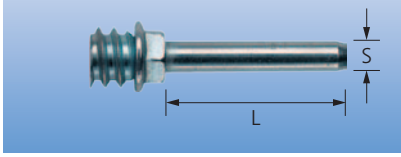
COMBIDISC® brush



Description	EAN 4007220	Filament dia. d_6 [mm]	D_1 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
CD system							
CD-B 50 ST 0,35	780077	0.35	50	5,000–6,000	19,100	BO PFF 50	5

Suitable arbor for COMBIDISC® Mini-POLIFAN® and COMBIDISC® brushes.

Arbor for COMBIDISC® brush



Description	EAN 4007220	S x L [mm]	Suitable tool	
BO PFF 50	593196	6 x 40	CD-B 50 ST 0,35	1

COMBIDISC® abrasive disc holders SBH/SBHR

Explanation of the abbreviations:
S = Shank dia.
L = Shank length

Colour code system of abrasive disc holders:
W (soft) = grey
M (medium) = blue
H (hard) = red

Ordering example:
EAN 4007220**266809**
SBH 50 **M**
Please complete the description with the desired hardness.

Ordering example explanation:
SBH = Abrasive disc holder
50 = Dia. D [mm]
M = Hardness

Description	Hardness			D [mm]	S x L [mm]	Max. perm. speed [RPM]	
	W (soft)	M (medium)	H (hard)				
	EAN 4007220						
CD system							
SBH 20	-	265901	-	20	6 x 40	47,500	1
SBH 25	-	266755	-	25	6 x 40	38,000	1
SBH 38	266762	266779	266786	38	6 x 40	25,000	1
SBH 50	266793	266809	266816	50	6 x 40	19,000	1
SBH 75	266823	266830	266847	75	6 x 40	12,500	1
CDR system							
SBHR 20	-	776315	-	20	6 x 40	47,500	1
SBHR 25	-	776322	-	25	6 x 40	38,000	1
SBHR 38	776346	597057	776339	38	6 x 40	25,000	1
SBHR 50	776360	597064	776353	50	6 x 40	19,000	1
SBHR 75	776384	597071	776377	75	6 x 40	12,500	1

Adapter
The abrasive disc holder can be replaced by suitable adapters. This enables the abrasive disc holder to be mounted directly to the drive spindle.

The following adapters are available:
AF 14-1/4, EAN (4007220**302026**)
Female thread M14, male thread 1/4-20 UNC. Suitable for drives with spindle M14.
SPV-20 CD 1/4-20 UNC,
(EAN 4007220**333167**)
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.

Ordering note:
More detailed information and ordering data for adapters can be found in Catalogue 209.

COMBIDISC® track grinder

Specifically designed for cleaning and slot grinding applications, e.g. cost-efficient cleaning and rust removal of seat mounting rails (tracks) in passenger aircraft.

Imparts an orbital ("wobble") movement to the abrasive or non-woven discs.

Description	EAN 4007220	S x L [mm]	Suitable tool	
STS 6	265895	6 x 40	CD 20, CD 25	1

For getting to know and testing the comprehensive system.

COMBIDISC® set 50
Contents:
3 pcs. each of COMBIDISC® abrasive discs:
- CD 50 A 60 FORTE
- CD 50 A 120 FORTE
- CD 50 A-COOL 60
- CD 50 CO-COOL 36
- CD 50 Z 60

3 pcs. each of COMBIDISC® non-woven discs:
- CD VRH 50 A 180 M
- CD VRW 50 A 100

1 pc. each of:
- abrasive disc holder, medium-hard SBH 50 M

COMBIDISC set 75
Contents:
3 pcs. each of COMBIDISC® abrasive discs:
- CD 75 A 60 FORTE
- CD 75 A 120 FORTE
- CD 75 A-COOL 60
- CD 75 CO-COOL 36
- CD 75 Z 60

3 pcs. each of COMBIDISC® non-woven discs:
- CD VRH 75 A 180 M
- CD VRW 75 A 100

1 pc. each of:
- Abrasive disc holder SBH 75 M

COMBIDISC® sets

Description	EAN 4007220	
COMBIDISC-SET 50	265918	1
COMBIDISC-SET 75	265932	1

Tool sets

Tool sets with drives

Set for all coarse and fine-grinding, polishing and cleaning tasks, especially on assembly and construction sites.

The single-hand, electronically speed-adjustable angle grinder included in the set covers the entire speed range for COMBIDISC® tools with 50 mm diameter.
The handy shape enables the comfortable use and easy handling of the well-rounded tool range.

For detailed information and ordering data for tool drives, please refer to Catalogue 209.

Contents:
- 1 electric angle grinder UWER 5/200 SI with electronic rotational speed control (9,000–20,000 RPM), 500 watts power output
- 4 abrasive disc holders and 2 arbors for alternative tool drives
- 135 different abrasive discs, TX discs, Mini-POLIFAN®, non-woven and felt discs with 50 mm diameter
- Polishing paste bar for use of felt discs

COMBIDISC® set CD 50 UWER 5/200 230 V

Description	EAN 4007220	
SET CD 50 UWER 5/200 230 V	607893	1

PFERD offers a comprehensive range of short and long belts. They differ in their
- dimensions,
- grit sizes,
- flexibility and
- abrasive.

The PFERD range is tailored to the common belt grinders available on the market.

PFERD short and long belts are designated "Abrasive Belts" according to ISO 2976.

Advantages:

- High abrasive performance
- High tensile strength with appropriate flexibility
- Very good grit adhesion
- Long tool life

Application examples:

- Fine grinding of larger surfaces in multiple steps
- Surface texturing
- Creation of uniform visual effects on large surfaces
- Polishing parts of railings with felt belts

Recommendations for use:

- Use grinding oil that is suitable for the material in order to significantly increase the tool life and the abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 120.

Safety notes:

- Observe the safety guidelines from the Association of German Abrasive Manufactures (VDS) entitled "Safety guidelines for correct use of abrasive belts". This information can be found at www.vds-bonn.de.


= Wear eye protection!


= Wear a dust mask!


= Wear hearing protection!


= Wear gloves!


= Please read the safety instructions!


= Not permitted for wet grinding!

Ordering instructions:

When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

Ordering example:
EAN 4007220**585269**
BA 10/480 A **80**

Ordering example explanation:

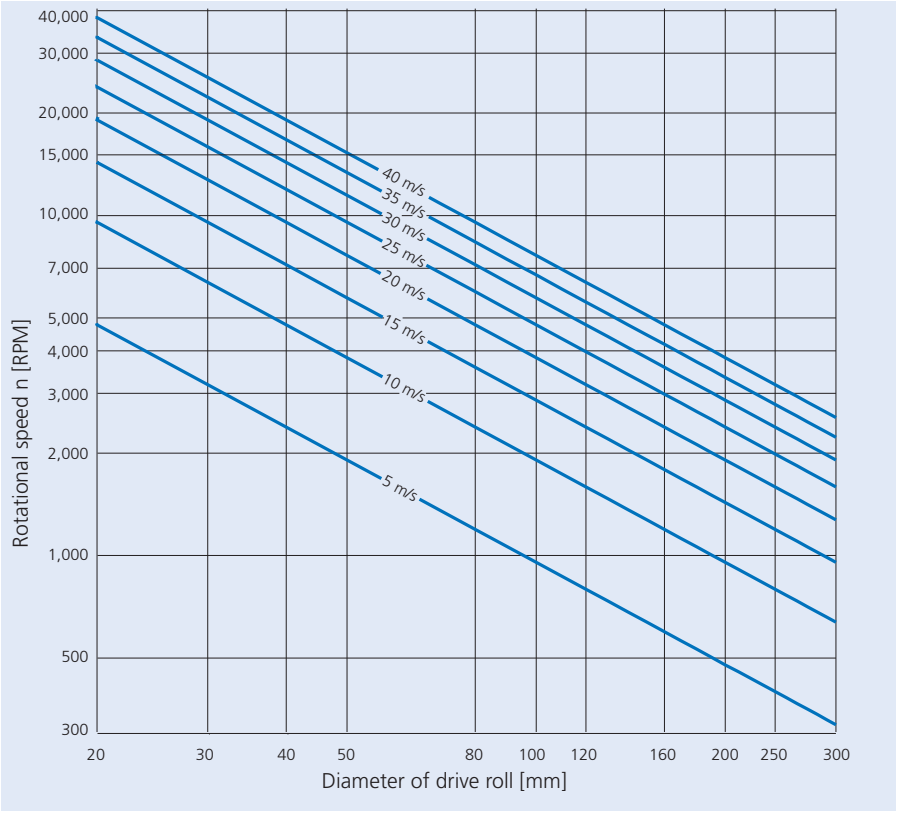
BA	= Abrasive belt
10	= Width T [mm]
480	= Length L [mm]
A	= Abrasive
80	= Grit size

Cutting speeds

The adjacent diagram allows you to determine the rotational speed [RPM] from a given cutting speed. For the recommended cutting speeds, see page 37.

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the diameter of the drive roll meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the recommended rotational speed [RPM] for the drive roll diameter selected.

Example:
BA 16/480 A 80
Dia. of drive roll: 27 mm
Cutting speed: 20–30 m/s
Rotational speed: 14,000–21,000 RPM



Material group			Application	Grit size	Recommended abrasives	Recommended cutting speeds [m/s]
Steel, cast steel	Non-hardened, non-heat-treated steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel	Coarse grinding Fine grinding Very fine grinding	coarse ▼ fine	Aluminium oxide A Non-woven material	25–35
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steel, cast steel	Coarse grinding Fine grinding Very fine grinding	coarse ▼ fine	Aluminium oxide A Zirconia alumina Z Non-woven material Ceramic oxide grain CO	20–30
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse grinding Fine grinding Very fine grinding	coarse ▼ fine	Ceramic oxide grain CO-COOL Aluminium oxide A-COOL Non-woven material Zirconia alumina Z-FORTE	15–25
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Aluminium alloys, brass, copper, zinc	Coarse grinding Fine grinding Very fine grinding	coarse ▼ fine	Aluminium oxide A Non-woven material	30–40
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, aluminium alloys (high Si content)	Coarse grinding Fine grinding Very fine grinding	coarse ▼ fine	Ceramic oxide grain CO-COOL Aluminium oxide A Non-woven material	20–30
	High-temperature-resistant materials	Nickel- and cobalt-based alloys	Coarse grinding Fine grinding Very fine grinding	coarse ▼ fine		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 cast iron EN-GJMB (GTS)	Coarse grinding Fine grinding Very fine grinding	coarse ▼ fine	Aluminium oxide A Zirconia alumina Z	25–35
Plastics, other materials		Fibre-reinforced plastics, thermoplastics, wood, chipboard, paint, melamine	Coarse grinding Fine grinding Very fine grinding	coarse ▼ fine	Aluminium oxide A	10–25

Coated abrasives

Tool drive and matching grinding belt dimensions

Manufacturer	Model	Abrasive belts width/length [mm]
PFERD	**Air-powered belt grinders**	
	PBS 3/200 DH 99	BA 3/305 BA 6/305 BA 9/305 BA 12/305
	PWS 3/200 DH + BSVH 25,5	
	PBSA 5/160 HV 925	BA 3/520 BA 6/520 BA 12/520 BA 16/520 BA 20/520 BA 6/610 BA 12/610
	PBS 5/155 HV	BA 6/610 BA 10/480 BA 16/480 BA 20/480 BA 25/480 BA 12/610
	Electric belt grinders	
	UBS 5/100 SI 925	BA 3/520 BA 6/520 BA 12/520 BA 16/520 BA 20/520 BA 6/610 BA 12/610
	Pipe belt grinders	
	UBS 5/70 SI-R	BA 30/533
	UBS 11/90 SI-R	BA 30/610
	Belt sanders BSG for flexible shaft drives	
	BSG 10/35E	BA 35/450
	BSG 10/50E	BA 50/450
	BSG 3/10/40	BA 40/505
	Angle hand pieces	
	WT 7 E M14 + BSVH 41	BA 3/520 BA 6/520 BA 12/520 BA 16/520 BA 20/520 BA 6/610 BA 12/610
	WZ 7 B + BSVH 36	
	WZ 10 B + BSVH 36	
	WZ 4 A + BSVH 24	BA 3/305 BA 6/305 BA 9/305 BA 12/305
AEG	HBS1000E	BA 75/533
	BBSE1100	BA 100/560
Atlas Copco	G2403 Pro belt grinder	BA 10/330
	G2404 Pro belt grinder	BA 20/520
ATA	RAL20L	BA 12/305
	BL16L	BA 20/480
Black& Decker	KA 88	BA 75/533
	KA 900 E	BA 13/457
	KA 86	BA 75/457

Manufacturer	Model	Abrasive belts width/length [mm]
DeWalt	DW650	BA 100/560
	DW650E	
	DW432	BA 75/533
	DW433	
Dynabrade	40352	BA 13/457
	40353	
	40320	
	40321	
	40324	
	40335	
	40381	
	15300	
	15400	
	40326	BA 6/520 BA 12/520 BA 16/520
	40330	BA 13/457 BA 6/610 BA 12/610
	40503	
	40615	
	15360	BA 6/610 BA 12/610
	15420	
	14000	
	15401	BA 12/520 BA 16/520 BA 20/520
	15003	BA 3/305 BA 6/305 BA 9/305 BA 12/305
Einhell	RT-BS 75	BA 75/533
	BT-US 400	BA 100/920
Fein/Grit	GX 75 / 75 2H	BA 75/2000
	GXC	
	GI 75 (2H) / GI 150 (2 H)	
	GIS 75	
	GIC	BA 75/2000 BA 150/2000
	GIM	
	GI 100	BA 100/1000
	GXR	BA 75/2250
	GIL	BA 150/2000
	GIS 150	
	BF10-280E	BA 3/520 BA 6/520 BA 12/520 BA 16/520 BA 20/520
	RS10-70E	BA 12/520 BA 16/520 BA 20/520 BA 30/533
Festool	BS 75	BA 75/533
	BS105	BA 100/620

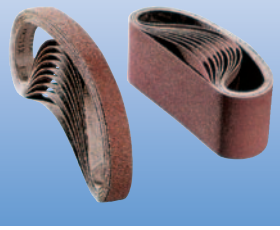
Manufacturer	Model	Abrasive belts width/length [mm]
Flott	BSM 75 / 75 A	BA 75/2000
	BSM 150 / 150A	BA 150/2000
	TBSM 75	BA 75/1000
Güde	BTS 4000 ECO	BA 100/920
	BTS 4000	
Hitachi	SB10V2	BA 100/610
Makita	9910	BA 75/457
	9911	
	9902	BA 75/533
	9903	
	9920	BA 75/610
	9404J	BA 100/610
	9403	
	9031	BA 30/533
	9032	BA 9/533
Metabo	BF 18 LTX 90	BA 13/457
	RB 18 LTX 60	BA 30/533
	BFE 9-90	BA 13/457
	BAE 75	BA 75/533
Milwaukee	BS 100 LE	BA 100/620
	HBSE 75 S	BA 75/533
Proxxon	BS/E	BA 10/330
Rexon	BD480A	BA 100/920
	BD460M	
Rodac	RC 8430	BA 10/330
	RC 8440	BA 20/520
Ryobi	EBS800V	BA 75/533
	EBS1310VFHG	BA 100/610
SCANTOOL	SC 75	BA 75/2000
	SC 150	BA 150/2000
Scheppach	ksm 2500	BA 150/2500
	ksm 2000	BA 150/2000
	bts 800	BA 100/920
SKIL	1215AA	BA 75/457
	1210AA	
Suhner	UBK 6-R	BA 35+50/450
	UTG 9-R	BA 30/610
	UTC 7-R	BA 30/533
	LBH 7 D 35	BA 35/450
	LBH 7 D 50	BA 50/450
	UBC 10-R	BA 6/520 BA 12/520
	LBC 16 H	
	WB 10	
	WB 7	
	LBB 20 DH	BA 6/305 BA 12/305
	WB 4	
	FTM	BA 30/610
	BSG 10/50	BA 50/450
	BSG 10/35	BA 35/450
Triton	TA 1200BS	BA 75/533

Suitable for coarse and fine grinding on metals and wood.

Abrasive: Aluminium oxide A

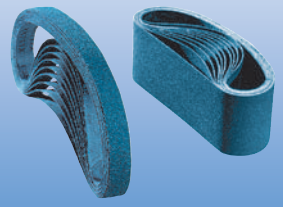
Ordering example:
EAN 4007220**585269**
BA 10/480 A **80**
Please complete the description with the desired grit size.

Short belts
Aluminium oxide A type



Description	Grit size										Acc. to ISO stand-ards	T x L [mm]	
	40	50	60	80	100	120	180	240	320	400			
	EAN 4007220												
BA 3/305 A	-	-	663899	-	-	663912	-	-	-	-	-	3 x 305	100
BA 6/305 A	-	-	664025	664032	-	-	664056	-	-	-	-	6 x 305	100
BA 9/305 A	-	-	664179	664186	-	664193	664209	-	-	-	-	9 x 305	100
BA 12/305 A	664261	-	664278	664285	-	664445	664292	-	-	-	-	12 x 305	100
BA 10/330 A	-	-	620151	620168	-	620182	620199	-	-	-	2976	10 x 330	100
BA 12/330 A	-	-	620229	-	-	-	-	-	-	-	-	12 x 330	100
BA 35/450 A	-	-	585665	-	585672	-	-	664704	664711	-	-	35 x 450	10
BA 50/450 A	585719	-	585726	-	585733	-	-	664766	-	-	2976	50 x 450	10
BA 13/457 A	620267	-	620274	620298	-	620304	-	-	-	-	2976	13 x 457	100
BA 10/480 A	585542	-	585252	585269	-	585559	-	-	-	-	-	10 x 480	100
BA 16/480 A	585597	-	585368	-	-	585382	-	-	-	-	-	16 x 480	50
BA 20/480 A	585610	664520	585429	585436	-	585443	664544	664551	-	-	2976	20 x 480	10
BA 25/480 A	585634	-	585481	585498	-	585641	-	-	-	-	2976	25 x 480	20
BA 3/520 A	663950	-	663967	663974	-	663981	663998	664001	-	-	-	3 x 520	100
BA 6/520 A	585528	-	585191	585207	-	585214	664124	664131	-	664155	2976	6 x 520	100
BA 12/520 A	585573	-	585306	585313	-	585320	664322	664339	664346	664353	-	12 x 520	100
BA 16/520 A	585603	-	585399	585405	-	585412	664407	-	-	-	-	16 x 520	50
BA 20/520 A	585627	-	585450	585467	-	585474	664568	664575	-	-	2976	20 x 520	20
BA 30/533 A	620359	-	620380	620397	-	620410	664667	664674	664681	-	2976	30 x 533	20
BA 75/533 A	584958	-	584965	584972	600429	584989	-	-	-	-	2976	75 x 533	10
BA 6/610 A	585535	-	585221	585238	-	585245	-	-	-	-	2976	6 x 610	100
BA 12/610 A	585580	-	585337	585344	-	585351	-	-	-	-	-	12 x 610	100
BA 30/610 A	776414	-	776421	776438	-	776445	776452	776469	-	-	-	30 x 610	10
BA 100/610 A	585030	-	585047	585054	600467	585061	-	-	-	-	2976	100 x 610	10
BA 100/920 A	620786	-	620793	620809	-	620823	-	-	-	-	-	100 x 920	10

Short belts
Zirconia alumina Z type



For heavy-duty use and maximum stock removal on steel, stainless steel (INOX), non-ferrous metals and cast iron with flake graphite.

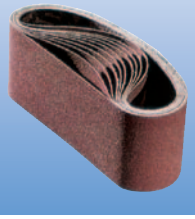
Abrasive: Zirconia alumina Z

Ordering note:
Short abrasive belts BA 20/520 Z, in grit sizes 40, 60 and 80, are supplied in packaging units of 20 pieces.

Ordering example:
EAN 4007220**620205**
BA 10/330 Z **40**
Please complete the description with the desired grit size.

Description	Grit size				Acc. to ISO standards	T x L [mm]	
	36	40	60	80			
	EAN 4007220						
BA 10/330 Z	-	620205	620212	-	2976	10 x 330	100
BA 12/330 Z	-	-	620236	620250	-	12 x 330	100
BA 20/480 Z	-	586297	586235	586242	2976	20 x 480	10
BA 12/520 Z	-	586273	586198	586204	-	12 x 520	100
BA 20/520 Z	620342	586303	586259	586310	2976	20 x 520	100
BA 12/610 Z	-	586280	586211	586228	-	12 x 610	100

Short belts
Aluminium oxide A-COOL type



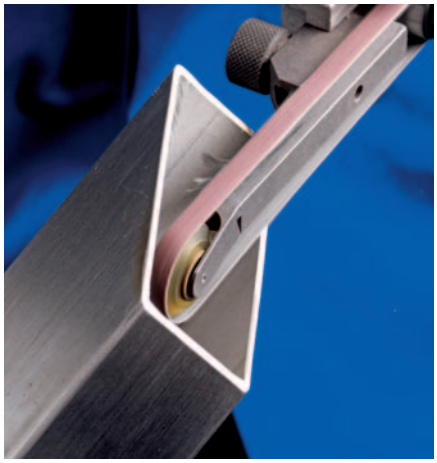
Suitable for work on stainless steel (INOX) and high-temperature-resistant materials.

Active grinding additives in the coating significantly increase stock removal, prevent clogging and result in cooler grinding.

Abrasive: Aluminium oxide A-COOL

Ordering example:
EAN 4007220**586099**
BA 50/450 A-COOL **40**
Please complete the description with the desired grit size.

Description	Grit size				Acc. to ISO standards	T x L [mm]	
	40	80	120	180			
	EAN 4007220						
BA 50/450 A-COOL	586099	586105	586112	586129	2976	50 x 450	10



For aggressive grinding with maximum stock removal on hard materials which do not conduct heat well.

Active grinding additives in the coating significantly improve stock removal rates, prevent clogging and allow cooler grinding.

Abrasive: Ceramic oxide grain CO-COOL

Ordering example:
EAN 4007220**799215**
BA 6/305 CO-COOL **40**
Please complete the description with the desired grit size.

Short belts
Ceramic oxide grain CO-COOL type

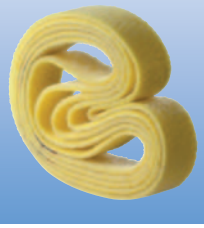
Description	Grit size				Acc. to ISO standards	T x L [mm]	
	40	60	80	120			
	EAN 4007220						
BA 6/305 CO-COOL	799215	799222	799239	799246	-	6 x 305	100
BA 9/305 CO-COOL	799352	799369	799376	799383	-	9 x 305	100
BA 12/305 CO-COOL	799444	799451	799468	799475	-	12 x 305	100
BA 10/330 CO-COOL	799390	799406	799413	799420	2976	10 x 330	100
BA 12/330 CO-COOL	799482	799499	799505	799536	-	12 x 330	100
BA 35/450 CO-COOL	949887	949894	949917	949924	2976	35 x 450	20
BA 50/450 CO-COOL	949931	949948	949955	949962	2976	50 x 450	20
BA 13/457 CO-COOL	799628	799635	799642	799659	2976	13 x 457	100
BA 16/480 CO-COOL	799666	799673	799680	799697	-	16 x 480	50
BA 20/480 CO-COOL	799741	799758	799772	799789	2976	20 x 480	20
BA 25/480 CO-COOL	799833	799840	799857	799864	2976	25 x 480	20
BA 6/520 CO-COOL	799260	799277	799284	799307	2976	6 x 520	100
BA 12/520 CO-COOL	799543	799550	799567	799574	-	12 x 520	100
BA 16/520 CO-COOL	799703	799710	799727	799734	-	16 x 520	50
BA 20/520 CO-COOL	799796	799802	799819	799826	2976	20 x 520	20
BA 30/533 CO-COOL	799871	799888	799895	799901	-	30 x 533	20
BA 6/610 CO-COOL	799314	799321	799338	799345	2976	6 x 610	100
BA 12/610 CO-COOL	799581	799598	799604	799611	-	12 x 610	100
BA 30/610 CO-COOL	799918	799925	799932	799949	-	30 x 610	10

Used with polishing pastes for pre-polishing and high-gloss polishing of tubular structures and rails.

Recommendations for use:
- For the polishing process, apply pre-polishing and high-gloss polishing successively
- When changing the polishing paste, also replace the polishing belt in order not to introduce any contaminants from the previous work step
- Felt type short belts achieve their best performance at a recommended cutting speed of 5–15 m/s

Ordering example:
EAN 4007220**936269**
P-BA 30/533

Short belts
Felt type



Description	EAN 4007220	Acc. to ISO standards	T x L [mm]	
P-BA 30/533	936269	2976	30 x 533	5
P-BA 30/610	936276	-	30 x 610	5

Short belts
Non-woven type

Suitable for producing matt and satin-finished surfaces on steel, stainless steels and non-ferrous metals.

Abrasive: Aluminium oxide A
Colour code for grit sizes:
100 G (coarse) = Yellow-brown
180 M (medium) = Red-brown
240 F (fine) = Blue

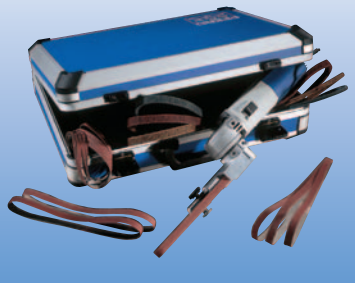
Recommendations for use:
- Non-woven short abrasive belts achieve their best performance at a recommended cutting speed of 5–15 m/s

Ordering example:
EAN 4007220**586631**
VB 35/450 A **100 G**
Please complete the description with the desired grit size.

Description	Grit size			Acc. to ISO standards	T x L [mm]	
	100 G	180 M	240 F			
	EAN 4007220					
VB 6/305 A	667552	667569	667545	-	6 x 305	10
VB 9/305 A	667668	667675	667620	-	9 x 305	10
VB 12/305 A	667637	667644	667651	-	12 x 305	10
VB 35/450 A	586631	586648	586655	-	35 x 450	10
VB 50/450 A	586662	586679	586686	2976	50 x 450	10
VB 6/520 A	586518	586525	586532	-	6 x 520	10
VB 12/520 A	586549	586556	586563	-	12 x 520	10
VB 16/520 A	586570	586587	586594	-	16 x 520	10
VB 20/520 A	586600	586617	586624	2976	20 x 520	5
VB 30/533 A	667699	667705	667682	2976	30 x 533	5
VB 30/610 A	776520	776537	776551	-	30 x 610	5

Tool sets
Tool sets with drives

Belt grinder set



Set for general-purpose surface work, from coarse to fine. The steplessly speed-adjustable electric belt grinder allows optimized rotational speed regulation for the use of abrasive belts that require high and non-woven belts that require low rotational speeds.

Ideally suitable for all belt grinding work, in particular for assembly work. The belt speeds can be regulated electronically and steplessly within the range 6.5 to 16 m/s.

For detailed information and ordering data regarding tool drives, please refer to Catalogue 209.

Contents:
- Electric belt grinder UBS 5/100 SI 925 with stepless speed regulation, 500 Watts power output
- 2 pcs. each of abrasive belts of width 6 and 12 mm, grit 40, 60, 80, 120 and 180
- 2 pcs. each of non-woven belts, coarse, medium and fine

Recommendations for use:
- Use abrasive belts at higher rotational speed levels (settings 4–6)
- Use non-woven belts at lower rotational speed levels (settings 1–4)

Safety notes:
- The maximum peripheral speed for abrasive belts is 32 m/s
- The maximum peripheral speed for non-woven belts is 25 m/s

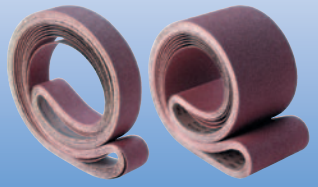
Description	EAN 4007220	
SET BA 6-12/520 UBS 5/100 230 V	344125	1

Suitable for coarse and fine grinding on metals and wood. They can be used on all commercially available and special belt grinders in industry and crafts.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**621059**
BA 50/1000 A **60**
Please complete the description with the desired grit size.

Long belts
Aluminium oxide A type



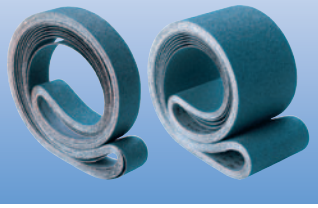
Description	Grit size					Acc. to ISO standards	T x L [mm]	
	36	40	60	80	120			
	EAN 4007220							
BA 50/1000 A	-	-	621059	621066	621073	2976	50 x 1,000	10
BA 100/1000 A	-	585917	585924	585931	585948	2976	100 x 1,000	10
BA 50/2000 A	-	585771	585788	585795	585801	2976	50 x 2,000	10
BA 75/2000 A	600481	585832	585849	585856	585863	2976	75 x 2,000	10
BA 150/2000 A	600597	585955	585962	585979	-	2976	150 x 2,000	10
BA 75/2500 A	620373	585870	585887	585894	585900	2976	75 x 2,500	10

For heavy-duty use and maximum stock removal on steel, stainless steel (INOX), non-ferrous metals and cast iron with flake graphite.

Abrasive: Zirconia alumina Z

Ordering example:
EAN 4007220**586457**
BA 100/1000 Z **40**
Please complete the description with the desired grit size.

Long belts
Zirconia alumina Z type



Description	Grit size						Acc. to ISO standards	T x L [mm]	
	24	36	40	60	80	120			
	EAN 4007220								
BA 100/1000 Z	-	-	586457	586464	586471	621042	2976	100 x 1,000	10
BA 50/2000 Z	621219	621233	586327	586334	586341	619353	2976	50 x 2,000	10
BA 75/2000 Z	600511	586358	586365	586372	586389	586396	2976	75 x 2,000	10
BA 150/2000 Z	-	600641	586488	586495	586501	600672	2976	150 x 2,000	10
BA 75/2250 Z	-	-	613191	613214	-	-	2976	75 x 2,250	10
BA 75/2500 Z	-	586402	586419	586426	586433	-	2976	75 x 2,500	10
BA 150/2500 Z	-	621141	-	-	-	-	2976	150 x 2,500	10

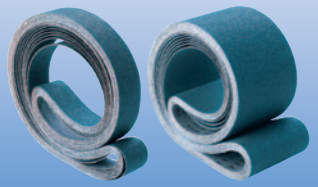
Designed for very cool grinding and long tool life.

Particularly suitable for work on thin-walled stainless steel (INOX) components and on steels or nickel-based alloys which do not conduct heat well.

Abrasive: Zirconia alumina Z-FORTE

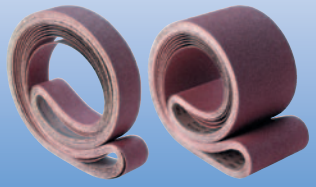
Ordering example:
EAN 4007220**620243**
BA 75/2000 Z **40 FORTE**
Please complete the description with the desired grit size.

Long belts
Z-FORTE type



Description	Grit size				Acc. to ISO standards	T x L [mm]	
	36 FORTE	40 FORTE	60 FORTE	80 FORTE			
	EAN 4007220						
BA 75/2000 Z	620175	620243	620311	620335	2976	75 x 2,000	10
BA 75/2500 Z	620458	620502	-	-	2976	75 x 2,500	10

Long abrasive belts
Ceramic oxide grain CO type



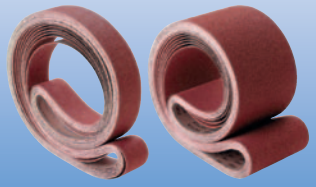
For aggressive grinding with very high stock removal rate and very long tool life. The ceramic oxide grain is specially designed for work on hard materials and layers.

Abrasive: Ceramic oxide grain CO

Ordering example:
EAN 4007220**950623**
BA 50/2000 CO **24**
Please complete the description with the desired grit size.

Description	Grit size							Acc. to ISO standards	T x L [mm]	
	24	36	40	50	60	80	120			
	EAN 4007220									
BA 50/2000 CO	950623	950630	950647	950654	950661	950678	950685	2976	50 x 2,000	10
BA 75/2000 CO	950692	950708	950715	950722	950739	950746	950753	2976	75 x 2,000	10
BA 75/2500 CO	950760	950777	950784	950791	950807	950814	950821	2976	75 x 2,500	10

Long abrasive belts
Ceramic oxide grain CO-COOL type

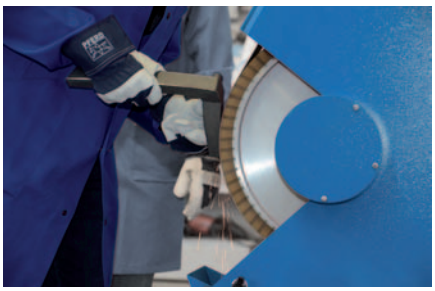


For aggressive grinding with highest stock removal rates on hard materials which do not conduct heat well.

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

Abrasive: Ceramic oxide grain CO-COOL

Ordering example:
EAN 4007220**950173**
BA 50/2000 CO-COOL **36**
Please complete the description with the desired grit size.



Description	Grit size						Acc. to ISO standards	T x L [mm]	
	36	40	50	60	80	120			
	EAN 4007220								
BA 50/2000 CO-COOL	950173	950333	950357	950371	950401	950425	2976	50 x 2,000	10
BA 75/2000 CO-COOL	950449	950470	950494	950500	950517	950524	2976	75 x 2,000	10
BA 75/2500 CO-COOL	950562	950579	950586	950593	950609	950616	2976	75 x 2,500	10

The cloth-backed abrasive sheets can be torn down to the required size, if necessary. They comply with ISO 21948.

Cloth-backed abrasive sheets brown:
Suitable for general heavy-duty use on alloyed and non-alloyed steels as well as non-ferrous metals.

Advantages:
- Very flexible cloth
- Very high grain adhesion
- High abrasive performance
- Oil- and kerosene-resistant

Cloth-backed abrasive sheets blue:
Lower-cost alternative for normal workloads when working on painted wooden and metal surfaces.

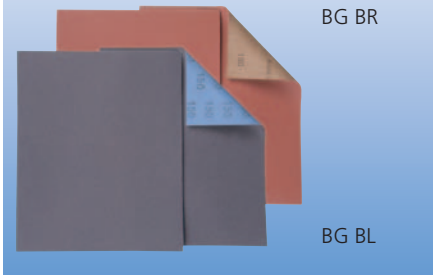
Advantages:
- Strong cloth
- Good grain adhesion
- Good abrasive performance

Ordering note for BG blue:
Grit sizes 100, 120, 150, 180 and 220 are supplied in packaging units of 100 pieces

Ordering example:
EAN 4007220**587393**
BG BR 230x280 A **40**
Please complete the description with the desired grit size.

Ordering example explanation:
BG = Abrasive sheets cloth-backed
BR = Brown
230 = Width T [mm]
280 = Length L [mm]
A = Abrasive
40 = Grit size

Abrasive sheets cloth-backed brown (BR), abrasive sheets cloth-backed blue (BL)



Description	Grit size								T x L [mm]	
	40	60	80	100	120	150	180	220		
	EAN 4007220									
BG BR 230x280 A	587393	587409	587416	587423	587430	587447	587454	587461	230 x 280	50
BG BL 230x280 A	587270	587287	587294	587300	587317	587324	587331	587348	230 x 280	50

Description	Grit size						T x L [mm]	
	240	280	320	400	444	999		
	EAN 4007220							
BG BR 230x280 A	587478	587485	587492	587515	587522	587539	230 x 280	50
BG BL 230x280 A	587355	-	-	-	-	-	230 x 280	100

The paper-backed abrasive sheets comply with ISO 21948.

Paper-backed abrasive sheets, waterproof, SiC type:
The SiC abrasive enables use on paint and glass. Particularly suitable for all wet grinding work on conventional painted constructions.

Advantages:
- Very flexible and light paper
- Very high grain adhesion
- Can be used for wet and dry grinding

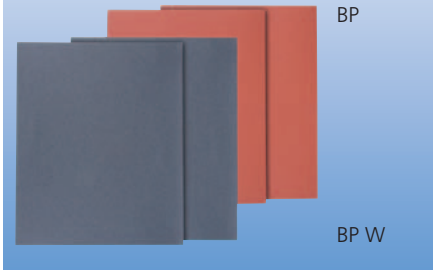
Paper-backed abrasive sheets, aluminium oxide A type:
Low-cost alternative for normal workloads when working on painted wooden and metal surfaces.

Advantages:
- Strong paper
- Good abrasive performance

Ordering note for BP:
Grit sizes 100, 120, 150, 180 and 220 are supplied in packaging units of 100 pieces

Ordering example:
EAN 4007220**587546**
BP W 230x280 SiC **100**
Please complete the description with the desired grit size.

Abrasive sheets paper-backed, waterproof (BP W), abrasive sheets paper-backed (BP)



Description	Grit size								T x L [mm]	
	40	60	80	100	120	150	180	220		
	EAN 4007220									
BP W 230x280 SiC	-	-	-	587546	588222	588239	588246	588253	230 x 280	50
BP 230x280 A	622520	622544	622551	622568	622575	622582	622476	622483	230 x 280	50

Description	Grit size										T x L [mm]	
	240	280	320	360	400	500	600	800	1000	1200		
	EAN 4007220											
BP W 230x280 SiC	588260	588277	588284	588291	588307	588314	588321	588338	588345	588352	230 x 280	50
BP 230x280 A	622490	622506	-	-	622513	-	-	-	-	-	230 x 280	100

POLINOX® hand pads

Suitable for light grinding, deburring and cleaning work on metal, plastics (GRP), stainless steel (INOX), aluminium, paint and fillers.

Due to the high flexibility, contours and hard-to-reach places can be worked on with ease.

Abrasive:
A = Aluminium oxide
SiC = Silicon carbide

Application example:
- Blending of grinding patterns
- Roughening of gluing points
- Cleaning of stainless steel (INOX) parts

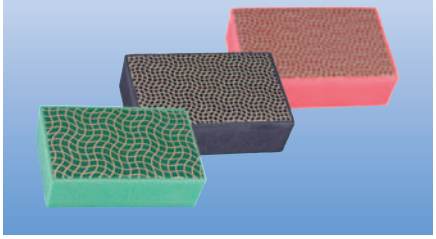
Recommendation for use:
- Can be used for wet or dry grinding

Ordering example:
EAN 4007220**294642**
PVSK 150 A **280**
Please complete the description with the desired grit size.

Ordering example explanation:
PVSK = POLINOX® hand pads
150 = Width T [mm]
A = Abrasive
280 = Grit size

Description	Grit size					T x L [mm]	
	80	100	180	280	400		
	EAN 4007220						
PVSK 150 A	294611	294628	294635	294642	-	154 x 224	10
PVSK 150 SiC	-	-	-	-	294659	154 x 224	10

Hand pads Diamond type



Exceptionally suitable for grinding work on wear protection coatings and on hard facings made of tungsten carbide, chromium carbide, titanium carbide etc. Particularly suitable for work on ceramic coatings in aircraft engine and turbine construction.
Also highly suitable for work on extremely abrasive materials such as glass or carbon-fibre-reinforced plastics (GRP/CRP).

Abrasive: Diamond
D 251 (green) = P 60
D 126 (black) = P 120
D 76 (red) = P 200
(P = Grit size according to ISO 6344)

Recommendations for use:
- Can be used for dry and wet grinding
- Work at low contact pressures

Ordering note:
Grit sizes are specified in µm. More detailed information on diamond grinding tools can be found in Catalogue 205.

Ordering example:
EAN 4007220**804568**
HP 5590 DIA **251**
Please complete the description with the desired grit size.

Ordering example explanation:
HP = Hand pads
55 = Width T [mm]
90 = Length L [mm]
DIA = Abrasive
251 = Grit size in µm

Description	Grit size [µm]			T x L [mm]	
	251	126	76		
	EAN 4007220				
HP 5590 DIA	804568	804575	804582	55 x 90	1

PFERD provides shop rolls with various
- belt widths,
- grit sizes and
- backing materials.

Advantages:

- High flexibility
- High tensile strength
- Very good grain adhesion

Application examples:

- Manual grinding in hard-to-reach areas
- Grinding of irregular contours, concave or convex curvatures on pipes
- Fine finishing of turned parts
- Work in an engineering workshop

Suitable for manual grinding of all types of materials. Supplied in a carton with tear off edge, so that pieces of abrasive belt can be cut off as needed at the workplace.

SBR 25, SBR 40 and SBR 50 correspond to shape B, ISO 3366.
SBR 100 corresponds to shape A, ISO 3366.

Abrasive: Aluminium oxide A

Ordering note:

Please order shop roll holder separately.

Ordering instructions:

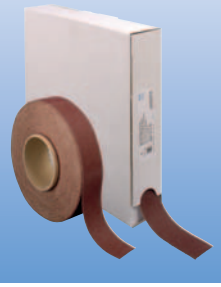
When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

Ordering example:
EAN 4007220**587775**
SBR 50 A **100**

Ordering example explanation:
SBR = Shop rolls
50 = Width T [mm]
A = Abrasive
100 = Grit size

Ordering example:
EAN 4007220**587553**
SBR 25 A **60**
Please complete the description with the desired grit size.

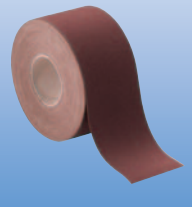
Shop rolls/cloth-backed Aluminium oxide A type



Description	Grit size							T x L [mm]	Centre hole dia. [mm]	
	40	50	60	80	100	120	150			
	EAN 4007220									
SBR 25 A	-	-	587553	587560	587577	587584	587591	25 x 50,000	75	1
SBR 38 A	602010	602027	602034	602041	602058	602065	602072	38 x 25,000	75	1
SBR 40 A	587645	-	587652	587669	587676	587683	587690	40 x 50,000	75	1
SBR 50 A	587744	-	587751	587768	587775	587782	587799	50 x 50,000	75	1
SBR 100 A	587843	-	587850	588864	587874	587881	587973	100 x 50,000	75	1

Description	Grit size							T x L [mm]	Centre hole dia. [mm]	
	180	220	240	320	400	600	800			
	EAN 4007220									
SBR 25 A	587607	-	587614	587621	587638	607237	607244	25 x 50,000	75	1
SBR 38 A	602089	602096	602102	602119	602126	-	-	38 x 25,000	75	1
SBR 40 A	587706	622612	587713	587720	587737	-	-	40 x 50,000	75	1
SBR 50 A	587805	621981	587812	587829	587836	607251	-	50 x 50,000	75	1
SBR 100 A	587980	-	587997	588000	588017	-	-	100 x 50,000	75	1

Shop rolls/paper-backed Aluminium oxide A type



Suitable for manual grinding on wood, metals and paints.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**667781**
SBR-P 115 A **60**
Please complete the description with the desired grit size.

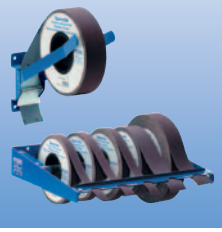
Description	Grit size						T x L [mm]	Centre hole dia. [mm]	
	40	60	80	100	120	150			
	EAN 4007220								
SBR-P 115 A	667774	667781	622858	622865	667798	667804	115 x 25,000	75	1

Tool holder

Shop roll holders SRH 1 and SRH 5

SRH 1

SRH 5



Two different holders are available for storage and for tearing off the belts to the required length when required:

Shop roll holder SRH 1 (empty)
For shop rolls 25, 38, 40 or 50 mm in width.

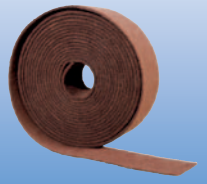
Shop roll holder SRH 5 (empty)
For shop rolls 25, 38, 40 or 50 mm in width. Various combinations of roll widths are possible e.g. 5 x 50 mm or 5 x 40 mm.

Both holders are suitable for wall mounting.

Description	EAN 4007220	No. of rolls	Suitable for roll widths [mm]	Suitable for roll dia. [mm]	
SRH 1	297551	1	25, 38, 40, 50	380	1
SRH 5	297568	5	25, 38, 40, 50	260	1

Non-woven shop rolls

Non-woven shop rolls



Suitable for work on metals, plastics, paints and fillers.
Recommended for light cleaning and deburring work. Water-, oil- and kerosene-resistant.

Abrasives:
A = Aluminium oxide
SiC = Silicon carbide

Ordering example:
EAN 4007220**622711**
VBR 100 A **100**
Please complete the description with the desired grit size.

Ordering example explanation:
VBR = Shop roll
100 = Width T [mm]
A = Abrasive
100 = Grit size

Description	Grit size				T x L [mm]	
	100	180	280	400		
	EAN 4007220					
VBR 100 A	622711	622728	622735	-	100 x 10,000	1
VBR 100 SiC	-	-	-	951385	100 x 10,000	1

PFERD velcro-backed abrasive discs are tailored to the standard tool drives available on the market. They are suitable for fine grinding of larger surfaces using eccentric orbital sanders and for general use on metal, wood and paint.

The velcro-backed abrasive discs with suction holes are designed according to ISO 21951, shape A:

Dia. 125 8L: 8 suction holes with dia. 10 mm, pitch circle 65 mm
ISO 21951 – Nominal size 6

Dia. 150 8L: 8 suction holes with dia. 10 mm, pitch circle 65 mm
ISO 21951 – Nominal size 9

Dia. 150 6L: 6 suction holes with dia. 10 mm, pitch circle 80 mm
ISO 21951 – Nominal size 10

Advantages:

- High flexibility
- Fast tool change
- High abrasive performance
- Little clogging, resulting in maximum tool life

Application examples:

- Paint removal
- Fine grinding in preparation for painting
- Fine grinding of wood

Safety notes:


= Wear eye protection!


= Wear a dust mask!


= Wear hearing protection!


= Only use with backing pad!

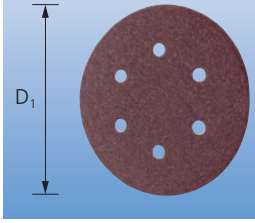
Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**588024**
KSS 125 8 L A **40**
Please complete the description with the desired grit size.

Ordering example explanation:

KSS	= Velcro-backed abrasive disc
125	= Outer dia. D_1 [mm]
8 L	= 8 holes (O L = without hole)
A	= Abrasive
40	= Grit size

Velcro-backed abrasive discs
Aluminium oxide A type



Description	Grit size										D_1 [mm]	
	40	60	80	100	120	150	180	240	320	400		
	EAN 4007220											
KSS 125 O L A	599273	599297	599303	599310	599426	599327	-	-	-	-	125	25
KSS 150 O L A	599341	599358	599365	599372	599389	599396	599402	599419	-	-	150	25
KSS 125 8 L A	588024	588031	588048	588055	588062	588079	588086	588093	588109	588116	125	25
KSS 150 8 L A	599105	599112	599129	599136	599143	599150	-	-	-	-	150	25
KSS 150 6 L A	588123	588130	588147	588154	588161	588178	588185	588192	588208	588215	150	25

Abrasive spiral bands and rubber drum holders

General information

For many different applications, PFERD provides a comprehensive range of abrasive spiral bands with various
- shapes,
- dimensions,
- abrasives,
- grit sizes and
- packaging units.

Matching, reusable rubber drum holders in two different shapes are available for using abrasive spiral bands:
- Cylindrical
- Conical

The high degree of fitting accuracy between the components ensures that the abrasive spiral band remains securely attached to the rubber drum holder during use.

Abrasive spiral bands are designated "Cylindrical Abrasive Sleeves" according to ISO 2421.

Cylindrical rubber drum holders are designated "Holding Fixtures of Cylindrical Abrasive Sleeves" according to ISO 15637-1.

Advantages:

- Because of slots, the holder expands during use, guaranteeing that the abrasive spiral band is firmly clamped in place
- Outstanding tool life due to special manufacturing process – even under the most demanding operating conditions
- Particularly high stock removal and high aggressiveness of the abrasive

Recommendations for use:

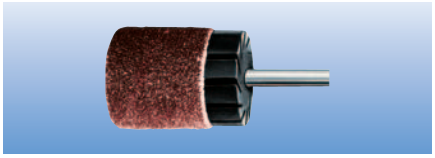
- Abrasive spiral bands can be mounted and removed by turning them slightly to the right
- Abrasive spiral bands are easier to mount when the rubber drum holder is mounted on the tool drive
- The secure attachment of the abrasive spiral band is only guaranteed if the minimum rotational speed is observed
- Abrasive spiral bands achieve their best performance at a recommended cutting speed of 20–30 m/s
- Use grinding oil that is suitable for the material in order to significantly increase the tool life and the abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 120.

Application examples:

- Removing weld seams in steel construction
- Fine grinding work in equipment, tank and vessel construction
- Post-processing for assembly and repair work
- Machining edges and contours in aircraft engine construction

Safety notes:

- The maximum permitted peripheral speed is 30 m/s
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times
- Do not allow abrasive spiral bands to protrude beyond the rubber body



Ordering instructions:

When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

Ordering example:
EAN 4007220**148426**
GSB 4530 Z-COOL **36**

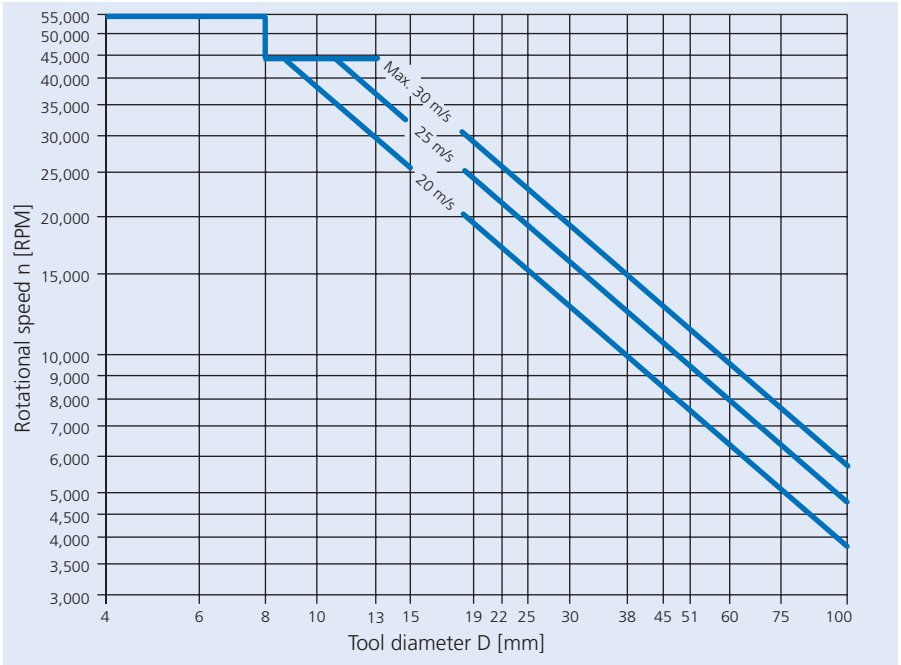
Ordering example explanation:

GSB	= Abrasive spiral bands, bulk pack
4530	= Inner dia. D x width T [mm]
Z	= Abrasive
COOL	= Bond type
36	= Grit size

Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the tool diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the abrasive spiral band and tool drive.

Example:
KSB 4530 A 60
Cutting speed: 20–30 m/s
Rotational speed: 8,500 –12,500 RPM

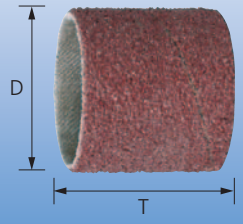


Suitable for general grinding applications from fine to very fine grinding on metals and other materials.

Abrasive: Aluminium oxide A

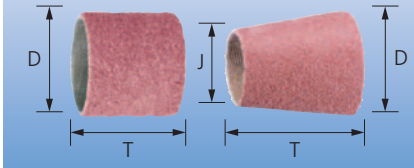
Ordering example:
EAN 4007220**149461**
KSB 4530 A **40**
Please complete the description with the desired grit size.

Abrasive spiral bands
Aluminium oxide A – small pack



Description	Grit size						D x T [mm]	Recom. speed [RPM]	
	40	50	60	80	150	240			
	EAN 4007220								
Cylindrical shape									
KSB 0410 A	-	-	-	-	148860	-	4 x 10	30,000–55,000	25
KSB 0610 A	-	-	-	-	148884	-	6 x 10	30,000–55,000	25
KSB 0810 A	-	-	-	-	148907	-	8 x 10	30,000–55,000	25
KSB 1010 A	-	-	-	148921	148938	-	10 x 10	30,000–44,000	25
KSB 1020 A	-	-	-	148952	148969	148976	10 x 20	30,000–44,000	25
KSB 1310 A	-	-	-	148983	148990	-	13 x 10	30,000–44,000	25
KSB 1325 A	-	-	-	149010	149027	-	13 x 25	30,000–44,000	25
KSB 1510 A	-	-	149041	149058	149065	-	15 x 10	26,000–36,000	25
KSB 1530 A	-	149089	149096	149102	149119	149126	15 x 30	26,000–36,000	25
KSB 1925 A	-	-	149133	149140	149157	149164	19 x 25	20,000–30,000	25
KSB 2220 A	-	149171	149188	149195	149201	-	22 x 20	18,000–26,000	25
KSB 2525 A	-	-	149225	149232	149249	-	25 x 25	16,000–22,900	25
KSB 3020 A	149263	-	149270	149287	149294	-	30 x 20	13,000–19,100	25
KSB 3030 A	149324	149317	149331	149348	149355	-	30 x 30	13,000–19,100	25
KSB 3825 A	149379	-	149386	149393	149409	-	38 x 25	10,000–15,900	25
KSB 4530 A	149461	149454	149478	149485	149492	-	45 x 30	8,500–12,700	10
KSB 5125 A	149515	-	149522	149539	149546	-	51 x 25	7,500–11,200	10
KSB 6030 A	149577	149560	149584	149591	149607	-	60 x 30	6,500–9,500	10
KSB 7530 A	149614	-	149621	149638	149645	-	75 x 30	5,000–7,600	10

Abrasive spiral bands
Aluminium oxide A – bulk pack



Suitable for general grinding applications from fine to very fine grinding on metals and other materials.

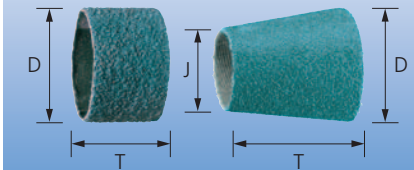
Available in cylindrical and conical shapes.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**148372**
GSB 4530 A **40**
Please complete the description with the desired grit size.

Description	Grit size						D x J x T [mm]	Recom. speed [RPM]	
	40	50	60	80	150	240			
	EAN 4007220								
Cylindrical shape									
GSB 0410 A	-	-	-	-	147610	-	4 x 10	30,000–55,000	100
GSB 0610 A	-	-	-	-	147634	-	6 x 10	30,000–55,000	100
GSB 0810 A	-	-	-	-	147658	-	8 x 10	30,000–55,000	100
GSB 1010 A	-	-	-	147672	147689	-	10 x 10	30,000–44,000	100
GSB 1020 A	-	-	949740	147702	147719	147726	10 x 20	30,000–44,000	100
GSB 1310 A	-	-	-	147733	147740	-	13 x 10	30,000–44,000	100
GSB 1325 A	-	-	-	147764	147771	-	13 x 25	30,000–44,000	100
GSB 1510 A	-	-	147795	147801	147818	-	15 x 10	26,000–36,000	100
GSB 1530 A	-	147832	147849	147856	147863	147870	15 x 30	26,000–36,000	100
GSB 1925 A	-	-	147931	147948	147955	-	19 x 25	20,000–30,000	100
GSB 2220 A	-	147979	147986	147993	148006	148013	22 x 20	18,000–26,000	100
GSB 2525 A	-	-	148075	148082	148099	-	25 x 25	16,000–22,900	100
GSB 3020 A	148112	-	148129	148136	148143	-	30 x 20	13,000–19,100	100
GSB 3030 A	148174	148167	148181	148198	148204	148211	30 x 30	13,000–19,100	100
GSB 3825 A	148280	-	148297	148303	148310	-	38 x 25	10,000–15,900	100
GSB 4530 A	148372	148365	148389	148396	148402	148419	45 x 30	8,500–12,700	100
GSB 5125 A	148488	-	148495	148501	148518	-	51 x 25	7,500–11,200	100
GSB 6030 A	148549	148532	148556	148563	148570	-	60 x 30	6,500–9,500	100
GSB 7530 A	148648	-	148655	148662	148679	-	75 x 30	5,000–7,600	100
GSB 10040 A	148686	-	148693	148709	148716	-	100 x 40	4,000–5,700	50
Conical shape									
GSB 201463 A	148723	-	148730	148747	148754	148761	20 x 14 x 63	19,000–26,000	100
GSB 292230 A	148778	-	148785	148792	148808	-	29 x 22 x 30	13,000–19,100	100
GSB 362260 A	148822	-	148839	148846	148853	-	36 x 22 x 60	10,000–15,900	100

Abrasive spiral bands
Zirconia alumina – bulk pack



Designed for maximum stock removal.

The outstandingly aggressive cutting quality of zirconia alumina is effective at increased contact pressures and ensures exceptional stock removal.

Available in cylindrical and conical shapes.

Abrasive: Zirconia alumina Z

Ordering example:
EAN 4007220**805664**
GSB 4530 Z **40**
Please complete the description with the desired grit size.

Description	Grit size						D x J x T [mm]	Recom. speed [RPM]	
	36	40	50	60	80	120			
	EAN 4007220								
Cylindrical shape									
GSB 1325 Z	-	-	804827	804872	804889	949757	13 x 25	30,000–44,000	100
GSB 1925 Z	-	804896	804902	804940	804957	949764	19 x 25	20,000–30,000	100
GSB 2525 Z	949771	805022	805077	805084	805091	949788	25 x 25	16,000–22,900	100
GSB 3030 Z	949795	805145	805152	805176	805183	-	30 x 30	13,000–19,100	100
GSB 3825 Z	949801	805190	949818	805206	949825	949832	38 x 25	10,000–15,900	100
GSB 4530 Z	-	805664	805671	805725	805732	-	45 x 30	8,500–12,700	100

Continued on next page

Description	Grit size						D x J x T [mm]	Recom. speed [RPM]	
	36	40	50	60	80	120			
	EAN 4007220								
GSB 5125 Z	949849	803943	949856	803950	803967	949863	51 x 25	7,500–11,200	100
Conical shape									
GSB 201463 Z	950050	-	950074	950081	950098	950104	20 x 14 x 63	19,000–26,000	100
GSB 292230 Z	950067	-	950128	950135	950142	950159	29 x 22 x 30	13,000–19,100	100
GSB 362260 Z	950166	-	950241	950258	950265	950289	36 x 22 x 60	10,000–15,900	100

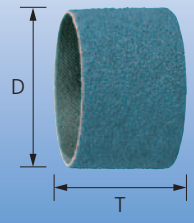
Particularly suitable for work on stainless steel (INOX).

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

Abrasive: Zirconia alumina Z-COOL

Ordering example:
EAN 4007220**148426**
GSB 4530 Z-COOL **36**
Please complete the description with the desired grit size.

Abrasive spiral bands
Zirconia alumina Z-COOL – bulk pack



Description	Grit size				D x T [mm]	Recom. speed [RPM]	
	36	50	80	150			
	EAN 4007220						
Cylindrical shape							
GSB 1530 Z-COOL	-	147887	147894	147924	15 x 30	26,000–36,000	100
GSB 2220 Z-COOL	-	148020	148037	148068	22 x 20	18,000–26,000	100
GSB 3030 Z-COOL	148228	148235	148242	148273	30 x 30	13,000–19,100	100
GSB 4530 Z-COOL	148426	148433	148440	148471	45 x 30	8,500–12,700	100
GSB 6030 Z-COOL	148587	148594	148600	148631	60 x 30	6,500–9,500	100

For aggressive grinding with maximum stock removal on hard and tough materials which do not conduct heat well.

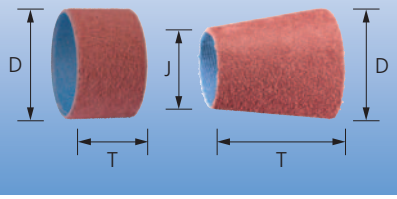
Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

Available in cylindrical and conical shapes.

Abrasive: Ceramic oxide grain CO-COOL

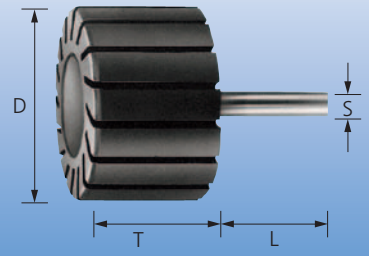
Ordering example:
EAN 4007220**772362**
GSB 4530 CO-COOL **60**
Please complete the description with the desired grit size.

Abrasive spiral bands
Ceramic oxide grain CO-COOL – bulk pack



Description	Grit size				D x J x T [mm]	Recom. speed [RPM]	
	36	60	80	120			
	EAN 4007220						
Cylindrical shape							
GSB 1530 CO-COOL	-	772195	772201	772218	15 x 30	26,000–36,000	100
GSB 2220 CO-COOL	-	772225	772232	772249	22 x 20	18,000–26,000	100
GSB 2525 CO-COOL	-	772256	772263	772270	25 x 25	16,000–22,900	100
GSB 3030 CO-COOL	772287	772294	772317	772331	30 x 30	13,000–19,100	100
GSB 4530 CO-COOL	772355	772362	772393	772409	45 x 30	8,500–12,700	100
GSB 6030 CO-COOL	772416	772423	772430	772447	60 x 30	6,500–9,500	100
Conical shape							
GSB 201463 CO-COOL	950302	950319	950326	950340	20 x 14 x 63	19,000–26,000	100
GSB 292230 CO-COOL	950364	950388	950395	950418	29 x 22 x 30	13,000–19,100	100
GSB 362260 CO-COOL	950432	950456	950463	950487	36 x 22 x 60	10,000–15,900	100

Rubber drum holders, cylindrical

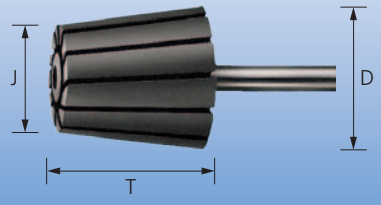


Rubber drum holders marked "H" are the harder type and permit grinding at higher contact pressure. Due to their reduced elasticity, they are more suitable for edge grinding.

Rubber drum holders standard type
= Hardness approx. 65–70 Shore A

Rubber drum holders special type H
= Hardness approx. 80 Shore A

Rubber drum holders, conical



Description	EAN 4007220	D x J x T [mm]	S x L [mm]	Acc. to ISO standards	Max. perm. speed [RPM]	Minimum speed [RPM]	
Cylindrical shape							
GK 0410/3	146729	4 x 10	3 x 40	-	55,000	30,000	5
GK 0410/6	146712	4 x 10	6 x 40	-	55,000	30,000	5
GK 0610/3	146743	6 x 10	3 x 40	-	55,000	30,000	5
GK 0610/6	146736	6 x 10	6 x 40	-	55,000	30,000	5
GK 0810/3	146767	8 x 10	3 x 40	-	55,000	30,000	5
GK 0810/6	146750	8 x 10	6 x 40	-	55,000	30,000	5
GK 1010/6	146774	10 x 10	6 x 35	15637-1	44,000	30,000	5
GK 1020/6	146781	10 x 20	6 x 35	15637-1	44,000	30,000	5
GK 1310/6	146798	13 x 10	6 x 35	-	44,000	30,000	5
GK 1325/6	146804	13 x 25	6 x 35	-	44,000	30,000	5
GK 1510/6	146811	15 x 10	6 x 35	15637-1	36,000	26,000	5
GK 1530/6	146828	15 x 30	6 x 35	15637-1	36,000	26,000	5
GK 1925/6	146835	19 x 25	6 x 35	-	30,000	20,000	5
GK 2220/6	146842	22 x 20	6 x 35	15637-1	26,000	18,000	5
GK 2220/6 H	146859	22 x 20	6 x 35	15637-1	26,000	18,000	5
GK 2525/6	146866	25 x 25	6 x 35	-	22,900	16,000	5
GK 3020/6	146873	30 x 20	6 x 35	15637-1	19,100	13,000	5
GK 3030/6	146880	30 x 30	6 x 35	15637-1	19,100	13,000	5
GK 3030/6 H	146897	30 x 30	6 x 35	15637-1	19,100	13,000	5
GK 3825/6	146903	38 x 25	6 x 35	-	15,900	10,000	5
GK 4530/6	146927	45 x 30	6 x 35	15637-1	12,700	8,500	5
GK 4530/6 H	146934	45 x 30	6 x 35	15637-1	12,700	8,500	5
GK 5125/6	146941	51 x 25	6 x 35	-	11,200	7,500	5
GK 6030/6	146958	60 x 30	6 x 35	15637-1	9,500	6,500	5
GK 6030/8	146965	60 x 30	8 x 35	15637-1	9,500	6,500	5
GK 7530/8	146972	75 x 30	8 x 35	15637-1	7,600	5,000	5
GK 10040/8	146989	100 x 40	8 x 35	15637-1	5,700	4,000	5
Conical shape							
GK 201463/6	147078	20 x 14 x 63	6 x 37	-	26,000	19,000	5
GK 292230/6	147085	29 x 22 x 30	6 x 40	-	19,100	13,000	5
GK 362260/6	147092	36 x 22 x 60	6 x 40	-	15,900	10,000	5

For work on hard-to-reach areas, PFERD provides POLIROLL® and POLICO® tools with various
- shapes,
- dimensions,
- abrasives and
- grit sizes.

POLIROLL® and POLICO® tools consist of a coated abrasive wound in a spiral. The abrasive grain is embedded in the resinoid coating on the strong cloth backing material for maximum abrasive performance.

Self-clamping due to a grooved conical tool holder ensures that the cartridge rolls remain securely attached during use.

Advantages:

- As the outer abrasive material of POLIROLL® cartridge rolls wears off, fresh abrasive grain is exposed
- Very good stock removal
- Easy to replace due to special tool holder

Application examples:

- Deburring work on bores and hard-to-reach areas
- Dressing fillet weld seams on metal structures
- Deburring work on castings

Recommendations for use:

- Always grind using the tip and not the surface, as otherwise the adhesive will be damaged by the heat produced
- Always position the cartridge rolls with the bonded side towards the tool holder
- Use grinding oil that is suitable for the material in order to significantly increase the tool life and the abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 120.

Ordering instructions:

When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

Ordering example:
EAN 4007220**803394**
PR 1225 CO-COOL **80**

Ordering example explanation:
PR = POLIROLL® cylindrical cartridge rolls
1225 = Outer diameter D x width T [mm]
CO = Abrasive
COOL = Bond type
80 = Grit size

Safety notes:

- The maximum permitted peripheral speed is 11 m/s
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times


= Wear eye protection!


= Wear a dust mask!


= Wear hearing protection!


= Wear gloves!

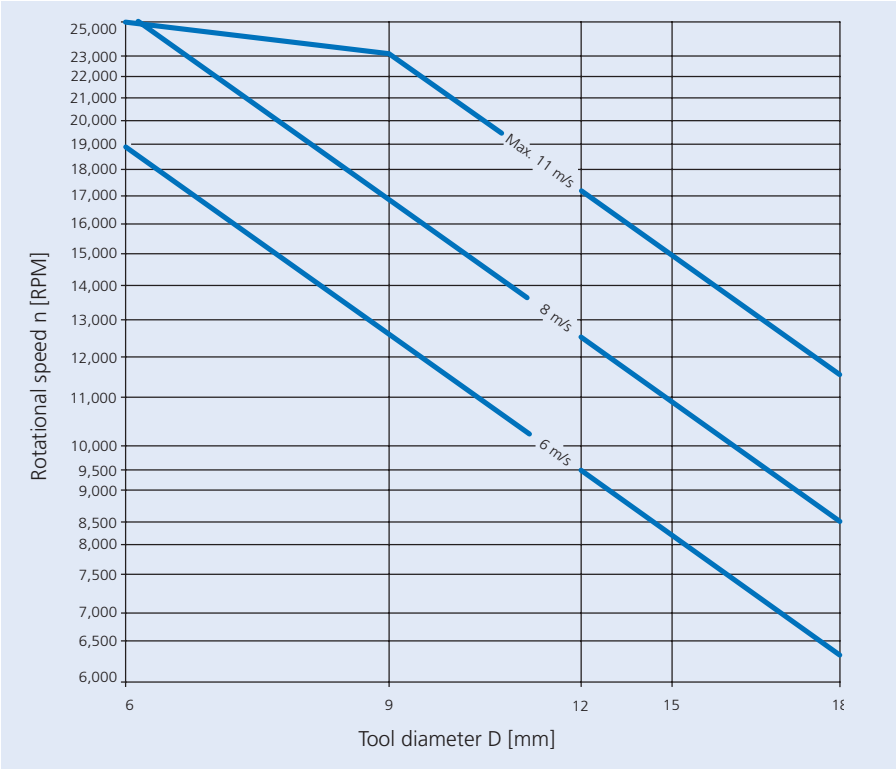

= Please read the safety instructions!


= Not permitted for wet grinding!

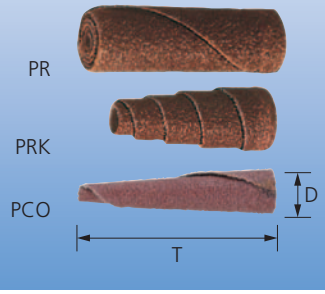
Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the tool diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the POLIROLL® and POLICO® tool and tool drive.

Example:
PR 1225 A 80
Cutting speed: 8 m/s
Rotational speed: 12,500 RPM



POLIROLL® cartridge rolls, POLICO® abrasive cones Aluminium oxide A type



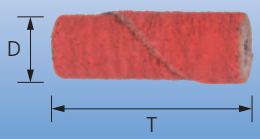
For general grinding work on metals and other materials.

Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**152393**
PR 1225 A **80**
Please complete the description with the desired grit size.

Description	Grit size			D x T [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	50	80	150					
	EAN 4007220							
Cylindrical shape (PR)								
PR 0625 A	-	152300	152317	6 x 25	20,000	25,000	BO 3-18-3, BO 6-18-3	50
PR 0635 A	-	152324	152331	6 x 35	20,000	25,000	BO 6-24-3	50
PR 0925 A	-	152348	152355	9 x 25	15,000	23,000	BO 6-18-3	50
PR 0935 A	-	152362	152379	9 x 35	15,000	23,000	BO 6-24-3	50
PR 1225 A	152386	152393	152409	12 x 25	12,000	17,000	BO 6-18-3	50
PR 1235 A	152416	152423	152430	12 x 35	12,000	17,000	BO 6-24-3	50
PR 1835 A	152447	152454	152461	18 x 35	8,000	12,000	BO 6-25-5	50
PR 1850 A	152478	152485	152492	18 x 50	8,000	12,000	BO 6-30-5	50
Conical type (PRK)								
PRK 1025 A	-	152508	152515	10 x 25	15,000	23,000	BO 3-18-3, BO 6-18-3	50
PRK 1225 A	152522	152539	152546	12 x 25	12,000	17,000	BO 6-18-3	50
PRK 1235 A	152553	152560	152577	12 x 35	12,000	17,000	BO 6-24-3	50
PRK 1535 A	152584	152591	152607	15 x 35	10,000	15,000	BO 6-24-3	50
POLICO® abrasive cones (PCO)								
PCO 1050 A	-	152614	152621	10 x 50	15,000	23,000	BO 6-50-8	50

POLIROLL® cartridge rolls Ceramic oxide grain CO-COOL



For aggressive grinding with maximum stock removal on hard materials which do not conduct heat well.

Active grinding additives in the coating substantially improve stock removal, prevent clogging and result in cooler grinding.

Abrasive: Ceramic oxide grain CO

Ordering example:
EAN 4007220**803394**
PR 1225 CO-COOL **80**
Please complete the description with the desired grit size.

Description	Grit size			D x T [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	60	80	120					
	EAN 4007220							
Cylindrical shape (PR)								
PR 0625 CO-COOL	803264	803271	803288	6 x 25	20,000	25,000	BO 3-18-3, BO 6-18-3	50
PR 0635 CO-COOL	803295	803301	803318	6 x 35	20,000	25,000	BO 6-24-3	50
PR 0925 CO-COOL	803325	803332	803349	9 x 25	15,000	23,000	BO 6-18-3	50
PR 0935 CO-COOL	803356	803363	803370	9 x 35	15,000	23,000	BO 6-24-3	50
PR 1225 CO-COOL	803387	803394	803400	12 x 25	12,000	17,000	BO 6-18-3	50
PR 1235 CO-COOL	803424	803431	803448	12 x 35	12,000	17,000	BO 6-24-3	50

PFERD has based the POLIROLL® set tool selection on the most common applications.

Contents:
150 POLIROLL® cartridge rolls with suitable arbor:

- 20 pcs. each of PR 0625, A 80 and A 150
- 20 pcs. each of PR 0925, A 80 and A 150
- 20 pcs. each of PR 1225, A 80 and A 150
- 10 pcs. each of PRK 1025, A 80 and A 150
- 10 pcs. each of PRK 1225, A 80

POLIROLL® set

Description	EAN 4007220	Dimensions [mm]	
PRS 151	335727	180 x 145 x 40	1

Arbors for POLIROLL® and POLICO®

Arbor for POLIROLL® and POLICO® tools. Tool change can be carried out without unclamping the arbor from the tool drive collet.

Ordering note:
Arbors BO 6-50-8 – matching PCO 1050. The cone of the clamping piece is 5°.

Arbors for POLIROLL® and POLICO® grinding tools

Description	EAN 4007220	S x L [mm]	Suitable for	
BO 3-18-3	152171	3 x 27	PR 0625, PRK 1025	1
BO 6-18-3	152188	6 x 30	PR 0625, PR 0925, PR 1225, PRK 1025, PRK 1225	1
BO 6-24-3	152195	6 x 30	PR 0635, PR 0935, PR 1235, PRK 1235, PRK 1535	1
BO 6-25-5	152201	6 x 30	PR 1835	1
BO 6-30-5	152218	6 x 30	PR 1850	1
BO 6-50-8	152232	6 x 30	PCO 1050	1

PFERD provides POLICAP® abrasive caps and cones with various
- shapes,
- dimensions,
- abrasives and
- grit sizes.

POLICAP® tools have a seamless design and the entire tool surface can be used.

Matching, reusable holders in various shapes are available for using abrasive caps and cones. The high degree of fitting accuracy between the components ensures that the abrasive caps and cones remain securely attached to the holder during use.

Advantages:

- Because of slots, the holder expands during use, guaranteeing that the abrasive cap/ cone is firmly clamped in place
- Good dimensional stability and excellent fine grinding thanks to a special manufacturing process
- Easy tool change

Application examples:

- Fine grinding in tool and mould construction
- Finishing on turbine blades after repair
- Feather edging of radii at transitions after milling frames in aircraft construction
- Fine grinding of hard-to-reach areas and bores
- Levelling of transitions in fitting and pump construction

Recommendations for use:

- Abrasive caps and cones can be mounted and removed by turning them slightly to the right
- Abrasive caps and cones are easier to replace when the holder is mounted on the tool drive
- Abrasive caps and cones achieve their best performance at a recommended cutting speed of 10–20 m/s

Safety notes:

- The maximum permitted peripheral speed is 25 m/s
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

Aluminium oxide A type (AL_2O_3)  A 60/80 A 150 A 280	For universal use on steel materials (hardened, tempered, non-hardened). Specially developed for specific tasks, e.g. in tool and mould construction and for appropriate repair work. Also suitable for working on plastics, wood and filler in model making.
SiC-COOL type (silicon carbide with abrasive grinding layer) 	Ideal for working on components made of titanium, aluminium and their respective alloys. Outstandingly well suited to use in aircraft and turbine construction and the associated maintenance work. The special grain selection and the abrasive grinding additive in the bond enable cool grinding, reduce the workpiece temperature and prevent chip adhesion.
CO-COOL type (ceramic oxide grain with abrasive grinding layer) 	Due to the specific structure of the ceramic oxide grain and the abrasive bond components, ideally suited to working on stainless steels (INOX) and the heat-resistant nickel- and cobalt-based alloys often used in turbine construction, such as Iconel® and Hastelloy®. The abrasive grinding additives prevent clogging and permit cooler grinding with significantly higher stock removal.

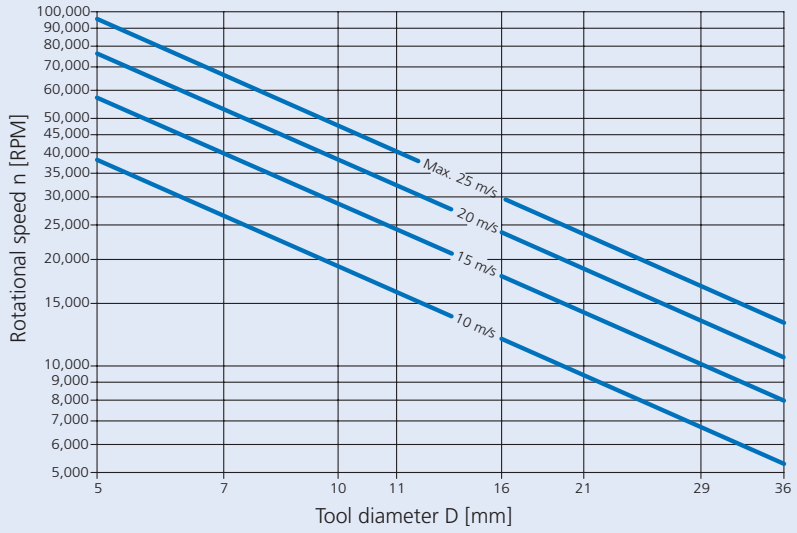
Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the tool diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] for the POLICAP® tool and tool drive.

Example:
PC 1015 A A 150
Cutting speed: 10–20 m/s
Rotational speed: 19,000–38,000 RPM

PFERDVIDEO

You will receive more information here or at www.pferd.com



POLICAP® abrasive caps PC, abrasive cap holders PCT, shape A

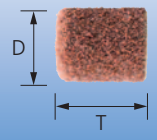
Abrasive: Aluminium oxide A

Grit size colour code:
60 and 80 = brown
150 = black
280 = red-brown

Ordering example:
EAN 4007220**150788**
PC 0510 A A **80**
Please complete the description with the desired grit size.

Ordering example explanation:
PC = POLICAP® abrasive cap
0510 = Inner dia. D x width T
A = Cylindrical shape
A = Abrasive
80 = Grit size

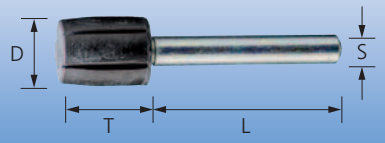
Abrasive caps shape A



Description	Grit size				D x T [mm]	Recom. speed [RPM]	
	60	80	150	280			
	EAN 4007220						
PC 0510 A A	-	150788	150795	150801	5 x 10	40,000	50
PC 0712 A A	150818	-	150825	150832	7 x 12	30,000	50
PC 1015 A A	150849	-	150856	150863	10 x 15	20,000	50
PC 1317 A A	150870	-	150887	150894	13 x 17	16,000	50
PC 1626 A A	150900	-	150917	150924	16 x 26	12,000	50

Ordering example:
EAN 4007220**147139**
PCT 0510 A/3

Abrasive cap holders shape A



Description	EAN 4007220	D x T [mm]	S x L [mm]	Max. perm. speed [RPM]	
PCT 0510 A/3	147139	5 x 10	3 x 27	95,000	5
PCT 0712 A/3	147146	7 x 12	3 x 25	65,000	5
PCT 1015 A/3	147153	10 x 15	3 x 24	45,000	5
PCT 1317 A/6	147221	13 x 17	6 x 39	35,000	5
PCT 1626 A/6	147238	16 x 26	6 x 39	30,000	5

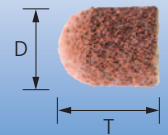
PFERD has based the POLICAP® set tool selection on the most common applications.

Contents:
- 5 pcs. each of POLICAP® abrasive caps PC 1015 A A, 1317 A A and 1626 A A (grit sizes 60, 150, 280)
- 10 pcs. each of POLICAP® abrasive caps PC 0510 A A and 0712 A A (grit sizes 60 or 80, 150, 280)
- 1 pc. each of POLICAP® abrasive cap holder PCT 0510 A/3, 0712 A/3, 1015 A/3, 1317 A/6 and 1626 A/6

POLICAP® set shape A

Description	EAN 4007220	Dimensions [mm]	
PCS 110 A	355404	180 x 145 x 40	1

Abrasive caps shape C



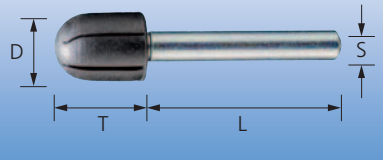
Abrasive:
A = Aluminium oxide
SiC-COOL= Silicon carbide (grey)
CO-COOL= Ceramic oxide grain (red)

Grit size colour code for aluminium oxide A:
60 and 80 = brown
150 = black
280 = red-brown

Ordering example:
EAN 4007220**953938**
PC 0511 C CO-COOL **80**
Please complete the description with the desired grit size.

Description	Grit size					D x T [mm]	Recom. speed [RPM]	
	60	80	120	150	280			
	EAN 4007220							
Aluminium oxide A								
PC 0511 C A	-	150931	-	150948	150955	5 x 11	40,000	50
PC 0713 C A	150962	-	-	150979	150986	7 x 13	30,000	50
PC 1015 C A	150993	-	-	151006	151013	10 x 15	20,000	50
PC 1317 C A	151020	-	-	151037	151044	13 x 17	16,000	50
PC 1626 C A	151051	-	-	151068	151075	16 x 26	12,000	50
SiC-COOL (Silicon carbide)								
PC 0511 C SiC-COOL	-	953716	-	953723	-	5 x 11	40,000	50
PC 0713 C SiC-COOL	-	953730	-	953747	-	7 x 13	30,000	50
PC 1015 C SiC-COOL	-	953754	-	953761	-	10 x 15	20,000	10
PC 1317 C SiC-COOL	-	953778	-	953792	-	13 x 17	16,000	50
PC 1626 C SiC-COOL	-	953808	-	953815	-	16 x 26	12,000	50
Ceramic oxide grain CO-COOL								
PC 0511 C CO-COOL	-	953938	953945	-	-	5 x 11	40,000	50
PC 0713 C CO-COOL	-	953952	953969	-	-	7 x 13	30,000	50
PC 1015 C CO-COOL	-	953976	954041	-	-	10 x 15	20,000	50
PC 1317 C CO-COOL	-	954058	954119	-	-	13 x 17	16,000	50
PC 1626 C CO-COOL	-	954126	954133	-	-	16 x 26	12,000	50

Abrasive cap holders shape C



Ordering example:
EAN 4007220**147160**
PCT 0511 C/3

Description	EAN 4007220	D x T [mm]	S x L [mm]	Max. perm. speed [RPM]	
PCT 0511 C/3	147160	5 x 11	3 x 26	95,000	5
PCT 0713 C/3	147177	7 x 13	3 x 24	65,000	5
PCT 1015 C/3	147184	10 x 15	3 x 24	45,000	5
PCT 1317 C/6	147245	13 x 17	6 x 39	35,000	5
PCT 1626 C/6	147252	16 x 26	6 x 39	30,000	5

POLICAP® set shape C

PFERD has based the POLICAP® set tool selection on the most common applications.

Contents:
- 5 pcs. each of POLICAP® abrasive caps PC 1015 C A, 1317 C A and 1626 C A (grit sizes 60, 150, 280)
- 10 pcs. each of POLICAP® abrasive caps PC 0511 C A and 0713 C A (grit size 60 and 80, 150, 280)
- 1 pc. each of POLICAP® abrasive cap holder PCT 0511 C/3, 0713 C/3, 1015 C/3, 1317 C/6 and 1626 C/6

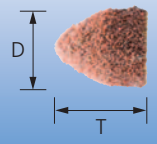
Description	EAN 4007220	Dimensions [mm]	
PCS 110 C	355411	180 x 145 x 40	1

Abrasive: Aluminium oxide A

Grit size colour code:
60 and 80 = brown
150 = black
280 = red-brown

Ordering example:
EAN 4007220**151082**
PC 0511 G A **80**
Please complete the description with the desired grit size.

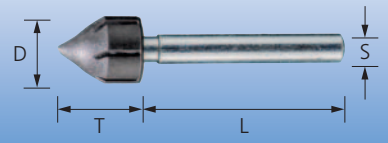
Abrasive caps shape G



Description	Grit size				D x T [mm]	Recom. speed [RPM]	
	60	80	150	280			
	EAN 4007220						
PC 0511 G A	-	151082	151099	151105	5 x 11	40,000	50
PC 0713 G A	151112	-	151129	151136	7 x 13	30,000	50
PC 1015 G A	151143	-	151150	151167	10 x 15	20,000	50
PC 1317 G A	151174	-	151181	151198	13 x 17	16,000	50
PC 1626 G A	151204	-	151211	151228	16 x 26	12,000	50

Ordering example:
EAN 4007220**147207**
PCT 0713 G/3

Abrasive cap holders shape G



Description	EAN 4007220	D x T [mm]	S x L [mm]	Max. perm. speed [RPM]	
PCT 0511 G/3	147191	5 x 11	3 x 27	95,000	5
PCT 0713 G/3	147207	7 x 13	3 x 26	65,000	5
PCT 1015 G/3	147214	10 x 15	3 x 26	45,000	5
PCT 1317 G/6	147269	13 x 17	6 x 41	35,000	5
PCT 1626 G/6	147276	16 x 26	6 x 41	30,000	5

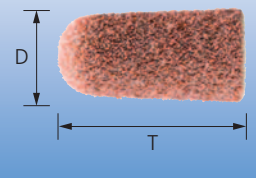
PFERD has based the POLICAP® set tool selection on the most common applications.

Contents:
- 5 pcs. each of POLICAP® abrasive caps PC 1015 G A, 1317 G A and 1626 G A (grit sizes 60, 150, 280)
- 10 pcs. each of POLICAP® abrasive caps PC 0511 G A and 0713 G A (grit size 60 and 80, 150, 280)
- 1 pc. each of POLICAP® abrasive cap holder PCT 0511 G/3, 0713 G/3, 1015 G/3, 1317 G/6 and 1626 G/6

POLICAP® set shape G

Description	EAN 4007220	Dimensions [mm]	
PCS 110 G	355428	180 x 145 x 40	1

Abrasive caps shape L



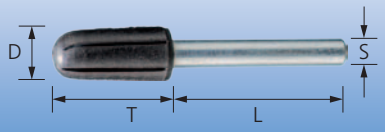
Abrasive:
A = Aluminium oxide A
SiC = Silicon carbide (grey)
CO-COOL = Ceramic oxide grain (red)

Grit size colour code for aluminium oxide A:
60 and 80 = brown
150 = black
280 = red-brown

Ordering example:
EAN 4007220**954140**
PC 0515 L CO-COOL **80**
Please complete the description with the desired grit size.

Description	Grit size					D x T [mm]	Recom. speed [RPM]	
	60	80	120	150	280			
	EAN 4007220							
Aluminium oxide A								
PC 0515 L A	-	151235	-	151242	151259	5 x 15	40,000	50
PC 1125 L A	151266	-	-	151273	151280	11 x 25	20,000	50
PC 1632 L A	151297	-	-	151303	151310	16 x 32	12,000	50
PC 2140 L A	151327	-	-	151334	151341	21 x 40	9,500	50
SiC-COOL (Silicon carbide)								
PC 0515 L SiC-COOL	-	953822	-	953839	-	5 x 15	40,000	50
PC 1125 L SiC-COOL	-	953846	-	953853	-	11 x 25	20,000	50
PC 1632 L SiC-COOL	-	953891	-	953907	-	16 x 32	12,000	50
PC 2140 L SiC-COOL	-	953914	-	953921	-	21 x 40	9,500	50
Ceramic oxide grain CO-COOL								
PC 0515 L CO-COOL	-	954140	954263	-	-	5 x 15	40,000	50
PC 1125 L CO-COOL	-	954164	954188	-	-	11 x 25	20,000	50
PC 1632 L CO-COOL	-	954195	954218	-	-	16 x 32	12,000	50
PC 2140 L CO-COOL	-	954225	954232	-	-	21 x 40	9,500	50

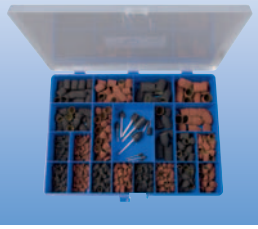
Abrasive cap holders shape L



Ordering example:
EAN 4007220**147283**
PCT 0515 L/6

Description	EAN 4007220	D x T [mm]	S x L [mm]	Max. perm. speed [RPM]	
PCT 0515 L/6	147283	5 x 15	6 x 40	95,000	5
PCT 1125 L/6	147290	11 x 25	6 x 40	40,000	5
PCT 1632 L/6	147306	16 x 32	6 x 40	30,000	5
PCT 2140 L/6	147313	21 x 40	6 x 40	20,000	5

POLICAP® set PCS 650



PFERD has based the POLICAP® set tool selection on the most common applications.

Contents:
- 10 pcs. each of POLICAP® abrasive caps PC 1626 A A and 1626 G A (grit size 150, 280)
- 25 pcs. each of POLICAP® abrasive caps PC 1015 A A, 1317 A A, 1015 G A and 1317 G A (grit size 150, 280)
- 50 pcs. each of POLICAP® abrasive caps PC 0510 A A, 0712 A A, 0511 G A and 0713 G A (grit size 150, 280)
- 1 pc. each of POLICAP® abrasive cap holder PCT 0510 A/3, 0712 A/3, 1317 A/3,1626 A/6, 0511/3 G, 0713 G/3, 1015 G/3, 1317 G/6 and 1626 G/6

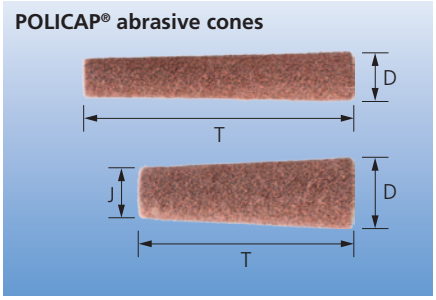
Description	EAN 4007220	Dimensions [mm]	
PCS 650	355435	332 x 235 x 50	1

Abrasive: Aluminium oxide A

Grit size colour code:
60 = brown
150 = black
280 = red-brown

Ordering example:
EAN 4007220**151471**
PCH 201565 L A **60**
Please complete the description with the desired grit size.

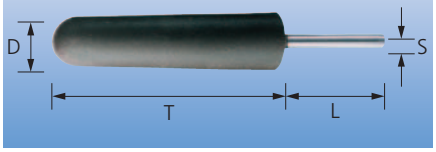
POLICAP® abrasive cones



Description	Grit size			D x J x T [mm]	Recom. speed [RPM]	Suitable arbors	
	60	150	280				
	EAN 4007220						
PCH 070585 L A	151358	151365	151372	7 x 5 x 85	12,000	PCT 0585	10
PCH 141185 L A	151389	151396	-	14 x 11 x 85	12,000	PCT 1185	10
PCH 201685 L A	151419	151426	-	20 x 16 x 85	12,000	PCT 1685	10
PCH 242185 L A	151440	151457	-	24 x 21 x 85	12,000	PCT 2185	10
PCH 201565 L A	151471	151488	-	20 x 15 x 65	18,500	GK 201463	10
PCH 362265 L A	151532	-	-	36 x 22 x 65	13,000	GK 362260	10

Ordering example:
EAN 4007220**147320**
PCT 0585 L/6

POLICAP® rubber abrasive cone holders PCT

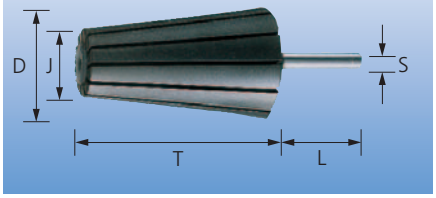


Description	EAN 4007220	D x T [mm]	S x L [mm]	Max. perm. speed [RPM]	
PCT 0585 L/6	147320	8 x 85	6 x 40	20,000	5
PCT 1185 L/6	147337	13 x 85	6 x 40	15,000	5
PCT 1685 L/6	147344	18 x 85	6 x 40	13,000	5
PCT 2185 L/6	147351	23 x 85	6 x 40	12,000	5

Rubber drum holders

Ordering example:
EAN 4007220**147078**
GK 201463/6

POLICAP® rubber drum holders GK



Description	EAN 4007220	D x J x T [mm]	S x L [mm]	Max. perm. speed [RPM]	Minimum speed [RPM]	
GK 201463/6	147078	20 x 14 x 63	6 x 37	26,000	19,000	5
GK 362260/6	147092	36 x 22 x 60	6 x 40	15,900	10,000	5

PFERD provides mounted flap wheels with various
- grit sizes,
- abrasives and
- dimensions.

PFERD mounted flap wheels are supplied with the standard shank length of 40 mm.
On request, we can manufacture mounted flap wheels with a threaded shank.
Please contact us.

The coated abrasive flaps are arranged radially around the tool axis in a fan-type configuration. Due to their flexibility, they adapt ideally to the contours of the workpiece. The abrasive grit is embedded in a resinoid bond on the strong, flexible backing cloth. PFERD mounted flap wheels are designated "Flap Wheels with Shaft" according to ISO 3919.

Advantages:

- High flexibility
- High stock removal due to the aggressive coated abrasive
- Carrier material wears off uniformly and without residue on the workpiece surface, meaning that sharp abrasive grit is exposed at all times
- Due to the flat cast core construction, the face of the mounted flap wheels can be used to work very close to edges and in corners

Application examples:

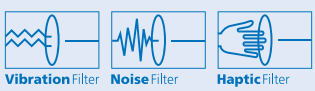
- Fine grinding on radii in tool and mould construction
- Machining of small and hard-to-reach areas in apparatus engineering and tank construction
- Machining of fittings made out of non-ferrous and light metals
- Grinding of turbine blades in aircraft engine construction and repair

Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the tool diameter meets the given cutting speed (diagonal). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the mounted flap wheels and tool drive.

Example:
F 6030/6 A 120
Cutting speed: 15–20 m/s
Rotational speed: 4,750–6,350 RPM

PFERDERGONOMICS® recommends mounted flap wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.



Recommendations for use:

- Mounted flap wheels achieve their best performance at a recommended cutting speed of 15–20 m/s. This provides an ideal compromise between stock removal, surface quality, thermal load on the workpiece and tool wear.
- Flexible shafts, electric and air-powered straight grinders can be used as tool drives
- Use grinding oil that is suitable for the material in order to significantly increase the tool life and the abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 120.

Factors influencing the work result:

- **Tool wear and thermal load:**
  The reduction of the contact pressure and the peripheral speed, together with the addition of grinding oil, reduce tool wear and the thermal load on the workpiece.
- **Stock removal:**
  An increase in stock removal should be attained by using a coarser grit size rather than by increasing the contact pressure in order to prevent unnecessary tool wear and thermal load on the workpiece.
- **Surface roughness:**
  The increase in cutting speed results in a slightly finer surface. By increasing the contact pressure, the surface becomes slightly rougher. The softer the material to be worked, the rougher the surface (if the same grit size is used).

Ordering instructions:

When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

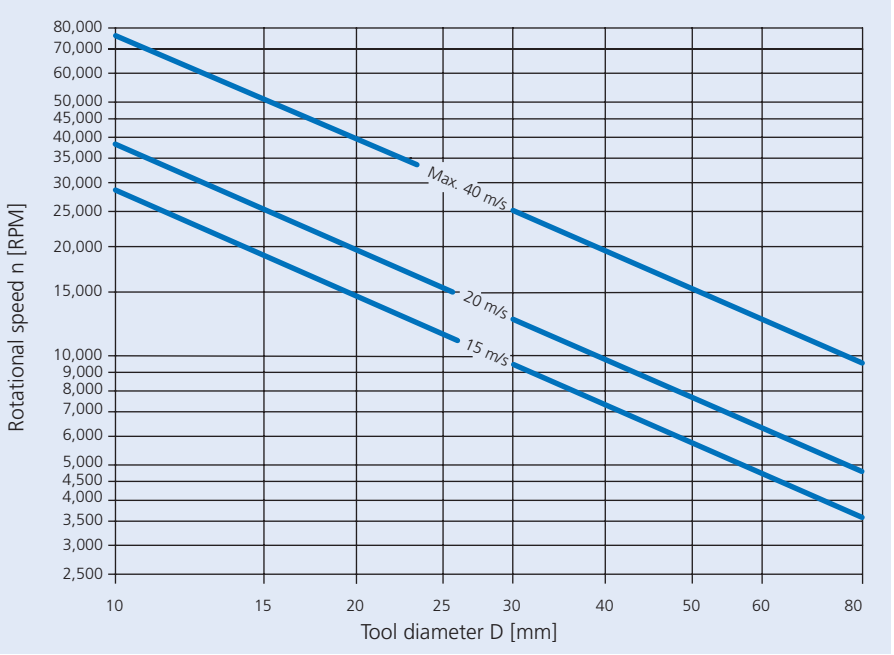
Ordering example:
EAN 4007220**155455**
F 6030/6 A **120**

Ordering example explanation:

F	= Mounted flap wheels
6030	= Outer dia. D x width T [mm]
6	= Shank dia. S_d [mm]
A	= Abrasive
120	= Grit size

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times
- Safety is only guaranteed if:
  - The clamping depth is at least 15 mm
  - The specified maximum rotational speed for unsupported shank lengths is not exceeded



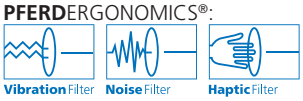
General use on all materials.

Mounted flap wheels F 3010, F 3015, F 4015, F 4020, F 5020, F 5030, F 6015, F 6020, F 6030, F 6040, F 8030, F 8040 and F 8050 comply with ISO 3919.

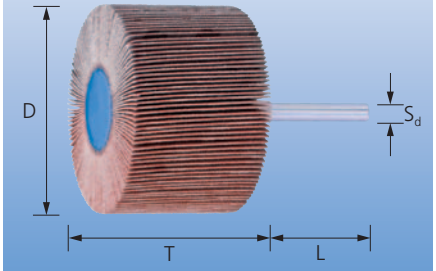
Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**155455**
F 6030/6 A **120**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

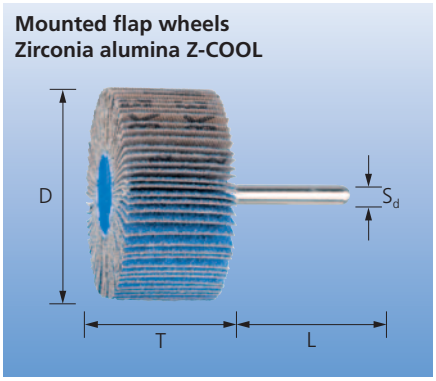


Mounted flap wheels
Aluminium oxide A



Description	Grit size									D x T [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	40	60	80	120	150	180	240	320	400				
	EAN 4007220												
Shank dia. 3 x 40 mm [S_d x L]													
F 1010/3 A	-	661529	661635	661642	661659	661673	-	661680	-	10 x 10	38,000	75,000	10
F 1015/3 A	-	661697	661703	661710	661727	661734	-	661741	-	10 x 15	38,000	75,000	10
F 1505/3 A	-	661758	661765	661772	661796	661802	-	661819	-	15 x 5	25,000	50,000	10
F 1510/3 A	-	661871	661918	661925	661932	661963	-	661987	-	15 x 10	25,000	50,000	10
F 1515/3 A	-	661994	662014	662038	662045	662052	-	662069	-	15 x 15	25,000	50,000	10
F 2010/3 A	-	-	-	154113	154120	292563	-	-	-	20 x 10	19,000	38,100	10
F 3005/3 A	-	154137	154151	154175	154199	292693	154212	154236	-	30 x 5	12,000	25,400	10
F 3010/3 A	-	154250	154274	154298	154311	292716	154335	154359	-	30 x 10	12,000	25,400	10
Shank dia. 6 x 40 mm [S_d x L]													
F 2010/6 A	-	-	292594	292617	292624	292631	-	-	-	20 x 10	19,000	38,100	10
F 2510/6 A	-	-	536896	536902	-	536919	-	-	-	25 x 10	15,000	30,500	10
F 2515/6 A	-	-	154557	154564	154571	292648	-	-	-	25 x 15	15,000	30,500	10
F 2520/6 A	-	-	536926	536933	-	536940	-	-	-	25 x 20	15,000	30,500	10
F 2525/6 A	-	-	292655	292662	292679	292686	-	-	-	25 x 25	15,000	30,500	10
F 3003/6 A	-	-	950838	950845	950852	950869	950876	950883	-	30 x 3	12,000	25,400	10
F 3005/6 A	-	154144	154168	154182	154205	292709	154229	154243	-	30 x 5	12,000	25,400	10
F 3010/6 A	-	154267	154281	154304	154328	292723	154342	154366	533017	30 x 10	12,000	25,400	10
F 3015/6 A	-	154687	154694	154700	154717	292730	154724	154731	-	30 x 15	12,000	25,400	10
F 3030/6 A	-	292747	292754	292761	292778	292785	292792	292808	-	30 x 30	12,000	25,400	10
F 4010/6 A	-	154373	154380	154403	154410	292815	154427	-	-	40 x 10	9,600	19,100	10
F 4015/6 A	-	154441	154458	154465	154489	292822	154496	154519	-	40 x 15	9,600	19,100	10
F 4020/6 A	800607	154625	154632	154649	154656	292839	154663	-	-	40 x 20	9,600	19,100	10
F 5005/6 A	-	950968	951019	951026	951033	951040	951057	951064	-	50 x 5	7,000	15,200	10
F 5010/6 A	-	155189	155196	155202	155219	292846	155226	155233	-	50 x 10	7,000	15,200	10
F 5015/6 A	-	155240	155257	155264	155271	292853	155288	155295	-	50 x 15	7,000	15,200	10
F 5020/6 A	-	155127	155134	155141	155158	292860	-	155172	-	50 x 20	7,000	15,200	10
F 5030/6 A	800591	155066	155073	155080	155097	292877	155103	155110	-	50 x 30	7,000	15,200	10
F 6005/6 A	-	951071	951088	951095	951101	951118	951125	951132	-	60 x 5	6,300	12,700	10
F 6015/6 A	-	155301	155318	155325	155332	-	155349	155356	-	60 x 15	6,300	12,700	10
F 6020/6 A	-	155363	155370	155387	155394	-	155400	155417	-	60 x 20	6,300	12,700	10
F 6030/6 A	155424	155431	155448	155455	155462	292907	155479	155486	533024	60 x 30	6,300	12,700	10
F 6040/6 A	-	155493	155509	155516	155523	-	155530	-	-	60 x 40	6,300	12,700	10
F 6050/6 A	155554	155561	155578	155585	155592	-	155608	155615	-	60 x 50	6,300	12,700	10
F 8015/6 A	-	155622	155639	155646	155653	-	-	-	-	80 x 15	4,800	9,500	10
F 8020/6 A	-	155684	155691	155707	155714	-	-	-	-	80 x 20	4,800	9,500	10
F 8030/6 A	155745	155752	155769	155776	155783	-	155790	155806	-	80 x 30	4,800	9,500	10
F 8040/6 A	-	155813	155820	155837	155844	-	155851	-	-	80 x 40	4,800	9,500	10
F 8050/6 A	155875	155882	155899	155905	155912	-	155929	155936	-	80 x 50	4,800	9,500	10

Mounted flap wheels
Zirconia alumina Z-COOL



Specially designed for work on stainless steel (INOX) and high-temperature-resistant alloys.

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

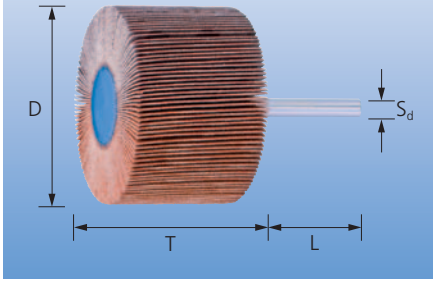
Abrasive: Zirconia alumina Z-COOL

Ordering example:
EAN 4007220**297353**
F 3020/6 Z-COOL **60**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

Description	Grit size		D x T [mm]	Acc. to ISO standards	Recom. speed [RPM]	Max. perm. speed [RPM]	
	60	80					
	EAN 4007220						
Shank dia. 6 x 40 mm [S_d x L]							
F 3020/6 Z-COOL	297353	297360	30 x 20	3919	12,000	25,400	10
F 4020/6 Z-COOL	297377	297384	40 x 20	3919	9,600	19,100	10
F 5020/6 Z-COOL	297391	297407	50 x 20	3919	7,000	15,200	10
F 6030/6 Z-COOL	297414	297421	60 x 30	3919	6,300	12,700	10
F 8050/6 Z-COOL	297438	297445	80 x 50	3919	4,800	9,500	10

Mounted flap wheels
Ceramic oxide grain CO-COOL



For aggressive grinding with maximum stock removal on hard materials which do not conduct heat well.

Active grinding additives in the coating significantly improve stock removal, prevent clogging and result in cooler grinding.

Abrasive: Ceramic oxide grain CO-COOL

Ordering example:
EAN 4007220**803936**
F 6030/6 CO-COOL **120**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

Description	Grit size				D x T [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	40	60	80	120				
	EAN 4007220							
Shank dia. 6 x 40 mm [S_d x L]								
F 3010/6 CO-COOL	803738	803745	803752	803769	30 x 10	12,000	25,400	10
F 3015/6 CO-COOL	803776	803783	803790	803806	30 x 15	12,000	25,400	10
F 4020/6 CO-COOL	803813	803820	803837	803844	40 x 20	9,600	19,100	10
F 5030/6 CO-COOL	803868	803875	803899	803882	50 x 30	7,000	15,200	10
F 6030/6 CO-COOL	803905	803912	803929	803936	60 x 30	6,300	12,700	10

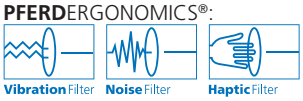
Suitable for work on hard and tough materials, e.g. titanium and titanium alloys. It is also ideally suitable for work on copper and bronze.

The SiC abrasive produces a particularly fine surface finish.

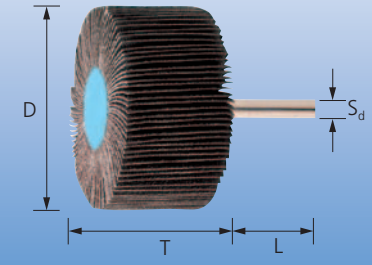
Abrasive: Silicon carbide SiC

Ordering example:
EAN 4007220**155943**
F 6030/6 SiC **60**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:



Mounted flap wheels Silicon carbide SiC



Description	Grit size				D x T [mm]	Acc. to ISO standards	Recom. speed [RPM]	Max. perm. speed [RPM]	
	60	80	120	150					
	EAN 4007220								
Shank dia. 6 x 40 mm [S_d x L]									
F 3010/6 SiC	154588	154595	154601	154618	30 x 10	3919	12,000	25,400	10
F 6030/6 SiC	155943	155950	155967	155974	60 x 30	3919	6,300	12,700	10

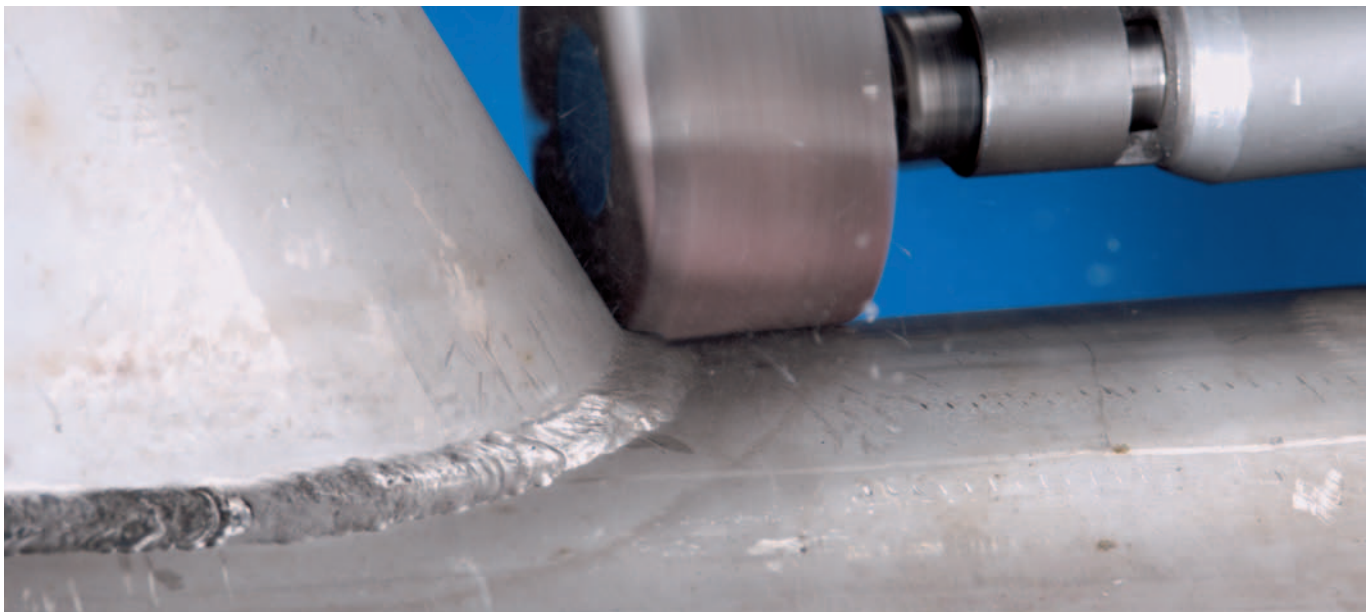
The content of the set is based on the most common applications in industry and crafts.

The sales-promoting display box for shops contains 40 mounted flap wheels of the aluminium oxide A type, with shank diameter 6 mm.

Contents:
5 pcs. each of 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
- F 8030/6 A 60

Mounted flap wheel set

Description	EAN 4007220	Dimensions [mm]	
FSO 5400	156087	240 x 145 x 240	1



PFERD provides unmounted flap wheels with various
- grit sizes,
- abrasives and
- dimensions.

The coated abrasive flaps are arranged radially around the tool axis in a fan-type configuration. Due to their flexibility, they adapt ideally to the contours of the workpiece. The abrasive grit is embedded in a resinoid bond on the strong, flexible backing cloth.

Unmounted flap wheels are designated "Flap Wheels" according to ISO 5429.

Application examples:

- Fine grinding work on large radii in container, kitchen and apparatus construction
- Removal of coarse uneven spots, e.g. weld dressing
- Achievement of homogeneous finishes (grinding patterns) on larger surfaces and contours in manual applications
- Very fine grinding as a precursor to high-gloss polishing
- Also suitable for robotic and stationary use

Recommendations for use:

- Unmounted flap wheels achieve their best performance at a recommended cutting speed of 15–30 m/s. This provides an ideal compromise between stock removal, surface quality, thermal load on the workpiece and tool wear.
- Flexible shafts, straight grinders and grinding blocks can be used as tool drives
- The drive power output required for tool drives is 1,000–1,500 watts
- Use grinding oil that is suitable for the material in order to significantly increase the tool life and the abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 120.

Advantages:

- High flexibility
- High stock removal due to the aggressive coated abrasive
- Carrier material wears off uniformly and without residue on the workpiece surface, meaning that sharp abrasive grain is exposed at all times
- Due to the special mounting system, the face of the unmounted flap wheels can be used to work very close to edges and in corners

Factors influencing the work result:

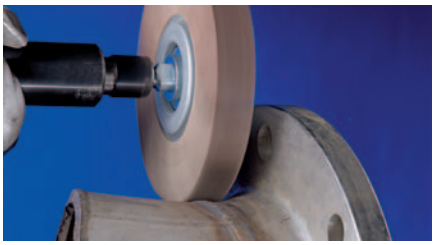
- **Tool wear and thermal load:**
  The reduction of the contact pressure and the peripheral speed, together with the addition of grinding oil, reduce tool wear and the thermal load on the workpiece.
- **Stock removal:**
  An increase in stock removal should be attained by using a coarser grit size rather than by increasing the contact pressure in order to prevent unnecessary tool wear and thermal load on the workpiece.
- **Surface roughness:**
  The increase in peripheral speed results in a slightly finer surface. By increasing the contact pressure, the surface becomes slightly rougher. The softer the material to be worked, the rougher the surface (if the same grit size is used).

Ordering note:

Unmounted flap wheels with diameters 100, 150 and 165 mm are supplied with the centre hole diameter of 25.4 mm. Unmounted flap wheels with diameters 200 and 250 mm are supplied with the centre hole diameter 44.0 mm.

Ordering instructions:

When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.



Ordering example:
EAN 4007220**469040**
FR 10030/25.4 A **40**

Ordering example explanation:

FR	= Unmounted flap wheels
10030	= Outer dia. D x width T [mm]
25.4	= Centre hole diameter H [mm]
A	= Abrasive
40	= Grit size

Safety notes:

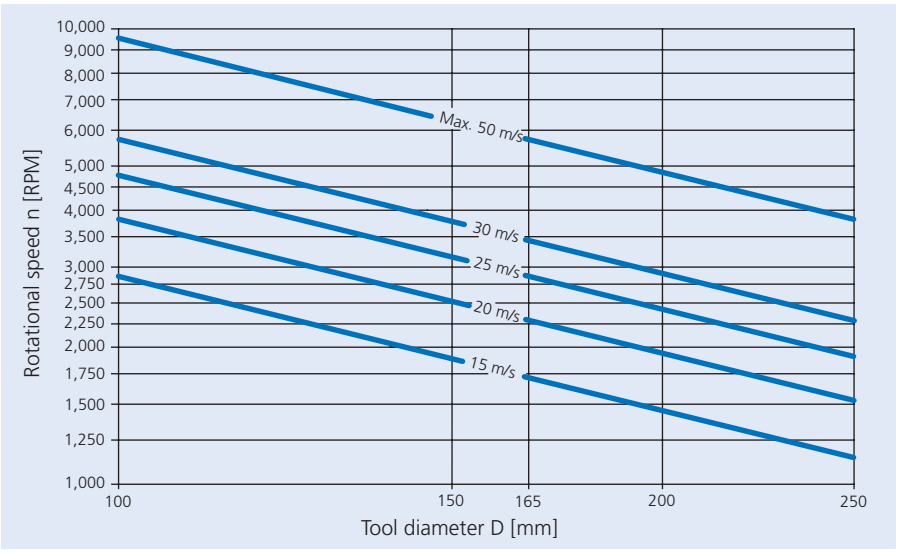
- As a rule, unmounted flap wheels should be used with the appropriate clamping flanges
- The maximum permitted peripheral speed is determined as follows:
  - Unmounted flap wheels = 50 m/s
  - Unmounted flap wheels for angle grinders = 80 m/s
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

PFERDERGONOMICS® recommends unmounted flap wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.

Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the tool diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin where you will find the corresponding rotational speed [RPM] for the unmounted flap wheels and tool drive.

Example:
FR 16550/25,4 A 80
Cutting speed 15–30 m/s
Rotational speed: 1,700–3,500 RPM



Universally suitable for all materials.

Unmounted flap wheels FR 10050, FR 15050, FR 16550, FR 20050 and FR 25050 comply with ISO 5429.

Abrasive: Aluminium oxide A

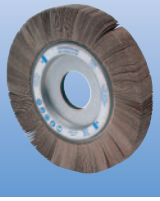
Ordering note:
Please order arbors separately.
Matching arbors for dia. 100, 150 and 165 mm: FR/VR 12/25.4

Matching arbors for dia. 200 mm and 250 mm: FR/VR 12/44.0

Ordering example:
EAN 4007220**469040**
FR 10030/25.4 A **40**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

Unmounted flap wheels Aluminium oxide A type



Description	Grit size							D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	40	60	80	120	150	240	320					
	EAN 4007220											
FR 10030/25,4 A	469040	469057	469071	469095	-	-	-	100 x 30	25.4	5,500	9,500	2
FR 10050/25,4 A	469187	469194	469224	469231	-	-	-	100 x 50	25.4	5,500	9,500	2
FR 15030/25,4 A	296851	296868	296875	296882	296899	-	-	150 x 30	25.4	3,500	6,300	2
FR 15050/25,4 A	296905	296912	296929	296936	296943	469699	-	150 x 50	25.4	3,500	6,300	2
FR 16530/25,4 A	470091	470107	470114	470121	470138	469941	-	165 x 30	25.4	3,200	5,700	2
FR 16550/25,4 A	469767	469781	469804	469811	469835	469842	469859	165 x 50	25.4	3,200	5,700	2
FR 20030/44,0 A	-	469606	469613	469637	-	469675	-	200 x 30	44	2,600	4,700	2
FR 20050/44,0 A	-	469262	469286	469309	469323	469347	-	200 x 50	44	2,600	4,700	2
FR 25050/44,0 A	-	469064	469088	469101	469132	469156	469170	250 x 50	44	2,100	3,800	1

Designed for work on stainless steel (INOX) and high-temperature-resistant alloys.

Active grinding additives in the coating substantially improve stock removal, prevent clogging and result in cooler grinding.

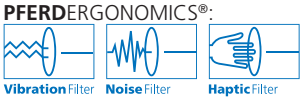
Unmounted flap wheels FR 15050 and FR 16550 comply with ISO 5429.

Abrasive: Aluminium oxide A-COOL

Ordering note:
Please order arbors separately.
Matching arbors for dia. 150 and 165 mm: FR/VR 12/25.4

Ordering example:
EAN 4007220**469576**
FR 15030/25.4 A-COOL **40**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:



Unmounted flap wheels Aluminium oxide A-COOL type

Description	Grit size				D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	40	60	80	120					
	EAN 4007220								
FR 15030/25,4 A-COOL	469576	469590	-	469668	150 x 30	25.4	3,500	6,300	2
FR 15050/25,4 A-COOL	469743	469774	469798	-	150 x 50	25.4	3,500	6,300	2
FR 16530/25,4 A-COOL	469989	470008	470015	470022	165 x 30	25.4	3,200	5,700	2
FR 16550/25,4 A-COOL	469866	469873	469903	469910	165 x 50	25.4	3,200	5,700	2

For mounting PFERD flap wheels.
The clamping flanges are constructed, so that they lie countersunk within the tool. It is then possible to grind in very narrow places, on edges and in angles.

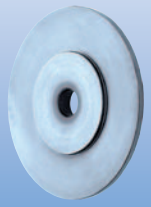
Supplied content:
- Arbor, clamp dia. 12 mm
- 2 flanges
- Matching screws (for different flap wheel widths)

Ordering note:
We manufacture arbors with morse cones on request.

Flap wheel arbors with flanges

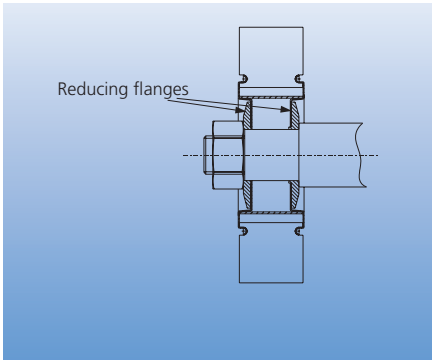
Description	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole dia. [mm]	Suitable for tool dia. [mm]	
FR/VR 12/25,4 100-165	479643	12 x 40	25–50	25.4	100, 150, 165	1
FR/VR 12/44,0 200-250	479650	12 x 40	25–50	44	200, 250	1

Reducing flanges for unmounted flap wheels



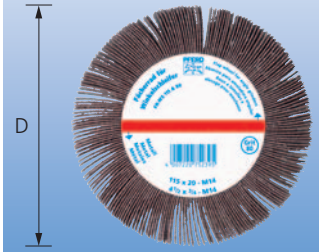
For mounting flap wheels and POLINOX® grinding wheels on drive spindles. The centre hole of the flange can be drilled out according to the dimension of the given drive spindle. The clamping flanges are designed to lie countersunk in the tool.

Supplied content:
- 1 pair, centre hole dia. 12 mm



Description	EAN 4007220	Centre hole dia. [mm]	Max. centre hole dia. [mm]	Suitable for tool dia. [mm]	
RF FR 150-165 Bo. 12-22,2	509876	12	22.2	150, 165	1
RF FR 200-250 Bo. 12-40	498460	12	40	200, 250	1

Unmounted flap wheels for angle grinders



The ideal tool for use on angle grinders in assembly shop operations.

Abrasive: Aluminium oxide A

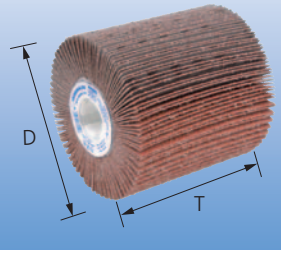
Recommendations for use:
- Unmounted flap wheels for angle grinders achieve their best performance at a recommended cutting speed of 40–50 m/s

Ordering example:
EAN 4007220**752364**
FR-WS 11520 M14 A **40**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

Description	Grit size				D x T [mm]	Thread	Recom. speed [RPM]	Max. perm. speed [RPM]	
	40	60	80	120					
	EAN 4007220								
FR-WS 11520 M14 A	752364	752388	752395	752401	115 x 20	M14	7,500	13,300	2
FR-WS 12520 M14 A	752418	752425	752432	752449	125 x 20	M14	6,850	12,200	2

Flap drums



Universally suitable for all materials.

Application examples:
- Fine grinding work on large radii in container, kitchen and apparatus construction
- Removal of coarse uneven spots e.g. weld dressing
- Achievement of homogenous finishes (grinding patterns) on larger surfaces and contours in manual applications
- Very fine grinding as a cursor to high-gloss polishing

Abrasive: Aluminium oxide A

Recommendations for use:
- Flap drums achieve their best performance at a recommended cutting speed of 15–30 m/s

Ordering note:
Additional drum tools can be found on pages 88 and 104 of this Catalogue and in Catalogue 208.

Ordering example:
EAN 4007220**770498**
FR-W 100100 A **40**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

Description	Grit size						D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	40	60	80	120	150	180					
	EAN 4007220										
FR-W 100100 A	770498	770504	770511	770528	770535	770542	100 x 100	19	3,800	6,100	1

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.

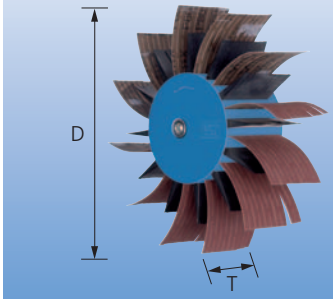
Application examples:
- Redressing and restoration of surface textures
- Fine grinding of radii, contours, curved areas or large surfaces
- Removal of fine secondary burrs
- Removal of heat discolouration
- Surface cleaning

Recommendations for use:
- Preferably used on straight grinders or with flexible shaft systems
- On stainless steel, an optimum surface finish is obtained at a rotational speed range of 1,400–1,700 RPM

Ordering note:
The POLIFLAP® grinding wheel is supplied without abrasive flaps. Please order abrasive flaps separately in the desired grit size.

PFERDERGONOMICS®:

POLIFLAP® grinding wheel



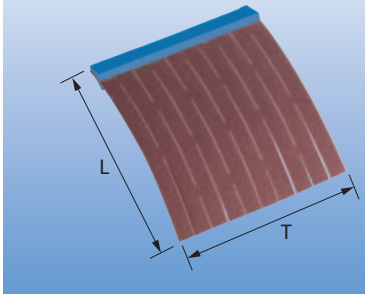
Description	EAN 4007220	D x T [mm]	S_d [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
PFL 17060/12	725405	170 x 60	12	1,500	3,500	1

Eight different grit sizes are available to achieve the required visual effect. After the abrasive flaps have worn down, they can easily be replaced on the grinding wheel.

Ordering note:
In order to fill the wheel, 12 abrasive flaps (1 packaging unit) are required.
Please order the initial flaps and any additional flaps separately.

Ordering example:
EAN 4007220**725276**
PFL-SL A **60**
Please complete the description with the desired grit size.

POLIFLAP® abrasive flaps

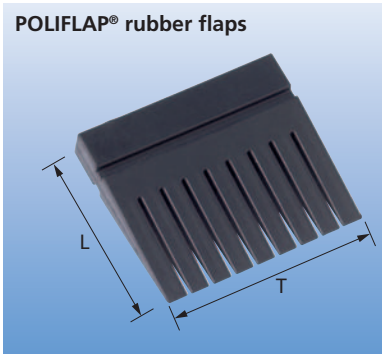


Description	Grit size								T x L [mm]	
	60	80	100	120	150	180	220	320		
	EAN 4007220									
PFL-SL A	725276	725283	725290	725306	725313	725320	725337	725344	60 x 75	12

The rubber flaps which lie between the abrasive flaps, support the grinding effect and the flexibility of the tool.
After the rubber flaps have worn down, they can easily be replaced on the grinding wheel.

Ordering note:
In order to fill the wheel, 12 rubber flaps (1 packaging unit) are required.

POLIFLAP® rubber flaps



Description	EAN 4007220	T x L [mm]	
PFL-GL	725412	55 x 50	12

Unmounted flap wheel set

Set with high-power output electric straight grinder with PFERD tools for cleaning, brush matting and very fine grinding of medium and large surfaces, in particular on stainless steel (INOX) components. Ideal for general-purpose grinding, in particular during assembly work.

Performance characteristics electric straight grinder:
- High, constant drive power output, even under load
- Insulated motor and integrated overload protection
- User-friendly, robust construction, stepless electronic speed regulation in the range of 2,800–5,900 RPM

For detailed information and ordering data for tool drives, please refer to Catalogue 209.

Contents:
1 pc. each of:
- Electric straight grinder UGER 15/60 SI 230 V
- Collets dia. 6, 8 and 12 mm
- Unmounted flap wheel FR 15030 A-COOL 60
- Unmounted flap wheel FR 15030 A-COOL 120
- POLINOX® mounted flap wheel PNL 15050 A100
- Arbor FR/VR 12/25.4
- Arbor BO 8/13/26

2 pcs. of:
- POLICLEAN® wheels PCLS 15013/13

Recommendations for use:
- The result of surface work on stainless steel (INOX) depends on the interaction of the following factors:
  - Tool (abrasive, grit size)
  - Rotational speed used
  - Contact pressure
  - Processing time
  - Quality of the steel to be worked on

Description	EAN 4007220	
SET FR 15030 UGER 15/60 230 V	777350	1

Drum set

Set with high-power output electric grinding drum drive and PFERD tools for cleaning, brush matting and very fine grinding of large surfaces on stainless steel (INOX) components.

The set is supplied in a practical case which keeps the components organized so that it is suitable for mobile use. The drive has a stepless electronic speed regulation in the range of 900–3,500 RPM.

For detailed information and ordering data for tool drives, please refer to Catalogue 209.

Contents:
1 pc. each of:
- Electric grinding drum drive UWER 15/40 A-SI D19
- 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.

Description	EAN 4007220	
SET FR-W 100100 UWER 15/40 230 V	777299	1

POLIFLAP® set

High-power output electric straight grinder in set with PFERD tools for brush matting and for pattern blending on medium and large surfaces on stainless steel (INOX) components.

Performance characteristics electric straight grinder:
- High, constant drive power output, even under load
- Insulated motor and integrated overload protection
- User-friendly, robust construction
- Stepless electronic speed regulation in the range of 750–3,000 RPM

For detailed information and ordering data for tool drives, please refer to Catalogue 209.

Contents:
1 pc. each of:
- Electric straigth grinder UGER 15/30 SI
- Collets dia. 6, 8 and 12 mm
- Hexagon socket wrench 6 mm
- POLIFLAP® grinding wheel PFL 17060/12 with abrasive flaps PFL-SL (grit sizes A 60, A 80, A 100, A 120, A 150, A 180, A 220, A 320)
- POLINOX® mounted flap wheel PNG 10050/6 SiC 180
- Poliflex® mounted texturing point PF ZY 10030/8 CU 16 PU-STRUC

2 pcs. of:
- Single-head spanners SW 22

Description	EAN 4007220	
SET PFL 17060 UGER 15/30 SI 230 V	777343	1

Special tools for side grinding in fillets and slots. They are mounted via a central threaded hub.

Abrasive: Aluminium oxide A

Advantages:
- Tool provides abrasive action on its front and rear side
- The two-sided overlapping fan structure is flexible and ideal for deburring in grooves, slots and finned structures

Recommendations for use:
- Hold the tool at an angle to grind with both disc sides

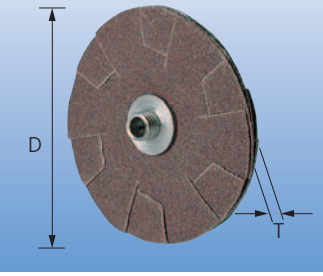
Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**152706**
KS 30-4 A **80**
Please complete the description with the desired grit size.

Ordering example explanation:
KS = Overlap slotted disc
30 = Outer dia. D [mm]
4 = No. of layers
A = Abrasive
80 = Grit size

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Haptic Filter

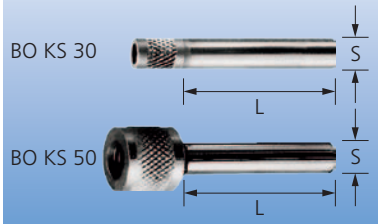
Overlap slotted discs



Description	Grit size	EAN 4007220	D x T [mm]	No. of layers	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
KS 30-4 A	80	152706	30 x 5	4	6,500	12,000	BO KS 30	20
KS 50-4 A	80	152768	50 x 5	4	4,000	8,000	BO KS 50	20

Reduces setup times significantly. The overlap slotted discs can be changed without removing the arbor from the collet mounted in the tool drive.

Arbors for overlap slotted discs



Description	EAN 4007220	S x L [mm]	Thread	Suitable for	
BO KS 30	152164	6 x 40	1/8 BSW	KS 30-4 A 80	1
BO KS 50	152157	6 x 40	1/4-28 UNF	KS 50-4 A 80	1

Flap wheels

POLISTAR

POLISTAR flexible tools have been specially developed for work on the inner surfaces of bores and pipes.

Advantages:

- High flexibility
- Well suited for working on bores or pipes of small diameters
- Particularly suitable for the 7–40 mm diameter range due to the small tool size

Application examples:

- Cleaning, fine grinding and very fine grinding of bores
- Removal of heat discolouration in stainless steel (INOX) pipes after welding
- Inlet and outlet radiusing of bores
- Light deburring work on bores (removal of secondary burrs) in preparation for painting
- Deburring in cross-bores

Recommendations for use:

- POLISTAR achieves its best performance at a recommended cutting speed of 15–20 m/s
- POLISTAR can be stacked in several layers. In doing this, ensure that they are aligned at an offset from one another, so that the abrasive has the optimal effect.
- PST 20/1.6 for centre hole dia. 7–15 mm
  PST 30/1.6 for centre hole dia. 10–20 mm
  PST 40/3 for centre hole dia. 15–25 mm
  PST 50/3 for centre hole dia. 20–40 mm

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

= Wear eye protection!

= Wear a dust mask!

= Wear hearing protection!

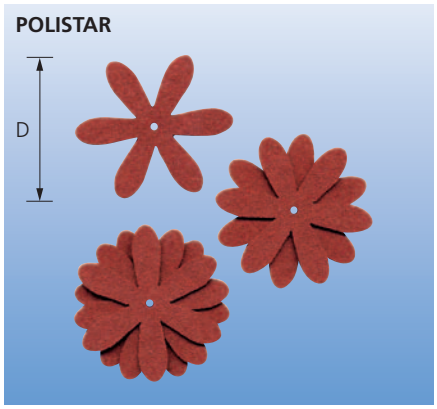
Ordering note:

Please order arbor separately.
POLISTAR are delivered in sheet form.
Sheet contents:
Dia. 20 and 30 mm = 25 pcs.
Dia. 40 and 50 mm = 10 pcs.

PFERDERGONOMICS® recommends POLISTAR and POLISTAR-TUBE as innovative tool solutions to sustainably reduce vibration and noise levels during use and to improve working comfort.

Vibration Filter Noise Filter Haptic Filter

POLISTAR



Ordering example:
EAN 4007220**661345**
PST 20/1.6 A **60**
Please complete the description with the desired grit size.

Ordering example explanation:
PST = POLISTAR
20 = Outer dia. D [mm]
1.6 = Centre hole dia. H [mm]
A = Abrasive
60 = Grit size

PFERDERGONOMICS®:

Vibration Filter Noise Filter Haptic Filter

Description	Grit size			D [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	60	80	120						
	EAN 4007220								
PST 20/1,6 A	661345	661444	661451	20	1.6	15,000	38,000	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100
PST 30/1,6 A	661468	661482	661512	30	1.6	9,500	25,000	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100
PST 40/3,0 A	661543	661550	661567	40	3	7,200	19,000	BO 6/3 1-6	100
PST 50/3,0 A	661574	661581	661598	50	3	5,700	15,000	BO 6/3 1-6	100

POLISTAR-TUBE are multi-layered tools that are riveted together. In order to prevent corrosion on stainless steel (INOX) pipes, POLISTAR-TUBE are manufactured using stainless steel rivets exclusively.

They are used specially for working on the inner surfaces of pipes and pipe bends.

The tools are used with the appropriate flexible shaft drives from the range in Catalogue 209:
- For PST-T dia. 50–80 mm – 4 PST-T DIN 10/M4
- For PST-T dia. 90–100 mm – 7 PST-T DIN 10/M5

Advantages:

- Very high flexibility
- Very fine surface finishes to R_a 0.2 µm

Application examples:

- For step-by-step cleaning and fine grinding on the inner surfaces of pipe bends
- For rounding of pipe ends and deburring of bores
- For use in straight pipes and deep bores. Please use with appropriate arbor.

Recommendations for use:

- With the different tool diameters, it is possible to work on pipes with the following inner diameters:
  - PST-T dia. 50 mm for inner pipe dia. 35–40 mm
  - PST-T dia. 60 mm for inner pipe dia. 40–45 mm
  - PST-T dia. 70 mm for inner pipe dia. 45–50 mm
  - PST-T dia. 80 mm for inner pipe dia. 50–55 mm
  - PST-T dia. 90 mm for inner pipe dia. 55–60 mm
  - PST-T dia. 100 mm for inner pipe dia. 60–65 mm
- With the different grit sizes, the following roughness values can be attained:
  - 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

Ordering note:

Please order arbor separately.
PST-T in grit size 60 are delivered in 4 layers.

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

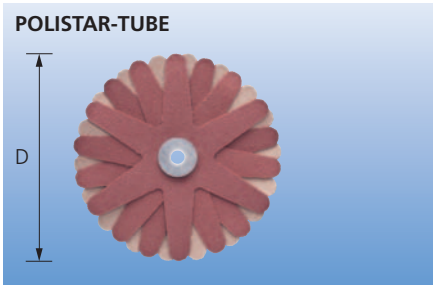
PFERDVIDEO

You will receive more information here or at www.pferd.com

Ordering example:
EAN 4007220**834404**
PST-T 50/4 A **120**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

POLISTAR-TUBE



Description	Grit size					D [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	60	120	180	240	320						
	EAN 4007220										
PST-T 50/4 6 A	834398	834404	834411	834435	834442	50	4	3,000	7,650	BO 6/4 0-10	10
PST-T 60/4 6 A	834596	834718	834725	834732	834749	60	4	2,500	6,350	BO 6/4 0-10	10
PST-T 70/4 6 A	834756	834763	834770	834787	834794	70	4	2,200	5,450	BO 6/4 0-10	10
PST-T 80/4 6 A	834800	834817	834824	834831	834848	80	4	1,900	4,750	BO 6/4 0-10	10
PST-T 90/5 8 A	834855	834862	834879	834886	834893	90	5	1,700	4,250	BO 6/5 0-10	10
PST-T 100/5 8 A	834909	834916	834923	834947	834954	100	5	1,500	3,820	BO 6/5 0-10	10

Arbors

Arbors 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

Description	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole dia. [mm]	
BO 2,3/1,6 1-5	151570	2.34 x 43	1–5	1.6	10
BO 3/1,6 1-5	151587	3 x 43	1–5	1.6	10
BO 6/3 1-6	505694	6 x 40	1–6	3	1
BO 6/4 0-10	834343	6 x 25	0–10	4	1
BO 6/5 0-10	834350	6 x 25	0–10	5	1

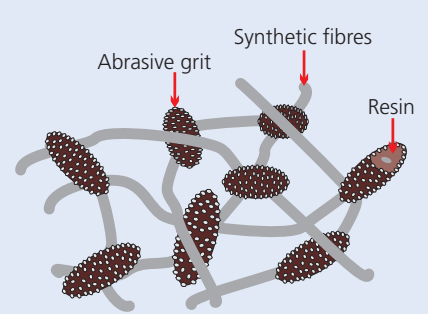
Grinding tools for work on metal and non-metal workpieces are divided into three groups:

- **Bonded abrasives**
  (e.g. grinding discs)
- **Flexible abrasives**
  (e.g. belts, discs and foils)
  These tools are used for coarse, fine and very fine grinding and for stock removal.
- **Non-woven abrasives**
  This group is designed to achieve specific surface structures.

Non-woven abrasives consist of polyamide fibres, synthetic resins and abrasive grit. The non-woven fibre structure is impregnated with resin and permeated with abrasive grit. The extremely loose connections between the individual fibres gives high flexibility and a strong spring-type effect to the non-woven material.

It is elastic and supple and leaves a very specific surface structure behind. The silk-matt grinding result is unique and cannot be produced with other abrasives.

Due to the uniform distribution of the abrasive grit in the non-woven material, a continuous supply of new, fresh and sharp abrasive grit is guaranteed throughout the entire grinding application.



Although the structure of non-woven abrasive material is completely different from that of flexible coated abrasives, the same abrasives are used for both groups of tools:

- Aluminium oxide (Al_2O_3) is very durable, achieves maximum tool life and is highly aggressive on hardened steel. The surface produced is characterized by its enhanced gloss. When working on aluminium, discolouration is prevented.
- Silicon carbide (SiC) is even sharper, harder and cuts more easily. Within a very short time, it can produce a finer, long-lasting and slightly matt grinding pattern on many material surfaces.

With conventional bonded abrasives or coated abrasives, the user selects a specific grit size. In the case of non-woven abrasives, the designation is made according to the following system:

PFERD designation	Comparable to grit size (Mesh)
very coarse	50– 80
coarse	80–100
medium	100–180
fine	180–220
very fine	220–400

Application:

Non-woven abrasives are used when other grinding tools have reached their limits or can no longer achieve the desired result.

Thanks to the elastic property of the polyamide fibres and the positive effect of the abrasive non-woven material, outstanding, gentle finishing tools are produced.

Non-woven abrasives are waterproof, can be rinsed out and are very resistant. They do not clog up, leave no rust on surfaces and do not conduct.

Abrasive non-woven material can be put to outstanding use in the deburring, cleaning and surface finishing of many metals, including aluminium, brass, copper, nickel, stainless steel (INOX) and titanium. It is also suitable for working on other materials that are difficult to grind, such as ceramic, glass and plastic. Abrasive non-woven material can be used in wet or dry grinding.

PFERDVIDEO

You will find more information here or at www.pferd.com

Non-woven tools

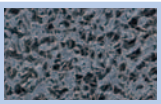
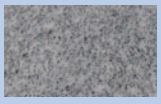
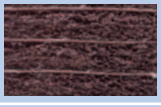
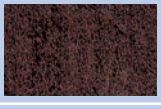
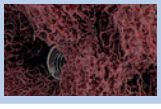
Abrasive non-woven material is suitable for the manufacture of numerous different tools, such as hand pads, grinding drums, discs, belts, and wheels.
The grinding properties of these tools are tailored to different applications and make an outstanding contribution to providing a solution for many machining applications in the field of metal working and further processing.
The PFERD range includes:

- COMBICLICK®/COMBIDISC® non-woven discs VRW
- Non-woven shop rolls, hand pads
- POLINOX® mounted grinding wheels, grinding discs, grinding wheels and grinding drums (PNL, PNZ, PNR, PNG, PNST and PNER)

Additional type

Abrasive non-woven material can also be produced with fabric reinforcement. The non-woven abrasive gains a significantly higher level of aggressiveness and stability.
Abrasive non-woven material with fabric reinforcement is suitable for manufacturing discs and non-woven belts.
The PFERD range includes:

- COMBICLICK®/COMBIDISC® non-woven discs VRH
- POLIVLIES® flap discs and self-adhesive discs
- Short belts, non-woven type

Designation		Description
PNER		Thanks to different combinations of compaction, fibres, grit and the appropriate bond, this tool can be used for a wide range of applications in the field of surface finishing, from relatively coarse grinding to preparing the surface for polishing.
PNK		The abrasive non-woven material is wound around a core and foamed. Thanks to different combinations of foaming, fibres, grit and bond, the tools can be optimized for different applications. The range of applications stretches from fine deburring to preparing surfaces for polishing.
PNL		The abrasive non-woven material is arranged radially in a flap pattern. The flaps are packed together very tightly, resulting in a long tool life. The tool is mainly used in surface machining.
PNZ		The abrasive non-woven material is arranged radially in a flap pattern, with an abrasive cloth between each of the flaps. Thanks to this flap combination, higher stock removal can be achieved and the surface receives a coarser finish.
PNG		The abrasive non-woven material consists of multiple strongly crimped strips which are wound around a core. Thanks to the undulating arrangement of the abrasive non-woven material, seamless brush finishing of surfaces is possible.
PNR		The abrasive non-woven material is arranged in discs (axially) one on top of the other. As the individual non-woven discs are not connected to one another, they adjust well to contours, for example when machining profiles and pipes.
PNST		The abrasive non-woven material is arranged in a star shape in several layers which are connected at the centre. This can be put to outstanding use, especially in narrow working areas such as bores and cavities, as well as in hard-to-reach areas.

POLINOX® unitized wheels PNER and unitized discs PNER consist of multiple layer, strongly compressed non-woven material, bonded with a special grit resin system.

POLINOX® convolute wheels PNK consist of abrasive non-woven material that has been foamed and wound around a core in a spiral.

This special bonding system produces non-woven tools with very good surface finishes, high stock removal and long tool life. These properties are particularly apparent when working on soft metals, as well as on alloyed and high-alloy steels and titanium alloys.

Recommendations for use:

- When working on materials with poor heat conductivity, e.g. titanium and stainless steel, significantly reduce the cutting speed
- Flexible shafts, electric and air-powered straight grinders as well as angle grinders and fillet weld grinders can be used as tool drives

Ordering instructions:

When ordering, please state the EAN or the complete description.

Ordering example:
EAN 4007220**355473**
PNER-H 7506-6 A G

Ordering example explanation:
PNER = POLINOX® unitized wheels
H = Type
7506 = Outer dia. D x width T [mm]
6 = Centre hole dia. H [mm]
A = Abrasive
G = Grit size

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

= Wear eye protection!

= Wear hearing protection!

= Wear a dust mask!

PFERDVIDEO

You will receive more information here or at www.pferd.com

Four different types are available:

soft W	Highest flexibility	Very well suited for machining contours
medium-soft MW	Semi-flexible version	Well suited for machining contours
medium-hard MH	Average flexibility	Good stock removal and edge strength
hard H	Low flexibility	Very good stock removal with good edge strength

PFERDERGONOMICS® recommends POLINOX® unitized wheels and unitized discs PNER to sustainably reduce vibration and noise levels during use and to improve working comfort.

Vibration Filter Noise Filter Haptic Filter

Designed for use on straight grinders and flexible shaft drives. Particularly suitable for work on small surfaces of stainless steel (INOX) and titanium alloy components. Unmounted grinding wheels with diameter 150 mm can also be used on grinding blocks, for reworking surgical instruments for example.

Abrasives:
A = Aluminium oxide
SiC = Silicon carbide (SiC)

Recommendations for use:
- POLINOX® unitized wheels PNER achieve their best performance at a cutting speed of 15–35 m/s. This provides an ideal compromise between stock removal, surface quality, themal load on the workpiece and tool wear.

Ordering note:
An adapter is included with the 150 mm diameter grinding wheels, which allows the centre hole diameter to be reduced from 25.4 to 20 mm.

Ordering example:
EAN 4007220**355473**
PNER-H 7506-6 A G

PFERDERGONOMICS®:

Vibration Filter Noise Filter Haptic Filter

POLINOX® unitized wheels PNER

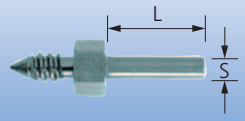
Description	EAN 4007220	Type	D x T [mm]	H [mm]	Grit size	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
PNER-MH 2525-6 A F	440452	medium-hard	25 x 25	6	fine	19,000	30,500	BO PNER 25 S6	10
PNER-H 2525-6 A G	440438	hard	25 x 25	6	coarse	19,000	30,500	BO PNER 25 S6	10
PNER-H 2525-6 A F	440445	hard	25 x 25	6	fine	19,000	30,500	BO PNER 25 S6	10
PNER-H 5003-6 A F	505700	hard	50 x 3	6	fine	9,500	15,300	BO 6/6 3-10	10
PNER-H 7503-6 A F	505717	hard	75 x 3	6	fine	6,400	10,200	BO 6/6 3-10	10
PNER-W 7506-6 A G	476307	soft	75 x 6	6	coarse	6,400	10,200	BO 6/6 3-10	5
PNER-W 7506-6 SiC F	355626	soft	75 x 6	6	fine	6,400	10,200	BO 6/6 3-10	5
PNER-MW 7506-6 A F	355534	medium-soft	75 x 6	6	fine	6,400	10,200	BO 6/6 3-10	5
PNER-MW 7506-6 SiC F	355558	medium-soft	75 x 6	6	fine	6,400	10,200	BO 6/6 3-10	5
PNER-MH 7506-6 A F	355503	medium-hard	75 x 6	6	fine	6,400	10,200	BO 6/6 3-10	5

Continued on next page

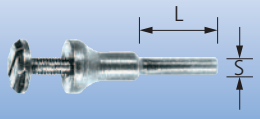
Description	EAN 4007220	Type	D x T [mm]	H [mm]	Grit size	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
PNER-H 7506-6 A G	355473	hard	75 x 6	6	coarse	6,400	10,200	BO 6/6 3-10	5
PNER-W 7513-6 A G	476314	soft	75 x 13	6	coarse	6,400	10,200	BO 6/6 3-10	5
PNER-W 7513-6 SiC F	476338	soft	75 x 13	6	fine	6,400	10,200	BO 6/6 3-10	5
PNER-MW 7513-6 A F	355565	medium-soft	75 x 13	6	fine	6,400	10,200	BO 6/6 3-10	5
PNER-MW 7513-6 SiC F	355589	medium-soft	75 x 13	6	fine	6,400	10,200	BO 6/6 3-10	5
PNER-MH 7513-6 A F	355510	medium-hard	75 x 13	6	fine	6,400	10,200	BO 6/6 3-10	5
PNER-H 7513-6 A G	355480	hard	75 x 13	6	coarse	6,400	10,200	BO 6/6 3-10	5
PNER-W 15025-25,4 SiC F	355633	soft	150 x 25	25.4	fine	3,200	5,100	BO 12/20 10-50	1
PNER-MW 15025-25,4 A F	476291	medium-soft	150 x 25	25.4	fine	3,200	5,100	BO 12/20 10-50	1
PNER-MW 15025-25,4 SiC F	355602	medium-soft	150 x 25	25.4	fine	3,200	5,100	BO 12/20 10-50	1
PNER-MH 15025-25,4 A F	355527	medium-hard	150 x 25	25.4	fine	3,200	5,100	BO 12/20 10-50	1
PNER-H 15025-25,4 A G	355497	hard	150 x 25	25.4	coarse	3,200	5,100	BO 12/20 10-50	1

Arbors

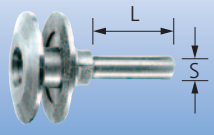
Arbors for POLINOX® unitized wheels



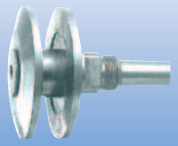
BO PNER 25 S6



BO 6/6 3-10



BO 12/20 10-50


BO MK 1/20 10-50

Description	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole dia. [mm]	
BO PNER 25 S6	440469	6 x 25	-	6	1
BO 6/6 3-10	297650	6 x 25	3–10	6	1
BO 12/20 10-50	297674	12 x 35	10–50	20	1
BO MK 1/20 10-50	297681	-	10–50	20	1

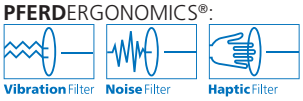
POLINOX® unitized discs are used for face-down grinding on speed-adjustable angle grinders. The compressed fleece is bonded to a glass woven base. The PNER discs are particularly suitable for working larger surfaces on stainless steel (INOX) components.

Abrasive: Silicon carbide SiC

Recommendations for use:
- POLINOX® unitized discs achieve their best performance at a recommended cutting speed of 35 m/s

Ordering example:
EAN 4007220**824337**
DISC PNER W 115-22.2 SiC F

PFERDERGONOMICS®:



POLINOX® unitized discs PNER

Description	EAN 4007220	Type	D x T [mm]	H [mm]	Grit size	Recom. speed [RPM]	Max. perm. speed [RPM]	
DISC PNER-W 115-22,2 SiC F	824337	soft	115 x 13	22.23	fine	6,000	10,000	5
DISC PNER-MW 115-22,2 SiC F	824344	medium-soft	115 x 13	22.23	fine	6,000	10,000	5
DISC PNER-MH 115-22,2 SiC F	824351	medium-hard	115 x 13	22.23	fine	6,000	10,000	5
DISC PNER-W 125-22,2 SiC F	824368	soft	125 x 13	22.23	fine	5,400	10,000	5
DISC PNER-MW 125-22,2 SiC F	824375	medium-soft	125 x 13	22.23	fine	5,400	10,000	5
DISC PNER-MH 125-22,2 SiC F	824382	medium-hard	125 x 13	22.23	fine	5,400	10,000	5

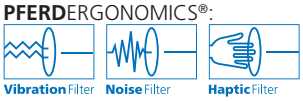
Designed for use on speed-adjustable angle grinders and fillet weld grinders. They are especially suitable for work on fillet welds and hard-to-reach slots or indentations in stainless steel (INOX) components.

Abrasive: Silicon carbide SiC

Recommendations for use:
- POLINOX® unitized wheels achieve their best performance on speed-adjustable angle grinders at a cutting speed of 30 m/s

Ordering example:
EAN 4007220**833131**
PNER-MW 12506-22.2 SiC F

PFERDERGONOMICS®:



POLINOX® unitized wheels PNER

Description	EAN 4007220	Type	D x T [mm]	H [mm]	Abrasives	Grit size	Recom. speed [RPM]	Max. perm. speed [RPM]	
PNER-MW 12506-22,2 SiC F	833131	medium-soft	125 x 6	22.23	SiC	fine	4,500	6,100	5
PNER-MW 12506-22,2 A F	833148	medium-soft	125 x 6	22.23	Alum. oxide	fine	4,500	6,100	5
PNER-MH 12506-22,2 A F	833155	medium-hard	125 x 6	22.23	Alum. oxide	fine	4,500	6,100	5
PNER-H 12506-22,2 A F	833162	hard	125 x 6	22.23	Alum. oxide	fine	4,500	6,100	5
PNER-H 12506-22,2 A G	833179	hard	125 x 6	22.23	Alum. oxide	coarse	4,500	6,100	5
PNER-MW 15003-25,4 SiC F	895719	medium-soft	150 x 3	25.4	SiC	fine	3,800	5,100	5
PNER-MH 15003-25,4 SiC F	895726	medium-hard	150 x 3	25.4	SiC	fine	3,800	5,100	5
PNER-H 15003-25,4 A F	895733	hard	150 x 3	25.4	Alum. oxide	fine	3,800	5,100	5
PNER-W 15006-25,4 SiC F	895740	soft	150 x 6	25.4	SiC	fine	3,800	5,100	5
PNER-MW 15006-25,4 SiC F	895757	medium-soft	150 x 6	25.4	SiC	fine	3,800	5,100	5
PNER-H 15006-25,4 A F	895764	hard	150 x 6	25.4	Alum. oxide	fine	3,800	5,100	5

POLINOX® set PNER

Handy electric fillet weld grinder in a set with selected PFERD tools for brushing, cleaning, smoothing and very fine grinding of fillet welds and hard-to-reach areas on stainless steel (INOX) components.

Ideal for all fine grinding work, especially for assembly work in stainless steel handrail fabrication. Also suitable for piping or chemical plant construction because of the very comprehensive range of accessories included for different applications.

Performance characteristics electric fillet weld grinder:
- Light, handy shape
- Insulated motor and integrated overload protection
- User-friendly construction
- Stepless electronic speed regulation within the range of 1,400–3,200 RPM

For detailed information and ordering data for tool drives, please refer to Catalogue 209.

Contents:
1 pc. each of:
- Electric fillet weld grinder KNER 5/34 V-SI 230V
- POLINOX® unitized wheels
  - PNER-MW 15003-25.4 SiC F
  - PNER-MH 15003-25.4 SiC F
  - PNER-H 15003-25.4 A F
  - PNER-W 15006-25.4 SiC F
  - PNER-MW 15006-25.4 SiC F
  - PNER-H 15006-25.4 A F
- Dressing stone SE 702212 CU 46 M5V
- POLINOX® discs
  - PVR 15008-13 A 100
  - PVR 15008-13 A 280
- Wheel brush RBU 15016/12.0 SiC 80 1.00 incl. arbor hole adapter 22.2 mm

Recommendations for use:
- Please use a dressing stone for dressing contours of POLINOX® unitized wheels
- Please observe the recommended rotational speed:
  - POLINOX® unitized wheels PNER 2,000–3,800 RPM
  - POLINOX® discs PVR 1,500–3,100 RPM
  - Wheel brush RBU 2,400–3,900 RPM

Description	EAN 4007220	
SET PNER 15003/06 KNER 5/34 230 V	936306	1

The non-woven abrasive is wound in a spiral around a core and foamed up. The structure guarantees steady release of sharp abrasives.

Abrasives:
A = Aluminium oxide
SiC = Silicon carbide

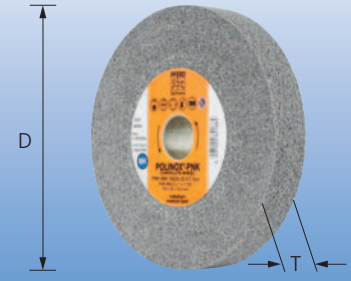
Application examples:
- Rounding of edges
- Fine grinding of implants
- Grinding of junctions on turbine blades
- Removal of processing traces on surgical instruments

Safety notes:
- The wound construction of the tools requires that the indicated direction of tool rotation is strictly observed. Non-compliance with the direction of tool rotation will lead to destruction of the tool and carries an increased risk of accidents.

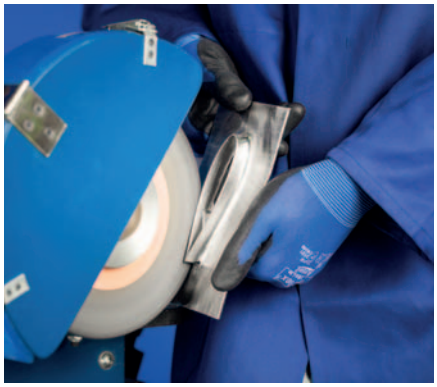
Ordering example:
EAN 4007220**841846**
PNK-MW 15013-25.4 SiC F

PFERDERGONOMICS®:

POLINOX® convolute wheels PNK



Description	EAN 4007220	Type	D x T [mm]	H [mm]	Abrasives	Grit size	Recom. speed [RPM]	Max. perm. speed [RPM]	
PNK-MW 15013-25,4 SiC F	841846	medium-soft	150 x 13	25.4	SiC	fine	2,500	5,100	1
PNK-MH 15013-25,4 SiC F	841860	medium-hard	150 x 13	25.4	SiC	fine	2,500	5,100	1
PNK-MH 15013-25,4 A G	841853	medium-hard	150 x 13	25.4	Alum. oxide	coarse	2,500	5,100	1
PNK-H 15013-25,4 SiC F	841877	hard	150 x 13	25.4	SiC	fine	2,500	5,100	1
PNK-MW 15025-25,4 SiC F	841884	medium-soft	150 x 25	25.4	SiC	fine	2,500	5,100	1
PNK-MH 15025-25,4 SiC F	841907	medium-hard	150 x 25	25.4	SiC	fine	2,500	5,100	1
PNK-MH 15025-25,4 A G	841891	medium-hard	150 x 25	25.4	Alum. oxide	coarse	2,500	5,100	1
PNK-H 15025-25,4 SiC F	841914	hard	150 x 25	25.4	SiC	fine	2,500	5,100	1
PNK-MW 20013-76,2 SiC F	841921	medium-soft	200 x 13	76.2	SiC	fine	1,900	3,850	1
PNK-MH 20013-76,2 SiC F	841945	medium-hard	200 x 13	76.2	SiC	fine	1,900	3,850	1
PNK-MH 20013-76,2 A G	841938	medium-hard	200 x 13	76.2	Alum. oxide	coarse	1,900	3,850	1
PNK-H 20013-76,2 SiC F	841952	hard	200 x 13	76.2	SiC	fine	1,900	3,850	1
PNK-MW 20025-76,2 SiC F	841969	medium-soft	200 x 25	76.2	SiC	fine	1,900	3,850	1
PNK-MH 20025-76,2 SiC F	841983	medium-hard	200 x 25	76.2	SiC	fine	1,900	3,850	1
PNK-MH 20025-76,2 A G	841976	medium-hard	200 x 25	76.2	Alum. oxide	coarse	1,900	3,850	1
PNK-H 20025-76,2 SiC F	841990	hard	200 x 25	76.2	SiC	fine	1,900	3,850	1
PNK-MW 20050-76,2 SiC F	842003	medium-soft	200 x 50	76.2	SiC	fine	1,900	3,850	1
PNK-MH 20050-76,2 SiC F	842027	medium-hard	200 x 50	76.2	SiC	fine	1,900	3,850	1
PNK-MH 20050-76,2 A G	842010	medium-hard	200 x 50	76.2	Alum. oxide	coarse	1,900	3,850	1
PNK-H 20050-76,2 SiC F	842034	hard	200 x 50	76.2	SiC	fine	1,900	3,850	1



PFERD provides a comprehensive range of POLINOX® mounted and unmounted grinding wheels with various
- dimensions,
- grit sizes,
- abrasives and
- types.

POLINOX® mounted and unmounted grinding wheels are made out of non-woven nylon in which abrasive grit is embedded. The flexible open-cell structure of the non-woven material makes the tools very elastic and ensures cool grinding.

Due to the high flexibility of the non-woven material, the tool will not alter the surface geometry of the workpiece in any way. Different surface textures and roughness levels can be obtained by selecting from a range of grit sizes and tool designs.

Advantages:

- Cool grinding and low thermal load on the workpiece
- No clogging of the tool

Application examples:

- Producing matt and satin finishes on metals
- Cleaning of oxidized non-ferrous metals
- Seamless brush finishing of stainless steel (INOX)
- Surface roughening of plastics in preparation for adhesive bonding
- Surface adaptation of weld seams

Recommendations for use:

- POLINOX® mounted and unmounted grinding wheels achieve their best performance at a recommended cutting speed of 10–20 m/s. This provides an ideal compromise between stock removal, surface quality, thermal load on the workpiece and tool wear.
- Flexible shaft drives, electric and air-powered straight grinders can be used as tool drives. For detailed information and ordering data for tool drives, please refer to Catalogue 209.

Safety notes:

- The maximum permitted peripheral speed is 32 m/s
- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times


= Wear eye protection!


= Wear a dust mask!


= Wear hearing protection!


= Please read the safety instructions!

Ordering instructions:

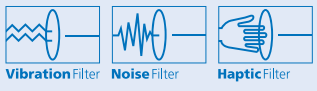
When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

Ordering example:
EAN 4007220**157060**
PNL 4020/6 A **100**

Ordering example explanation:

PNL	= POLINOX® mounted flap wheels
4020	= Outer dia. D x width T [mm]
A	= Abrasive
100	= Grit size

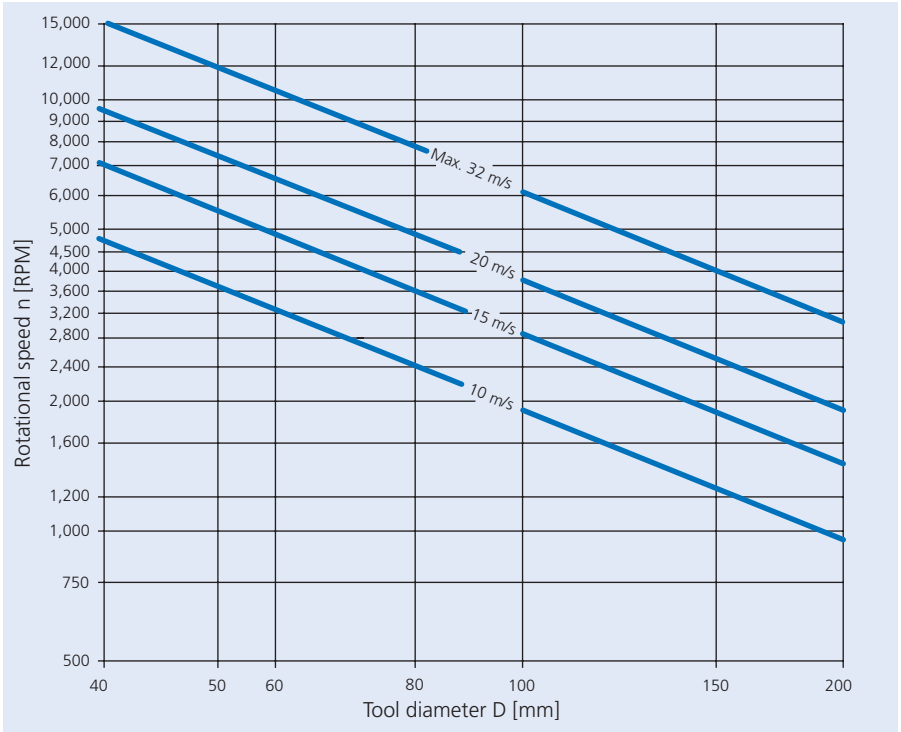
PFERDERGONOMICS® recommends POLINOX® mounted and unmounted grinding wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.



Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the tool diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the POLINOX® mounted and unmounted grinding wheels and tool drive.

Example:
PNL 6050/6 A 100
Cutting speed: 15 m/s
Rotational speed: 4,750 RPM



The non-woven abrasive flaps are arranged radially. A long tool life is achieved through the dense packing of the flaps.

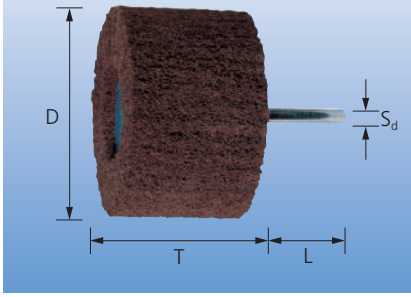
These tools are particularly used for surface work.

Abrasive:
A = Aluminium oxide
SiC = Silicon carbide

Ordering example:
EAN 4007220**157060**
PNL 4020/6 A **100**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

POLINOX® mounted flap wheels PNL



Description	Grit size			D x T [mm]	S_d x L [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	100	180	280					
	EAN 4007220							
Aluminium oxide A								
PNL 4020/6 A	157060	157077	157084	40 x 20	6 x 40	7,500	15,000	10
PNL 5030/6 A	157107	157114	157121	50 x 30	6 x 40	6,000	12,000	10
PNL 6025/6 A	892879	892886	892893	60 x 25	6 x 40	5,000	10,000	10
PNL 6050/6 A	157213	157220	157237	60 x 50	6 x 40	5,000	10,000	10
PNL 8025/6 A	892978	892992	893005	80 x 25	6 x 40	4,000	7,500	10
PNL 8050/6 A	157183	157190	157206	80 x 50	6 x 40	4,000	7,500	10
Silicon carbide (SiC)								
PNL 4020/6 SiC	803455	293669	293676	40 x 20	6 x 40	7,500	15,000	10
PNL 5030/6 SiC	803493	293683	293690	50 x 30	6 x 40	6,000	12,000	10
PNL 6050/6 SiC	803509	293706	293713	60 x 50	6 x 40	5,000	10,000	10
PNL 8050/6 SiC	803516	293720	293737	80 x 50	6 x 40	4,000	7,500	10

The non-woven abrasive flaps are arranged radially with abrasive cloth interlayers.

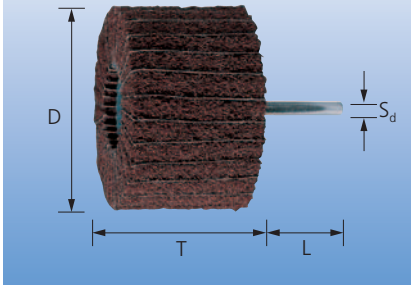
This flap structure permits an improved stock removal and produces a coarser finish.

Abrasives:
A = Aluminium oxide
SiC = Silicon carbide

Ordering example:
EAN 4007220**157053**
PNZ 4020/6 A **100**
Please complete the description with the desired grit size.

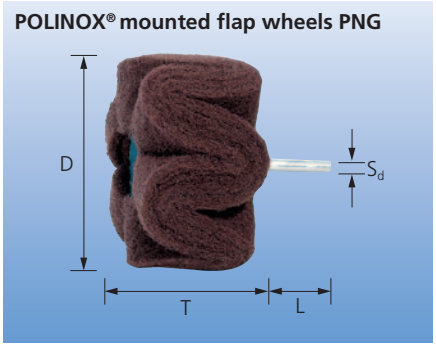
PFERDERGONOMICS®:

POLINOX® mounted flap wheels PNZ



Description	Grit size		D x T [mm]	S_d x L [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	100	180					
	EAN 4007220						
Aluminium oxide A							
PNZ 4020/6 A	157053	294697	40 x 20	6 x 40	7,500	15,000	10
PNZ 5030/6 A	803158	803165	50 x 30	6 x 40	6,000	12,000	10
PNZ 6025/6 A	892909	892916	60 x 25	6 x 40	5,000	10,000	10
PNZ 6050/6 A	157138	294703	60 x 50	6 x 40	5,000	10,000	10
PNZ 8025/6 A	893012	893029	80 x 25	6 x 40	4,000	7,500	10
PNZ 8050/6 A	157176	294710	80 x 50	6 x 40	4,000	7,500	10
PNZ 10050/6 A	294666	294673	100 x 50	6 x 40	3,000	6,000	5
Silicon carbide (SiC)							
PNZ 8050/6 SiC	617571	617588	80 x 50	6 x 40	4,000	7,500	10

POLINOX® mounted flap wheels PNG



Made of several strips of corrugated non-woven material, wound around a common core.

The wavy structure of the non-woven material permits seamless brush matting of surfaces.

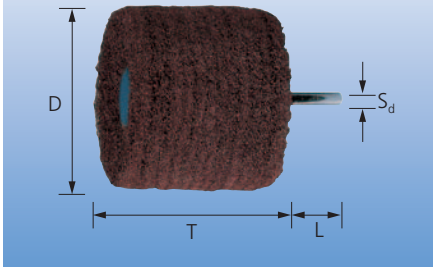
Abrasives:
A = Aluminium oxide
SiC = Silicon carbide

Ordering example:
EAN 4007220**499580**
PNG 10050/6 A **100**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Haptic Filter

Description	Grit size			D x T [mm]	S_d x L [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	100	180	280					
	EAN 4007220							
Aluminium oxide A								
PNG 8050/6 A	737989	737996	738009	80 x 50	6 x 40	4,000	7,500	10
PNG 10050/6 A	499580	499597	499603	100 x 50	6 x 40	3,000	6,000	5
Silicon carbide (SiC)								
PNG 8050/6 SiC	738016	738023	803639	80 x 50	6 x 40	4,000	7,500	10
PNG 10050/6 SiC	617595	617601	803646	100 x 50	6 x 40	3,000	6,000	5

POLINOX® mounted flap wheels PNR



The non-woven abrasive is arranged in multiple axial layers.

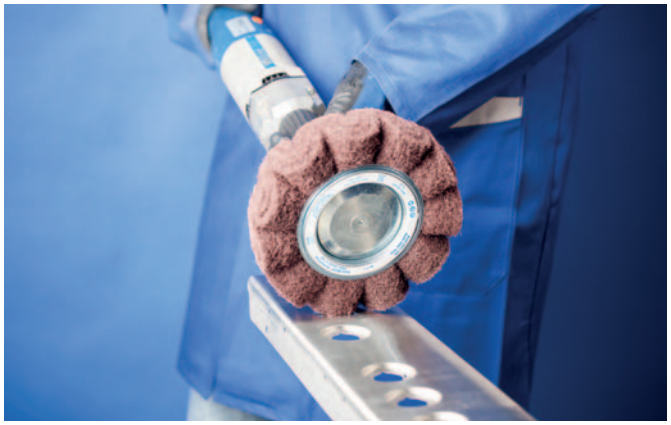
Since the individual layers are not interconnected, the abrasive surface adapts easily to different workpiece contours (e.g. in work on profiles or pipes).

Abrasive:
A = Aluminium oxide

Ordering example:
EAN 4007220**157145**
PNR 6050/6 A **100**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Haptic Filter

Description	Grit size			D x T [mm]	S_d x L [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	100	180	280					
	EAN 4007220							
Aluminium oxide A								
PNR 6050/6 A	157145	157152	157169	60 x 50	6 x 40	5,000	10,000	10
PNR 8050/6 A	157244	157251	157268	80 x 50	6 x 40	4,000	7,500	10



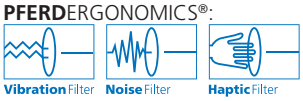
Suitable for cleaning, deburring and fine grinding of inner surfaces and contours. Particularly suitable for hard-to-reach places such as drilled holes and cavities.

Application examples:
- Deburring of bores on non-ferrous metal components
- Fine grinding on the inner surfaces of pipes made of stainless steel (INOX)
- Cleaning of thread pitches

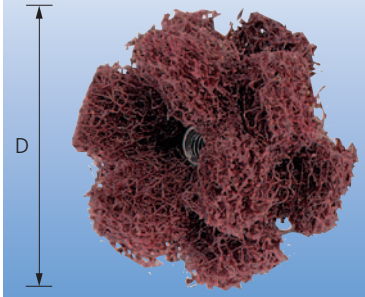
Ordering note:
Please order arbor BO PNST 6-75 or 6-125 separately.

Ordering example:
EAN 4007220**441138**
PNST 25-2 A **180**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:



POLINOX® cross buffs PNST



Description	Grit size			D [mm]	No. of layers	Recom. speed [RPM]	Max. perm. speed [RPM]	
	100	180	280					
	EAN 4007220							
PNST 19-2 A	-	899199	899205	19	2	15,000	25,100	20
PNST 25-2 A	899212	441138	441145	25	2	10,000	19,100	20
PNST 38-3 A	899229	441152	441169	38	3	7,500	12,600	20
PNST 50-2 A	899410	899427	899434	50	2	5,500	9,500	20

Arbor for POLINOX® cross buffs. Both arbors are of different lengths, thus allowing bores or cut-outs of different depths to be reached.

Arbors for POLINOX® cross buffs

Description	EAN 4007220	S x L [mm]	Thread	Mounting length [mm]	
BO PNST 6-75	440988	6 x 75	8-32 UNC	30	1
BO PNST 6-125	440995	6 x 125	8-32 UNC	30	1

Tool sets

Tool sets with drives

High-power output electric straight grinder in set with PFERD tools for cleaning, brush matting and very fine grinding of small and medium surfaces on stainless steel (INOX) components.

Performance characteristics electric straight grinder:
- Insulated motor with integrated overload protection
- User-friendly, robust construction
- Stepless electronic speed regulation in the range of 4,000–9,000 RPM

For detailed information and ordering data for tool drives, please refer to Catalogue 209.

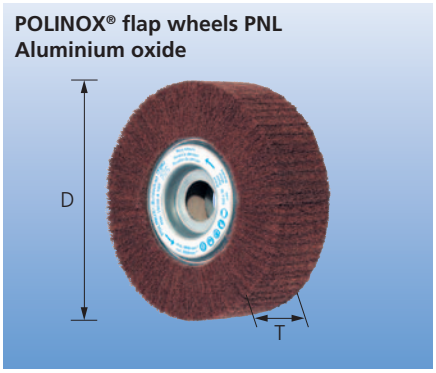
Contents:
- Electric straight grinder UGER 5/90 SI
- 2 mounted flap wheels
- 10 POLINOX® mounted grinding wheels of various types and grit sizes
- POLIFAN® flap disc PFC 115 A 60 SG-COOL

Recommendations for use:
- The result of surface work on stainless steel (INOX) depends on the interaction of the following factors:
  - Tool (abrasive, grit size)
  - Rotational speed used
  - Contact pressure
  - Processing time
  - Quality of the steel to be worked on

POLINOX® set

Description	EAN 4007220	
SET PNL/Z/R 6050 UGER 5/90 230 V	323274	1

POLINOX® flap wheels PNL Aluminium oxide



Made of radially arranged flaps of non-woven abrasive material. A long tool life is achieved through the dense packing of the flaps.

This tool is mainly used for work on large surfaces.

Abrasive: Aluminium oxide A

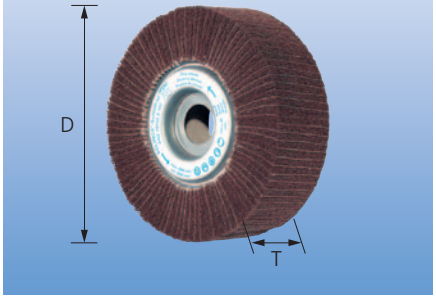
Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**479667**
PNL 15050/25.4 A **100**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Haptic Filter

Description	Grit size			D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	100	180	280						
	EAN 4007220								
PNL 15050/25,4 A	479667	479674	479681	150 x 50	25.4	2,000	4,000	FR/VR 12/25,4	1
PNL 20050/44 A	479698	479704	479711	200 x 50	44	1,500	3,000	FR/VR 12/44,0	1

POLINOX® flap wheels PNZ Aluminium oxide



The non-woven abrasive is arranged in multiple radial flaps, with abrasive cloth interlayers.

This flap structure permits improved stock removal and produces a coarser finish.

Abrasive: Aluminium oxide A

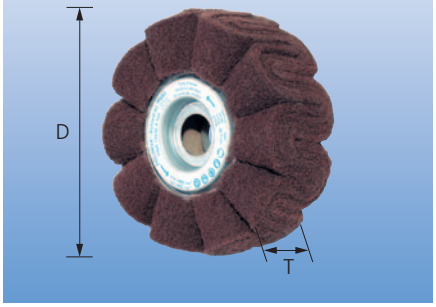
Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**479728**
PNZ 15050/25.4 A **100**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Haptic Filter

Description	Grit size		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	100	180						
	EAN 4007220							
PNZ 15050/25,4 A	479728	479735	150 x 50	25.4	2,000	4,000	FR/VR 12/25,4	1
PNZ 20050/44 A	479759	479766	200 x 50	44	1,500	3,000	FR/VR 12/44,0	1

POLINOX® flap wheels PNG Aluminium oxide



Made of several very wavy arranged strips of non-woven material, wound around a core.

The wavy structure of the non-woven material permits seamless brush matting of surfaces.

Abrasive: Aluminium oxide A

Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**479780**
PNG 15050/25.4 A **100**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Haptic Filter

Description	Grit size			D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	100	180	280						
	EAN 4007220								
PNG 15050/25,4 A	479780	479797	479803	150 x 50	25.4	2,000	4,000	FR/VR 12/25,4	1
PNG 20050/44 A	479810	479827	479834	200 x 50	44	1,500	3,000	FR/VR 12/44,0	1

Made of several slightly wavy arranged strips of non-woven material, wound around a metal core.

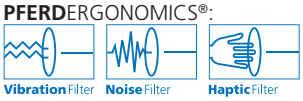
The open structure and high flexibility of the non-woven material enables exceptional adaption to contours. Suitable for seamless brush matting of surfaces, profiles and pipes.

Abrasive: Aluminium oxide A

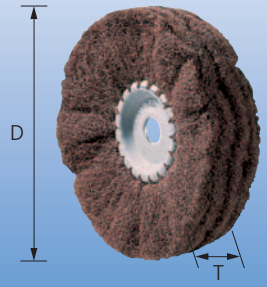
Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**293546**
PNR 10035/10 A **180**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:



POLINOX® flap wheels PNR Aluminium oxide



Description	Grit size		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	180	280						
	EAN 4007220							
PNR 10035/10 A	293546	293560	100 x 35	10	2,500	5,500	BO 8/10 6-20	1
PNR 15040/20 A	293577	293584	150 x 40	20	2,000	4,000	BO 12/20 10-50, BO MK 1/20 10-50	1

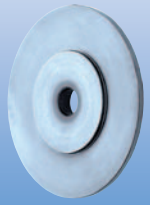
Arbors

Arbors for POLINOX® grinding wheels

BO 8/41 6-20 | BO 12/20 10-50 | BO MK 1/20 10-50 | FR/VR 12/25,4 100-165 | FR/VR 12/44,0 200-250

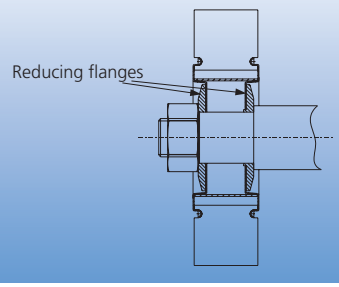
Description	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole dia. [mm]	
BO 8/10 6-20	297667	8 x 30	6–20	10	1
BO 12/20 10-50	297674	12 x 35	10–50	20	1
BO MK 1/20 10-50	297681	-	10–50	20	1
FR/VR 12/25,4 100-165	479643	12 x 40	25–50	25.4	1
FR/VR 12/44,0 200-250	479650	12 x 40	25–50	44	1

Reducing flanges for POLINOX® unmounted grinding wheels



For mounting flap wheels and POLINOX® grinding wheels on drive spindles. The centre hole of the flange can be drilled out according to the dimension of the given drive spindle. The clamping flanges are designed to lie countersunk in the tool.

Supplied content:
- 1 pair, centre hole dia. 12 mm



Description	EAN 4007220	Centre hole dia. [mm]	Max. centre hole dia. [mm]	Suitable for tool dia. [mm]	
RF FR 150-165 Bo. 12-22,2	509876	12	22.2	150	1
RF FR 200-250 Bo. 12-40	498460	12	40	200	1

The non-woven abrasive material is arranged in radial flaps. The tightly-packed flaps ensure a long tool life.

In the case of PNZ-W grinding drums, additional abrasive cloth is located between the flaps. The flap arrangement results in a higher stock removal rate and produces a coarser finish.

Grinding drums are particularly suitable for working on large sufaces.

Advantages:

- Cool grinding and low thermal load on the workpiece
- No clogging of the tool

Ordering note:

The centre hole diameter of 19 mm with 4 wedge keyways fits on all conventional drum drives.

For further drum tools, please refer to page 70, 104, for the sets to page 72 or to Catalogue 208.

Suitable tool drives can be found in Catalogue 209.

Ordering instructions:

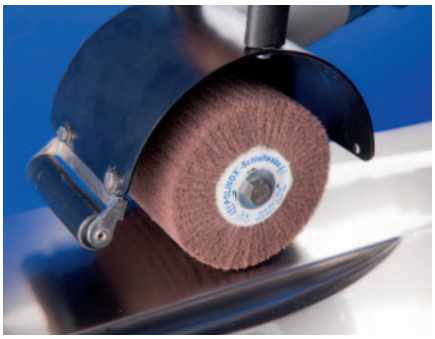
When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

Ordering example:
EAN 4007220**593523**
PNL-W 100100 A **100**

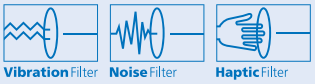
Ordering example explanation:
PNL-W = POLINOX® grinding drums
100100 = Outer dia. D x width T [mm]
A = Abrasive
100 = Grit size

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all time



PFERDERGONOMICS® recommends POLINOX® grinding drums to sustainably reduce vibration and noise levels during use and to improve working comfort.

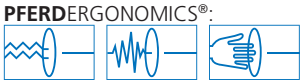


POLINOX® grinding drums PNL-W

Abrasive: Aluminium oxide A

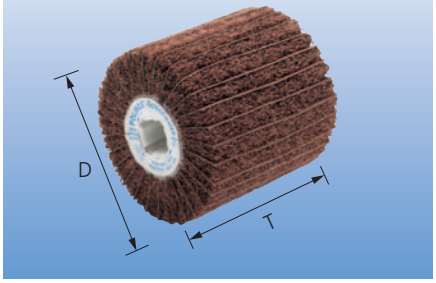
Ordering example:
EAN 4007220**593523**
PNL-W 100100 A **100**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:



Description	Grit size			D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	100	180	280					
	EAN 4007220							
PNL-W 100100 A	593523	593530	593547	100 x 100	19	2,500	4,800	1

POLINOX® grinding drums PNZ-W



Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**593554**
PNZ-W 100100 A **60**
Please complete the description with the desired grit size.

PFERDERGONOMICS®:

Description	Grit size			D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	60	80	120					
	EAN 4007220							
PNZ-W 100100 A	593554	593561	593578	100 x 100	19	2,500	4,800	1

POLINOX® discs are suitable for flexible work on complicated tool contours. They are used in peripheral grinding.

Application examples:

- Deburring of ribs and deep fins
- Cleaning of cylinder heads
- Fine grinding of radiators

Recommendations for use:

- Up to three discs can be clamped one behind another to increase the usage width
- POLINOX® discs achieve their best performance at a recommended cutting speed of 10–25 m/s

Ordering note:

Please order arbor separately.

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

PFERDERGONOMICS® recommends POLINOX® discs to sustainably reduce vibration and noise levels during use and to improve working comfort.

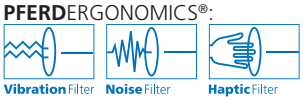
Abrasive: Aluminium oxide A

Ordering example:
EAN 4007220**505847**
PVR 15008-13 A **100**
Please complete the description with the desired grit size.

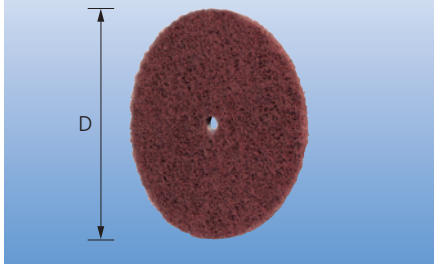
Ordering example explanation:

PVR	= POLINOX® discs
15008	= Outer dia. D x width T [mm]
13	= Centre hole dia. H [mm]
A	= Abrasive
100	= Grit size

PFERDERGONOMICS®:



POLINOX® discs



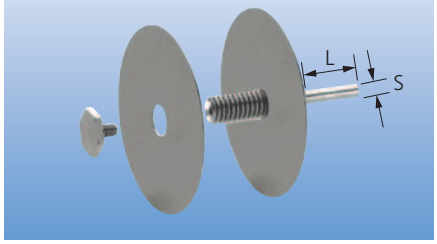
Description	Grit size		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	100	280						
	EAN 4007220							
PVR 5008-6 A	955796	955802	50 x 8	6	3,500–9,500	12,250	BO 6/6 3-10	10
PVR 7508-6 A	955819	955826	75 x 8	6	2,500–6,400	8,150	BO 6/6 3-10	10
PVR 10008-13 A	955833	955840	100 x 8	13	1,900–4,700	6,150	PVR 6/13 1-25	10
PVR 12508-13 A	955857	955864	125 x 8	13	1,500–3,800	4,900	PVR 6/13 1-25	10
PVR 15008-13 A	505847	505861	150 x 8	13	1,300–3,100	4,100	PVR 6/13 1-25	10

Arbors

Arbor for POLINOX® discs.

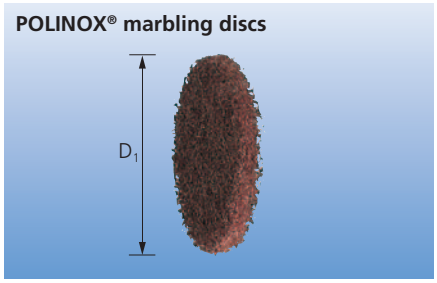
Recommendations for use:
- The clamping depth is preset via a hexagonal nut on the shank side
- Up to three POLINOX® discs can be mounted. Supplied with one pair of side discs (50 and 80 mm diameter) in order to vary the lateral flexibility
- The tool can be changed from the front by slackening the mounting screw. The arbor needs not be removed from the tool drive to replace the tool.

Arbors for POLINOX® discs



Description	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole dia. [mm]	
PVR 6/13 1-25	505878	6 x 35	1–25	13	1

POLINOX® marbling discs



Special tools for marbling surfaces.

Water and oil-resistant quality.

Abrasive: Aluminium oxide A

Recommendations for use:
- The discs must be used with the matching marbling tool holder

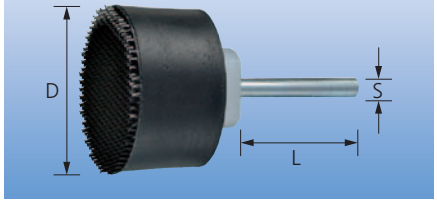
Ordering example:
EAN 4007220**156964**
MKRK 40 A **100**
Please complete the description with the desired grit size.

Ordering example explanation:
MKRK = Marbling disc
40 = Outer dia. D_1 [mm]
A = Abrasive
100 = Grit size

PFERDERGONOMICS®:
Vibration Filter | Noise Filter | Haptic Filter

Description	Grit size			D_1 [mm]	Recom. speed [RPM]	Suitable arbors	
	100	180	280				
	EAN 4007220						
MKRK 40 A	156964	156971	156988	40	600–1,400	MK 6/40/6	100
MKRK 50 A	156995	157008	157015	50	600–1,400	MK 6/50/6	100
MKRK 60 A	157022	157039	157046	60	600–1,400	MK 6/60/6	100

POLINOX® marbling tool holders

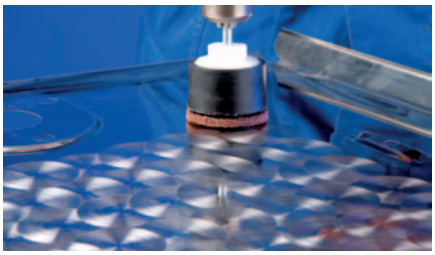


Serves to hold the non-woven marbling disc.

A highly elastic intermediate layer carries the velcro fastening system.

Ordering example:
EAN 4007220**156933**
MK 6/40/6

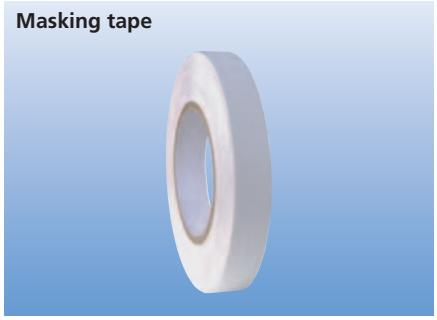
Ordering example explanation:
MK 6 = Marbling tool holder
40 = Outer dia. D [mm]
6 = Shank dia. [mm]



Description	EAN 4007220	D [mm]	S x L [mm]	Max. perm. speed [RPM]	Suitable tool	
MK 6/40/6	156933	40	6 x 40	4,700	MKRK 40	1
MK 6/50/6	156940	50	6 x 40	3,800	MKRK 50	1
MK 6/60/6	156957	60	6 x 40	3,200	MKRK 60	1

Other non-woven tools

Masking tape



This self-adhesive masking tape is used to preserve the clear separation between different surface finishes in adjacent areas. Masking tape is applied to protect areas not to be machined.

Advantages:
- High elasticity and tear strength
- Can be removed without leaving adhesive residues
- High edge stability
- Leaves no undesirable oily films on workpieces

Application examples:
- Clear-cut separation of areas requiring different abrasive finish patterns, e.g. mitre joints
- Protection of previously finished surfaces

Recommendations for use:
- Masking tape is only suitable for surface protection during finish machining with soft, flexible tools (e.g. non-woven tools)
- To avoid its inadvertent removal, ensure that the tape is only loaded in the direction of tool rotation during work with grinding tools

Description	EAN 4007220	T x L [mm]	
ADB 20	726372	20 x 25,000	1

POLIVLIES® flap discs and self-adhesive discs are suitable for working on large stainless steel (INOX) surfaces.

Application examples:

- Fine grinding of large surfaces
- Removal of heat discolouration
- Cleaning and gentle fettling of weld seams
- Finishing work after assembly in equipment, tank and pressure vessel construction

Abrasive: Aluminium oxide A
Colour code for grit sizes:
100 G (coarse) = yellow-brown
180 M (medium) = red-brown
240 F (fine) = blue

Recommendations for use:
- POLIVLIES® flap discs achieve their best performance at a recommended cutting speed of 30–35 m/s

Ordering instructions:

When ordering, please state the EAN or the complete description. Please complete the description with the desired grit size.

Ordering example:
EAN 4007220**748343**
PVL 115 **180 M**

Ordering example explanation:
PVL = POLIVLIES® flap discs
115 = Outer dia. D [mm]
A = Abrasive
180 M = Grit size

Ordering example:
EAN 4007220**748343**
PVL 115 **180 M**
Please complete the description with the desired grit size.

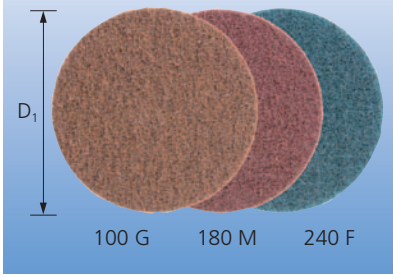
Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

POLIVLIES® flap discs

Description	Grit size			D [mm]	Width [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	100 G	180 M	240 F						
	EAN 4007220								
PVL 115 A	748336	748343	748350	115	18	22.23	5,000–5,800	13,300	5
PVL 125 A	748367	748374	748381	125	18	22.23	4,600–5,300	12,200	5

POLIVLIES® self-adhesive discs



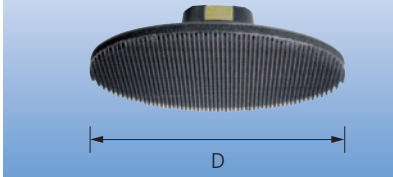
Abrasive: Aluminium oxide A
Colour code for grit sizes:
100 G (coarse) = yellow-brown
180 M (medium) = red-brown
240 F (fine) = blue

Recommendations for use:
- Use with POLIVLIES® self-adhesive disc holder PVKRH
- POLIVLIES® self-adhesive discs achieve their best performance at a recommended cutting speed of 15–20 m/s. This provides an ideal compromise between stock removal, surface quality, thermal load on the workpiece and tool wear.

Ordering example:
EAN 4007220**354230**
PVKR 115 A **100 G**
Please complete the description with the desired grit size.

Description	Grit size			D_1 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	100 G	180 M	240 F					
	EAN 4007220							
PVKR 115 A	354230	297469	354254	115	3,300	5,300	PVKRH 115	10
PVKR 125 A	354261	297452	354278	125	3,000	4,850	PVKRH 125	10
PVKR 178 A	354285	354292	354308	178	2,200	3,500	PVKRH 178	10

POLIVLIES® self-adhesive disc holders



The elastic interlayer of the POLIVLIES® self-adhesive disc holder permits surface finishing without visible transitions, in addition to rapid tool changes.

Description	EAN 4007220	D [mm]	Thread	Max. perm. speed [RPM]	
PVKRH 115	316962	115	M14	5,300	1
PVKRH 125	316979	125	M14	4,850	1
PVKRH 178	354223	178	M14	3,500	1

PFERD provides a comprehensive range of POLICLEAN® tools:
- POLICLEAN® wheels
- POLICLEAN® mounted tools
- COMBIDISC®-POLICLEAN® discs (refer to COMBIDISC® tools, page 30)
- POLICLEAN® discs

POLICLEAN® is a coarse-structured, non-woven abrasive cleaning material made of a special combination of synthetic fibres and abrasive grit.

Advantages:

- The flexible structure adapts to the surface contours and shape of the workpiece
- Open-cell material prevents clogging and allows cool grinding
- No corrosive residues on the workpiece surface

Application examples:

- Removal of rust, corrosion residues, scale, dirt, stubborn paint or adhesive residues, old coatings or residues of seals or gaskets
- Cleaning of weld seams, removal of slight drawing marks and heat discolourations, especially on stainless steel (INOX)
- Surface roughening in preparation for adhesive bonding or application of fillers
- Cleaning of surfaces of diverse characteristics

Recommendations for use:

- POLICLEAN® tools achieve their best performance at a recommended cutting speed of 15–20 m/s.
  This provides an ideal compromise between stock removal, surface quality, thermal load on the workpiece and tool wear.

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times


= Wear eye protection!


= Wear a dust mask!

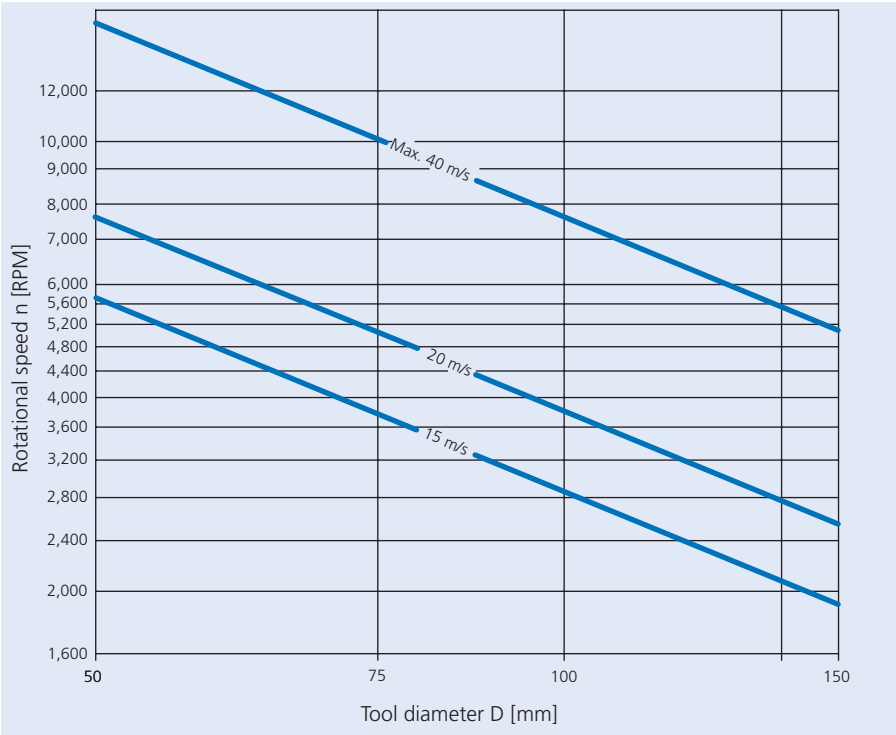

= Wear hearing protection!


= Please read the safety instructions!

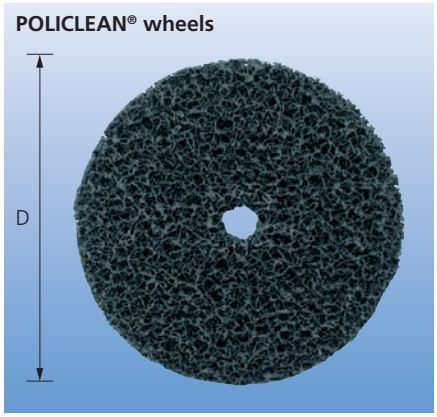
Cutting speeds

In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the tool diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the POLICLEAN® tool and tool drive.

Example:
PCLS 7513/6
Cutting speed: 15–20 m/s
Rotational speed: 3,800–5,000 RPM



POLICLEAN® wheels



POLICLEAN® discs are used for general-purpose peripheral grinding applications.

Recommendations for use:
- Flexible shafts, electric and air-powered straight grinders can be used as tool drives

Ordering note:
Please order arbor separately.

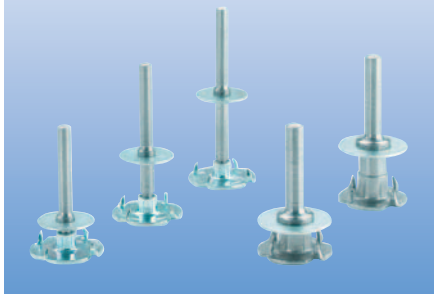
Ordering example:
EAN 4007220**471470**
PCLS 7513/6

Ordering example explanation:
PCLS = POLICLEAN® discs
75 = Outer dia. D [mm]
13 = Width T [mm]
6 = Centre hole dia. H [mm]

Description	EAN 4007220	D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
PCLS 7513/6	471470	75 x 13	6	4,000–5,100	10,000	PCLB 6/6/13, PCLB 6/6/26, PCLB 6/6/39	6
PCLS 10013/13	471487	100 x 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
PCLS 15013/13	471494	150 x 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

Arbors

Arbors for POLICLEAN® wheels



Mounting system for POLICLEAN® wheels with wheel stacking possibility.
The use of this arbor reduces set-up times significantly. Discs can be changed without removing the shank from the tool drive collet.

PFERD provides three arbors for clamping one, two or three wheels, respectively.

Explanation of the codes:
S = Shank dia.
L = Shank length

Description	EAN 4007220	S x L [mm]	Suitable for centre hole dia. [mm]	Packaging	Suitable tool	
PCLB 6/6/13	471562	6 x 40	6	1 disc	PCLS 7513/6	1
PCLB 6/6/26	471579	6 x 40	6	2 discs	PCLS 7513/6	1
PCLB 6/6/39	471586	6 x 40	6	3 discs	PCLS 7513/6	1
PCLB 6/13/13	532928	6 x 40	13	1 disc	PCLS 10013/13, PCLS 15013/13	1
PCLB 6/13/26	532935	6 x 40	13	2 discs	PCLS 10013/13, PCLS 15013/13	1
PCLB 8/13/13	471593	8 x 40	13	1 disc	PCLS 10013/13, PCLS 15013/13	1
PCLB 8/13/26	471609	8 x 40	13	2 discs	PCLS 10013/13, PCLS 15013/13	1

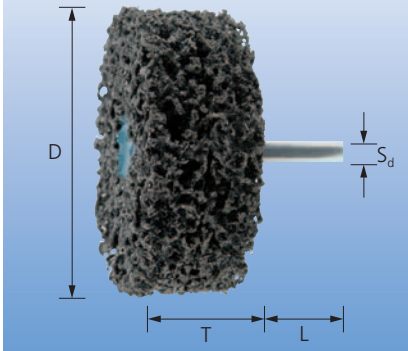
POLICLEAN® mounted tools are used for general-purpose peripheral grinding.

Recommendations for use:
- Flexible shafts, electric and air-powered straight grinders can be used as tool drives

Ordering example:
EAN 4007220**661369**
PCLZY 5026/6

Ordering example explanation:
PCLZY = POLICLEAN® mounted tools
5026 = Outer dia. D x width T [mm]
6 = Shank dia. S_d [mm]

POLICLEAN® mounted tools



Description	EAN 4007220	D x T [mm]	S_d x L [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
PCLZY 5013/6	661321	50 x 13	6 x 40	6,000–7,000	15,000	5
PCLZY 5026/6	661369	50 x 26	6 x 40	6,000–7,000	15,000	5
PCLZY 7513/6	661376	75 x 13	6 x 40	4,000–5,100	10,000	5
PCLZY 7526/6	661383	75 x 26	6 x 40	4,000–5,100	10,000	5
PCLZY 10013/6	661406	100 x 13	6 x 40	3,000–3,800	7,500	5

The non-woven cleaning fabric is glued onto a glass woven base. This design allows POLICLEAN® discs to be used in face-down grinding.

Recommendations for use:
- Preferably for use on slow-running angle grinders
- POLICLEAN® discs achieve their best performance at a recommended cutting speed of 30–35 m/s

Ordering example:
EAN 4007220**515297**
PCLD 125-13

Ordering example explanation:
PCLD = POLICLEAN® discs
125 = Outer dia. D [mm]
13 = Width T [mm]

POLICLEAN® discs

Description	EAN 4007220	D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
PCLD 115-13	515280	115 x 13	22.23	5,000–7,000	10,000	5
PCLD 125-13	515297	125 x 13	22.23	5,000–7,000	10,000	5

PFERD offers a very extensive range of Poliflex® fine grinding tools. Starting from a large selection of
- shapes,
- abrasives,
- grit sizes and
- bonds,

fine grinding tools adapted for the specific application are produced.

PFERD manufactures Poliflex® fine grinding tools to high standards of dimensional accuracy, with outstandingly consistent quality and tight dimensional tolerances. The tools are ideally suited for fine grinding, texturing and making preparations for polishing work.

Advantages:

- High surface quality
- The exact concentricity of the Poliflex® fine grinding points
  - considers the user's health,
  - protects the tool drive,
  - enables quiet working,
  - prevents chatter marks and
  - reduces wear
- Depending on the intended application, Poliflex® fine grinding tools can easily be shaped with a diamond dresser or with ceramic dressing stones at low rotational speed. For detailed information and ordering data for dressing tools, please refer to Catalogue 203.

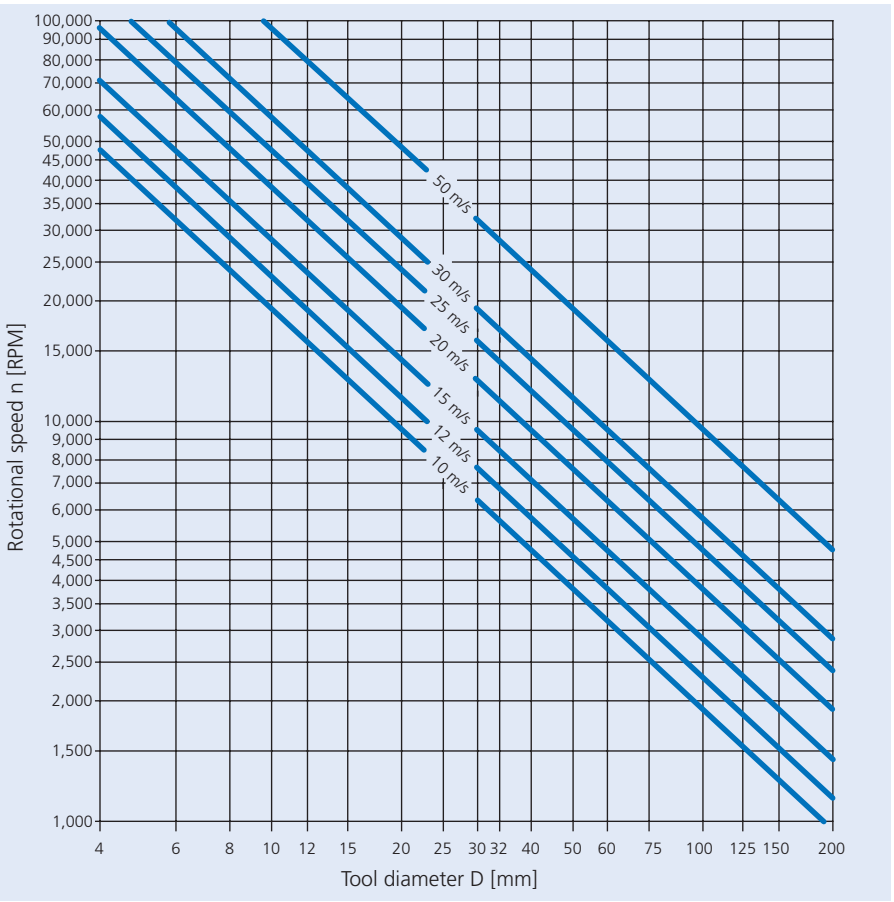
Cutting speeds

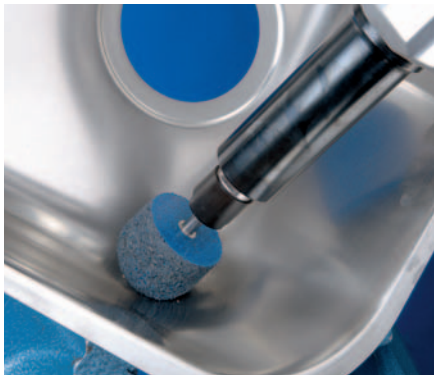
In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the tool diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the tool and tool drive.

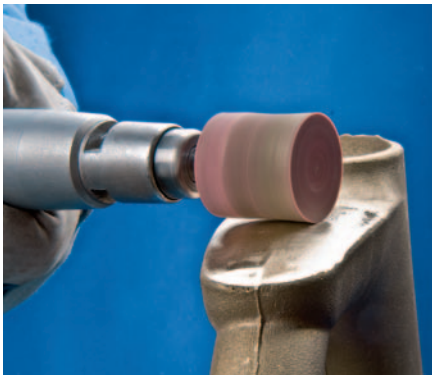
Example:
PF KU 15 6 AR 120 GR
Tool dia.: 15 mm
Cutting speed: 15 m/s
Rotational speed: 19,000 RPM

PFERDVIDEO

You will receive more information here or at www.pferd.com







Ordering instructions:

Ordering example
Poliflex® fine grinding points

PF	ZY	2030	6	AR	120	GR
❶	❷	❸	❹	❺	❻	❼

Ordering example
Poliflex® fine grinding wheels

PF	SC	4010	6	AR	120	GR
❶	❷	❸	❹	❺	❻	❼

❶ Product code

PF = Abbreviation for Poliflex®

❷ Shapes

SC = Wheel

W = Roller

LI = Lens

ZY = Cylindrical

WR = Cylindrical with radius end

KU = Ball

SP = Tree

KE = Tapered

❸ Dimensions

Poliflex® fine grinding points
Grinding point outer dia. D x grinding point width T [mm]
20 mm x 30 mm = 2030

Poliflex® fine grinding wheels
Grinding wheel outer dia. D x wheel width T [mm]
40 mm x 10 mm = 4010

❹ Mountings

Poliflex® fine grinding points
Shank dia. S_d x shank length L_2 [mm]
3 mm x 30 mm
6 mm x 40 mm
8 mm x 40 mm

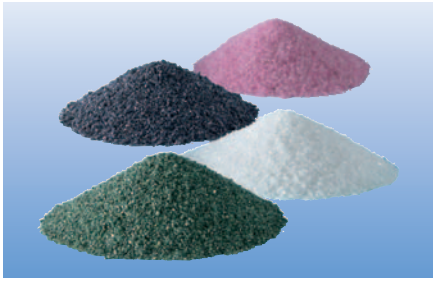
Poliflex® fine grinding wheels
Depending on the wheel dimensions, the centre hole diameter is 2, 3, 6, 10 or 20 mm.

Poliflex® marbling tools
Female thread M 8

❺ Abrasives

In general, two grain types are used, with internationally defined designations according to ISO 525:
A = Aluminium oxide (Al_2O_3)
C = Silicon carbide (SiC)

In order to specify the exact grain mixture, classification beyond ISO 525 is necessary. The following abbreviations are used:
AW = Aluminium oxide, white
AR = Aluminium oxide, pink
AN = Aluminium oxide, regular
CN = Silicon carbide, green
CU = Silicon carbide, grey
AWCN = Mixture of AW + CN
ANCN = Mixture of AN + CN



❻ Grit sizes according to ISO 525 and ISO 8486

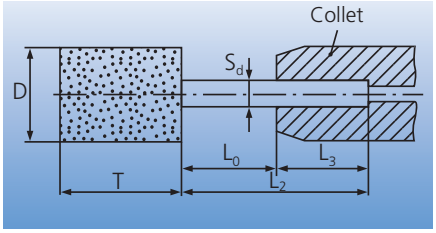
The grit sizes of PFERD fine grinding points are correlated to the shape and diameter of the points.

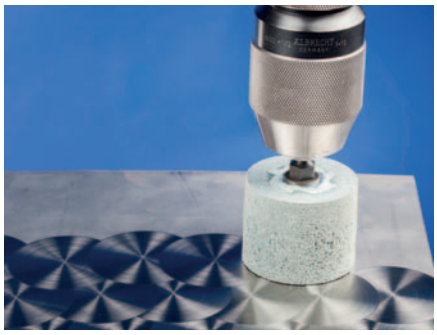
❼ Bonds

The following bonds are available:
PUR = Polyurethane (soft, medium-hard)
PU-STRUC = Polyurethane
GR = Rubber
GHR = Hard rubber
LR = Leather
LHR = Hard leather
TX = Textile

Explanation of the abbreviations according to EN 12413:

D = Grinding point outer dia.
T = Grinding point width
S_d = Shank dia.
L_0 = Unsupported shank length
L_2 = Shank length
L_3 = Clamping depth of shank





Safety notes:

Poliflex® fine grinding tools are approved for the following maximum working speeds:

PUR	**15 m/s**
GR	**15 m/s**
LR	**25 m/s**
TX	**30 m/s**
PUR-STRUC	**15 m/s**
GHR	**30 m/s**
LHR	**50 m/s**

Maximum rotational speed levels for the various shank lengths and shank diameters are defined in DIN 69170, based on EN 12413. These must be strictly adhered to in order to avoid buckling of the shank during use.

Regardless of the shank length, the clamping depth (L_3) of the shank must be at least 10 mm.

The maximum permitted rotational speed calculated in accordance with EN 12413 is determined by the following factors:
- Shape and dimensions of the grinding point
- Diameter of the steel shank S_d
- Unsupported shank length L_0

Each packaging of PFERD fine grinding points comes with rotational speed recommendations for a given unsupported shank length (L_0) of that product. In addition, the concentric accuracy and correct clamping of the tool drive must be ensured.

Tables with the maximum permitted rotational speed levels for the entire range of Poliflex® fine grinding points are available on request.

= Wear eye protection!

= Wear hearing protection!

= Please read the safety instructions!

Poliflex® tools

The fast way to the best tool

To facilitate the selection of the optimum Poliflex® fine grinding tool, we have focused on material groups, main applications and special application requirements.

The overview shows which variations of abrasive and bond are recommended for the various materials, taking the respective application into account.

The subdivision of the different selection criteria material, application and desired surface finish are necessary to find the best tool. Tool bond and grain mix have a decisive impact on the abrasive performance, tool life and aggressiveness of the tools. Moreover, they have an impact on the appearance of the surface.

How to find the best Poliflex® fine grinding tool?

❶ Material
Normally the workpiece material is known. The various material groups are colour-coded and form the starting point for the selection of the most appropriate fine grinding tool.

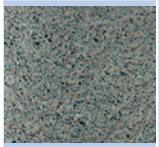
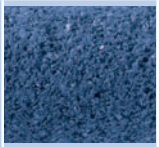
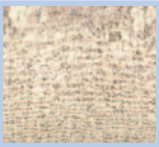
❶ Material group ▼			❷ Application ▼	Bond ▶ / Abrasives (grain mixes) ▶ / ❹ Designation/ Bond ▶ / Recommended cutting speed ▶ / ❸ Surface finish ▼
Steel, cast steel	Non-hardened, non-heat-treated steels up to 1,200 N/mm² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high form stability	Matt surface
				Shiny surface
	Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, alloyed cast steel	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high form stability	Matt surface
				Shiny surface
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high form stability	Matt surface
				Shiny surface
			General use	Textured surface
Non-ferrous metals	Soft non-ferrous metals, non-ferrous metals	Aluminium alloys, brass, copper, zinc	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high form stability	Matt surface
				Shiny surface
	Hard non-ferrous metals	Bronze, titanium, titanium alloys, hard aluminium alloys (high Si content)	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high form stability	Matt surface
				Shiny surface
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	**Surface grinding**	Matt surface
				Shiny surface
			Edge grinding with high form stability	Matt surface
				Shiny surface
● = highly suitable	❍ = suitable			❺ Catalogue page ▶

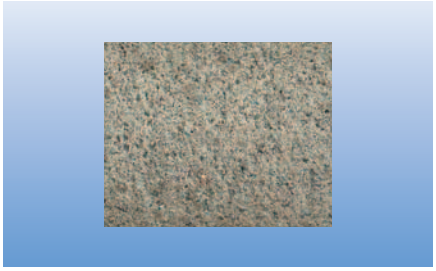
❷ Application
After the material, the application must be selected:
- General grinding
- Surface grinding
- Edge grinding

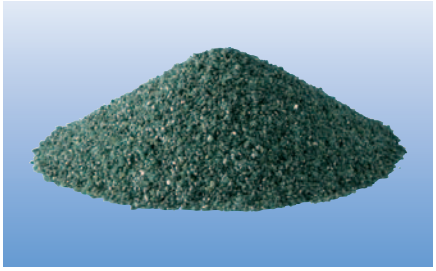
❸ Desired surface finish
Then the desired work result needs to be selected:
- Matt surface
- Shiny surface
- Textured surface

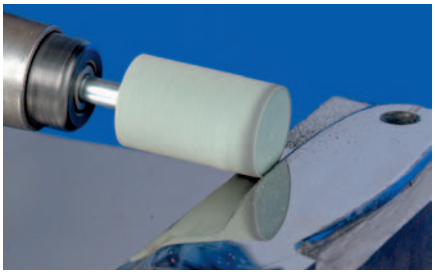
❹ Tool bond
After the application and the required surface finish have been determined, the suitable bond can be selected in the right-hand part of the overview. The "highly suitable" bond is shown with a black dot (●). Further, "suitable" hardness grades are indicated by an open dot (❍).

❺ Reference to catalogue page
For more information about the selected bond, the tool shapes/dimensions and grit sizes, please refer to the catalogue pages specified in the table.

Polyurethane bond			Elastomer bond				Resinoid bond
CN			AR	ANCN	AW	AWCN	AN
							
PUR W (Soft)	PUR MH (Medium-hard)	PUR STRUC	GR	GHR	LR	LHR	TX
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
❍	●		❍				
			●		❍		
	❍		❍				●
				●		❍	
❍	●		❍				
			❍		●		
	❍						●
				❍		●	
●	❍						
			●		❍		
	❍						●
				●	❍		
❍	❍	●					
●	❍						❍
			❍		●		
				❍			●
			❍		●		
	❍						●
			❍				
				❍		●	
	❍						●
			●	❍			
	❍			❍			●
				❍		●	
100–102	100–102	103–104	105–107	105–107	108–109	108–109	110–111







Poliflex® fine grinding tools with PUR bond are manufactured from green silicon carbide (SiC). The PUR bond is a very soft bond that is available in two hardness grades (PUR-W, PUR-MH).

Abrasive grain is homogeneously distributed in the PUR bond. The open-cell surface and elastic properties of the bond ensure a good adaptability to contours and a soft, cool grinding action.

Advantages:

- Ideally suited to use on surfaces of components made of steel, stainless steel (INOX), titanium, light metals and non-ferrous metals
- Produces a fine, matt finish
- The specially shaped SiC grain and the soft grain embedment enable smooth grinding
- The aggressiveness can be varied via the selection of the hardness grade

Application examples:

- Fine grinding of press and forging tools
- Fine grinding of welds on stainless steel (INOX) constructions
- Pre-grinding in preparation of polishing on components for foodstuff processing and kitchen equipment

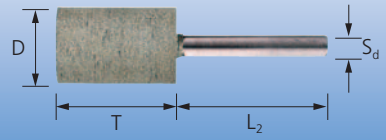
Recommendations for use:

- Poliflex® fine grinding tools in PUR bond achieve their best performance at a recommended cutting speed of 10–15 m/s
- Flexible shafts, electric and air-powered straight and angle grinders can be used as tool drives

Safety notes:

- For safety reasons, it is imperative to remain within the stated rotational speed at all times

Poliflex® fine grinding points ZY PUR



Ordering example:
EAN 400722**0535288**
PF ZY 3232/6 CN **80** PUR-MH
Please complete the description with the desired grit size.

Description	Grit size			D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	80	150	220					
	EAN 4007220							
Shank dia. 3 mm PUR-W								
PF ZY 0812/3 CN . . . PUR-W	535004	535028	-	8 x 12	3 x 30	24,000	35,800	10
Shank dia. 6 mm PUR-W								
PF ZY 1025/6 CN . . . PUR-W	535042	535073	-	10 x 25	6 x 40	19,000	28,600	10
PF ZY 1530/6 CN . . . PUR-W	535141	535165	-	15 x 30	6 x 40	12,500	19,000	10
PF ZY 2030/6 CN . . . PUR-W	535233	535257	-	20 x 30	6 x 40	9,500	14,300	10
PF ZY 2530/6 CN . . . PUR-W	297841	297865	-	25 x 30	6 x 40	7,500	11,400	10
Shank dia. 3 mm PUR-MH								
PF ZY 0812/3 CN . . . PUR-MH	-	535011	535035	8 x 12	3 x 30	24,000	35,800	10
Shank dia. 6 mm PUR-MH								
PF ZY 1025/6 CN . . . PUR-MH	-	535059	535080	10 x 25	6 x 40	19,000	28,600	10
PF ZY 1530/6 CN . . . PUR-MH	535134	535158	535172	15 x 30	6 x 40	12,500	19,000	10
PF ZY 2030/6 CN . . . PUR-MH	535325	535240	-	20 x 30	6 x 40	9,500	14,300	10
PF ZY 3232/6 CN . . . PUR-MH	535288	535295	-	32 x 32	6 x 40	6,000	8,900	5

Poliflex discs are suitable for work on larger surfaces in face-down grinding.

Recommendation for use:
- Used preferably on slow-running angle grinders

Ordering example:
EAN 4007220**536346**
PFD 115-22 CN **60** PUR-MH
Please complete the description with the desired grit size.

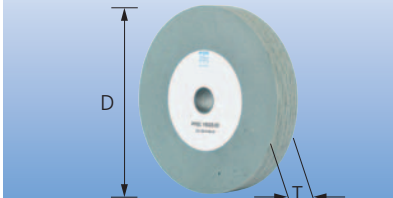
Poliflex® discs PFD PUR

Description	Grit size		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	60	150					
	EAN 4007220						
PFD 115-22 CN . . . PUR-W	536377	536391	115 x 14	22.23	2,400	5,300	5
PFD 115-22 CN . . . PUR-MH	536346	536360	115 x 14	22.23	2,400	5,300	5

Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**144749**
PF SC 7510/10 CN **80** PUR-W
Please complete the description with the desired grit size.

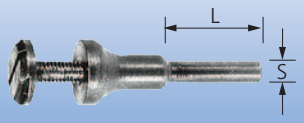
Poliflex® fine grinding wheels SC PUR



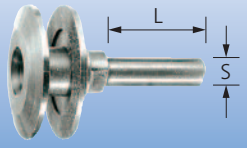
Description	Grit size		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	80	150						
	EAN 4007220							
PF SC 7510/10 CN . . . PUR-W	144749	-	75 x 10	10	2,500	3,800	BO 8/10 6-20	5
PF SC 12520/20 CN . . . PUR-W	144794	-	125 x 20	20	1,500	2,300	BO 12/20 10-50, BO MK 1/20 10-50	1
PF SC 15025/20 CN . . . PUR-W	298428	298435	150 x 25	20	1,200	1,900	BO 12/20 10-50, BO MK 1/20 10-50	1

Arbors

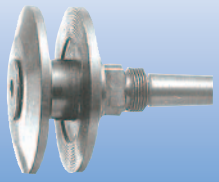
Arbors for Poliflex® fine grinding wheels SC PUR



BO 8/10 6-20



BO 12/20 10-50



BO MK 1/20 10-50

Description	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole dia. [mm]	
BO 8/10 6-20	297667	8 x 30	6–20	10	1
BO 12/20 10-50	297674	12 x 35	10–50	20	1
BO MK 1/20 10-50	297681	-	10–50	20	1

Poliflex® blocks PUR

Due to their rhomboid shape, these blocks make it easy to work in hard-to-reach areas such as corners.

They can be reduced in size as desired using a cut-off wheel, to meet specific application needs.

Ordering example:
EAN 4007220**298688**
PFB 1156030 CU **120** PUR
Please complete the description with the desired grit size.

Description	Grit size			Dimension L x B x C [mm]	
	60	120	240		
	EAN 4007220				
PFB 1156030 CU . . . PUR	298671	298688	298695	115 x 60 x 30	5

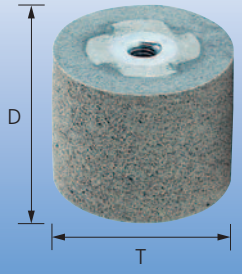
Poliflex® block set

Poliflex® blocks in a sales-promoting display box.

Contents:
9 pcs., 3 each of Poliflex® blocks with
- Grit 60 (coarse)
- Grit 120 (medium)
- Grit 240 (fine)

Description	EAN 4007220	Dimensions [mm]	
PSO 11560	298886	285 x 150 x 60	1

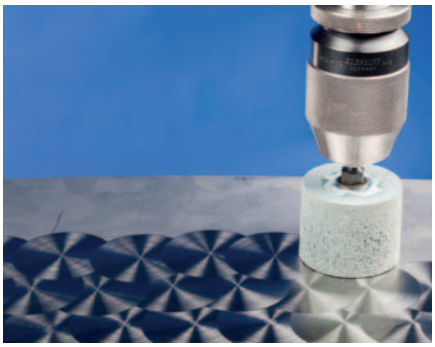
Poliflex® marbling tools



Tool with an M8 female thread for producing surface effects (marbling).
A reusable arbor is needed for mounting this tool.

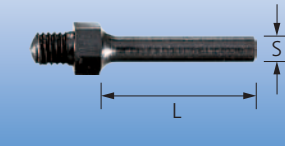
Recommendations for use:
- Only use for face-down grinding at 1,000–4,000 RPM

Ordering example:
EAN 4007220**146194**
PF ZY 5040 M 8 CN **30** PUR
Please complete the description with the desired grit size.



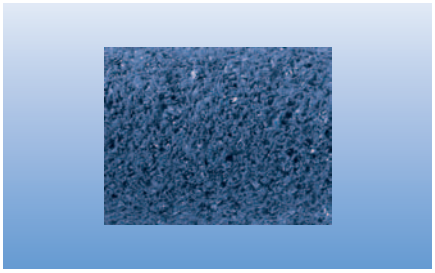
Description	Grit size		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	30	80						
	EAN 4007220							
PFZY 5040 M8 CN . . . PUR	146194	146200	50 x 40	M8	1,000–4,000	5,700	BO 6/8	5

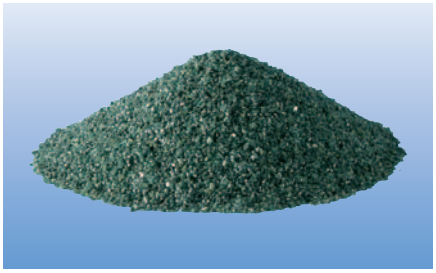
Arbors for Poliflex® marbling tools

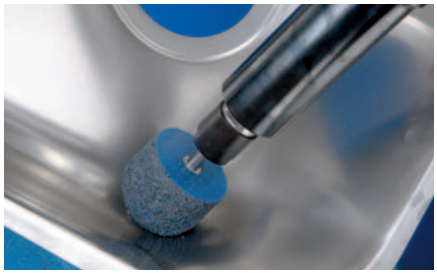


The arbor BO 6/8 (shank dia. 6 mm) is suitable for use with Poliflex® marbling tools.

Description	EAN 4007220	S x L [mm]	Thread	
BO 6/8	062104	6 x 40	M8	1







Poliflex® texturing tools are manufactured from grey silicon carbide. They are outstandingly well suited for work on stainless steel (INOX) components. A high concentration of abrasive grain is homogeneously distributed in the PU-STRUC bond.

Advantages:

- The open-cell surface and elastic properties of the bond ensure a good adaptability to contours and a soft, cool grinding action
- Faults and transitions on dressed grinding patterns can be refined in a very quick and effective manner

Application examples:

- Weld seam finishing on stainless steel (INOX) sheets
- Grinding out of surface defects in sink construction
- Achieving desired visual finishes on components of the food processing industry
- Blending grinding patterns in handrail fabrication

Recommendations for use:

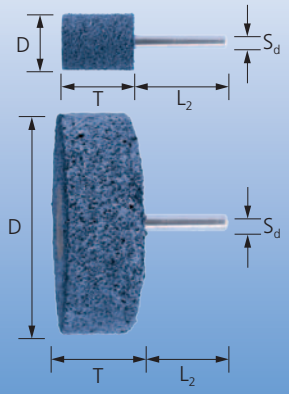
- Poliflex® texturing tools achieve their best performance at a recommended cutting speed of 5–10 m/s
- Flexible shafts, electric and air-powered straight grinders can be used as tool drives

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

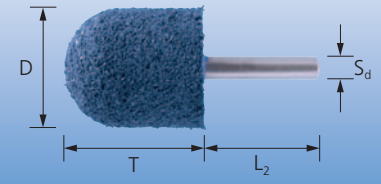
Ordering example:
EAN 4007220**752029**
PF ZY 2030/6 CU 16 PU-STRUC

Poliflex® mounted texturing points ZY



Description	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
Shank dia. 6 mm						
PF ZY 2030/6 CU 16 PU-STRUC	752029	20 x 30	6 x 40	4,750–9,550	14,000	10
PF ZY 2530/6 CU 16 PU-STRUC	752036	25 x 30	6 x 40	3,800–7,600	11,500	10
PF ZY 3232/6 CU 16 PU-STRUC	752043	32 x 32	6 x 40	3,000–6,000	9,000	5
PF ZY 7510/6 CU 16 PU-STRUC	752050	75 x 10	6 x 40	1,250–2,500	4,000	1
PF ZY 7530/6 CU 16 PU-STRUC	752067	75 x 30	6 x 40	1,250–2,500	4,000	1
Shank dia. 8 mm						
PF ZY 10030/8 CU 16 PU-STRUC	752074	100 x 30	8 x 40	1,000–1,900	2,800	1

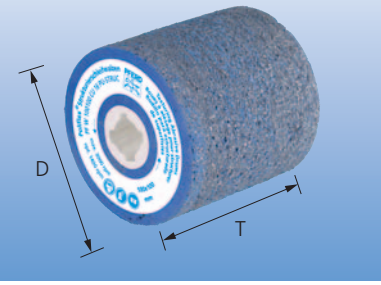
Poliflex® mounted texturing points WR



Ordering example:
EAN 4007220**752081**
PF WR 3045/8 CU 16 PU-STRUC

Description	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
PF WR 3045/8 CU 16 PU-STRUC	752081	30 x 45	8 x 40	3,150–6,350	9,500	5
PF WR 4045/8 CU 16 PU-STRUC	752104	40 x 45	8 x 40	2,350–4,750	7,000	5
PF WR 5045/8 CU 16 PU-STRUC	752111	50 x 45	8 x 40	1,900–3,800	5,700	5

Poliflex® texturing rollers

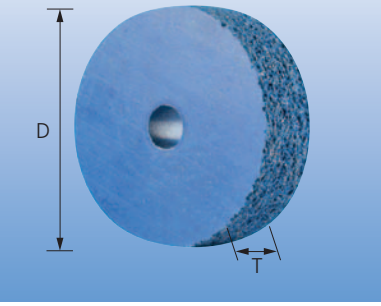


Ordering note:
Additional drum tools can be found in the sets on pages 70 and 88 of this Catalogue and in Catalogue 208.

Ordering example:
EAN 4007220**752159**
PF W 100100/19 CU 16 PU-STRUC

Description	EAN 4007220	D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
PF W 100100/19 CU 16 PU-STRUC	752159	100 x 100	19	1,000–1,900	2,800	1

Poliflex® texturing wheels



Ordering example:
EAN 4007220**752135**
PF SC 10010/20 CU 16 PU-STRUC

Description	EAN 4007220	D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
PF SC 10010/20 CU 16 PU-STRUC	752135	100 x 10	20	1,000–1,900	2,800	BO 12/20 10-50	1
PF SC 10030/20 CU 16 PU-STRUC	752142	100 x 30	20	1,000–1,900	2,800	BO 12/20 10-50	1

GR bond

Poliflex® fine grinding tools in GR bond are manufactured from pink aluminium oxide. The GR bond is a soft elastomer-based bond.

Advantages:

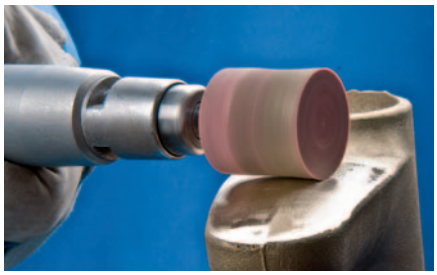
- Ideally suited to use on surfaces of non-hardened steel, stainless steel (INOX) and non-ferrous metal components
- Produces a fine, shiny finish
- The soft, elastic embedment of the grain guarantees a smooth, fine grinding action

GHR bond

Poliflex® fine grinding tools in GHR bond are manufactured from an abrasive grain mix consisting of regular aluminium oxide and green silicon carbide (SiC). GHR is also a soft, but durable elastomer-based bond.

Advantages:

- Ideally suited to use on edges of components made of non-hardened steel and stainless steel (INOX)
- Produces a fine, shiny finish
- On high-temperature-resistant alloys, titanium or titanium alloys, a shiny finish is achieved



Application examples:

- Fine grinding of edges and transitions on tools for plastic injection parts
- Fine grinding of press dies
- Fine grinding of turbine blades
- Creation of a fine surface finish on fittings

Recommendations for use:

- Poliflex® fine grinding tools in GR bond achieve their best performance at a recommended cutting speed of 10–12 m/s
- Poliflex® fine grinding tools in GHR bond achieve their best performance at a recommended cutting speed of 20–25 m/s
- Flexible shafts, electric and air-powered straight grinders can be used as tool drives

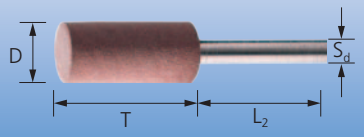
Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

Ordering note:
Poliflex® fine grinding points with grit size 400 are manufactured from abrasive AW, white aluminium oxide.

Ordering example:
EAN 4007220**534113**
PF ZY 2030/6 AR **80** GR
Please complete the description with the desired grit size.

Poliflex® fine grinding points ZY GR/GHR

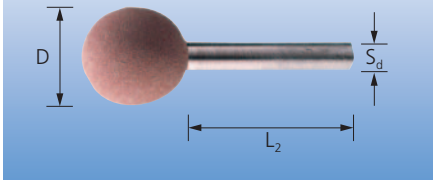


Description	Grit size					D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	46	80	120	220	400					
	EAN 4007220									
Shank dia. 3 mm GR										
PF ZY 0408/3 AR . . . GR	-	-	144800	-	-	4 x 8	3 x 30	47,500	71,600	10
PF ZY 0610/3 AR . . . GR	-	-	144824	-	-	6 x 10	3 x 30	32,000	47,700	10
PF ZY 0808/3 AR . . . GR	-	-	144848	144855	-	8 x 8	3 x 30	24,000	35,800	10
PF ZY 0812/3 AR . . . GR	-	-	144886	144893	-	8 x 12	3 x 30	24,000	35,800	10
PF ZY 1006/3 AR . . . GR	-	-	145838	-	-	10 x 6	3 x 30	19,000	28,600	10
PF ZY 1010/3 AR . . . GR	-	-	144947	144954	-	10 x 10	3 x 30	19,000	28,600	10
PF ZY 1015/3 AR . . . GR	-	-	145036	145043	-	10 x 15	3 x 30	19,000	28,600	10
PF ZY 1208/3 AR . . . GR	-	-	145883	-	-	12 x 8	3 x 30	16,000	23,800	10
PF ZY 1212/3 AR . . . GR	-	-	145203	-	-	12 x 12	3 x 30	16,000	23,800	10
PF ZY 1220/3 AR . . . GR	-	-	145265	-	-	12 x 20	3 x 30	16,000	23,800	10
Shank dia. 6 mm GR										
PF ZY 1010/6 AR . . . GR	-	-	144992	-	-	10 x 10	6 x 40	19,000	28,600	10
PF ZY 1015/6 AR . . . GR	-	-	145081	145098	-	10 x 15	6 x 40	19,000	28,600	10
PF ZY 1025/6 AR . . . GR	-	533925	145128	145135	-	10 x 25	6 x 40	19,000	28,600	10
PF ZY 1208/6 AR . . . GR	-	-	145913	-	-	12 x 8	6 x 40	16,000	23,800	10
PF ZY 1212/6 AR . . . GR	-	-	145234	-	-	12 x 12	6 x 40	16,000	23,800	10

Continued on next page

Description	Grit size					D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	46	80	120	220	400					
	EAN 4007220									
PF ZY 1220/6 AR . . . GR	-	-	145296	145302	-	12 x 20	6 x 40	16,000	23,800	10
PF ZY 1515/6 AR . . . GR	-	-	145371	-	-	15 x 15	6 x 40	12,500	19,000	10
PF ZY 1525/6 AR . . . GR	-	-	145418	145425	-	15 x 25	6 x 40	12,500	19,000	10
PF ZY 1530/6 AR . . . GR	-	-	145470	145487	-	15 x 30	6 x 40	12,500	19,000	10
PF ZY 2012/6 AR . . . GR	-	-	145982	-	-	20 x 12	6 x 40	9,500	14,300	10
PF ZY 2020/6 AR . . . GR	-	-	145562	145579	-	20 x 20	6 x 40	9,500	14,300	10
PF ZY 2030/6 AR . . . GR	-	534113	145630	-	-	20 x 30	6 x 40	9,500	14,300	10
PF ZY 2515/6 AR . . . GR	-	-	146026	-	-	25 x 15	6 x 40	7,500	14,300	10
PF ZY 2525/6 AR . . . GR	-	-	145708	145715	-	25 x 25	6 x 40	7,500	11,400	10
PF ZY 3020/6 AR . . . GR	-	-	146057	-	-	30 x 20	6 x 40	6,500	9,500	5
PF ZY 3030/6 AR . . . GR	-	-	145760	-	-	30 x 30	6 x 40	6,500	9,500	5
Shank dia. 8 mm GR										
PF ZY 4025/8 AR . . . GR	-	-	146095	-	-	40 x 25	8 x 40	4,500	9,500	5
Shank dia. 3 mm GHR										
PF ZY 0408/3 AW . . . GHR	-	-	-	-	533734	4 x 8	3 x 30	100,000	143,200	10
PF ZY 0812/3 ANCN . . . GHR	-	-	533765	-	-	8 x 12	3 x 30	60,000	71,600	10
PF ZY 0812/3 AW . . . GHR	-	-	-	-	533772	8 x 12	3 x 30	60,000	71,600	10
PF ZY 1010/3 ANCN . . . GHR	-	-	533871	-	-	10 x 10	3 x 30	45,000	57,200	10
PF ZY 1015/3 ANCN . . . GHR	-	-	533895	-	-	10 x 15	3 x 30	45,000	52,000	10
Shank dia. 6 mm GHR										
PF ZY 1025/6 ANCN . . . GHR	-	-	533956	-	-	10 x 25	6 x 40	45,000	57,200	10
PF ZY 1025/6 AW . . . GHR	-	-	-	-	533970	10 x 25	6 x 40	45,000	57,200	10
PF ZY 1220/6 ANCN . . . GHR	145364	-	-	-	-	12 x 20	6 x 40	40,000	47,700	10
PF ZY 1530/6 ANCN . . . GHR	145555	534069	-	-	-	15 x 30	6 x 40	32,000	47,700	10
PF ZY 2030/6 ANCN . . . GHR	145692	-	-	-	-	20 x 30	6 x 40	24,000	28,600	10
PF ZY 2525/6 ANCN . . . GHR	145753	-	-	-	-	25 x 25	6 x 40	19,000	22,900	10

Poliflex® fine grinding points KU GR



Ordering example:
EAN 4007220**146316**
PF KU 25/6 AR **120** GR
Please complete the description with the desired grit size.

Description	Grit size	D [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	120					
	EAN 4007220					
Shank dia. 3 mm						
PF KU 08/3 AR . . . GR	146217	8	3 x 30	24,000	35,800	10
PF KU 10/3 AR . . . GR	146231	10	3 x 30	19,000	28,600	10
Shank dia. 6 mm						
PF KU 12/6 AR . . . GR	146255	12	6 x 40	16,000	23,800	10
PF KU 15/6 AR . . . GR	146279	15	6 x 40	12,500	19,000	10
PF KU 20/6 AR . . . GR	146293	20	6 x 40	9,500	14,300	10
PF KU 25/6 AR . . . GR	146316	25	6 x 40	7,500	11,400	10
PF KU 30/6 AR . . . GR	146323	30	6 x 40	6,500	9,500	5

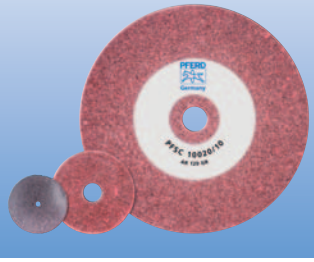
Ideal for very fine grinding on all metals, e.g. in tool and mould making, dental lab work and jewellery production.
Because of its design, the smaller diameter discs are particularly suitable for work in narrow and hard-to-reach places.

Ordering example:
EAN 4007220**146699**
PF SC 2503/2 AR **120** GR
Please complete the description with the desired grit size.

Poliflex® miniature discs, polishing lenses SC/LI GR/GHR

SC

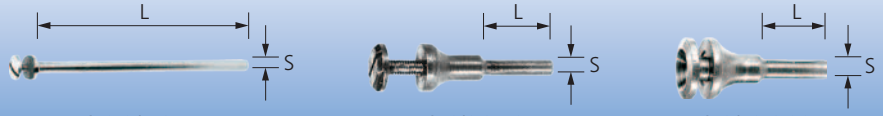
LI



Description	Grit size 120	Grit size 220	D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	EAN 4007220							
Disc shape								
PF SC 2503/2 AR . . . GR	146699	-	25 x 3	2	7,500	11,400	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100
PF SC 2503/2 CU . . . GHR	-	146705	25 x 3	2	7,500	11,400	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100
PF SC 3006/6 AR . . . GR	144695	-	30 x 6	6	6,300	9,500	BO 6/6 3-10	5
PF SC 5006/6 AR . . . GR	144718	-	50 x 6	6	3,800	5,700	BO 6/6 3-10	5
PF SC 8006/10 AR . . . GR	144756	-	80 x 6	10	2,400	3,500	BO 8/10 6-20	5
PF SC 10020/10 AR . . . GR	144787	-	100 x 20	10	1,900	2,800	BO 8/10 6-20	1
Lens shape								
PF LI 1604/2 CU . . . GHR	-	146675	16 x 4	2	12,000	17,900	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100
PF LI 2403/2 CU . . . GHR	-	146682	24 x 3	2	8,000	12,000	BO 2,3/1,6 1-5, BO 3/1,6 1-5	100

Arbors

Arbors for Poliflex® fine grinding discs SC/LI/GR/GHR



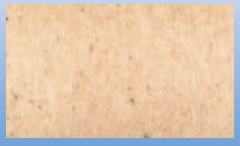
BO 2,3/1,6 1-5
BO 3/1,6 1-5

BO 6/6 3-10

BO 8/10 6-20

Description	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole dia. [mm]	
BO 2,3/1,6 1-5	151570	2.34 x 43	1–5	1.6	10
BO 3/1,6 1-5	151587	3 x 43	1–5	1.6	10
BO 6/6 3-10	297650	6 x 25	3–10	6	1
BO 8/10 6-20	297667	8 x 30	6–20	10	1

LR bond

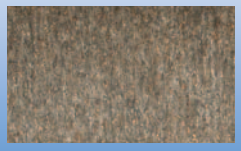


Poliflex® fine grinding tools in LR bond are manufactured from white aluminium oxide. The LR bond is a hard, durable bond.

Advantages:

- Ideally suited to fine grinding on surfaces of hardened and tempered steel and titanium components
- Good stock removal with a long tool life and fine surface finish

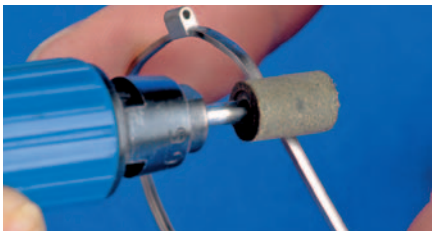
LHR bond



Poliflex® fine grinding tools in LHR bond are manufactured from an abrasive grain mix consisting of white aluminium oxide and green silicon carbide. The LHR bond is a hard, durable bond.

Advantages:

- Ideally suited to use on edges of components made out of hardened and tempered steel and high-temperature-resistant alloys
- Produces a fine, shiny finish
- Long tool life and edge stability with high stock removal



Application examples:

- Fine grinding work in tool and mould construction
- Grinding of components made out of nickel-based alloys
- Creation of a fine surface finish on components made out of high-temperature-, heat-resistant alloys

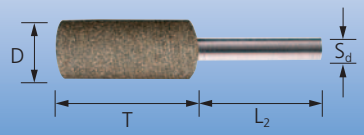
Recommendations for use:

- Poliflex® fine grinding points in LR bond achieve their best performance at a recommended cutting speed of 15–20 m/s
- Poliflex® fine grinding points in LHR bond achieve their best performance at a recommended cutting speed of 30–40 ms/s
- Flexible shafts, electric and air-powered straight grinders can be used as tool drives

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

Poliflex® fine grinding points ZY LR/LHR



Ordering note:
Poliflex® fine grinding points LHR with grit size 60 are manufactured from an abrasive mix of AWCN, white aluminium oxide and green silicon carbide.

Ordering example:
EAN 4007220**145449**
PF ZY 1525/6 AW **120** LR
Please complete the description with the desired grit size.

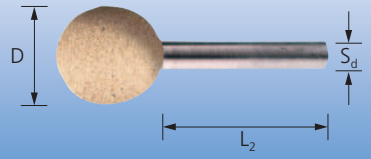
Description	Grit size				D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	60	120	220	400					
	EAN 4007220								
Shank dia. 3 mm LR									
PF ZY 0408/3 AW . . . LR	-	144817	-	533697	4 x 8	3 x 30	95,000	143,200	10
PF ZY 0610/3 AW . . . LR	-	144831	-	-	6 x 10	3 x 30	64,000	95,400	10
PF ZY 0808/3 AW . . . LR	-	144862	-	-	8 x 8	3 x 30	47,500	71,600	10
PF ZY 0812/3 AW . . . LR	-	144909	144916	533758	8 x 12	3 x 30	47,500	71,600	10
PF ZY 1010/3 AW . . . LR	-	144961	144978	-	10 x 10	3 x 30	38,000	57,200	10
PF ZY 1015/3 AW . . . LR	-	145050	-	-	10 x 15	3 x 30	38,000	57,200	10
PF ZY 1208/3 AW . . . LR	-	145906	-	-	12 x 8	3 x 30	32,000	47,700	10
PF ZY 1212/3 AW . . . LR	-	145210	-	-	12 x 12	3 x 30	32,000	33,700	10
PF ZY 1220/3 AW . . . LR	-	145272	-	-	12 x 20	3 x 30	32,000	33,700	10
Shank dia. 6 mm LR									
PF ZY 1010/6 AW . . . LR	-	145012	-	-	10 x 10	6 x 40	38,000	57,200	10
PF ZY 1015/6 AW . . . LR	-	145104	-	-	10 x 15	6 x 40	38,000	57,200	10
PF ZY 1025/6 AW . . . LR	-	145142	145159	-	10 x 25	6 x 40	38,000	57,200	10
PF ZY 1212/6 AW . . . LR	-	145258	-	-	12 x 12	6 x 40	32,000	47,700	10
PF ZY 1220/6 AW . . . LR	-	145319	-	-	12 x 20	6 x 40	32,000	47,700	10
PF ZY 1515/6 AW . . . LR	-	145395	-	-	15 x 15	6 x 40	25,500	38,100	10

Continued on next page

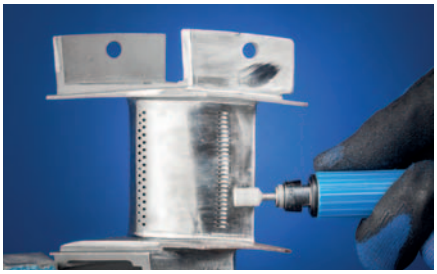
Description	Grit size				D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	60	120	220	400					
	EAN 4007220								
PF ZY 1525/6 AW . . . LR	-	145449	-	-	15 x 25	6 x 40	25,500	38,100	10
PF ZY 1530/6 AW . . . LR	-	145500	-	-	15 x 30	6 x 40	25,500	38,100	10
PF ZY 2020/6 AW . . . LR	-	145593	-	-	20 x 20	6 x 40	19,000	28,600	10
PF ZY 2030/6 AW . . . LR	-	145661	-	-	20 x 30	6 x 40	19,000	28,600	10
PF ZY 2525/6 AW . . . LR	-	145739	-	-	25 x 25	6 x 40	15,000	22,900	10
PF ZY 3030/6 AW . . . LR	-	145791	-	-	30 x 30	6 x 40	12,500	19,000	5
Shank dia. 3 mm LHR									
PF ZY 0812/3 AW . . . LHR	-	144923	-	-	8 x 12	3 x 30	47,000	76,700	10
Shank dia. 6 mm LHR									
PF ZY 1025/6 AWCN . . . LHR	145166	-	-	-	10 x 25	6 x 40	75,000	83,200	10
PF ZY 1025/6 AW . . . LHR	-	145173	-	-	10 x 25	6 x 40	75,000	83,200	10
PF ZY 2020/6 AW . . . LHR	-	145616	-	-	20 x 20	6 x 40	38,000	47,700	10

Ordering example:
EAN 4007220**146224**
PF KU 08/3 AW **120** LR
Please complete the description with the desired grit size.

Poliflex® fine grinding points KU LR



Description	Grit size	D [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	120					
	EAN 4007220					
Shank dia. 3 mm						
PF KU 08/3 AW . . . LR	146224	8	3 x 30	47,000	71,600	10
PF KU 10/3 AW . . . LR	146248	10	3 x 30	38,000	57,200	10
Shank dia. 6 mm						
PF KU 15/6 AW . . . LR	146286	15	6 x 40	29,500	38,100	10
PF KU 20/6 AW . . . LR	146309	20	6 x 40	19,000	28,600	10



Poliflex® fine grinding tools with TX bond are manufactured from regular aluminium oxide. The textile fabric inserts make the TX bond an extremely hard, durable bond.

Advantages:

- Ideally suited to use on edges of components made of steel, stainless steel (INOX), titanium, light metals and non-ferrous metals
- Produces a fine, matt finish
- The very stable grit bond achieves a highly aggressive abrasive action which simultaneously results in a fine surface structure

Application examples:

- Fine grinding of hardened press and forging tools
- Fine grinding of weld seams on stainless steel (INOX) components
- Pre-grinding in preparation of polishing for engine or turbine construction

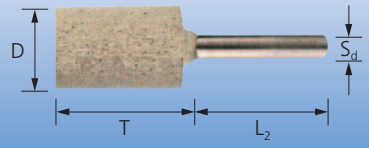
Recommendations for use

- Poliflex® fine grinding points in TX bond achieve their best performance at a recommended cutting speed of 20–30 m/s
- Flexible shafts, electric and air-powered straight grinders can be used as tool drives

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

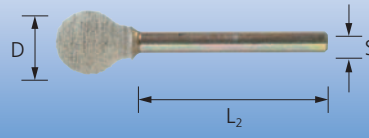
Poliflex® fine grinding points ZY TX



Ordering example:
EAN 4007220**297964**
PF ZY 2032/6 AN **120** TX
Please complete the description with the desired grit size.

Description	Grit size		D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	80	120					
	EAN 4007220						
Shank dia. 3 mm							
PF ZY 0610/3 AN . . . TX	298060	298077	6 x 10	3 x 30	63,000	95,400	10
PF ZY 0812/3 AN . . . TX	298084	298091	8 x 12	3 x 30	47,500	71,600	10
Shank dia. 6 mm							
PF ZY 1025/6 AN . . . TX	297780	297889	10 x 25	6 x 40	38,000	57,200	10
PF ZY 1632/6 AN . . . TX	297919	297940	16 x 32	6 x 40	24,000	35,800	10
PF ZY 2032/6 AN . . . TX	297957	297964	20 x 32	6 x 40	19,000	28,600	10
PF ZY 2532/6 AN . . . TX	297988	297995	25 x 32	6 x 40	15,000	22,900	10

Poliflex® fine grinding points KU TX

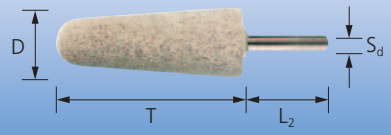


Ordering example:
EAN 4007220**298190**
PF KU 10/3 AN **120** TX
Please complete the description with the desired grit size.

Description	Grit size		D [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	80	120					
	EAN 4007220						
Shank dia. 3 mm							
PF KU 06/3 AN . . . TX	298145	298152	6	3 x 30	63,000	95,400	10
PF KU 08/3 AN . . . TX	-	298176	8	3 x 30	47,500	71,600	10
PF KU 10/3 AN . . . TX	-	298190	10	3 x 30	38,000	57,200	10

Ordering example:
EAN 4007220**298008**
PF KE 2570/6 AN **80** TX
Please complete the description with the desired grit size.

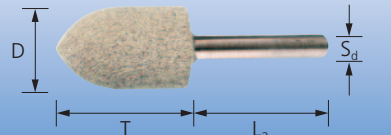
Poliflex® fine grinding points KE TX



Description	Grit size		D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	80	120					
	EAN 4007220						
Shank dia. 6 mm							
PF KE 1025/6 AN . . . TX	298121	298138	10 x 25	6 x 40	38,000	57,200	10
PF KE 1645/6 AN . . . TX	298015	-	16 x 45	6 x 40	24,000	38,800	10
PF KE 2570/6 AN . . . TX	298008	-	25 x 70	6 x 40	15,000	22,900	10

Ordering example:
EAN 4007220**298046**
PF SP 2032/6 AN **120** TX
Please complete the description with the desired grit size.

Poliflex® fine grinding points SP TX

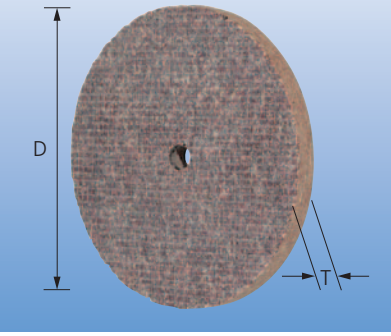


Description	Grit size		D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	80	120					
	EAN 4007220						
Shank dia. 3 mm							
PF SP 1020/3 AN . . . TX	298107	298114	10 x 20	3 x 30	38,000	57,200	10
Shank dia. 6 mm							
PF SP 2032/6 AN . . . TX	298039	298046	20 x 32	6 x 40	19,000	28,600	10

Ordering note:
Please order arbor separately.

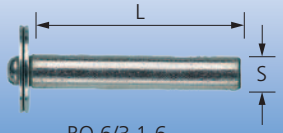
Ordering example:
EAN 4007220**505502**
PF SC 2503/3 A **80** TX
Please complete the description with the desired grit size.

Poliflex® fine grinding wheels SC TX

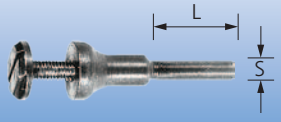


Description	Grit size		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	80	120						
	EAN 4007220							
PF SC 2503/3 A . . . TX	505502	505519	25 x 3	3	15,000	22,900	BO 6/3 1-6	20
PF SC 2506/3 A . . . TX	-	505540	25 x 6	3	15,000	22,900	BO 6/3 1-6	20
PF SC 4003/3 A . . . TX	505564	505571	40 x 3	3	9,500	14,300	BO 6/3 1-6	10
PF SC 4006/6 A . . . TX	-	505618	40 x 6	6	9,500	14,300	BO 6/6 3-10	10

Arbors for Poliflex® fine grinding wheels SC TX



BO 6/3 1-6



BO 6/6 3-10

Description	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole dia. [mm]	
BO 6/3 1-6	505694	6 x 40	1–6	3	1
BO 6/6 3-10	297650	6 x 25	3–10	6	1

Ceramic fibre files

Ceramic fibre files KFF

Ceramic fibre files are made of high-grade ceramic fibres embedded in a special resinoid bond. Suitable for use on surfaces and in hard-to-reach areas in tool and mould making.

A PFERD product providing high stock removal and a high-quality surface finish.

Suitable for manual use of air-powered and electric filing machines (e.g. air-powered filing machine PFG 07/220). For detailed information and ordering data, please refer to Catalogue 209.

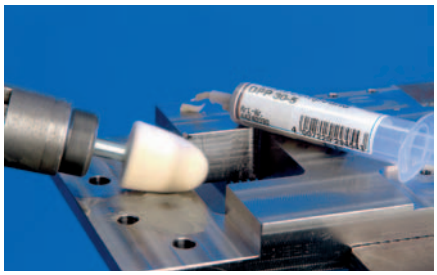
Abrasive: Ceramic fibres
Colour code for grit sizes:
180 = gold
280 = light brown
400 = orange
700 = blue

Materials to be worked:
- Tool steel (heat-treated)
- Steel castings, stainless steel (INOX)
- Aluminium, copper

Recommendations for use:
- The highest stock removal is achieved by applying the file at a 45° angle

Ordering example:
EAN 4007220**668887**
KFF 0.5 x 4 x 150 A **180**
Please complete the description with the desired grit size.

Description	Grit size				Height [mm]	Width [mm]	Length [mm]	
	180	280	400	700				
	EAN 4007220							
KFF 0,5 x 4 x 150 A	668887	668894	668900	668917	0.5	4	150	1
KFF 1,0 x 4 x 150 A	668924	668931	668948	668955	1	4	150	1
KFF 2,0 x 4 x 150 A	668962	668979	668986	668993	2	4	150	1
KFF 0,5 x 6 x 150 A	669006	669013	669020	669037	0.5	6	150	1
KFF 1,0 x 6 x 150 A	669044	669051	669068	669075	1	6	150	1
KFF 2,0 x 6 x 150 A	669082	669099	669105	669112	2	6	150	1
KFF 1,0 x 10 x 150 A	669129	669136	669143	669150	1	10	150	1



The comprehensive PFERD range includes polishing tools in various diameters and shapes:
- Felt points
- Mounted felt flap wheels
- Felt wheels
- Felt flap wheels
- Cloth rings

Felt points and wheels are available in two types:
- Felt points/wheels without metal insert: They are predominantly used for high-gloss polishing
- Felt points/wheels with metal insert (MS): They are used for increased stock removal when pre-polishing with diamond grinding pastes

Felt points and wheels are significantly harder and less flexible than cloth rings or felt flap wheels and are therefore used where geometric shapes must be preserved exactly. To achieve this, diamond polishing pastes and polishing paste bars are generally used.

Cloth rings and felt flap wheels, in turn, are suitable for polishing highly contoured workpieces due to their flexibility. They are used in conjunction with polishing and grinding pastes.

Advantages:

- Even workpieces with complex geometry can be polished
- PFERD felt tools can be shaped as required

Application examples:

- Pre-polishing and high-gloss polishing of injection moulding tools for plastic parts
- High-gloss polishing of stainless steel (INOX) components
- Pre-polishing of fittings
- Polishing of tungsten carbide cutting blades

Recommendations for use:

- Felt tools achieve their best performance at a recommended cutting speed of 5–10 m/s. This provides an ideal compromise between polishing performance, thermal load on the workpiece and tool wear.
- When changing the polishing paste, the polishing tool must also be changed

Ordering instructions:

When ordering, please state the EAN or the complete description.

Ordering example:
EAN 4007220**295243**
FK ZYA 0610/3

Ordering example explanation:

FK	= Felt point
ZYA	= Cylindrical shape
0610	= Outer dia. D x width T [mm]
3	= Shank dia. S_d [mm]

Safety notes:

- For safety reasons, it is imperative to remain within the stated maximum permitted rotational speed at all times

 = Wear eye protection!

 = Wear a dust mask!

 = Wear hearing protection!

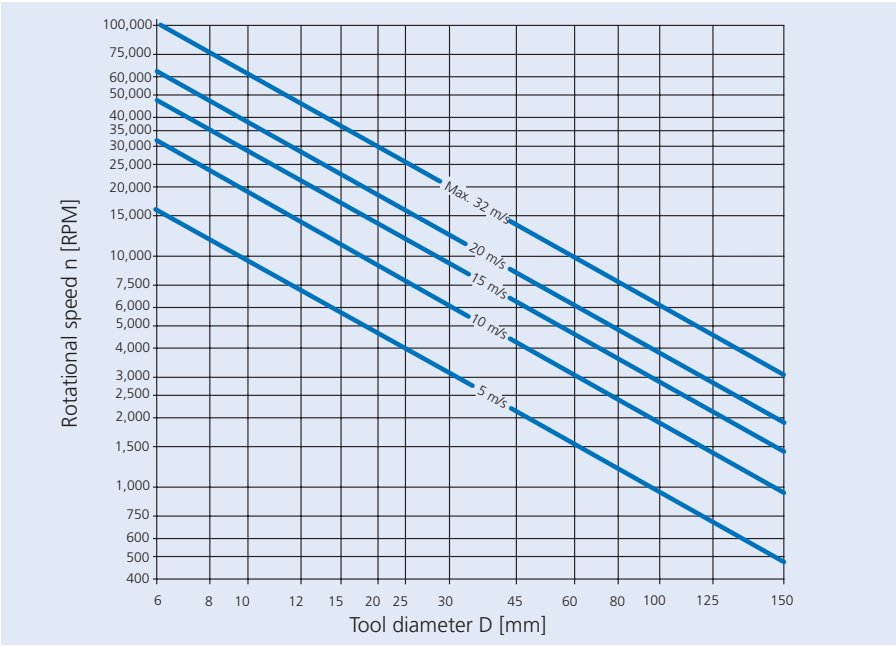
 = Please read the safety instructions!

Cutting speeds

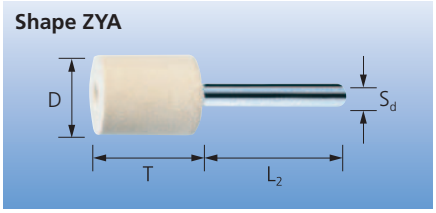
In the diagram, the cutting speeds are represented by blue diagonal lines. The vertical line representing the tool diameter meets the given cutting speed (diagonals). From its point of intersection, proceed horizontally to the left margin, where you will find the corresponding rotational speed [RPM] for the felt tool or cloth ring and the tool drive.

Example:
FK ZYA 2530/6 ST-BO
Cutting speed: 5–10 m/s
Rotational speed: 3,800–7,600 RPM

Example:
TR 10010 ST/10
Cutting speed: 10–15 m/s
Rotational speed: 1,900–2,850 RPM



Shape ZYA



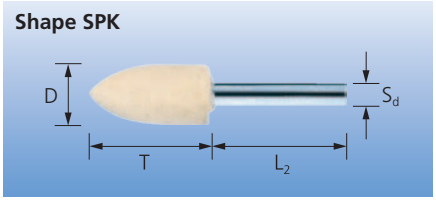
The cylindrical shape ZYA is mainly used peripherally. The type with end hole (ST-BO) is particularly suitable for face-down polishing.

Felt points with metal inserts (MS) are used for increased stock removal in pre-polishing with diamond polishing pastes.

Ordering example:
EAN 4007220**295243**
FK ZYA 0610/3

Description	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
Shank dia. 3 mm						
FK ZYA 0610/3	295243	6 x 10	3 x 40	16,000–32,000	79,500	10
FK ZYA 0810/3	295250	8 x 10	3 x 40	12,000–24,000	59,500	10
FK ZYA 1014/3	153871	10 x 14	3 x 40	10,000–20,000	47,500	10
FK ZYA 1014/3 MS	295304	10 x 14	3 x 40	10,000–20,000	47,500	10
Shank dia. 6 mm						
FK ZYA 1014/6	153772	10 x 14	6 x 40	10,000–20,000	47,500	10
FK ZYA 1520/6 ST-BO	294727	15 x 20	6 x 40	6,000–12,000	31,500	10
FK ZYA 2025/6 ST-BO	153802	20 x 25	6 x 40	5,000–10,000	23,500	10
FK ZYA 2530/6 ST-BO	153888	25 x 30	6 x 40	4,000–8,000	19,000	10
FK ZYA 1520/6 MS ST-BO	295311	15 x 20	6 x 40	6,000–12,000	31,500	10
FK ZYA 2025/6 MS ST-BO	295328	20 x 25	6 x 40	5,000–10,000	23,500	10
FK ZYA 2530/6 MS ST-BO	295335	25 x 30	6 x 40	4,000–8,000	19,000	10

Shape SPK



The conical pointed shape SPK is mainly used for work on radii and contours.

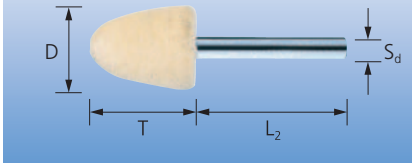
Ordering example:
EAN 4007220**294734**
FK SPK 2025/6

Description	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
Shank dia. 3 mm						
FK SPK 0812/3	295267	8 x 12	3 x 40	12,000–24,000	59,500	10
FK SPK 1018/3	153925	10 x 18	3 x 40	10,000–20,000	47,500	10
FK SPK 1218/3	295274	12 x 18	3 x 40	8,000–16,000	39,500	10
Shank dia. 6 mm						
FK SPK 1018/6	153796	10 x 18	6 x 40	10,000–20,000	47,500	10
FK SPK 1520/6	153932	15 x 20	6 x 40	6,000–12,000	31,500	10
FK SPK 1530/6	153949	15 x 30	6 x 40	6,000–12,000	31,500	10
FK SPK 2025/6	294734	20 x 25	6 x 40	5,000–10,000	23,500	10

The conical shape with radius end KEL is mainly used for work on radii.

Ordering example:
EAN 4007220**153956**
FK KEL 2025/6

Shape KEL



Description	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
FK KEL 1520/6	294741	15 x 20	6 x 40	6,000–12,000	31,500	10
FK KEL 2025/6	153956	20 x 25	6 x 40	5,000–10,000	23,500	10
FK KEL 2530/6	153819	25 x 30	6 x 40	4,000–8,000	19,000	10
FK KEL 3035/6	153826	30 x 35	6 x 40	3,000–6,000	15,500	10

The cylindrical shape with radius end WRC is mainly used for work on small concave contours.

Ordering example:
EAN 4007220**153901**
FK WRC 2025/6

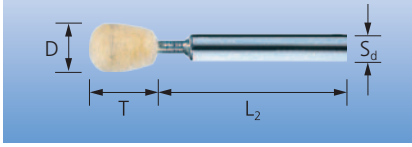
Shape WRC

Description	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
Shank dia. 3 mm						
FK WRC 0812/3	295281	8 x 12	3 x 40	12,000–24,000	59,500	10
FK WRC 1014/3	295298	10 x 14	3 x 40	10,000–20,000	47,500	10
Shank dia. 6 mm						
FK WRC 1520/6	153895	15 x 20	6 x 40	6,000–12,000	31,500	10
FK WRC 2025/6	153901	20 x 25	6 x 40	5,000–10,000	23,500	10
FK WRC 2530/6	153918	25 x 30	6 x 40	4,000–8,000	19,000	10

The oval shape TRE is mainly used for work on small radii.

Ordering example:
EAN 4007220**153789**
FK TRE 1014/6

Shape TRE

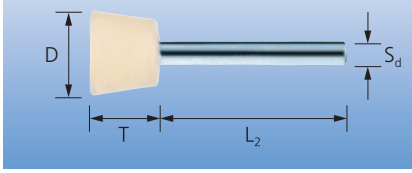


Description	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
FK TRE 1014/6	153789	10 x 14	6 x 40	10,000–20,000	47,500	10

The inverted cone shape WKN is mainly used for work on interior angles.

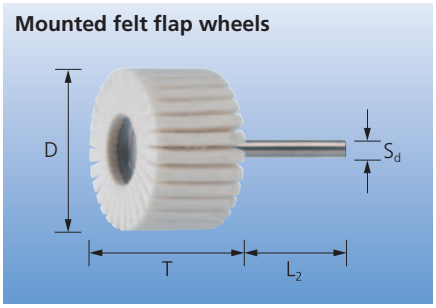
Ordering example:
EAN 4007220**294758**
FK WKN 2016/6

Shape WKN



Description	EAN 4007220	D x T [mm]	S_d x L_2 [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
FK WKN 2016/6	294758	20 x 16	6 x 40	5,000–10,000	23,500	10

Mounted felt flap wheels



Mounted felt flap wheels are used with polishing pastes for pre-polishing and high-gloss polishing of small to medium-sized components.

With its flap design, this polishing tool adapts ideally to the workpiece contours. The thermal load of the workpiece is significantly reduced.

Recommendations for use:
- The hard type is ideal for pre-polishing flat surfaces
- The soft type is optimal for high-gloss polishing and processing workpieces with lots of contours
- If very fine finishes need to be achieved, the two types can be used successively. This requires the use of suitable polishing pastes.

Ordering example:
EAN 4007220**936184**
FLS 4020/6 **W**
Please complete the description with the desired type.

Description	Type		D x T [mm]	S_d x L [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	W (soft)	H (hard)					
	EAN 4007220						
FLS 3020/6	936160	936177	30 x 20	6 x 40	6,300	20,000	5
FLS 4020/6	936184	936191	40 x 20	6 x 40	4,750	15,000	5
FLS 5030/6	936207	936214	50 x 30	6 x 40	3,800	12,000	5
FLS 6040/6	936221	936238	60 x 40	6 x 40	3,150	10,000	5
FLS 8050/6	936245	936252	80 x 50	6 x 40	2,400	7,500	5

Felt wheels

Felt wheels

Felt wheels are mainly used for polishing with the peripheral surface.

Felt wheels with metal inserts (MS) provide increased stock removal in pre-polishing with diamond abrasive pastes.

Ordering note:
Please order arbor separately.

Ordering example:
EAN 4007220**295359**
FK SC 10020/10 MS

Description	EAN 4007220	D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
FK SC 3007/6	153864	30 x 7	6	3,000–6,000	20,000	BO 6/6 3-10	5
FK SC 4509/6	153840	45 x 9	6	2,000–4,000	13,500	BO 6/6 3-10	5
FK SC 6010/6	297605	60 x 10	6	1,500–3,000	10,000	BO 6/6 3-10	5
FK SC 8010/10	154069	80 x 10	10	1,000–2,000	7,500	BO 8/10 6-20	5
FK SC 10020/10	297612	100 x 20	10	900–1,800	6,100	BO 8/10 6-20	1
FK SC 12520/20	297629	125 x 20	20	750–1,500	4,900	BO 12/20 10-50, BO MK 1/20 10-50	1
FK SC 15025/20	297636	150 x 25	20	600–1,200	4,000	BO 12/20 10-50, BO MK 1/20 10-50	1
FK SC 20030/20	297643	200 x 30	20	500–1,000	3,000	BO 12/20 10-50, BO MK 1/20 10-50	1
FK SC 8010/10 MS	295342	80 x 10	10	1,000–2,000	7,500	BO 8/10 6-20	5
FK SC 10020/10 MS	295359	100 x 20	10	900–1,800	6,100	BO 8/10 6-20	1
FK SC 12520/20 MS	295366	125 x 20	20	750–1,500	4,900	BO 12/20 10-50, BO MK 1/20 10-50	1

Felt flap discs are used with polishing pastes for pre-polishing and high-gloss polishing of medium to large-sized components.

With its flap design, this polishing tool adapts ideally to the workpiece contours. The thermal load of the workpiece is significantly reduced.

Recommendations for use:
- The hard type is ideal for pre-polishing flat surfaces
- The soft type is optimal for buffing and work on workpieces with lots of contours
- If very fine finishes need to be achieved, the two types can be used successively. This requires the use of suitable polishing pastes.

Ordering example:
EAN 4007220**936085**
FFS 115/22.23 **W**
Please complete the description with the desired type.

Felt flap discs

Description	Type		D x T [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	
	W (soft)	H (hard)					
	EAN 4007220						
FFS 115/22,23	936085	936139	115 x 22	22.23	1,650	8,350	5
FFS 125/22,23	936146	936153	125 x 22	22.23	1,500	7,650	5

Cloth rings

Cloth rings are used with polishing pastes for pre-polishing and high-gloss polishing.

For very smooth finishes it may be recommended to use several, or even all, types in succession.

Cloth rings are available in four types:
- ST (sisal fabric) = Coarse pre-polishing
- TH (hard cloth) = Pre-polishing
- TW (soft cloth) = High-gloss polishing
- FL (flannel) = High-gloss polishing/ buffing

Recommendations for use:
- Pre-polishing of steel and INOX: cloth rings ST or TH with polishing paste PP 1 VP Fe
- Pre-polishing of aluminium and brass: cloth rings ST or TH with polishing paste PP 2 VP MS
- Pre-polishing of non-ferrous metals: cloth rings ST or TH with polishing paste PP 3 VP NE
- High-gloss polishing of all metals: cloth rings TW or FL with polishing paste PP 4 HGP
- High-gloss polishing of plastics: cloth rings TW or FL with polishing paste PP 5 HGP K

Recommended cutting speeds:
- Cloth rings of type TW and FL achieve their best performance at a recommended cutting speed of 5–15 m/s
- Cloth rings of type ST and TH achieve their best performance at a recommended cutting speed of 10–15 m/s

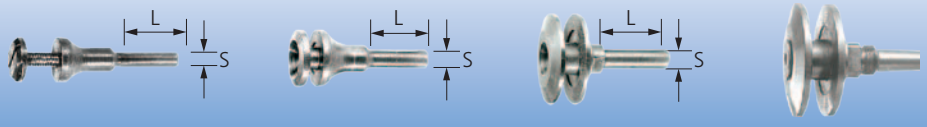
Ordering note:
Please order arbors separately.
TR 12510 type ST: 10 mm centre hole (25.4/6 edge, arbor FR/VR12/25.4)

Ordering example:
EAN 4007220**294185**
TR 12510-20 **TW**
Please complete the description with the desired type.

Cloth rings

Description	Type				D [mm]	Used width [mm]	H [mm]	Recom. speed [RPM]	Max. perm. speed [RPM]	Suitable arbors	
	ST	TH	TW	FL							
	EAN 4007220										
TR 5010-6	-	804315	804322	804339	50	10	6	3,800	12,000	BO 6/6 3-10	5
TR 8010-10	294086	294093	294109	294116	80	10	10	2,500	7,500	BO 8/10 6-20	5
TR 10010-10	294123	294130	294147	294154	100	10	10	1,900	6,100	BO 8/10 6-20	5
TR 12510-20	294161	294178	294185	294192	125	10	20	1,300	4,900	BO 12/20 10-50, BO MK 1/20 10-50	5
TR 15010-20	294208	294215	294222	294239	150	10	20	1,250	4,000	BO 12/20 10-50, BO MK 1/20 10-50	5
TR 20010-20	294246	294253	294260	294277	200	10	20	950	3,000	BO 12/20 10-50, BO MK 1/20 10-50	5

Arbors for felt wheels and cloth rings

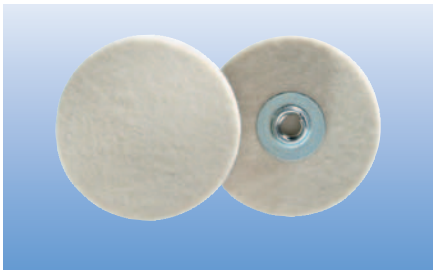


BO 6/6 3-10 | BO 8/10 6-20 | BO 12/20 10-50 | BO MK 1/20 10-50

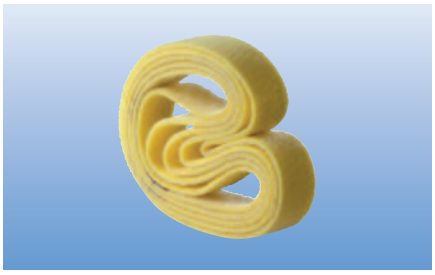
Description	EAN 4007220	S x L [mm]	Clamping width [mm]	Suitable for centre hole dia. [mm]	
BO 6/6 3-10	297650	6 x 25	3–10	6	1
BO 8/10 6-20	297667	8 x 30	6–20	10	1
BO 12/20 10-50	297674	12 x 35	10–50	20	1
BO MK 1/20 10-50	297681	-	10–50	20	1

More polishing tools made of felt can be found in the following product families:

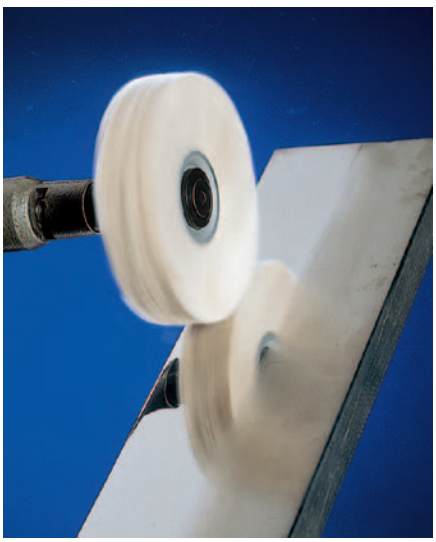
COMBICLICK®:
CC-FR, page 15



COMBIDISC®:
CD-FR, page 33



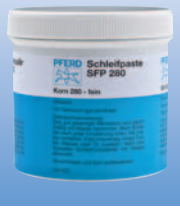
Short abrasive belts:
P-BA, page 41



Oil-soluble grinding compounds with sharp-edged SiC grain are ideal for very fine polishing operations, e.g. regrinding of valve seats or shaft bearings, and in preparation for polishing steps with felt tools and cloth rings.

Ordering example:
EAN 4007220**298664**
SFP 600

Grinding compounds



Description	EAN 4007220	Grit size [µm]	Content [g]	
SFP 90	153963	90	250	1
SFP 150	153970	150	250	1
SFP 280	153987	280	250	1
SFP 360	153994	360	250	1
SFP 600	298664	600	250	1
SFP 800	154007	800	250	1

Diamond polishing pastes are used for work on very hard materials e.g. tungsten carbide and hardened steels. They are used with felt polishing tools or wheels.
The diamond polishing pastes can be diluted or dissolved in water or alcohol. The extremely high concentration ensures quick and economic work.

Available grit sizes:
30 (coarse) = P 500
15 (medium) = P 1200
7 (fine) = P 2500
3 (very fine)
(P = Grit size according to ISO 6344)

Recommendations for use:
- When using diamond polishing pastes, use the coarse paste first
- If extensive surface improvements are required, use several grit sizes one after another, each finer than the previous, cleaning well between pastes
- When changing grit size, make sure that a new, clean abrasive support (e.g. felt point or felt disc) is used

Ordering note:
Grit sizes are indicated in µm.

Diamond polishing pastes

Description	EAN 4007220	Grit size [µm]	Cap colour	Content [g]	
DPP 30-5	294543	30	brown	5	1
DPP 30-20	535981	30	brown	20	1
DPP 15-5	294536	15	blue	5	1
DPP 15-20	535998	15	blue	20	1
DPP 7-5	294505	7	red	5	1
DPP 7-20	536001	7	red	20	1
DPP 3-5	294499	3	green	5	1
DPP 3-20	536018	3	green	20	1

This diluent is used to maintain a constant lubricant layer between the abrasive support and the workpiece in polishing applications.

Recommendations for use:
- 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.

Special diluent for diamond polishing pastes

Description	*	EAN 4007220	Content (ml)	
PSP 125	*	294550	125	1

* The products marked with an asterisk cannot be transported by air, sea or rail.

Polishing paste bars

PFERD provides five different polishing paste bars. They are colour-coded to easily identify the intended application. The interpretation of the colours is given in the table below.

Polishing paste bars are available in bulk and small packs.

Ordering example:
EAN 4007220**294574**
G-PP 2 VP MS

Ordering example explanation:
G = Bulk pack
PP = Polishing paste bar
2 = Number
VP = Pre-polishing
MS = Aluminium + brass

Description	EAN 4007220	Type	Colour	Use for	Content [g]	Dimension B x H x L [mm]	
G-PP 1 VP Fe	294567	pre-polishing	green	Steel + stainless steel (INOX)	1,100	70 x 50 x 140	1
G-PP 2 VP MS	294574	pre-polishing	grey	Aluminium + brass	1,300	70 x 50 x 140	1
G-PP 3 VP NE	294581	pre-polishing	brown	Non-ferrous metals	1,150	70 x 50 x 140	1
G-PP 4 HGP	294598	high-gloss polishing	pink	All metals	1,150	70 x 50 x 140	1
G-PP 5 HGP K	294604	high-gloss polishing	beige	Plastics	1,100	70 x 50 x 140	1
K-PP 1 VP FE	955666	pre-polishing	green	Steel + stainless steel (INOX)	108	25 x 30 x 90	1
K-PP 2 VP MS	955673	pre-polishing	grey	Aluminium + brass	142	25 x 30 x 90	1
K-PP 3 VP NE	955680	pre-polishing	brown	Non-ferrous metals	111	25 x 30 x 90	1
K-PP 4 HGP	955697	high-gloss polishing	pink	All metals	132	25 x 30 x 90	1
K-PP 5 HGP K	955703	high-gloss polishing	beige	Plastics	104	25 x 30 x 90	1

Grinding oils

Grinding oils

Grinding oils are used in combination with coated abrasive tools.

PFERD provides three types:
- Type Fe for steel:
  Provides corrosion protection
- Type NE for non-ferrous metals and stainless steel (INOX):
  Prevents annoying stains on the workpiece, particularly on stainless steel (INOX) surfaces
- Type ALU for aluminium:
  Prevents the clogging of grinding tools

Advantages:
- Longer tool life
- The lubrication and cooling effect prevent excess temperature developing
- Chip loading to the abrasive coating is reduced
- The surface finish is improved

Ordering example:
EAN 4007220**294451**
411/1 NE

Description	*	EAN 4007220	Use for	Content (ml)	
Spray can					
410 Fe	*	147597	Steel	400	1
411 NE	*	147603	Non-ferrous metals, stainless steel (INOX)	400	1
412 ALU	*	791332	Aluminium	400	1
Canister 1 l					
410/1 Fe	-	294444	Steel	1,000	1
411/1 NE	-	294451	Non-ferrous metals, stainless steel (INOX)	1,000	1
412/1 ALU	-	791349	Aluminium	1,000	1
Canister 5 l					
410/5 Fe	-	294468	Steel	5,000	1
411/5 NE	-	294475	Non-ferrous metals, stainless steel (INOX)	5,000	1
412/5 ALU	-	791356	Aluminium	5,000	1

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