# Fine grinding and polishing tools

PFERD

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# Fine grinding and polishing tools
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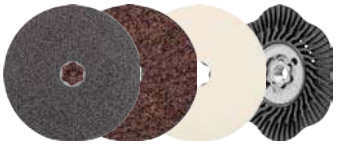
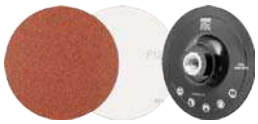


### COMBICLICK



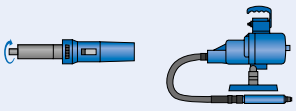
### Fibre discs





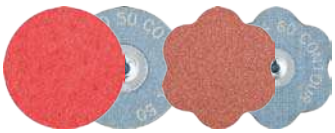
### Self-adhesive discs

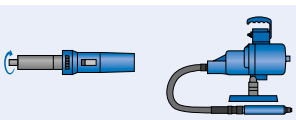




### Self-adhesive abrasive discs

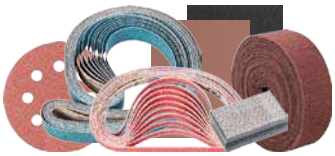


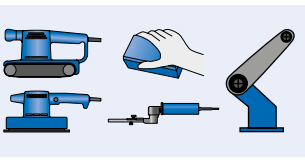




### COMBIDISC grinding tools

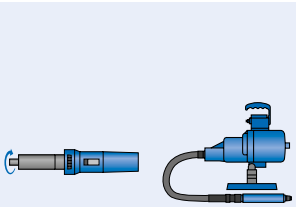






### Flexible abrasives

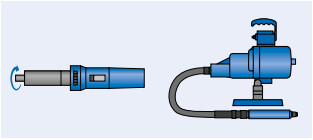




### Abrasive spiral bands and rubber drum holders

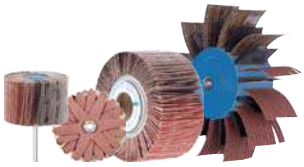


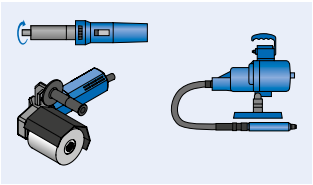
### POLIROLL, POLICO



## POLICAP

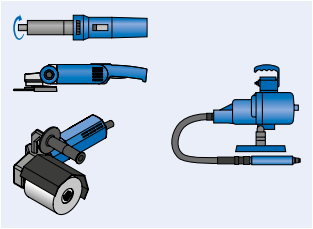






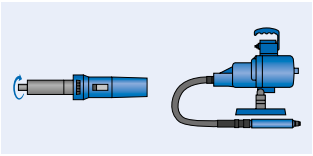
## Flap tools





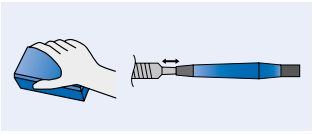
## Non-woven tools





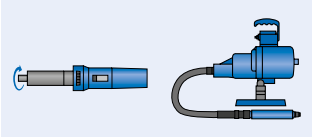
## Poliflex tools





## Ceramic fibre files





## Polishing tools



## Grinding oils and polishing pastes

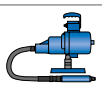


## Tool sets

**Tool sets with drives**
are allocated to the respective tools.

Angle grinder

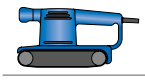
Straight grinder



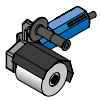
Flexible shaft drive

Eccentric orbital sander

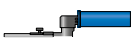
Stationary belt grinder



Belt grinder

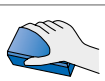


Burnishing machines



Belt grinder

Manual filing machines



Manual application

# Fine grinding and polishing tools
General information

## PFERD quality

Fine grinding and polishing tools from PFERD are developed, manufactured and tested in accordance with the strictest quality requirements.

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

PFERD quality management is certified according to ISO 9001.

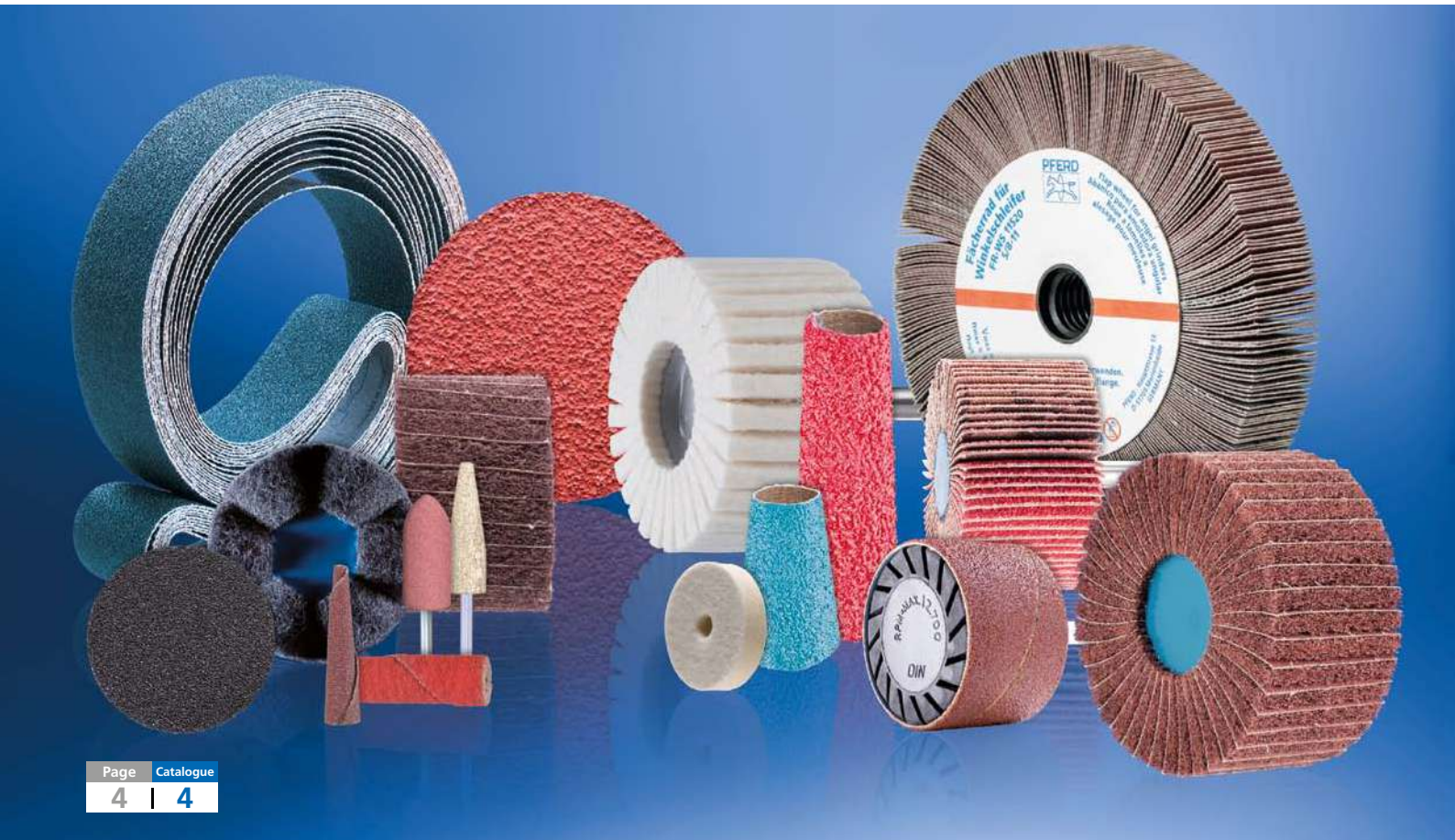
## PFERD customer support

If you have any questions regarding the optimization of your grinding work or solutions to specific application problems, our sales representatives and technical advisers will be happy to help. Just get in touch! Our worldwide sales addresses can be found at: **www.pferd.com**

## Products made to order

If you cannot find the solution for your particular application in our extensive catalogue range, we can produce fine grinding and polishing tools in premium PFERD quality specifically for your application upon request.

We take into account your specifications and wishes, drawings, information on dimensions and shapes, grit sizes and grain types, grain mixtures, in addition to shank diameters and lengths. Please speak to our sales representatives. We will be happy to advise you.



## PFERD packaging

PFERD supplies fine grinding and polishing tools in robust industrial packaging, which protects the tools against damage. You can find details on the packaging unit (PU) in the product tables. Important information such as the item number, description, EAN code, technical specifications and safety notes can be found on the packaging label.

## **PFERD**TOOL-CENTER

You will also find all the important information you require in order to select the most appropriate tool at your local specialist retailer's **PFERD**TOOL-CENTER. The information and theme cards from PFERD provide you with useful tips on tools and applications.

Your local retailer or PFERD sales representative will be glad to answer any questions you might have.


## PFERD PRAXIS brochures and theme brochures

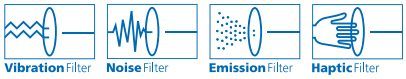
Our PFERD PRAXIS brochures, theme brochures and FOCUS brochures contain a wealth of useful information on material properties, as well as tips and tricks for using PFERD tools.


## **PFERD**VALUE – Your added value with PFERD

Results from the PFERD test laboratories as well as from the product tests by independent testing institutes prove: PFERD tools offer measurable added value.

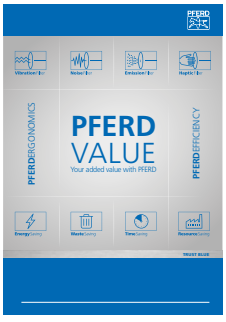
Discover **PFERD**ERGONOMICS and **PFERD**EFFICIENCY:

As part of **PFERD**ERGONOMICS, PFERD offers ergonomically optimized tools and tool drives that contribute to greater safety and working comfort, and thus to health protection.




As part of **PFERD**EFFICIENCY, PFERD offers innovative, high-performance tool solutions and tool drives with outstanding added value.


For more information on this topic, please refer to our brochure "**PFERD**VALUE – Your added value with PFERD".




**All tools and more information:**
**www.pferd.com**

# Fine grinding and polishing tools
The fast way to the best tool

| Work type / Work steps | Face-down grinding<br>Tools with backing pad | Page | | Page | Belt grinding<br>Tools for belt grinders | Page |
|---|---|---|---|---|---|---|
| Changing geometrical profiles  | COMBIDISC<br>■ abrasive discs<br>■ diamond abrasive discs | 31–38<br>37 | Self-adhesive discs | 25–26 | Short belts | 48–51 |
| | COMBIDISC<br>midget fibre discs | 35–36 | Fibre discs | 21–24 | Long belts | 52–54 |
| | COMBIDISC<br>Mini-POLIFAN | 30 | COMBICLICK<br>fibre discs | 13–15 | | |
| Step-by-step fine grinding<br>Reducing roughness depths  | COMBIDISC<br>■ abrasive discs<br>■ non-woven discs | 31–38<br>39–41 | Self-adhesive discs | 25–26 | Short belts | 48–51 |
| | Poliflex<br>discs | 131 | PSA discs | 27 | Long belts | 52–54 |
| | COMBICLICK<br>non-woven discs | 16–17 | Velcro-backed<br>abrasive discs | 61–62 | | |
| | POLINOX<br>unitized discs | 102 | Fibre discs | 21–24 | | |
| | POLINOX-discs<br>PNL/PNZ | 115 | COMBICLICK<br>fibre discs | 13–15 | | |
| Fine grinding<br>Very fine grinding  | Grinding oils | 155 | Fibre discs | 21–24 | Grinding oils | 155 |
| | COMBIDISC<br>■ abrasive discs<br>■ non-woven discs | 31–38<br>39–41 | PSA discs | 27 | Short belts | 48–51 |
| | Poliflex<br>discs | 131 | COMBICLICK<br>fibre discs | 13–15 | Long belts | 52–54 |
| | POLINOX<br>unitized discs | 102 | | | Short belts,<br>non-woven | 50 |
| Cleaning  | COMBIDISC<br>non-woven discs | 39–41 | POLIVLIES<br>self-adhesive discs | 122 | Short belts,<br>non-woven | 50 |
| | COMBIDISC<br>POLICLEAN<br>discs | 38 | POLICLEAN<br>discs | 125 | | |
| | COMBICLICK<br>non-woven discs | 16–17 | | | | |
| Creating visual effects  | COMBIDISC<br>non-woven discs | 39–41 | POLIVLIES<br>self-adhesive discs | 122 | Short belts,<br>non-woven | 50 |
| | COMBIDISC<br>TX discs | 42 | Marbling tools | 120, 132 | | |
| | POLIVLIES<br>flap discs | 121 | Poliflex<br>structuring tools | 133–134 | | |
| | POLINOX discs<br>PNL/PNZ | 115 | COMBICLICK<br>non-woven discs | 16–17 | | |
| Polishing  | COMBIDISC<br>felt discs | 42 | Felt flap wheels | 149 | Short belts,<br>felt | 51 |
| | COMBICLICK<br>felt discs | 18 | | | | |

## Peripheral grinding
Mounted tools, tools with arbor holes

## Manual grinding

# Fine grinding and polishing tools
Surface roughness – influencing factors and reference values

## Factors influencing surface roughness:

**Abrasive:**
- The larger the grit, the rougher the surface finish will be.
- Aluminium oxide, ceramic oxide grain and zirconia alumina achieve similar levels of surface roughness.
- Workpieces which are machined with silicon carbide exhibit a slightly finer surface finish.

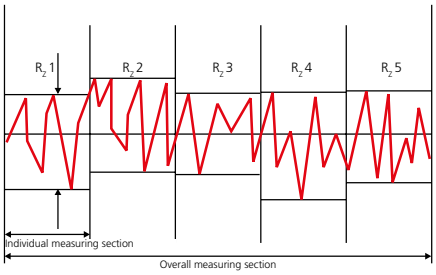
**Material to be worked:**
- The softer the material to be machined, the coarser the finished surface will be when using the same grit sizes.
- Adding grease or lubricant will achieve a slightly finer surface finish.

**Work parameters:**
- The relationship between the cutting speed and feed rate has the following impact:
  - Increasing the cutting speed slightly improves the surface quality.
  - Reducing the speed of the feed rate makes the surface quality slightly finer.
- The contact pressure only has a minor influence on the surface roughness.

## There is a differentiation between the following roughness depths:

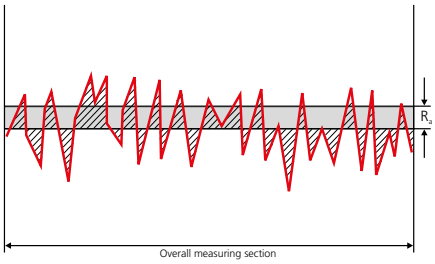
The **individual roughness depth $R_{zi}$** is the sum of the height of the largest profile peak and the depth of the largest profile trough within an individual measuring section.

The **roughness depth $R_z$** is the mean value of the individual roughness depths ($R_{zi}$) of consecutive individual measuring sections.




The **roughness depth $R_{max}$** is the largest individual roughness depth within the overall measuring section.

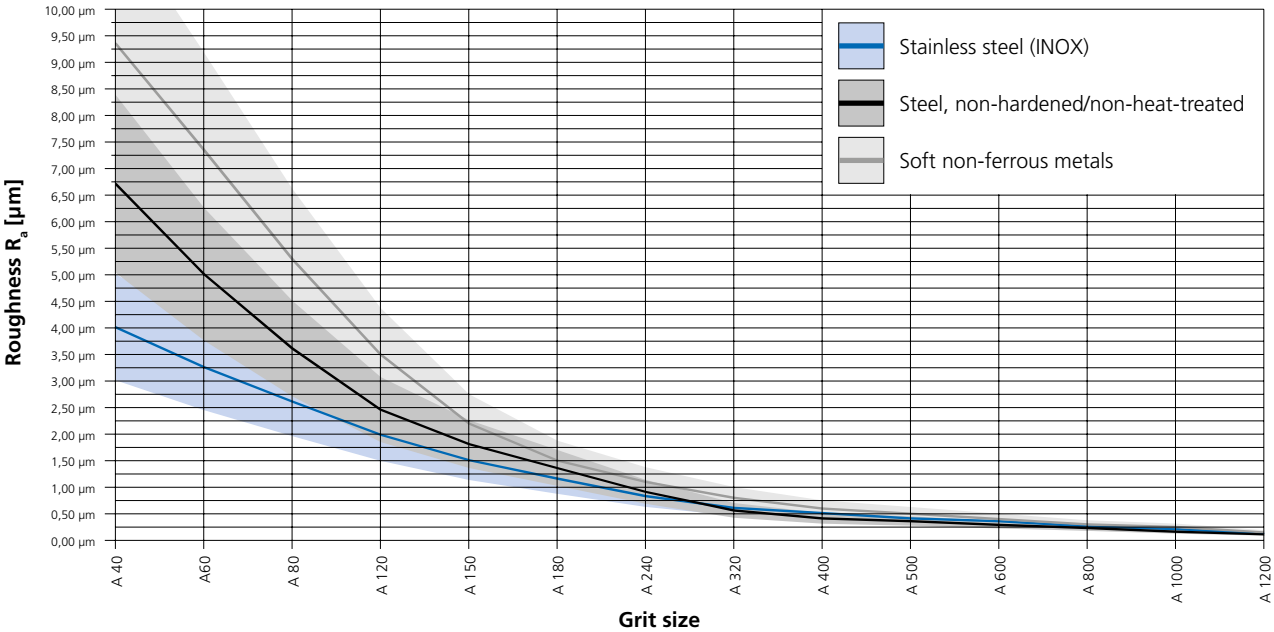
The **average roughness value $R_a$** is the arithmetic mean value of the sum of all profile values within the roughness profile.




**Reference values for roughness depths in the case of different applications**

| Application | Roughness depth |
|---|---|
| Coarse grinding: Grit sizes 24 to 150 | $R_a$ = 0.70 to 12 µm |
| Fine grinding: Grit sizes 180 to 400 | $R_a$ = 0.20 to 0.70 µm |
| Very fine grinding: Grit sizes 500 to 1,200 | $R_a$ = 0.05 to 0.20 µm |
| Polishing:<br>Step 1:<br>Step 2:<br>Step 3: | <br>$R_a$ = 0.10 to 0.20 µm<br>$R_a$ = 0.04 to 0.10 µm<br>$R_a$ = < 0.01 µm |
| Structuring: Surfaces ground | $R_a$ = 0.20 to 0.70 µm |
| Satinizing/ matt finishing: With non-woven abrasive | $R_a$ = 0.10 to 0.70 µm |

## Surface roughness of different materials after machining with tools using coated abrasives



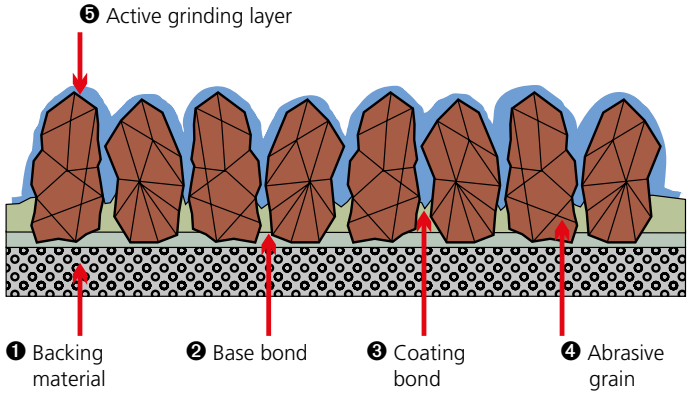
## Structure of coated abrasives

PFERD supplies a wide range of tools with coated abrasives for machining a variety of workpiece geometries and materials:

- COMBICLICK fibre discs
- Fibre discs
- COMBIDISC abrasive discs
- Abrasive spiral bands and abrasive belts
- Mounted and unmounted flap wheels
- Abrasive sheets and shop rolls
- POLIROLL cartridge rolls and POLICO abrasive cones
- Velcro-backed abrasive discs
- Self-adhesive abrasive discs (PSA)

You can find additional PFERD tools with coated abrasives in catalogue section 6.

Coated abrasives are used for both wet and dry grinding.






### ❶ Backing material

Bond and abrasive grain are applied to the base. The backing materials available for selection differ in their properties, such as tear strength, flexibility and wear. The respective grinding tool is adapted to the requirements of the intended application by choosing the appropriate base material. The PFERD range is sub-divided into three groups:

**Paper:**
The main areas of application for coated abrasives with a paper base are in the woodworking industry and in trade, e.g. among carpenters, painters and decorators. Coated abrasives with a paper base are rarely used for industrial metalwork.
Abrasives for manual grinding are predominantly made from paper with a surface weight of 70 to 100 g/m². Heavier paper types are used to make abrasives for machine applications involving wide and narrow belts alike.

**Cloth:**
Coated abrasives with a cloth base are predominantly used for metalwork.

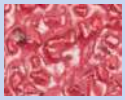
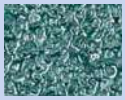
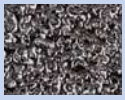
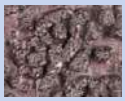
**Vulcanized fibre:**
When adapted to the corresponding applications, vulcanized fibre in various thicknesses is predominantly used for making fibre grinding discs. Vulcanized fibre is a very sturdy, robust backing material, and also very wear-resistant.

### ❷ + ❸ Bond

When manufacturing coated abrasives, different resin bonds are used to fix the abrasive grain to the backing material. First, the backing material is coated with the base bond (❷). After this, the abrasive grain is evenly scattered over the surface and aligned to achieve higher aggressiveness with the help of special procedures. The coating bond (❸) ensures that the abrasive grain is fixed in place and protects the grain against the forces and loads resulting from the grinding process.

## ❹ Abrasive grain

Choosing the right abrasive grain has a significant influence on surface quality and profitability.
The most common materials for abrasive grain are:

| | | |
|---|---|---|
| **Aluminium oxide A** |  | Numerous types of aluminium oxide are used as abrasives. These may be present in molten or sintered form. The hardness and toughness can be influenced by special manufacturing procedures or additives. Standard types of aluminium oxide and a "sharp-edged" grain shape are predominantly used for coated abrasives. |
| **Ceramic oxide grain CO** |  | For sintered aluminium oxides, a differentiation is made between sintered bauxite aluminium oxides and sol-gel aluminium oxides. Sol-gel aluminium oxides are predominantly used for coated abrasives in the form of abrasive ceramic grain. This state-of-the-art abrasive is used for numerous applications thanks to its high toughness and good self-sharpening qualities. |
| **Zirconia alumina Z** |  | Zirconia alumina is a fused mixture of aluminium oxide and zirconium oxide. In comparison to aluminium oxides, zirconia alumina exhibits lower hardness but greater toughness. The high proportion of zirconium oxide results in an extremely powerful self-sharpening effect and contributes to outstanding stock removal rates with cool grinding and a long tool life. |
| **Silicon carbide SiC** |  | Silicon carbide is synthetically manufactured abrasive grain which is very sharp-edged, with low toughness and very high hardness. It is particularly suitable for work on titanium, aluminium, bronze, stone and plastics.<br>Ideally suited for use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components. |
| **Diamond grain D** |  | Diamond grain is the hardest abrasive. It consists of pure carbon in a crystalline structure. For grinding tools, the diamonds used are generally synthetic, produced at very high temperatures and under high pressure. The properties of diamond grain can be adapted for use in grinding tools through various synthesis conditions. |
| **Compact grain CK** |  | In the case of compact grain, individual grains are built up as granulate with a bond system. Each individual grain of granulate is one solid unit, in which numerous abrasive grains made from aluminium oxide or silicon carbide (SiC) are joined together. Used abrasive grains are torn out of this compound structure by the forces resulting from the grinding, and expose sharp abrasive points in doing so. This guarantees a long tool life with a constant surface quality. |
| **VICTO**GRAIN |  | **VICTO**GRAIN products are some of the most effective grinding tools in the world.<br>PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance.<br><br>The **VICTO**GRAIN abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As such, the user benefits from an efficient machining process with fast working, a long tool life, less heat build-up in the workpiece, and a lower power output required for the tool drive.<br><br>The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides. This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency.<br><br>The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off.<br><br>By combining all these properties together, users benefit from optimal, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness. |

**Grit sizes**
The various grit sizes for coated abrasives are specified in ISO 6344 and have been adopted for FEPA standards:

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

## ❺ Active grinding layer

The use of an active grinding layer considerably increases the stock removal rate and reduces the workpiece temperature.
This is especially advantageous for materials with poor heat-conducting properties, such as stainless steel (INOX).
PFERD tools with an active grinding layer feature the additional "COOL" label in their item description.

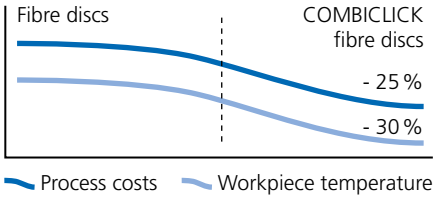
## The patented quick-mounting and cooling system from PFERD is suitable for use with fibre, non-woven and felt discs.

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

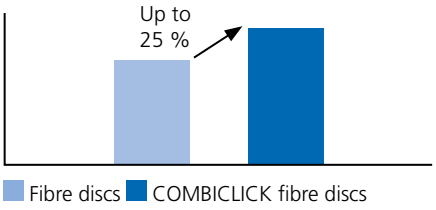
The special geometry of the cooling slots ensures high air throughput, which in turn considerably reduces the thermal load on the abrasive material and the workpiece.

Compared to conventional tools, the quick-mounting system, the robust holder, the safe fixing of the tool and the integrated cooling system together achieve a workpiece temperature that is 30 % lower, a stock removal rate that is 25 % higher, a tool life that is 30 % longer and better exploitation of the abrasive material.

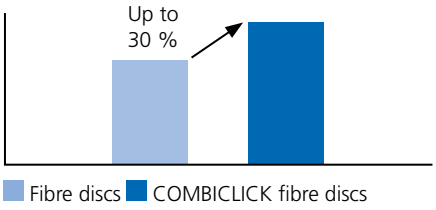
**Lower process costs and workpiece temperature**




**Higher stock removal rate**




**Longer tool life**




## Advantages:

**System**

Very easy and convenient handling.

**Clamping**

Extremely fast and simple tool changing reduces process costs.

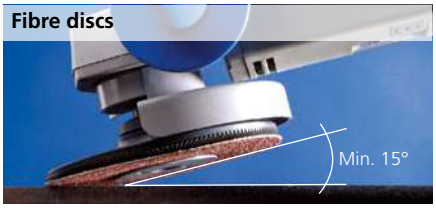
**Cooling effect**

Very good cooling of the tool and workpiece.

**Flexible grinding**

Particularly soft and flexible grinding properties for face-down grinding with fibre discs of diameter 125 mm.

**A very low angle to the workpiece is possible with COMBICLICK!**

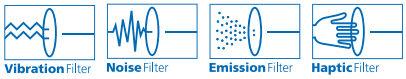




Using COMBICLICK helps to avoid scratches caused by protruding clamping pieces, and exploits the abrasive material that is available.

## PFERDVALUE:

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




**PFERD**EFFICIENCY recommends COMBICLICK for long, fatigue-free and resource-saving work, with perfect results in the shortest possible time. The patented quick-mounting system reduces tool change and setup times.


GERMAN FEDERAL AWARD
FOR OUTSTANDING INNOVATION IN THE CRAFTS SECTOR
INTERNATIONALE HANDWERKSMESSE
*(INTERNATIONAL CRAFTS FAIR)*

# COMBICLICK
## General information – Fibre discs

The wide range of COMBICLICK fibre discs offers the best tool for any grinding application, from coarse to fine.

### Advantages:

- Innovative quick-mounting system guarantees convenient handling and cool grinding.
- High profitability thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives.

### Applications:

- Levelling
- Deburring
- Surface work
- Work on edges
- Work on weld seams
- Step-by-step fine grinding

### Recommendations for use:

- Use COMBICLICK fibre discs with COMBICLICK backing pads on commercially available angle grinders.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.
- For particularly flexible performance when face-down grinding, use fibre discs with a diameter of 125 mm.

### Matching tool drives:

- Angle grinders
- Cordless angle grinders

### Ordering notes:

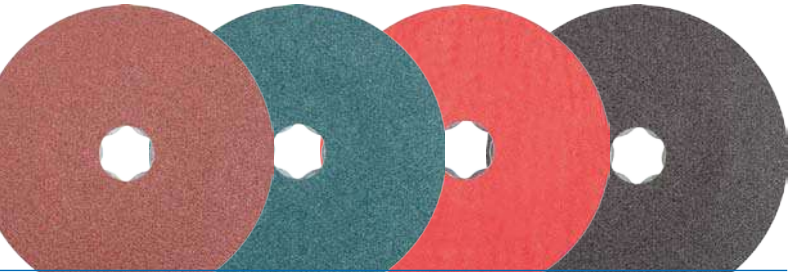
- Please order COMBICLICK backing pads separately. More detailed information and ordering data for backing pads can be found on page 19.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**722275**
  CC-FS 125 A-COOL **60**
- **Ordering example explanation:**
  CC-FS = COMBICLICK fibre disc
  125 = Outer diameter D [mm]
  A = Abrasive
  COOL = Bond type
  **60** = Grit size

### Safety notes:

- The maximum permitted peripheral speed is 80 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

### Accessories:

- COMBICLICK backing pads



### The fast way to the best tool

| Material group ▼ | | Abrasive ▶ | Aluminium oxide A | Zirconia Alumina Z | Ceramic oxide grain CO | VICTO-GRAIN COOL | Silicon carbide SiC | Aluminium oxide A-COOL | Ceramic oxide grain 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-based and cobalt-based alloys | | ❍ | ❍ | ● | | | ● |
| Cast iron | Grey cast iron, white cast iron | Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS) | ● | ❍ | ● | | | | |
| Plastics, other materials | | Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork | ● | | | | ● | | |

● = Highly suitable ❍ = Suitable

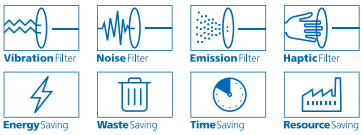
## Aluminium oxide A type

For universal grinding work from coarse to fine grinding in industry and professional trades.


**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

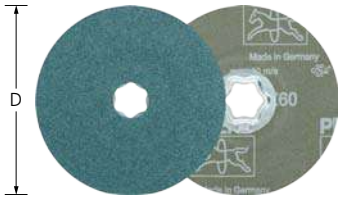
**PFERD**VALUE:




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

## Zirconia alumina Z type

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

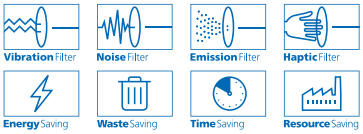



**Abrasive:**
Zirconia alumina Z

**Recommendations for use:**
- Use powerful angle grinders in the case of a higher contact pressure.

**Ordering notes:**
- Please complete the description with the desired grit size.

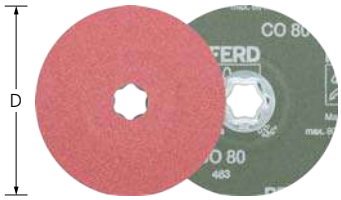
**PFERD**VALUE:




| D [mm] | Grit size | | | | | | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | 24 | 36 | 50 | 60 | 80 | 120 | | | |
| | EAN 4007220 | | | | | | | | |
| 115 | - | 722572 | 722596 | 763230 | 722619 | 722633 | 13,300 | 25 | CC-FS 115 Z ... |
| 125 | 722640 | 722657 | 722664 | 722671 | 722688 | 722695 | 12,200 | 25 | CC-FS 125 Z ... |

## Ceramic oxide grain CO type

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

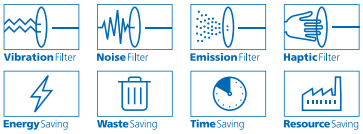



**Abrasive:**
Ceramic oxide grain CO

**Recommendations for use:**
- Use powerful angle grinders.

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:




| D [mm] | Grit size | | | | | | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | 24 | 36 | 50 | 60 | 80 | 120 | | | |
| | EAN 4007220 | | | | | | | | |
| 115 | 763247 | 763254 | 763261 | 763278 | 763285 | 763292 | 13,300 | 25 | CC-FS 115 CO ... |
| 125 | 722084 | 722169 | 722183 | 722206 | 722237 | 722268 | 12,200 | 25 | CC-FS 125 CO ... |


## Silicon carbide SiC type

For universal grinding work on components made from aluminium, copper, bronze, titanium and fibre-reinforced plastics.

Particularly recommended for use on titanium alloys.

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

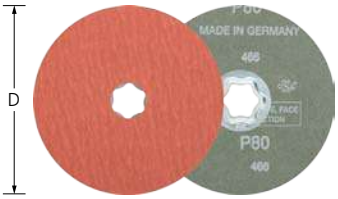
**Abrasive:**
Silicon carbide SiC

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter
Energy Saving · Waste Saving · Time Saving · Resource Saving

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




## Aluminium oxide A-COOL type

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

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

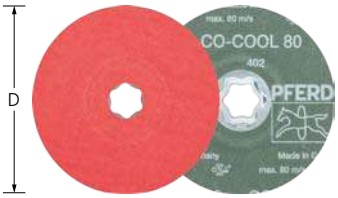
**Abrasive:**
Aluminium oxide A-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter
Energy Saving · Waste Saving · Time Saving · Resource Saving

| D [mm] | Grit size 50 | 60 | 80 | 120 | 150 | 180 | 220 | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | EAN 4007220 | | | | | | | | | |
| 115 | - | 722176 | 722190 | 722213 | 722220 | - | 722244 | 13,300 | 25 | CC-FS 115 A-COOL ... |
| 125 | 722251 | 722275 | 722299 | 722312 | 722329 | 722343 | 722367 | 12,200 | 25 | CC-FS 125 A-COOL ... |




## Ceramic oxide grain CO-COOL type

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

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

**Abrasive:**
Ceramic oxide grain CO-COOL

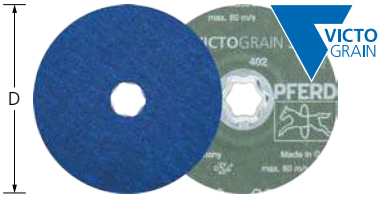
**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter
Energy Saving · Waste Saving · Time Saving · Resource Saving

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

## VICTOGRAIN-COOL type




For extremely aggressive grinding with an extremely long tool life and an outstanding stock removal rate on steels and materials which are hard or have poor heat-conducting properties.

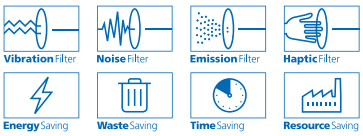
Outstanding, constant high performance thanks to the **VICTO**GRAIN abrasive grain.

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

**Abrasive:**
**VICTO**GRAIN-COOL

**Recommendations for use:**
- Use powerful angle grinders.

**PFERD**VALUE:




| D [mm] | EAN 4007220 | Max. RPM | | Description |
|---|---|---|---|---|
| 100 | 109267 | 15,300 | 25 | CC-FS 100 VICTOGRAIN-COOL 36 |
| 115 | 109250 | 13,300 | 25 | CC-FS 115 VICTOGRAIN-COOL 36 |
| 125 | 109274 | 12,200 | 25 | CC-FS 125 VICTOGRAIN-COOL 36 |
| 180 | 109281 | 8,500 | 25 | CC-FS 180 VICTOGRAIN-COOL 36 |

## High-performance tools with VICTOGRAIN abrasive grain

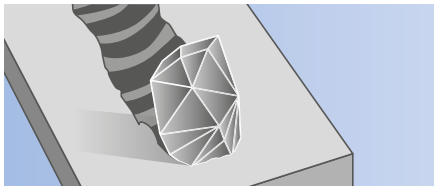
**VICTO**GRAIN products are some of the most effective grinding tools in the world. PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance.

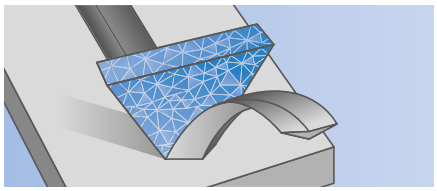
The **VICTO**GRAIN abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As such, the user benefits from an efficient machining process with
- fast working,
- a long tool life,
- less heat build-up in the workpiece, and
- a lower power output required for the tool drive.

The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides. This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency.

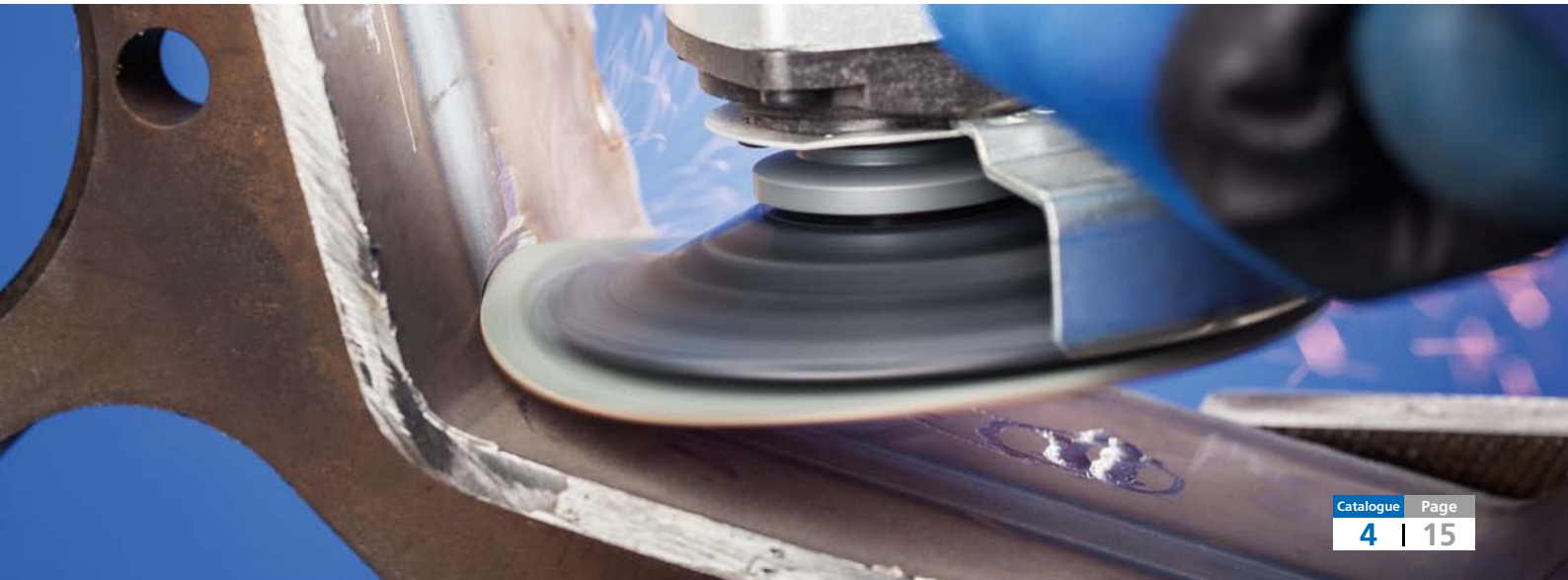
The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off.

By combining all these properties together, users benefit from optimal, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.


Conventional abrasive grain


**VICTO**GRAIN abrasive grain


The **VICTO**GRAIN abrasive grain is optimally aligned



COMBICLICK non-woven discs are used for face-down grinding.
They are available in the following types: VRW (soft), VRH (hard) and PNER.

## Advantages:

- Innovative quick-mounting system guarantees convenient handling and cool grinding.

## Materials that can be worked:

- Can be used on nearly all materials.

## Applications:

- Roughening
- Deburring
- Surface work
- Cleaning
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

## Recommendations for use:

- Use COMBICLICK non-woven discs with COMBICLICK backing pads on speed-adjustable angle grinders.

## Matching tool drives:

- Angle grinders
- Cordless angle grinders

## Ordering notes:

- Please order COMBICLICK backing pads separately. More detailed information and ordering data for backing pads can be found on page 19.
- When ordering, please state the EAN or the full description.

- **Ordering example:**
  EAN 4007220**935873**
  CC-VRH 115 A **180 M**
- **Ordering example explanation:**
  CC-VRH = COMBICLICK non-woven discs, hard type
  115 = Outer diameter D [mm]
  A = Abrasive
  **180 M** = Grit size

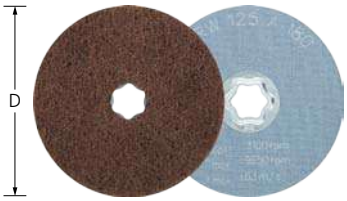
## Safety notes:

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

## Accessories:

- COMBICLICK backing pads

# Non-woven discs




## Soft type CC-VRW

Suitable for very fine grinding on moderate and coarse surfaces and contours, and for cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces. Highly open structure.

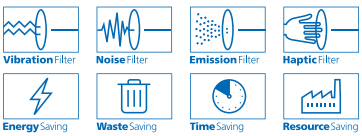
**Advantages:**
- Can be used for wet and dry working.
- The open structure and high flexibility of the non-woven material prevents tool clogging.

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

**Recommendations for use:**
- For the best results, use 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 notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:




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

## Hard type CC-VRH


Suitable for universal work on moderate and coarse metal surfaces, e.g. removal of rough grinding traces, removal of oxidation and light deburring work.
Achieve matt and satin-finished surfaces.

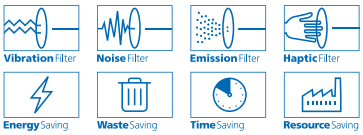
**Advantages:**
- Little wear due to high tear strength.
- The open structure of the non-woven material prevents tool clogging.

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

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

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:




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

## CC-PNER type


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

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

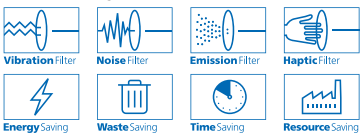
**Advantages:**
- High edge strength thanks to extreme durability.
- Can be profiled as desired, enabling optimal adjustment to the contour.

**Abrasive:**
Aluminium oxide A
Silicon carbide SiC

**Recommendations for use:**
- For the best results, use at a recommended cutting speed of 15–35 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

**Ordering notes:**
- Please complete the description with the desired type.
- Further information on PNER type non-woven products can be found on pages 99–100.

**PFERD**VALUE:




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

# COMBICLICK
## General information – Felt discs

COMBICLICK felt discs are used for face-down grinding on medium-sized and large surfaces. They are supplied in various diameters.

### Advantages:

- Innovative quick-mounting system guarantees convenient handling with fast tool changes.

### Materials that can be worked:

- Can be used on nearly all materials.

### Applications:

- Polishing

### Recommendations for use:

- Use COMBICLICK felt discs with COMBICLICK backing pads on speed-adjustable angle grinders.
- For best performance, use with 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, use a brand-new felt disc.

### Matching tool drives:

- Angle grinders
- Cordless angle grinders

### Ordering notes:

- Please order COMBICLICK backing pads separately. More detailed information and ordering data for backing pads can be found on page 19.
- Please order grinding and polishing pastes separately. Detailed information and ordering data for grinding and polishing pastes can be found on pages 153–155.

### Safety notes:

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

### Accessories:

- COMBICLICK backing pads
- Grinding and polishing pastes


## Felt discs CC-FR

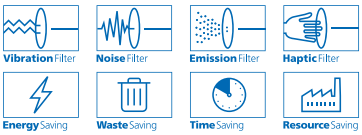

### CC-FR type

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

**Advantages:**

- High economic efficiency due to very long tool life.
- Focused working over the entire lifespan thanks to high dimensional stability.

**PFERD**VALUE:




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

## CC-GT type

With this backing pad, COMBICLICK tools can be used on commercially available angle grinders. The different hardnesses are colour-coded:
CC-GT (medium) = black
CC-H-GT (hard) = blue

**Advantages:**
- The geometry of the cooling slots significantly reduces the thermal load.
- High economic efficiency due to minimized tool change times.

**Recommendations for use:**
- Type CC-H-GT is mainly used to work on stainless steel (INOX). It features very high edge strength, which enables a higher contact pressure.

**Safety notes:**
- The maximum 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 the backing pad from overstretching.

**PFERD**VALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

| Suitable for CC diameter [mm] | Thread | Hardness | Suitable for machine types | EAN 4007220 | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|
| 100 | M10 | medium | Angle grinders 100, spindle M10 | 836200 | 15,300 | 1 | CC-GT 100 M10 |
| 115, 125 | M14 | medium | Angle grinders 115 / 125, spindle M14 | 725764 | 13,300 | 1 | CC-GT 115-125 M14 |
| | 5/8 | medium | Angle grinders 115 / 125, spindle 5/8" | 725771 | 13,300 | 1 | CC-GT 115-125 5/8 |
| | M14 | hard | Angle grinders 115 / 125, spindle M14 | 835869 | 13,300 | 1 | CC-H-GT 115-125 M14 |
| | 5/8 | hard | Angle grinders 115 / 125, spindle 5/8" | 841419 | 13,300 | 1 | CC-H-GT 115-125 5/8 |
| 180 | M14 | medium | Angle grinders 180, spindle M14 | 725788 | 8,500 | 1 | CC-GT 180 M14 |
| | 5/8 | medium | Angle grinders 180, spindle 5/8" | 725795 | 8,500 | 1 | CC-GT 180 5/8 |

4

## Set

## CC-SET

Set for surface work, from coarse to mirror-polished. The sets with a diameter of 125 mm are especially flexible around the edge.

**Contents:**
- 3 pcs. each of COMBICLICK fibre discs:
  - CC-FS CO-COOL 36
  - CC-FS CO-COOL 120
  - CC-FS A-COOL 220
- 1 pc. each of COMBICLICK non-woven disc:
  - CC-VRH A 240 F
  - CC-VRH A 180 M
  - CC-VRH A 100 G
  - CC-VRW A 280
  - CC-VRW A 180
  - CC-VRW A 100
  - CC-PNER W SiC F
- 1 pc. each of:
  - Universal polishing paste
  - COMBICLICK felt disc CC-FR
  - COMBICLICK backing pad CC-GT M14 or 5/8-11

**Advantages:**
- Getting to know and testing the comprehensive system.
- Coordinated selection of the most common versions.

**Abrasive:**
Aluminium oxide A
Ceramic oxide grain CO-COOL
Silicon carbide SiC

**PFERD**VALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Energy Saving · Waste Saving · Time Saving · Resource Saving

| D [mm] | Thread | EAN 4007220 | | Description |
|---|---|---|---|---|
| 115 | M14 | 955345 | 1 | CC-SET 115 M14 |
| | 5/8-11 | 955406 | 1 | CC-SET 115 5/8-11 |
| 125 | M14 | 955369 | 1 | CC-SET 125 M14 |
| | 5/8-11 | 955413 | 1 | CC-SET 125 5/8-11 |

# Fibre discs
## General information

The wide range of fibre discs offers the best tool for any grinding application, from coarse to fine.
PFERD fibre discs are manufactured in compliance with ISO 16057 in shape A1, type F, under the designation "vulcanized fibre disc".

### Advantages:

- High profitability thanks to long tool life and very high stock removal rate.
- Consistent surface finish thanks to high-quality abrasives.
- Optimum adaptation to contours thanks to high flexibility.

### Applications:

- Levelling
- Deburring
- Surface work
- Work on edges
- Work on weld seams
- Step-by-step fine grinding

### Recommendations for use:

- Use fibre discs conforming to ISO 15636 with backing pads on commercially available angle grinders.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

### Matching tool drives:

- Angle grinders
- Cordless angle grinders

### Ordering notes:

- Please order backing pads separately. More detailed information and ordering data for backing pads can be found on page 24.
- When ordering, please state the EAN or the full description.

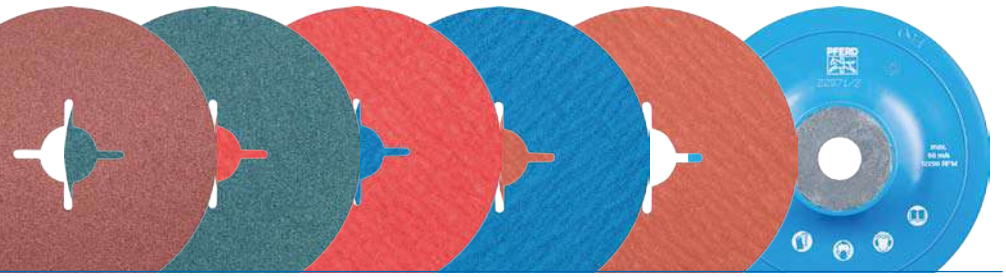
- **Ordering example:**
  EAN 4007220**696354**
  FS 115-22 A-COOL **60**
- **Ordering example explanation:**
  FS = Fibre disc
  115 = Outer diameter D [mm]
  22 = Centre hole diameter H [mm]
  A = Abrasive
  COOL = Bond type
  **60** = Grit size

### Safety notes:

- The maximum permitted peripheral speed is 80 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

### Accessories:

- Backing pads



### The fast way to the best tool

| Material group ▼ | | Abrasive ▶ | Aluminium oxide A | Zirconia Alumina Z | Ceramic oxide grain CO | VICTO-GRAIN COOL | Aluminium oxide A-COOL | Zirconia Alumina Z-COOL | Ceramic oxide grain 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-based and cobalt-based alloys | | ❍ | ❍ | ● | | ● | ● |
| Cast iron | Grey cast iron, white cast iron | Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS) | ● | ❍ | ● | | | | |
| Plastics, other materials | | Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork | ● | | | | | | |

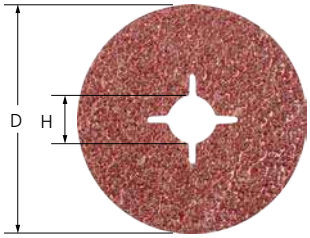
● = Highly suitable ❍ = Suitable

## Aluminium oxide A type

For universal grinding work from coarse to fine grinding in industry and professional trades.

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.




| D [mm] | H [mm] | Grit size | | | | | | | | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 16 | 24 | 36 | 50 | 60 | 80 | 100 | 120 | | | |
| | | EAN 4007220 | | | | | | | | | | |
| 100 | 16 | 344477 | 228012 | 227442 | 301630 | 228319 | 228326 | 228043 | 306444 | 15,300 | 25 | FS 100-16 A ... |
| 115 | 22 | 164914 | 164952 | 165003 | 500910 | 165058 | 165102 | 165157 | 500934 | 13,300 | 25 | FS 115-22 A ... |
| 125 | 22 | 164921 | 164969 | 165010 | 696286 | 165065 | 165119 | 165164 | 500941 | 12,200 | 25 | FS 125-22 A ... |
| 150 | 22 | - | - | 165027 | - | 165072 | 165126 | - | - | 10,200 | 25 | FS 150-22 A ... |
| 180 | 22 | 164945 | 164983 | 165034 | 696323 | 165089 | 165133 | 165188 | 165201 | 8,500 | 25 | FS 180-22 A ... |

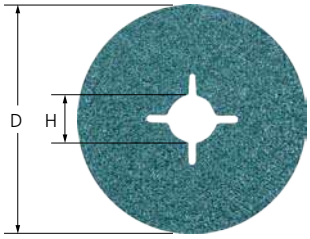
## Zirconia alumina Z type

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

**Abrasive:**
Zirconia alumina Z

**Recommendations for use:**
- Use powerful angle grinders in the case of a higher contact pressure.

**Ordering notes:**
- Please complete the description with the desired grit size.




| D [mm] | H [mm] | Grit size | | | | | | | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 24 | 36 | 50 | 60 | 80 | 100 | 120 | | | |
| | | EAN 4007220 | | | | | | | | | |
| 100 | 16 | 832943 | 832950 | 832967 | 750636 | 832974 | 750643 | 832981 | 15,300 | 25 | FS 100-16 Z ... |
| 115 | 22 | 216569 | 216576 | 216583 | 216590 | 216606 | 696606 | 696613 | 13,300 | 25 | FS 115-22 Z ... |
| 125 | 22 | 216613 | 216620 | 216637 | 216644 | 216651 | 696620 | 696637 | 12,200 | 25 | FS 125-22 Z ... |
| 180 | 22 | 216668 | 216675 | 216682 | 216699 | 216705 | 696644 | 696651 | 8,500 | 25 | FS 180-22 Z ... |

## Ceramic oxide grain CO type

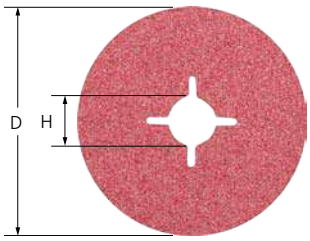
For aggressive grinding with a very high stock removal rate and very long tool life.
Consistently high performance due to self-sharpening ceramic oxide grain.

The ceramic oxide grain is specifically designed for work on hard materials and layers.

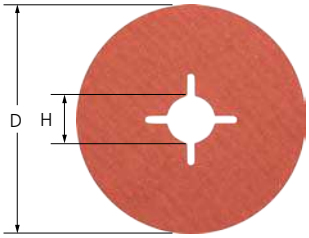
**Abrasive:**
Ceramic oxide grain CO

**Recommendations for use:**
- Use powerful angle grinders.

**Ordering notes:**
- Please complete the description with the desired grit size.




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




## Aluminium oxide A-COOL type

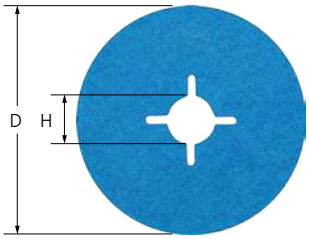
For universal grinding work from fine to very fine grinding on materials which do not conduct heat well, e.g. stainless steel (INOX).

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

**Abrasive:**
Aluminium oxide A-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.

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




## Zirconia alumina Z-COOL type

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

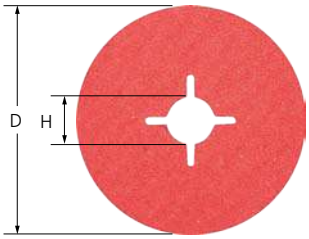
Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

**Abrasive:**
Zirconia alumina Z-COOL

**Recommendations for use:**
- Use powerful angle grinders in the case of a higher contact pressure.

**Ordering notes:**
- Please complete the description with the desired grit size.

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




## Ceramic oxide grain CO-COOL type

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

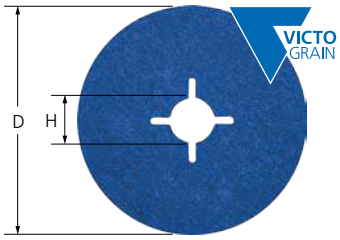
Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

**Abrasive:**
Ceramic oxide grain CO-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | H [mm] | Grit size | | | | | | | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 24 | 36 | 50 | 60 | 80 | 100 | 120 | | | |
| | | EAN 4007220 | | | | | | | | | |
| 100 | 16 | 899625 | 832998 | 833001 | 833018 | 833025 | - | 908129 | 15,300 | 25 | FS 100-16 CO-COOL ... |
| 115 | 22 | 696880 | 696897 | 696903 | 696910 | 696927 | 696934 | 696941 | 13,300 | 25 | FS 115-22 CO-COOL ... |
| 125 | 22 | 696958 | 696965 | 696972 | 696989 | 696996 | 697009 | 697016 | 12,200 | 25 | FS 125-22 CO-COOL ... |
| 180 | 22 | 697023 | 697030 | 697047 | 697054 | 697061 | 697078 | 697085 | 8,500 | 25 | FS 180-22 CO-COOL ... |

## VICTOGRAIN-COOL type




For extremely aggressive grinding with an extremely long tool life and an outstanding stock removal rate on steels and materials which are hard or have poor heat-conducting properties.

Outstanding, constant high performance thanks to the **VICTO**GRAIN abrasive grain.

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

**Abrasive:**
**VICTO**GRAIN-COOL

| D [mm] | H [mm] | EAN 4007220 | Max. RPM | | Description |
|---|---|---|---|---|---|
| 100 | 16 | 108796 | 15,300 | 25 | FS 100-16 VICTOGRAIN-COOL 36 |
| 115 | 22 | 108789 | 13,300 | 25 | FS 115-22 VICTOGRAIN-COOL 36 |
| 125 | 22 | 108802 | 12,200 | 25 | FS 125-22 VICTOGRAIN-COOL 36 |
| 180 | 22 | 108819 | 8,500 | 25 | FS 180-22 VICTOGRAIN-COOL 36 |

## High-performance tools with VICTOGRAIN abrasive grain

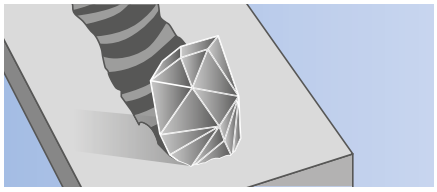
**VICTO**GRAIN products are some of the most effective grinding tools in the world. PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance.

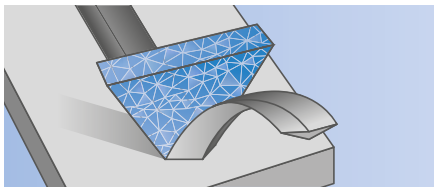
The **VICTO**GRAIN abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As such, the user benefits from an efficient machining process with
- fast working,
- a long tool life,
- less heat build-up in the workpiece, and
- a lower power output required for the tool drive.

The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides. This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency.

The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off.

By combining all these properties together, users benefit from optimal, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.


Conventional abrasive grain


**VICTO**GRAIN abrasive grain


The **VICTO**GRAIN abrasive grain is optimally aligned


GT


H-GT


HT-GT

## GT, H-GT and HT-GT types

Three different backing pad types are supplied for using fibre discs on commercially available angle grinders.

**GT:**
Backing pad for optimum adaptation to contours thanks to high flexibility.
According to ISO 15636.

**H-GT:**
High-performance backing pad with a long tool life thanks to abrasion-resistant, glass-fibre-reinforced plastic. Impresses with particularly cool grinding due to radially arranged cooling fins, and high fibre disc stock removal rate due to sturdy, rigid design.

**HT-GT:**
Flexible and extremely temperature-resistant backing pad with a long tool life due to the highly temperature-resistant material. Enables high-precision work thanks to high flexibility.
According to ISO 15636.

**Ordering notes:**
- The matching clamping nut is included.

**Accessories:**
- Clamping nuts for backing pads GT

| Suitable for tool dia. [mm] | Thread | Suitable for machine types | EAN 4007220 | Max. RPM | | Description |
|---|---|---|---|---|---|---|
| **GT** | | | | | | |
| 100 | M10 | Angle grinders 100, spindle M10 | 100998 | 15,300 | 1 | GT 100 MF M10 |
| 115 | M10 | Angle grinders 115, spindle M10 | 668047 | 13,300 | 1 | GT 115 MF M10 |
| | M14 | Angle grinders 115, spindle M14 | 668054 | 13,300 | 1 | GT 115 MF M14 |
| 125 | M14 | Angle grinders 125, spindle M14 | 668061 | 12,200 | 1 | GT 125 MF M14 |
| 150 | M14 | Angle grinders 150, spindle M14 | 668078 | 10,200 | 1 | GT 150 MF M14 |
| 180 | M14 | Angle grinders 180, spindle M14 | 668085 | 8,500 | 1 | GT 180 MF M14 |
| **H-GT, high-performance backing pad** | | | | | | |
| 115 | M14 | Angle grinders 115, spindle M14 | 668115 | 13,300 | 1 | H-GT 115 MF M14 |
| 125 | M14 | Angle grinders 125, spindle M14 | 668122 | 12,200 | 1 | H-GT 125 MF M14 |
| 180 | M14 | Angle grinders 180, spindle M14 | 668139 | 8,500 | 1 | H-GT 180 MF M14 |
| **HT-GT, temperature-resistant backing pad** | | | | | | |
| 115 | M14 | Angle grinders 115, spindle M14 | 032398 | 13,300 | 1 | HT-GT 115 MF M14 |
| 125 | M14 | Angle grinders 125, spindle M14 | 032404 | 12,200 | 1 | HT-GT 125 MF M14 |
| 180 | M14 | Angle grinders 180, spindle M14 | 032381 | 8,500 | 1 | HT-GT 180 MF M14 |

## FL-GT, clamping nuts for backing pads GT

Accessories for GT-type backing pads.

**Advantages:**
- Matching centre hole distances for standard commercial face pin spanners.

| Thread | Suitable for machine types | EAN 4007220 | | Description |
|---|---|---|---|---|
| M10 | Angle grinders 100–115, spindle M10 | 668146 | 1 | FL-GT 100-115 M10 |
| M14 | Angle grinders 80–115, spindle M14 | 668153 | 1 | FL-GT 80-115 M14 |
| | Angle grinders 125, spindle M14 | 668160 | 1 | FL-GT 125 M14 |
| | Angle grinders 150–230, spindle M14 | 668177 | 1 | FL-GT 150-230 M14 |

Self-adhesive discs are suited to grinding larger surfaces.

The flexible system comprising a self-adhesive disc and the associated holder enables use on contours.

With the self-adhesive disc holder, self-adhesive discs can be used on commercially available, speed-adjustable or slow-running angle grinders with an M14 spindle.

## Advantages:

- Quick tool changes thanks to self-adhesive system.
- Optimum adaptation to contours thanks to high flexibility.

## Materials that can be worked:

- Can be used on nearly all materials.

## Applications:

- Levelling
- Deburring
- Surface work
- Work on edges
- Work on weld seams
- Step-by-step fine grinding

## Recommendations for use:

- The best grinding results are achieved with speed-adjustable angle grinders.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

## Matching tool drives:

- Angle grinders
- Cordless angle grinders

## Ordering notes:

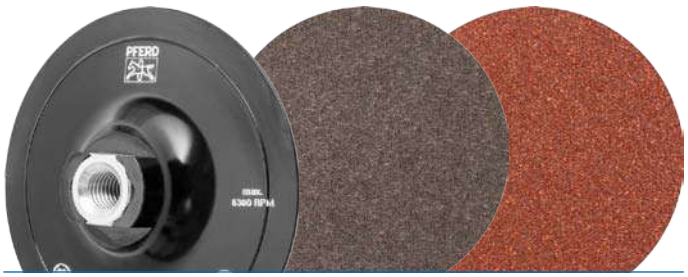
- Please order self-adhesive disc holders separately. More detailed information and ordering data for self-adhesive disc holders can be found on page 26.

## Safety notes:

- The maximum permitted peripheral speed is 32 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- Position the self-adhesive discs centrally on the holder.

## Accessories:

- Self-adhesive disc holders





## Self-adhesive discs KR

### Aluminium oxide A type

For universal grinding work from coarse to fine grinding in industry and professional trades.

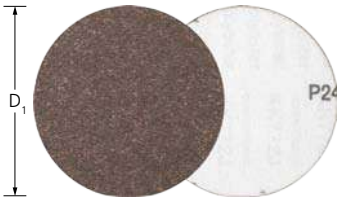

**Advantages:**
- Suitable for universal use on virtually all materials.

**Ordering notes:**
- Please complete the description with the desired grit size.

**Abrasive:**
Aluminium oxide A

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

# Self-adhesive discs
## Self-adhesive discs KR




### Aluminium oxide A compact grain type

The wide range of different grains makes this range outstandingly suited to fine and very fine grinding, and for step-by-step preparations for polishing.

**Advantages:**
- Very long tool life and consistent surface roughness over the entire lifespan thanks to self-sharpening compact grain.

**Abrasive:**
Aluminium oxide A compact grain

**Ordering notes:**
- Please complete the description with the desired grit size.

| $D_1$ [mm] | Grit size | | | | | | | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 120 | 180 | 240 | 320 | 400 | 600 | 800 | 1000 | 1200 | | | | |
| | EAN 4007220 | | | | | | | | | | | | |
| 115 | 026113 | 026168 | 026175 | 026199 | 026205 | 026212 | 026229 | 026236 | 026243 | 5,000 | 5,300 | 50 | KR 115 A ... CK |
| 125 | 026250 | 026267 | 026274 | 026281 | 026298 | 026304 | 026311 | 026328 | 026335 | 4,600 | 4,850 | 50 | KR 125 A ... CK |

## Self-adhesive disc holders KRH


### KRH type

Flexible arbor for using self-adhesive discs on commercially available angle grinders.

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

The comprehensive range of self-adhesive abrasive discs and abrasive disc holders is specifically intended for tool- and mould-making.

## Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Quick and easy tool changes.
- Secure hold of the disc on the holder thanks to high-quality adhesive connections.

## Materials that can be worked:

- Can be used on nearly all materials.

## Applications:

- Levelling
- Surface work
- Finishing
- Step-by-step fine grinding

## Recommendations for use:

- Use abrasive discs with abrasive disc holders.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

## Matching tool drives:

- Flexible shaft drives
- Straight grinders

## Safety notes:

- The maximum permitted peripheral speed is 20 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

## Accessories:

- Abrasive disc holder



# Self-adhesive abrasive discs PSA and abrasive disc holders PSA-H

## PSA type

For heavily contoured, delicate components. Different surface quality levels from coarse to very fine can be successively achieved.

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please order abrasive disc holders separately.
- Please complete the description with the desired grit size.


| $D_1$ [mm] | Grit size | | | | | | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 60 | 80 | 120 | 180 | 240 | 320 | 400 | 600 | | | | |
| | EAN 4007220 | | | | | | | | | | | |
| 12 | 026182 | 026731 | 026991 | 027004 | 027011 | 027028 | 027035 | 027042 | 16,000 | 31,800 | 100 | PSA 12 A ... |
| 20 | 027059 | 027066 | 027080 | 027097 | 027103 | 027110 | 027127 | 027134 | 10,000 | 19,100 | 100 | PSA 20 A ... |
| 30 | 027141 | 027158 | 027165 | 027172 | 027189 | 027196 | 027202 | 027219 | 6,500 | 12,700 | 100 | PSA 30 A ... |
| 50 | 027226 | 027233 | 027240 | 027257 | 027264 | 027271 | 027288 | 027295 | 4,000 | 7,650 | 100 | PSA 50 A ... |

## PSA-H type

Flexible abrasive disc holder for using self-adhesive abrasive discs.

**Recommendations for use:**
- When working on narrow radii, choose the abrasive disc holder to be one size smaller than the abrasive disc so that the outer edges of the abrasive disc can adapt to the contour of the radius.


| D [mm] | S [mm] | L [mm] | Suitable for | EAN 4007220 | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|
| **Shank dia. 2.35 mm** | | | | | | | |
| 10 | 2.35 | 35 | PSA 12 | 026885 | 31,800 | 5 | PSA-H 12-2,35 |
| 18 | 2.35 | 35 | PSA 20 | 026939 | 19,100 | 5 | PSA-H 20-2,35 |
| 25 | 2.35 | 35 | PSA 30 | 026953 | 12,700 | 5 | PSA-H 30-2,35 |
| **Shank dia. 3 mm** | | | | | | | |
| 10 | 3 | 35 | PSA 12 | 026922 | 31,800 | 5 | PSA-H 12-3 |
| 18 | 3 | 35 | PSA 20 | 026946 | 19,100 | 5 | PSA-H 20-3 |
| 25 | 3 | 35 | PSA 30 | 026960 | 12,700 | 5 | PSA-H 30-3 |
| 45 | 3 | 35 | PSA 50 | 026984 | 7,650 | 5 | PSA-H 50-3 |
| **Shank dia. 6 mm** | | | | | | | |
| 45 | 6 | 35 | PSA 50 | 026977 | 7,650 | 5 | PSA-H 50-6 |

# COMBIDISC
## General information

The COMBIDISC product range contains a wide selection of grinding tools for surface finishing.
From coarse machining and surface texturing to face-down mirror polishing – the range provides the best tool, even for complicated applications.

### Advantages:

- High profitability thanks to quick tool changes.
- Great convenience thanks to simple handling and low-vibration working.
- No operational disruptions caused by sticking, slipping or disengaging.

### Applications:

- Roughening
- Levelling
- Deburring
- Surface work
- Work on edges
- Polishing
- Cleaning
- Sharpening
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

### Recommendations for use:

- Use COMBIDISC grinding tools with arbors or abrasive disc holders on flexible shaft drives with angle handpieces, compressed-air or electric angle grinders.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

### Matching tool drives:

- Flexible shaft drives
- Straight grinders
- Angle grinders
- Cordless angle grinders

### Ordering notes:

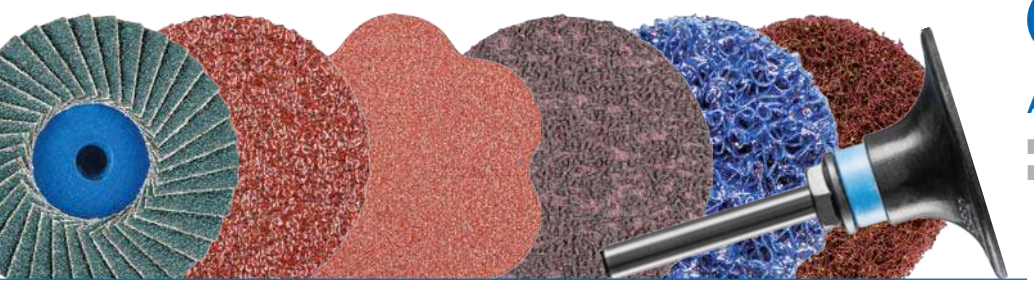
- Please order arbors or COMBIDISC abrasive disc holders separately.
  More detailed information and ordering data can be found on page 43.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**266175**
  CD 38 A **180**
- **Ordering example explanation:**
  CD = COMBIDISC abrasive discs
  38 = Outer diameter $D_1$ [mm]
  A = Abrasive
  **180** = Grit size

### Safety notes:

- The maximum permitted peripheral speed is 50 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

### Accessories:

- Arbors for COMBIDISC Mini-POLIFAN
- COMBIDISC abrasive disc holders



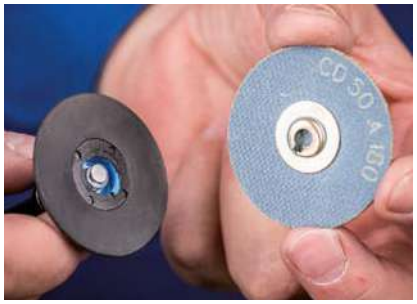
### The fast way to the best tool

| Material group ▼ | | Abrasive ▶ | Aluminium oxide A, A-PLUS, A-FLEX, A-CONTOUR, A-FORTE | Aluminium oxide A Compact grain | Zirconia alumina Z |
|---|---|---|---|---|---|
| Steel, cast steel | Non-hardened, non-heat-treated steels | Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel | ● | | ❍ |
| | Hardened, heat-treated steels | Tool steels, tempering steels, alloyed steels, cast steel | ❍ | ● | ● |
| Stainless steel (INOX) | Rust- and acid-resistant steels | Austenitic and ferritic stainless steels | | ● | ❍ |
| Non-ferrous metals | Soft non-ferrous metals, non-ferrous metals | Soft aluminium alloys | ❍ | | |
| | | Brass, copper, zinc | ● | | ❍ |
| | Hard non-ferrous metals | Hard aluminium alloys | ● | | ❍ |
| | | Bronze, titanium | | | ❍ |
| | High-temperature-resistant materials | Nickel-based and cobalt-based alloys | | | ❍ |
| Cast iron | Grey cast iron, white cast iron | Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS) | ● | | ❍ |
| Plastics, other materials | | Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork | ● | | |

● = Highly suitable ❍ = Suitable

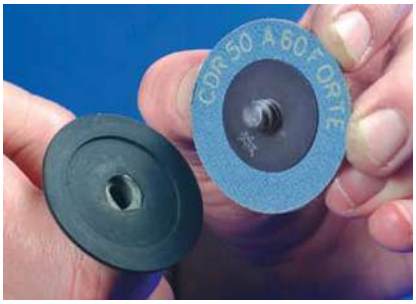
## PFERD offers two alternative clamping systems:

### CD system




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

### CDR system




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

## PFERDVALUE:

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

Vibration Filter | Noise Filter | Emission Filter | Haptic Filter

**PFERD**EFFICIENCY recommends COMBIDISC tools to reduce tool change and setup times.

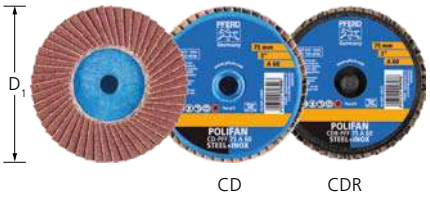
Time Saving

## Recommended rotational speed range

**Example:**
CD 50 A-COOL 60
Application:
Grinding stainless steel (INOX)
Cutting speed: 20–25 m/s
**Rotational speed: 7,600–9,500 RPM**

| $D_1$ [mm] | Cutting speed [m/s] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 |
| | Rotational speeds [RPM] | | | | | | | | |
| 20 | 4,700 | 9,500 | 14,300 | 19,000 | 23,800 | 28,600 | 33,400 | 38,100 | 47,700 |
| 25 | 3,800 | 7,600 | 11,400 | 15,200 | 19,000 | 22,900 | 26,700 | 30,500 | 38,100 |
| 38 | 2,500 | 5,000 | 7,500 | 10,000 | 12,500 | 15,000 | 17,500 | 20,100 | 25,100 |
| 50 | 1,900 | 3,800 | 5,700 | 7,600 | 9,500 | 11,400 | 13,300 | 15,200 | 19,000 |
| 75 | 1,200 | 2,500 | 3,800 | 5,000 | 6,300 | 7,600 | 8,900 | 10,100 | 12,700 |

| Silicon carbide SiC | Aluminium oxide A-COOL | Ceramic oxide grain CO-COOL | VICTOGRAIN-COOL | Diamond abrasive discs | POLICLEAN discs | Non-woven discs PNER, VRH, VRW |
|---|---|---|---|---|---|---|
| | | ● | ● | | ● | ● |
| | | ● | ● | | ❍ | ❍ |
| | ● | ● | ● | | ● | ● |
| | ● | ❍ | | | ● | ● |
| | | | | | ● | ● |
| ❍ | | | | | ● | ● |
| ● | | ● | ● | ● | ❍ | ● |
| | | ● | ● | ● | ❍ | ● |
| | | | | | ● | ● |
| ● | | | | ● | ● | ● |




## Aluminium oxide A type

For universal coarse grinding work with high stock removal rates.

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

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

| $D_1$ [mm] | Grit size 40 | 60 | 80 | 120 | Opt. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|
| | EAN 4007220 | | | | | | | |
| **CD system** | | | | | | | | |
| 50 | 617359 | 617366 | 617373 | 617380 | 12,000–14,000 | BO PFF 50, SBH 20–50 | 10 | CD PFF 50 A ... |
| 75 | 617397 | 617403 | 617410 | 617625 | 8,000–10,000 | BO PFF 75, SBH 75 | 10 | CD PFF 75 A ... |
| **CDR system** | | | | | | | | |
| 50 | 016121 | 016145 | 821633 | 016152 | 12,000–14,000 | SBHR 20–75 | 10 | CDR PFF 50 A ... |
| 75 | 016169 | 016176 | 821640 | 016336 | 8,000–10,000 | SBHR 20–75 | 10 | CDR PFF 75 A ... |


## Zirconia alumina Z type

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

**Abrasive:**
Zirconia alumina Z

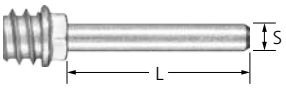
**Recommendations for use:**
- Use in the case of a higher contact pressure.

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

| $D_1$ [mm] | Grit size 40 | 60 | 80 | 120 | Opt. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|
| | EAN 4007220 | | | | | | | |
| **CD system** | | | | | | | | |
| 50 | 592717 | 592724 | 592731 | 592748 | 12,000–14,000 | BO PFF 50, SBH 20–50 | 10 | CD PFF 50 Z ... |
| 75 | 592755 | 592762 | 592779 | 592786 | 8,000–10,000 | BO PFF 75, SBH 75 | 10 | CD PFF 75 Z ... |
| **CDR system** | | | | | | | | |
| 50 | 902707 | 902714 | 016534 | 016541 | 12,000–14,000 | SBHR 20–75 | 10 | CDR PFF 50 Z ... |
| 75 | 835111 | 016558 | 016565 | 821688 | 8,000–10,000 | SBHR 20–75 | 10 | CDR PFF 75 Z ... |

# Mini-POLIFAN arbors




## BO PFF

Matching arbors for COMBIDISC Mini-POLIFAN.

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

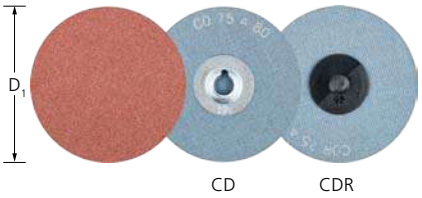
## Aluminium oxide A type

For universal coarse to fine grinding applications in industry and professional trades.

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving




| D1 [mm] | Grit size 36 | 60 | 80 | 120 | 180 | 320 | Opt. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | EAN 4007220 | | | | | | | | |
| **CD system** | | | | | | | | | |
| 20 | - | 265864 | 266007 | 266038 | 266052 | 266069 | 20,000–35,000 | 100 | CD 20 A ... |
| 25 | - | 355718 | 355725 | 355732 | 266083 | 266151 | 15,000–26,000 | 100 | CD 25 A ... |
| 38 | 355749 | 355756 | 355763 | 355770 | 266175 | 266199 | 10,000–16,000 | 100 | CD 38 A ... |
| 50 | 355787 | 355794 | 355800 | 355817 | 266212 | 266281 | 8,000–13,000 | 100 | CD 50 A ... |
| 75 | 355824 | 355831 | 355848 | 355855 | 266328 | 266359 | 5,000–9,000 | 50 | CD 75 A ... |
| **CDR system** | | | | | | | | | |
| 20 | - | 778036 | 778043 | 778050 | 778074 | 778081 | 20,000–35,000 | 100 | CDR 20 A ... |
| 25 | - | 778098 | 778104 | 778111 | 778128 | 778135 | 15,000–26,000 | 100 | CDR 25 A ... |
| 38 | 596456 | 596463 | 596470 | 597255 | 597262 | 596500 | 10,000–16,000 | 100 | CDR 38 A ... |
| 50 | 596517 | 596524 | 596531 | 596548 | 596555 | 596562 | 8,000–13,000 | 100 | CDR 50 A ... |
| 75 | 596586 | 596593 | 596609 | 596616 | 596623 | 596630 | 5,000–9,000 | 50 | CDR 75 A ... |

## Aluminium oxide A-PLUS type

For universal applications from coarse to fine grinding.

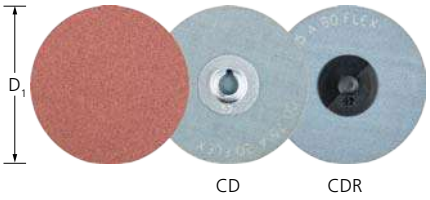
Higher stock removal rate due to sturdy backing material.
Particularly for use in edge grinding due to high tear strength.

**Abrasive:**
Aluminium oxide A-PLUS

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving


| D1 [mm] | Grit size 36 PLUS | 60 PLUS | 80 PLUS | 120 PLUS | Opt. RPM | | Description |
|---|---|---|---|---|---|---|---|
| | EAN 4007220 | | | | | | |
| **CD system** | | | | | | | |
| 50 | 593608 | 593615 | 593622 | 593653 | 8,000–13,000 | 100 | CD 50 A ... |
| 75 | 593660 | 593677 | 593684 | 593691 | 5,000–9,000 | 50 | CD 75 A ... |
| **CDR system** | | | | | | | |
| 50 | 778302 | 778319 | 778326 | 778333 | 8,000–13,000 | 100 | CDR 50 A ... |
| 75 | 778340 | 778357 | 778364 | 778371 | 5,000–9,000 | 50 | CDR 75 A ... |


## Aluminium oxide A-FLEX type

Particularly flexible abrasive discs, which are especially suitable for work on contours and concave surfaces, e.g. in tool- and mould-making.
For achieving seamless transitions in the surface finish.

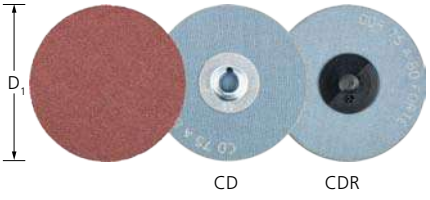
**Abrasive:**
Aluminium oxide A-FLEX

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

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

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




## Aluminium oxide A-FORTE type

For universal applications from coarse to fine grinding, with a high stock removal rate and long tool life.

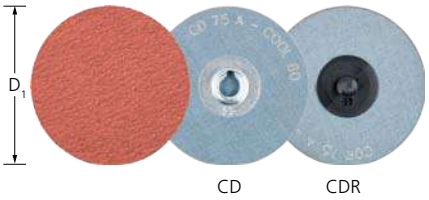
**Abrasive:**
Aluminium oxide A-FORTE

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

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

## Aluminium oxide A-COOL type




For universal applications from coarse to fine grinding on materials with challenging stock removal properties, e.g. stainless steel (INOX).

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

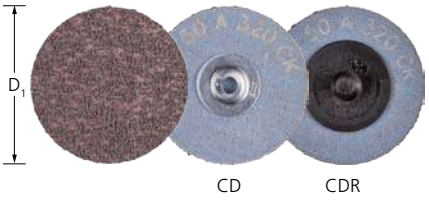
**Abrasive:**
Aluminium oxide A-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

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

## Aluminium oxide A compact grain type




Outstandingly suited to fine and very fine grinding, and for step-by-step preparations for polishing.

The self-sharpening compact grain facilitates a very long tool life and achieves consistent surface quality levels throughout the entire tool life.

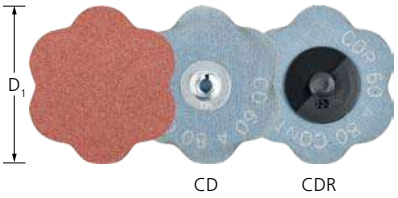
**Abrasive:**
Aluminium oxide A compact grain

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

| $D_1$ [mm] | Grit size 120 | 180 | 240 | 320 | 400 | 600 | 800 | 1000 | 1200 | Opt. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | EAN 4007220 | | | | | | | | | | | |
| **CD system** | | | | | | | | | | | | |
| 50 | 003169 | 065594 | 065600 | 065860 | 065921 | 065976 | 066539 | 066546 | 066553 | 3,800–13,000 | 100 | CD 50 A ... CK |
| 75 | 066775 | 066782 | 066799 | 066805 | 066812 | 066836 | 066843 | 066850 | 066867 | 2,500–9,000 | 50 | CD 75 A ... CK |
| **CDR system** | | | | | | | | | | | | |
| 50 | 066577 | 066591 | 066607 | 066621 | 066638 | 066645 | 066652 | 066669 | 066737 | 3,800–13,000 | 100 | CDR 50 A ... CK |
| 75 | 066874 | 066881 | 066904 | 067123 | 067130 | 067161 | 067185 | 067192 | 067208 | 2,500–9,000 | 50 | CDR 75 A ... CK |

# COMBIDISC
## Abrasive discs CD, CDR




### Aluminium oxide A-CONTOUR type

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

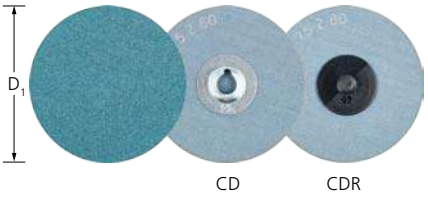
**Abrasive:**
Aluminium oxide A-CONTOUR

**Recommendations for use:**
- Use an abrasive disc holder with a diameter of 20–50 mm.

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

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




### Zirconia alumina Z type

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

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

**Abrasive:**
Zirconia alumina Z

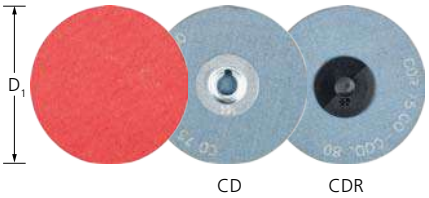
**Recommendations for use:**
- Use with hard or medium-hard COMBIDISC abrasive disc holders.

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

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

## Ceramic oxide grain CO-COOL type




For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

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

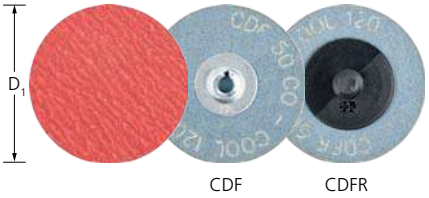
**Abrasive:**
Ceramic oxide grain CO-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter, Noise Filter, Emission Filter, Haptic Filter, Time Saving

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

## Ceramic oxide grain CO-COOL midget fibre discs type




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

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

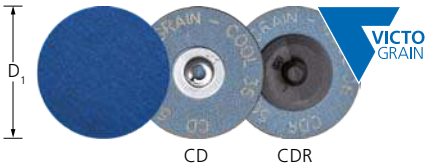
Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

**Abrasive:**
Ceramic oxide grain CO-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter, Noise Filter, Emission Filter, Haptic Filter, Time Saving

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




## VICTOGRAIN-COOL type

For extremely aggressive grinding with an extremely long tool life and an outstanding stock removal rate on steels and materials which are hard or have poor heat-conducting properties.

Outstanding, constant high performance thanks to the **VICTO**GRAIN-COOL abrasive grain.

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

**Abrasive:**
**VICTO**GRAIN-COOL

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

| $D_1$ [mm] | EAN 4007220 | Opt. RPM | | Description |
|---|---|---|---|---|
| **CD system** | | | | |
| 38 | 108857 | 5,000–16,000 | 100 | CD 38 VICTOGRAIN-COOL |
| 50 | 109762 | 3,800–13,000 | 100 | CD 50 VICTOGRAIN-COOL |
| 75 | 109779 | 2,500–9,000 | 50 | CD 75 VICTOGRAIN-COOL |
| **CDR system** | | | | |
| 38 | 109786 | 5,000–16,000 | 100 | CDR 38 VICTOGRAIN-COOL |
| 50 | 109793 | 3,800–13,000 | 100 | CDR 50 VICTOGRAIN-COOL |
| 75 | 109809 | 2,500–9,000 | 50 | CDR 75 VICTOGRAIN-COOL |


## VICTOGRAIN-COOL midget fibre discs type

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

For extremely aggressive grinding with an extremely long tool life and an outstanding stock removal rate on steels and materials which are hard or have poor heat-conducting properties.

Outstanding, constant high performance thanks to the **VICTO**GRAIN-COOL abrasive grain.

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

**Abrasive:**
**VICTO**GRAIN-COOL

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

| $D_1$ [mm] | EAN 4007220 | Opt. RPM | | Description |
|---|---|---|---|---|
| **CD system** | | | | |
| 38 | 109298 | 5,000–16,000 | 100 | CDF 38 VICTOGRAIN-COOL 36 |
| 50 | 109304 | 3,800–13,000 | 100 | CDF 50 VICTOGRAIN-COOL 36 |
| 75 | 109311 | 2,500–9,000 | 50 | CDF 75 VICTOGRAIN-COOL 36 |
| **CDR system** | | | | |
| 38 | 109328 | 5,000–16,000 | 100 | CDFR 38 VICTOGRAIN-COOL 36 |
| 50 | 109335 | 3,800–13,000 | 100 | CDFR 50 VICTOGRAIN-COOL 36 |
| 75 | 109342 | 2,500–9,000 | 50 | CDFR 75 VICTOGRAIN-COOL 36 |

## High-performance tools with VICTOGRAIN abrasive grain

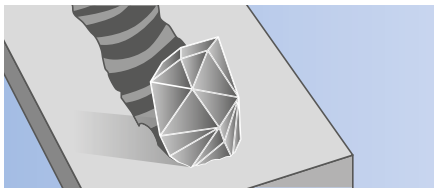
**VICTO**GRAIN products are some of the most effective grinding tools in the world. PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance.

The **VICTO**GRAIN abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As such, the user benefits from an efficient machining process with
- fast working,
- a long tool life,
- less heat build-up in the workpiece, and
- a lower power output required for the tool drive.

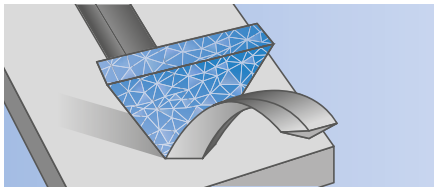
The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides. This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency.

The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off.

By combining all these properties together, users benefit from optimal, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.



Conventional abrasive grain

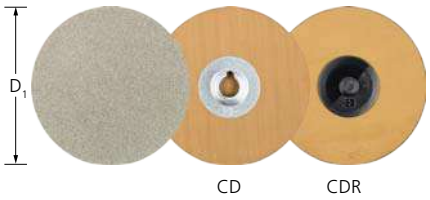


**VICTO**GRAIN abrasive grain

The **VICTO**GRAIN abrasive grain is optimally aligned



## Diamond type




CD CDR

Exceptionally suitable for work on wear-resistant coatings 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.

Detailed information on diamond grinding tools can be found in catalogue section 5.

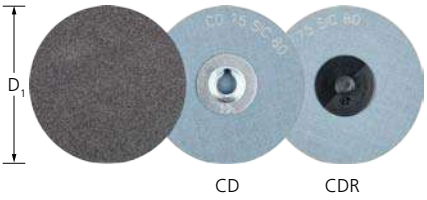
**Abrasive:**
Diamond
D 251 = P 60
D 126 = P 120
D 76 = P 220
(P = Grit size according to ISO 6344)

**Recommendations for use:**
- For the best results, use at a recommended cutting speed of 10–20 m/s.
- Use with hard or medium-hard COMBIDISC abrasive disc holders.

**Ordering notes:**
- Please complete the description with the desired grit size.
- Grit sizes are indicated in µm.

**PFERD**VALUE:
Vibration Filter, Noise Filter, Emission Filter, Haptic Filter, Time Saving

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




## Silicon carbide SiC type

For universal grinding work on components made from aluminium, copper, bronze, titanium and fibre-reinforced plastics.

Particularly recommended for use on titanium alloys.

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

**Abrasive:**
Silicon carbide SiC

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

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

# POLICLEAN discs CD, CDR


## PCLR and PCLR PLUS types

For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues in face-down grinding.

POLICLEAN-PLUS discs (blue) exhibit a higher stock removal rate with a very long tool life.

**Applications:**
roughening, surface work, cleaning

**Abrasive:**
Aluminium oxide A
Silicon carbide SiC

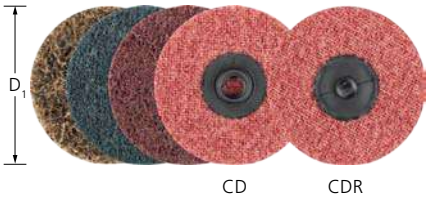
**Recommendations for use:**
- Use with hard or medium-hard COMBIDISC abrasive disc holders.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

| $D_1$ [mm] | Type | Abrasives | EAN 4007220 | Opt. RPM | | Description |
|---|---|---|---|---|---|---|
| **CD system** | | | | | | |
| 50 | PCLR | SiC | 471500 | 5,500–8,000 | 10 | CD 50 PCLR |
| 75 | PCLR | SiC | 471517 | 3,800–5,000 | 10 | CD 75 PCLR |
| 50 | PCLR PLUS | A | 069288 | 5,500–8,000 | 10 | CD 50 PCLR PLUS |
| 75 | PCLR PLUS | A | 069295 | 3,800–5,000 | 10 | CD 75 PCLR PLUS |
| **CDR system** | | | | | | |
| 50 | PCLR | SiC | 677124 | 5,500–8,000 | 10 | CDR 50 PCLR |
| 75 | PCLR | SiC | 677131 | 3,800–5,000 | 10 | CDR 75 PCLR |
| 50 | PCLR PLUS | A | 069301 | 5,500–8,000 | 10 | CDR 50 PCLR PLUS |
| 75 | PCLR PLUS | A | 069318 | 3,800–5,000 | 10 | CDR 75 PCLR PLUS |

## Hard type VRH

Suitable for universal work on small and medium-sized metal surfaces, e.g. removing rough grinding traces, removing oxidation and light deburring work.
Achieve matt and satin-finished surfaces.




**Applications:**
roughening, deburring, surface work, cleaning, weld dressing, structuring, fine grinding in multiple steps

**Abrasive:**
Aluminium oxide A
Available POLIVLIES 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.

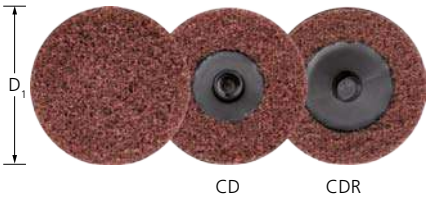
**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

| $D_1$ [mm] | Grit size | | | Opt. RPM | | Description |
|---|---|---|---|---|---|---|
| | 100 G | 180 M | 240 F | | | |
| | EAN 4007220 | | | | | |
| **CD system** | | | | | | |
| 20 | 628218 | 584507 | 265871 | 14,000–19,000 | 50 | CD VRH 20 A ... |
| 25 | 268865 | 266564 | 266571 | 11,000–15,000 | 50 | CD VRH 25 A ... |
| 38 | 266588 | 266595 | 268872 | 7,000–10,000 | 50 | CD VRH 38 A ... |
| 50 | 266618 | 266625 | 266632 | 5,500–7,500 | 50 | CD VRH 50 A ... |
| 75 | 266649 | 266656 | 266663 | 3,800–5,000 | 25 | CD VRH 75 A ... |
| **CDR system** | | | | | | |
| 38 | 596906 | 596913 | 596920 | 7,000–10,000 | 50 | CDR VRH 38 A ... |
| 50 | 596937 | 596944 | 596951 | 5,500–7,500 | 50 | CDR VRH 50 A ... |
| 75 | 596968 | 596975 | 597354 | 3,800–5,000 | 25 | CDR VRH 75 A ... |




# COMBIDISC
## Non-woven discs CD, CDR




### Soft type VRW

Suitable for very fine grinding on small and medium-sized surfaces and contours, and for cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces. Highly open structure.

**Applications:**
roughening, deburring, surface work, cleaning, weld dressing, structuring, fine grinding in multiple steps

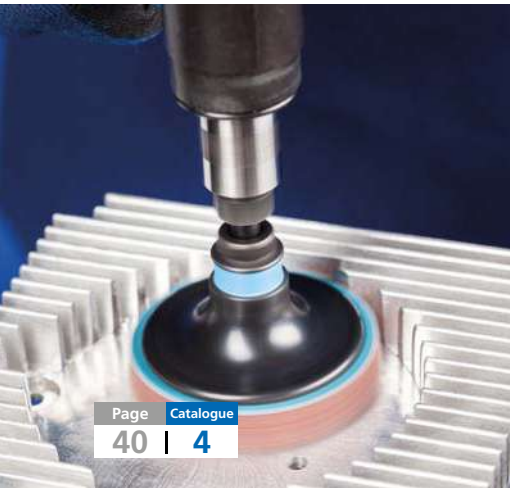
**Abrasive:**
Aluminium oxide A
Available POLINOX grit sizes:
100 = medium
180 = fine
280 = very fine

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

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

| $D_1$ [mm] | Grit size 100 | 180 | 280 | Opt. RPM | | Description |
|---|---|---|---|---|---|---|
| | EAN 4007220 | | | | | |
| **CD system** | | | | | | |
| 38 | 537039 | 450345 | 450352 | 7,000–10,000 | 50 | CD VRW 38 A ... |
| 50 | 266670 | 266687 | 266694 | 5,500–7,500 | 50 | CD VRW 50 A ... |
| 75 | 266717 | 266724 | 266731 | 3,800–5,000 | 25 | CD VRW 75 A ... |
| **CDR system** | | | | | | |
| 50 | 596999 | 597002 | 597019 | 5,500–7,500 | 50 | CDR VRW 50 A ... |
| 75 | 597026 | 597033 | 597040 | 3,800–5,000 | 25 | CDR VRW 75 A ... |



## PNER type

For achieving a very fine, uniform surface finish which, depending on requirements, is a sufficient preparation for high-gloss polishing. Particularly suitable for work on small and medium-sized surfaces of stainless steel (INOX) components.

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


Further information on non-woven products in the PNER type can be found on pages 99–100.

**Applications:**
roughening, deburring, surface work, cleaning, weld dressing, structuring, fine grinding in multiple steps

**Abrasive:**
Aluminium oxide A
Silicon carbide SiC

**Ordering notes:**
- Please complete the description with the desired grit size.
- The non-woven discs are supplied with a thickness of 6 mm.

**PFERD**VALUE:
Vibration Filter, Noise Filter, Emission Filter, Haptic Filter, Time Saving

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



# COMBIDISC
## TX discs CD


### Aluminium oxide A type

For achieving fine, matt grinding finishes in one process. The very sturdy granular bond facilitates very aggressive abrasive performance.
Particularly suitable for work on stainless steel (INOX) and aluminium.

**Applications:**
deburring, surface work, weld dressing, structuring, fine grinding in multiple steps

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

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

## Felt discs CD, CDR


### FR type

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

**Applications:**
polishing

**Recommendations for use:**
- Use COMBIDISC felt discs with an abrasive disc holder on flexible shaft drives with an angle handpiece or small compressed-air or electric angle grinders.
- For the best results, use 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 applying a different polishing paste, use a new unused felt disc.

**Ordering notes:**
- Further information on felt tools can be found on page 144.

**Accessories:**
- Grinding and polishing pastes

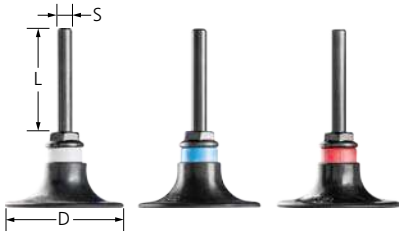
**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

| $D_1$ [mm] | EAN 4007220 | Opt. RPM | | Description |
|---|---|---|---|---|
| **CD system** | | | | |
| 50 | 440490 | 2,000–4,000 | 10 | CD FR 50 |
| 75 | 440506 | 1,200–2,500 | 10 | CD FR 75 |
| **CDR system** | | | | |
| 50 | 004784 | 2,000–4,000 | 10 | CDR FR 50 |
| 75 | 004791 | 1,200–2,500 | 10 | CDR FR 75 |



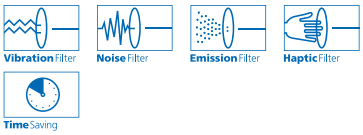
## SBH and SBHR types

Matching arbors for COMBIDISC grinding tools. Available in three different hardness grades.




**Ordering notes:**
- The different hardness grades are colour-coded: W (soft) – grey; M (medium) – blue; H (hard) – red
- Please complete the description with the desired hardness grade.

**PFERD**VALUE:




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

**Adapters:**
The shank of the abrasive disc holders can be replaced by suitable adapters. This enables the abrasive disc holder to be mounted directly to the drive spindle of the tool drive.

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.

**AF M5 CD 1/4-20 UNC**
(EAN 4007220**064702**)
Male thread M5,
male thread 1/4-20 UNC.
Suitable for cordless angle grinder, dia. 75, with spindle M5 (female thread).

**Ordering notes:**
More detailed information and ordering data for adapters can be found in catalogue section 9.

## COMBIDISC SET

Set of various COMBIDISC tools.

**Contents:**
- 3 pcs. each of COMBIDISC abrasive discs:
  - CD A 60 FORTE
  - CD A 120 FORTE
  - CD A-COOL 60
  - CD CO-COOL 36
  - CD Z 60
- 3 pcs. each of COMBIDISC non-woven discs:
  - CD VRH A 180 M
  - CD VRW A 100
- 1 pc. each of:
  - Abrasive disc holder SBH M

**Advantages:**
- Getting to know and testing the comprehensive system.
- Coordinated selection of the most common versions.

**Abrasive:**
Aluminium oxide A
Zirconia alumina Z
Aluminium oxide A-FORTE
Aluminium oxide A-COOL
Ceramic oxide grain CO-COOL

**Recommendations for use:**
- Use COMBIDISC grinding tools with an arbor or abrasive disc holder on flexible shaft drives with an angle handpiece or small compressed-air or electric angle grinders.

**PFERD**VALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

| $D_1$ [mm] | EAN 4007220 | | Description |
|---|---|---|---|
| 50 | 265918 | 1 | COMBIDISC-SET 50 |
| 75 | 265932 | 1 | COMBIDISC-SET 75 |

## SET CD UWER

Set of different COMBIDISC tools, including single-hand angle grinder, for all coarse and fine grinding, polishing and cleaning work, especially on assembly and construction sites.

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

**Advantages:**
- Entire rotational speed range covered for COMBIDISC tools with a diameter of 50 mm.
- Easy and comfortable to use thanks to the handy angle grinder design.
- Coordinated selection of the most common versions.

**Ordering notes:**
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

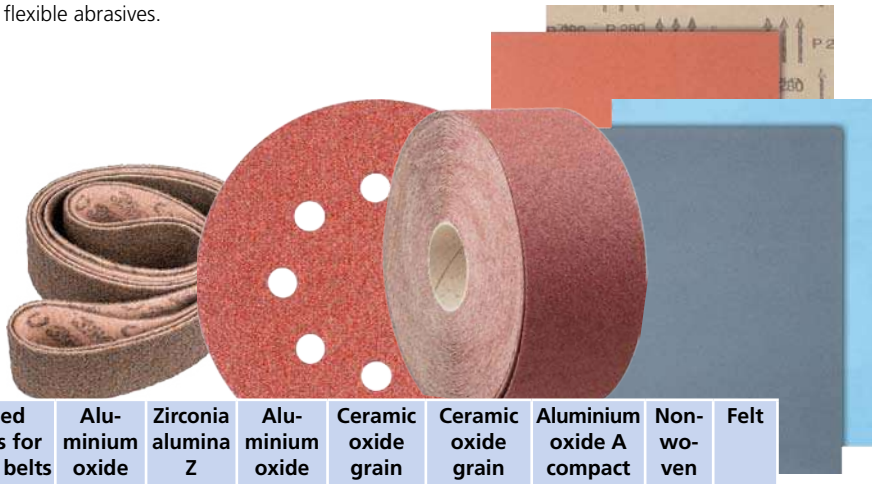
**PFERD**VALUE:

Vibration Filter · Noise Filter · Emission Filter · Haptic Filter · Time Saving

| $D_1$ [mm] | EAN 4007220 | | Description |
|---|---|---|---|
| 50 | 607893 | 1 | SET CD 50 UWER 5/200 230 V |

PFERD supplies a comprehensive range of products which utilize flexible abrasives.

- Short and long belts
- Abrasive sheets, cloth and paper
- Hand pads, non-woven and diamond
- Shop rolls, non-woven, cloth and paper
- Velcro-backed abrasive discs



## The fast way to the best tool

| Material group ▼ | | Abrasive ▶ | Recommended cutting speeds for short and long belts [m/s] | Aluminium oxide A | Zirconia alumina Z | Aluminium oxide A-COOL | Ceramic oxide grain CO | Ceramic oxide grain CO-COOL | Aluminium oxide A compact grain | Non-woven | Felt |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Steel, cast steel | Non-hardened, non-heat-treated steels | Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel | 25–35 | ● | ❍ | | ● | | | ● | ● |
| | Hardened, heat-treated steels | Tool steels, tempering steels, alloyed steels, cast steel | 20–30 | ❍ | ● | | ● | | ● | ❍ | ● |
| Stainless steel (INOX) | Rust- and acid-resistant steels | Austenitic and ferritic stainless steels | 15–25 | | ❍ | ● | | ● | ● | ● | ● |
| Non-ferrous metals | Soft non-ferrous metals, non-ferrous metals | Soft aluminium alloys | 30–40 | ❍ | | ● | | ❍ | | ● | ● |
| | | Brass, copper, zinc | | ● | ❍ | | ❍ | | | ● | ● |
| | Hard non-ferrous metals | Hard aluminium alloys | 20–30 | ● | ❍ | | ❍ | | | ● | ● |
| | | Bronze, titanium | | | ❍ | | ❍ | ● | | ● | ● |
| | High-temperature-resistant materials | Nickel-based and cobalt-based alloys | 5–15 | | ❍ | | ❍ | ● | | ● | ● |
| Cast iron | Grey cast iron, white cast iron | Cast iron with flake graphite EN-GJL (GG), with nodular graphite/ nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS) | 25–35 | ● | ❍ | | ● | | | ● | |
| Plastics, other materials | | Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork | 10–25 | ● | | | | | | ● | ● |

● = Highly suitable ❍ = Suitable

# Coated abrasives
## General information – Short and long belts

The comprehensive range of short and long belts is tailored to the belt grinders that are commonly found on the market.

Short and long belts from PFERD are designated as "abrasive belts" in ISO 2976.

### Advantages:

- High profitability thanks to high abrasive performance and long tool life.
- High tear strength with optimum flexibility.
- Consistent work results thanks to very high grain adhesion.

### Applications:

- Levelling
- Deburring
- Work on edges
- Sharpening
- Work on weld seams
- Step-by-step fine grinding

### Recommendations for use:

- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

### Matching tool drives:

- Belt grinders

### Ordering notes:

- When ordering, please state the EAN or the full description. Please include the desired grit size with the description.
- **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

### Safety notes:

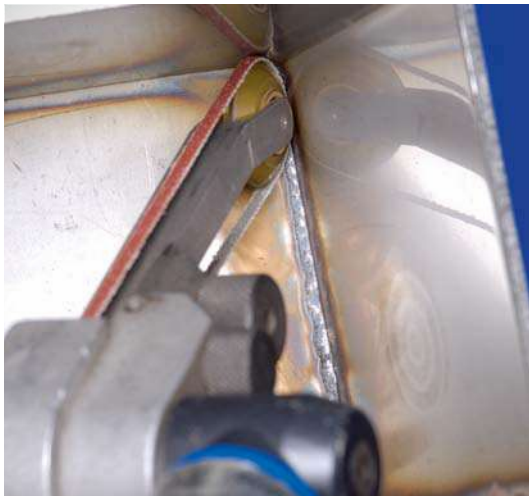
- Observe the safety notes "Safety notes for the correct use of abrasive belts" provided by the German Abrasives Association (VDS). You can find this information at www.pferd.com.

### Recommended rotational speed range

Using the table opposite, you can determine the rotational speed in RPM based on the cutting speed. Please refer to page 45 for the recommended cutting speeds.

**Example:**
BA 16/480 A 60
Diameter of the drive roller: 30 mm
Cutting speed: 20–30 m/s
**Rotational speed: 12,700–19,000 RPM**

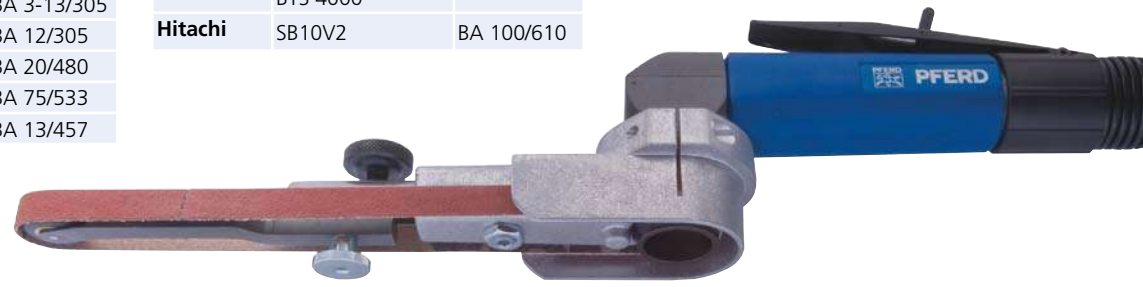
| Drive roller dia. [mm] | Cutting speed [m/s] | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 |
| | Rotational speeds [RPM] | | | | | | | |
| 20 | 4,700 | 9,500 | 14,300 | 19,000 | 23,800 | 28,600 | 33,400 | 38,100 |
| 30 | 3,100 | 6,300 | 9,500 | 12,700 | 15,900 | 19,000 | 22,200 | 25,400 |
| 40 | 2,300 | 4,700 | 7,100 | 9,500 | 11,900 | 14,300 | 16,700 | 19,000 |
| 50 | 1,900 | 3,800 | 5,700 | 7,600 | 9,500 | 11,400 | 13,300 | 15,200 |
| 80 | 1,100 | 2,300 | 3,500 | 4,700 | 5,900 | 7,100 | 8,300 | 9,500 |
| 100 | 900 | 1,900 | 2,800 | 3,800 | 4,700 | 5,700 | 6,600 | 7,600 |
| 120 | 700 | 1,500 | 2,300 | 3,100 | 3,900 | 4,700 | 5,500 | 6,300 |
| 160 | 500 | 1,100 | 1,700 | 2,300 | 2,900 | 3,500 | 4,100 | 4,700 |
| 200 | 400 | 900 | 1,400 | 1,900 | 2,300 | 2,800 | 3,300 | 3,800 |
| 250 | 300 | 700 | 1,100 | 1,500 | 1,900 | 2,200 | 2,600 | 3,000 |
| 300 | 300 | 600 | 900 | 1,200 | 1,500 | 1,900 | 2,200 | 2,500 |

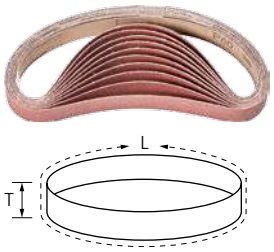


| Manu-facturer | Model | Abrasive belts' width/ length [mm] |
|---|---|---|
| **PFERD** | **Compressed-air belt grinder** | |
| | PBS 3/200 DH 99 | BA 3/305 |
| | PWS 3/200 DH + BSVH 25.5 | BA 6/305<br>BA 9/305<br>BA 12/305 |
| | PBSA 5/160 HV 925 | BA 3/520<br>BA 6/520<br>BA 12/520<br>BA 16/520<br>BA 20/520<br>BA 6/610<br>BA 12/610 |
| | PBS 5/155 HV | BA 6/610<br>BA 10/480<br>BA 16/480<br>BA 20/480<br>BA 25/480<br>BA 12/610 |
| | **Electric belt grinders** | |
| | UBS 5/100 SI 925 | BA 3/520<br>BA 6/520<br>BA 12/520<br>BA 16/520<br>BA 20/520<br>BA 6/610<br>BA 12/610 |
| | **Pipe belt grinders** | |
| | UBS 5/70 SI-R | BA 30/533 |
| | UBS 11/90 SI-R | BA 30/610 |
| | **BSG belt grinders for flexible shaft drives** | |
| | BSG 10/35E | BA 35/450 |
| | BSG 10/50E | BA 50/450 |
| | **Angle handpieces** | |
| | WT 7 E M14 + BSVH 41 | BA 3/520<br>BA 6/520 |
| | WZ 7 B + BSVH 36 | BA 12/520<br>BA 16/520 |
| | WZ 10 B + BSVH 36 | BA 20/520<br>BA 6/610<br>BA 12/610 |
| | WZ 4 A + BSVH 24 | BA 3/305<br>BA 6/305<br>BA 9/305<br>BA 12/305 |
| **3M** | 3M™ file belt sander | BA 13/457 |
| **AEG** | HBS 1000E | BA 75/533 |
| | BBSE 1100 | BA 100/560 |
| **Atlas Copco** | G2403 | BA 10/330 |
| | G2404 | BA 20/520 |
| | G2410 | BA 3-13/305 |
| **ATA** | RAL20L | BA 12/305 |
| | BL16L | BA 20/480 |
| **Black & Decker** | KA 88 | BA 75/533 |
| | KA 900 E | BA 13/457 |

| Manu-facturer | Model | Abrasive belts' width/ length [mm] |
|---|---|---|
| **Bosch** | GBS 75 AE | BA 75/533 |
| **DeWalt** | DW432 | BA 75/533 |
| | DW433 | |
| | DWP352VS | |
| **Dynabrade** | 40352 | BA 13/457 |
| | 40353 | |
| | 40320 | |
| | 40321 | |
| | 40324 | |
| | 40335 | |
| | 40381 | |
| | 15300 | |
| | 15400 | |
| | 40326 | BA 6-16/520 |
| | 40330 | BA 13/457 |
| | 40615 | BA 6/610 |
| | 40503 | BA 12/610 |
| | 15360 | BA 6/610<br>BA 12/610 |
| | 15420 | |
| | 14000 | |
| | 15401 | BA 12-0/520 |
| | 15003 | BA 3-12/305 |
| **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 (2H) | |
| | GIS 75 | |
| | GIC | BA 75/2000<br>BA 150/2000 |
| | GI 100 / 100 EF | BA 100/1000 |
| | GIM | BA 150/2000 |
| | GIL | BA 150/2000 |
| | GIS 150 | |
| | BF10-280E | BA 3-20/520 |
| | RS10-70E | BA 12-20/520<br>BA 30/533 |
| **Festool** | BS 75 | BA 75/533 |
| **Flott** | BSM 75 / 75A / 75A pol | BA 75/2000 |
| | BSM 150 / 150A / 150A pol | BA 150/2000 |
| | TBSM 75 | BA 75/1000 |
| **Güde** | BS 76-900 E | BA 75/533 |
| | BTS 4000 ECO | BA 100/920 |
| | BTS 4000 | |
| **Hitachi** | SB10V2 | BA 100/610 |

| Manu-facturer | Model | Abrasive belts' width/ length [mm] |
|---|---|---|
| **Makita** | 9910 | BA 75/457 |
| | 9911 | |
| | 9902 | BA 75/533 |
| | 9903 | |
| | 9920 | BA 75/610 |
| | 9404 | 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 9-20 | BA 13/457 |
| | BAE 75 | BA 75/533 |
| | DBF 457 | BA 13/457 |
| **Milwaukee** | BS 100 LE | BA 100/620 |
| | HBSE 75 S | BA 75/533 |
| **Proxxon** | BS/E | BA 10/330 |
| | BS/A | BA 10/330 |
| **Rexon** | BD480A | BA 100/920 |
| | BD460M | |
| **Ryobi** | EBS800V | BA 75/533 |
| | EBS1310VFHG | BA 100/610 |
| **SCANTOOL** | SC 75 | BA 75/2000 |
| | SC 150 | BA 150/2000 |
| **Scheppach** | 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 6-12/520 |
| | LBC 16 H | |
| | WB 10 | |
| | LBB 20 DH | BA 6/305<br>BA 12/305 |
| | FTM | BA 30/610 |
| | BSG 10/35 | BA 35/450 |
| | BSG 10/50 | BA 50/450 |
| **Triton** | TA 1200BS | BA 75/533 |





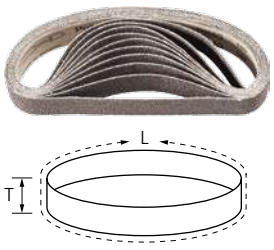

## Aluminium oxide A type

For universal applications from coarse to fine grinding.

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

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




## Aluminium oxide A compact grain type

Outstandingly suited to fine and very fine grinding, and for step-by-step preparations for polishing.

The self-sharpening compact grain facilitates a very long tool life and achieves consistent surface quality levels throughout the entire tool life.

**Abrasive:**
Aluminium oxide A compact grain

**Ordering notes:**
- Please complete the description with the desired grit size.

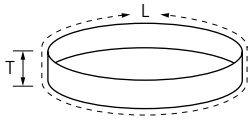
| L [mm] | T [mm] | Grit size | | | | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 120 | 180 | 240 | 320 | 400 | 600 | 800 | 1000 | 1200 | | |
| | | EAN 4007220 | | | | | | | | | | |
| 533 | 30 | 025925 | 025932 | 025949 | 025956 | 025963 | 025970 | 025987 | 025994 | 026007 | 10 | BA 30/533 J A ... CK |
| 610 | 30 | 026014 | 026021 | 026038 | 026045 | 026052 | 026069 | 026076 | 026083 | 026090 | 10 | BA 30/610 J A ... CK |

## Zirconia alumina Z type

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

**Abrasive:**
Zirconia alumina Z

**Ordering notes:**
- Please complete the description with the desired grit size.




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

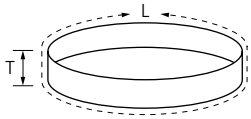
## Aluminium oxide A-COOL type

For universal 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 substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

**Abrasive:**
Aluminium oxide A-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.




| L [mm] | T [mm] | Grit size 40 | 80 | 120 | 180 | Acc. to ISO standards | | Description |
|---|---|---|---|---|---|---|---|---|
| | | EAN 4007220 | | | | | | |
| 450 | 50 | 586099 | 586105 | 586112 | 586129 | 2976 | 20 | BA 50/450 A-COOL ... |

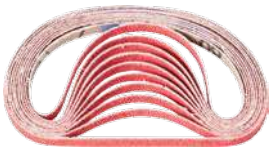
## Ceramic oxide grain CO-COOL type

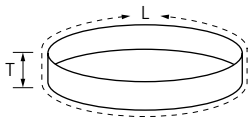
For aggressive grinding with the highest stock removal rates on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

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

**Abrasive:**
Ceramic oxide grain CO-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.



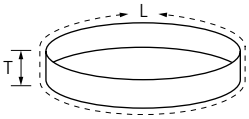



| L [mm] | T [mm] | Grit size 40 | 60 | 80 | 120 | Acc. to ISO standards | | Description |
|---|---|---|---|---|---|---|---|---|
| | | EAN 4007220 | | | | | | |
| 305 | 6 | 799215 | 799222 | 799239 | 799246 | - | 100 | BA 6/305 CO-COOL ... |
| | 9 | 799352 | 799369 | 799376 | 799383 | - | 100 | BA 9/305 CO-COOL ... |
| | 12 | 799444 | 799451 | 799468 | 799475 | - | 100 | BA 12/305 CO-COOL ... |
| 330 | 10 | 799390 | 799406 | 799413 | 799420 | 2976 | 100 | BA 10/330 CO-COOL ... |
| | 12 | 799482 | 799499 | 799505 | 799536 | - | 100 | BA 12/330 CO-COOL ... |
| 450 | 35 | 949887 | 949894 | 949917 | 949924 | 2976 | 20 | BA 35/450 CO-COOL ... |
| | 50 | 949931 | 949948 | 949955 | 949962 | 2976 | 20 | BA 50/450 CO-COOL ... |
| 457 | 13 | 799628 | 799635 | 799642 | 799659 | 2976 | 100 | BA 13/457 CO-COOL ... |
| 480 | 16 | 799666 | 799673 | 799680 | 799697 | - | 50 | BA 16/480 CO-COOL ... |
| | 20 | 799741 | 799758 | 799772 | 799789 | 2976 | 20 | BA 20/480 CO-COOL ... |

Continued on next page

| L [mm] | T [mm] | Grit size 40 | 60 | 80 | 120 | Acc. to ISO standards | | Description |
|---|---|---|---|---|---|---|---|---|
| | | EAN 4007220 | | | | | | |
| 480 | 25 | 799833 | 799840 | 799857 | 799864 | 2976 | 20 | BA 25/480 CO-COOL ... |
| 520 | 6 | 799260 | 799277 | 799284 | 799307 | 2976 | 100 | BA 6/520 CO-COOL ... |
| | 12 | 799543 | 799550 | 799567 | 799574 | - | 100 | BA 12/520 CO-COOL ... |
| | 16 | 799703 | 799710 | 799727 | 799734 | - | 50 | BA 16/520 CO-COOL ... |
| | 20 | 799796 | 799802 | 799819 | 799826 | 2976 | 20 | BA 20/520 CO-COOL ... |
| 533 | 30 | 799871 | 799888 | 799895 | 799901 | - | 20 | BA 30/533 CO-COOL ... |
| 610 | 6 | 799314 | 799321 | 799338 | 799345 | 2976 | 100 | BA 6/610 CO-COOL ... |
| | 12 | 799581 | 799598 | 799604 | 799611 | - | 100 | BA 12/610 CO-COOL ... |
| | 30 | 799918 | 799925 | 799932 | 799949 | - | 10 | BA 30/610 CO-COOL ... |

## Short belts VB




### Non-woven type

Suitable for universal work on surfaces such as metal tubular structures, e.g. removal of rough grinding traces, removal of oxidation and light deburring work. Achieve matt and satin-finished surfaces.

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

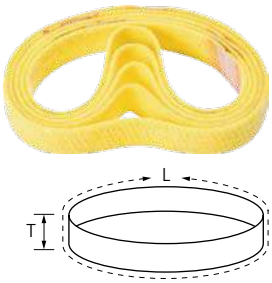
**Recommendations for use:**
- For the best results, use at a recommended cutting speed of 5–15 m/s.

**Ordering notes:**
- Please complete the description with the desired grit size.

| L [mm] | T [mm] | Grit size 100 G | 180 M | 240 F | Acc. to ISO standards | | Description |
|---|---|---|---|---|---|---|---|
| | | EAN 4007220 | | | | | |
| 305 | 6 | 667552 | 667569 | 667545 | - | 10 | VB 6/305 A ... |
| | 9 | 667668 | 667675 | 667620 | - | 10 | VB 9/305 A ... |
| | 12 | 667637 | 667644 | 667651 | - | 10 | VB 12/305 A ... |
| 450 | 35 | 586631 | 586648 | 586655 | - | 10 | VB 35/450 A ... |
| | 50 | 586662 | 586679 | 586686 | 2976 | 10 | VB 50/450 A ... |
| 520 | 6 | 586518 | 586525 | 586532 | - | 10 | VB 6/520 A ... |
| | 12 | 586549 | 586556 | 586563 | - | 10 | VB 12/520 A ... |
| | 16 | 586570 | 586587 | 586594 | - | 10 | VB 16/520 A ... |
| | 20 | 586600 | 586617 | 586624 | 2976 | 5 | VB 20/520 A ... |
| 533 | 30 | 667699 | 667705 | 667682 | 2976 | 5 | VB 30/533 A ... |
| 610 | 6 | 101063 | 101070 | 101087 | 2976 | 10 | VB 6/610 A ... |
| | 12 | 101117 | 101124 | 101131 | - | 10 | VB 12/610 A ... |
| | 30 | 776520 | 776537 | 776551 | - | 5 | VB 30/610 A ... |

## Felt type

Suitable for polishing with polishing paste bars and grinding pastes on tubular constructions 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.
- For the best results, use at a recommended cutting speed of 5–15 m/s.

**Accessories:**
- Grinding and polishing pastes

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



## Belt grinder set BA

Set of different short belts, including electric belt grinder, for universal work on surfaces from coarse to fine, especially for assembly work.

**Contents:**
- Electric belt grinder UBS 5/100 SI 925 with continuous rotational speed control from 6.5–16 m/s, output 500 watts
- 2 pcs. each of abrasive belts, width 6 and 12 mm, in aluminium oxide A type, grain 40, 60, 80, 120 and 180
- 2 pcs. each of non-woven belts (6 and 12 mm wide) in coarse, medium and fine

**Advantages:**
- Optimal, stepless rotational speed regulation for the use of high-speed abrasive belts and low-speed non-woven belts.
- Coordinated selection of the most common versions.

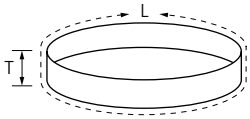
**Abrasive:**
Aluminium oxide A

**Recommendations for use:**
- Use abrasive belts at the higher rotational speed levels 4–6 (7,000–10,000 RPM = 11–16 m/s).
- Use non-woven belts at the lower rotational speed levels 1–4 (4,000–7,000 RPM = 6–11 m/s).

**Ordering notes:**
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

**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.

| L [mm] | EAN 4007220 | | Description |
|---|---|---|---|
| 520 | 344125 | 1 | SET BA 6-12/520 UBS 5/100 230 V |



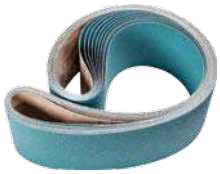

## Aluminium oxide A type

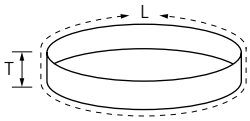
For universal applications from coarse to fine grinding.

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

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






## Zirconia alumina Z type

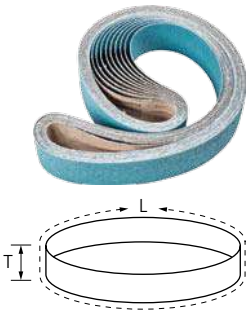
For coarse grinding work with a high stock removal rate and a long tool life.

**Abrasive:**
Zirconia alumina Z

**Ordering notes:**
- Please complete the description with the desired grit size.

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

## Zirconia alumina Z-FORTE type




For coarse grinding work with a high stock removal rate, a long tool life and very cool grinding.

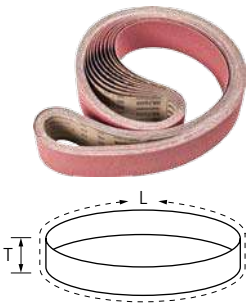
Particularly suitable for work on thin-walled stainless steel (INOX) components and on steels or nickel-based alloys which do not conduct heat well.

**Abrasive:**
Zirconia alumina Z-FORTE

**Ordering notes:**
- Please complete the description with the desired grit size.

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

## Ceramic oxide grain CO type



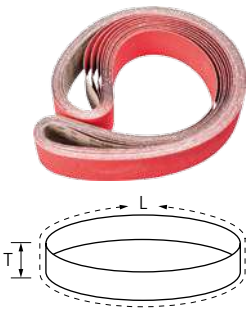

For aggressive grinding with a very high stock removal rate and very long tool life. Consistently high performance due to self-sharpening ceramic oxide grain. The ceramic oxide grain is specifically designed for work on hard materials and layers.

**Abrasive:**
Ceramic oxide grain CO

**Ordering notes:**
- Please complete the description with the desired grit size.

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

## Ceramic oxide grain CO-COOL type



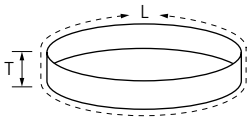

For aggressive grinding with the highest stock removal rates on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

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

**Abrasive:**
Ceramic oxide grain CO-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.

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




## Non-woven type

Suitable for universal work on metal surfaces in stationary applications, e.g. removal of rough grinding traces, removal of oxidation and light deburring work.
Achieve matt and satin-finished surfaces.

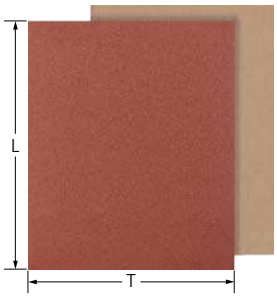
**Abrasive:**
Aluminium oxide A
Available POLIVLIES grit sizes:
100 G = coarse (yellow-brown)
180 M = medium (red-brown)
240 F = fine (blue)

**Recommendations for use:**
- For the best results, use at a recommended cutting speed of 5–15 m/s.

**Ordering notes:**
- Please complete the description with the desired grit size.

| L [mm] | T [mm] | Grit size | | | | Description |
|---|---|---|---|---|---|---|
| | | 100 G | 180 M | 240 F | | |
| | | EAN 4007220 | | | | |
| 2,000 | 75 | 066164 | 066188 | 066195 | 2 | VB 75/2000 A ... |
| 2,500 | 75 | 066225 | 066232 | 066249 | 2 | VB 75/2500 A ... |

## Brown BR type




The brown cloth-backed variant is suitable for universal, heavy-duty use on alloyed and non-alloyed steels, as well as non-ferrous metals.

The cloth-backed abrasive sheets comply with ISO 21948.

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

**Abrasive:**
Aluminium oxide A

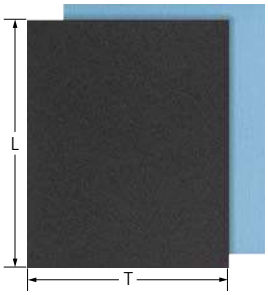
**Recommendations for use:**
- Tear to the necessary size if required.

**Ordering notes:**
- Please complete the description with the desired grit size.

| L [mm] | T [mm] | Grit size | | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 40 | 60 | 80 | 100 | 120 | 150 | 180 | | |
| | | EAN 4007220 | | | | | | | | |
| 280 | 230 | 587393 | 587409 | 587416 | 587423 | 587430 | 587447 | 587454 | 50 | BG BR 230x280 A ... |

| L [mm] | T [mm] | Grit size | | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 220 | 240 | 280 | 320 | 400 | 444 | 999 | | |
| | | EAN 4007220 | | | | | | | | |
| 280 | 230 | 587461 | 587478 | 587485 | 587492 | 587515 | 587522 | 587539 | 50 | BG BR 230x280 A ... |

## Blue BL type




The blue cloth-backed variant is the low-cost alternative for normal workloads when working on painted wooden and metal surfaces.

The cloth-backed abrasive sheets comply with ISO 21948.

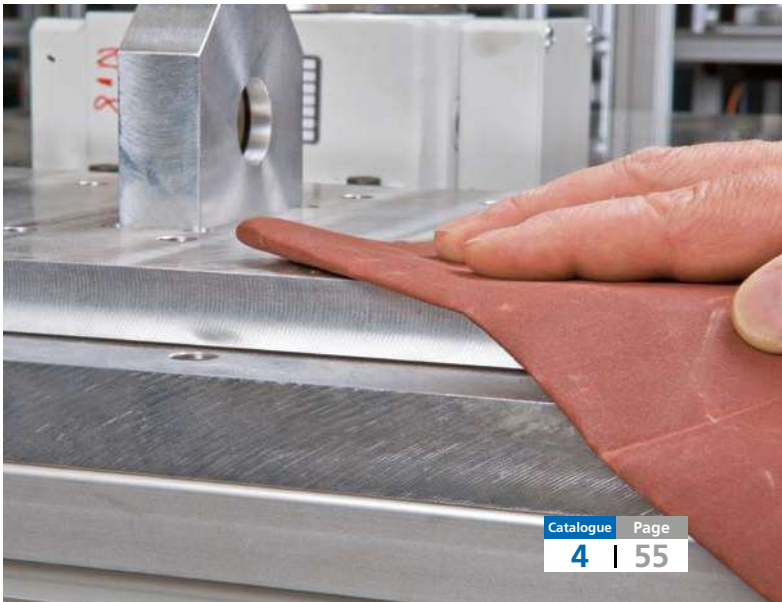
**Advantages:**
- Good grain adhesion on sturdy cloth.
- Good abrasive performance.

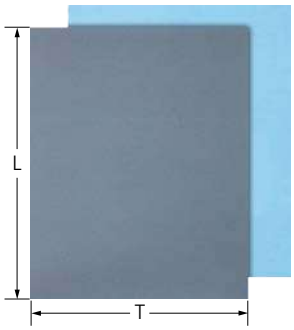
**Abrasive:**
Aluminium oxide A

**Recommendations for use:**
- Tear to the necessary size if required.

**Ordering notes:**
- Grit sizes 40, 60 and 80 are supplied in packaging units of 50 pieces.
- Please complete the description with the desired grit size.

| L [mm] | T [mm] | Grit size | | | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 40 | 60 | 80 | 100 | 120 | 150 | 180 | 220 | 240 | |
| | | EAN 4007220 | | | | | | | | | |
| 280 | 230 | 587270 | 587287 | 587294 | 587300 | 587317 | 587324 | 587331 | 587348 | 587355 | 100 | BG BL 230x280 A ... |






## SiC type, waterproof W

The SiC abrasive enables use on paint and glass.
Particularly suitable for all wet grinding work on conventional painted constructions.

The paper-backed abrasive sheets comply with ISO 21948.

**Advantages:**
- Very high grain adhesion on very flexible and light paper.
- Maximum abrasive performance.
- Can be used for wet and dry grinding.

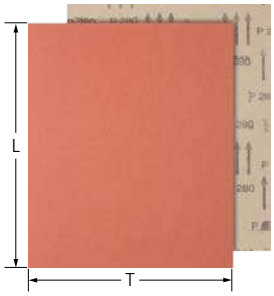
**Abrasive:**
Silicon carbide SiC

**Recommendations for use:**
- Tear to the necessary size if required.

**Ordering notes:**
- Please complete the description with the desired grit size.

| L [mm] | T [mm] | Grit size | | | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 100 | 120 | 150 | 180 | 220 | 240 | 280 | 320 | | |
| | | EAN 4007220 | | | | | | | | | |
| 280 | 230 | 587546 | 588222 | 588239 | 588246 | 588253 | 588260 | 588277 | 588284 | 50 | BP W 230x280 SiC ... |

| L [mm] | T [mm] | Grit size | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | 360 | 400 | 500 | 600 | 800 | 1000 | 1200 | |
| | | EAN 4007220 | | | | | | | |
| 280 | 230 | 588291 | 588307 | 588314 | 588321 | 588338 | 588345 | 588352 | 50 | BP W 230x280 SiC ... |




## Aluminium oxide A type

The aluminium oxide A abrasive is the low-cost alternative for normal workloads when working on painted wooden and metal surfaces.

The paper-backed abrasive sheets comply with ISO 21948.

**Advantages:**
- Good grain adhesion on sturdy paper.
- Good abrasive performance.

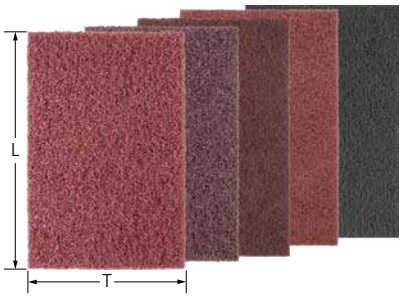
**Abrasive:**
Aluminium oxide A

**Recommendations for use:**
- Tear to the necessary size if required.

**Ordering notes:**
- Grit sizes 40, 60 and 80 are supplied in packaging units of 50 pieces.
- Please complete the description with the desired grit size.

| L [mm] | T [mm] | Grit size | | | | | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 40 | 60 | 80 | 100 | 120 | 150 | 180 | 220 | 240 | 280 | 400 | |
| | | EAN 4007220 | | | | | | | | | | | |
| 280 | 230 | 622520 | 622544 | 622551 | 622568 | 622575 | 622582 | 622476 | 622483 | 622490 | 622506 | 622513 | 100 | BP 230x280 A ... |

## POLINOX hand pads PVSK




Suitable for very fine grinding on small to large surfaces and contours, and for manually cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces.
Highly open structure.

**Advantages:**
- Highly flexible, enabling optimal adjustment to the contour.
- Hard-to-reach areas can be accessed.
- Can be used for wet and dry grinding.

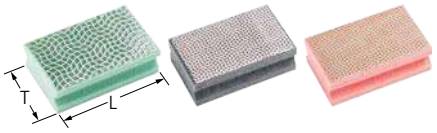
**Abrasive:**
Aluminium oxide A
Silicon carbide SiC

**Recommendations for use:**
- Cut to the necessary size if required.

**Ordering notes:**
- Please complete the description with the desired grit size.

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

## HP diamond type




Exceptionally suitable for work on wear-resistant coatings 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.

**Advantages:**
- Highly flexible, enabling optimal adjustment to the contour.
- Hard-to-reach areas can be accessed.
- Can be used for wet and dry grinding.

**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:**
- Work with little contact pressure.

**Ordering notes:**
- Grit sizes are indicated in µm.
- Further information on diamond grinding tools can be found in catalogue section 5.
- Please complete the description with the desired grit size.

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

Thanks to their high flexibility, shop rolls are ideally suited to a range of grinding applications.
The matching shop roll holder is suitable for storing and tearing off the belts to the required length.

## Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Low wear thanks to high tear strength and very high grain adhesion.

## Applications:

- Roughening
- Surface work
- Cleaning
- Step-by-step fine grinding

## Recommendations for use:

- Cut to the required dimensions if necessary.

## Matching tool drives:

- Manual application

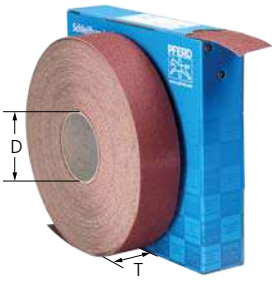
## Ordering notes:

- Please order shop roll holders separately.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**587775**
  SBR 50 A **100**
- **Ordering example explanation:**
  SBR = Shop rolls
  50 = Width T [mm]
  A = Abrasive
  **100** = Grit size

## Accessories:

- Shop roll holders

# Shop rolls SBR




## Cloth, aluminium oxide A type

The brown cloth-backed variant is suitable for universal, heavy-duty use on alloyed and non-alloyed steels, as well as non-ferrous metals. The carton has a tear-off edge for separating the sections of abrasive belt at the workplace.

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

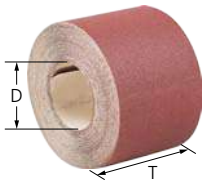
**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

| Length [m] | T [mm] | D [mm] | Grit size | | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 40 | 50 | 60 | 80 | 100 | 120 | 150 | | |
| | | | EAN 4007220 | | | | | | | | |
| 25 | 38 | 75.0 | 602010 | 602027 | 602034 | 602041 | 602058 | 602065 | 602072 | 1 | SBR 38 A ... |
| 50 | 25 | 75.0 | - | - | 587553 | 587560 | 587577 | 587584 | 587591 | 1 | SBR 25 A ... |
| | 40 | 75.0 | 587645 | - | 587652 | 587669 | 587676 | 587683 | 587690 | 1 | SBR 40 A ... |
| | 50 | 75.0 | 587744 | - | 587751 | 587768 | 587775 | 587782 | 587799 | 1 | SBR 50 A ... |
| | 100 | 75.0 | 587843 | - | 587850 | 588864 | 587874 | 587881 | 587973 | 1 | SBR 100 A ... |

| Length [m] | T [mm] | D [mm] | Grit size | | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 180 | 220 | 240 | 320 | 400 | 600 | 800 | | |
| | | | EAN 4007220 | | | | | | | | |
| 25 | 38 | 75.0 | 602089 | 602096 | 602102 | 602119 | 602126 | - | - | 1 | SBR 38 A ... |
| 50 | 25 | 75.0 | 587607 | - | 587614 | 587621 | 587638 | 607237 | 607244 | 1 | SBR 25 A ... |
| | 40 | 75.0 | 587706 | 622612 | 587713 | 587720 | 587737 | - | - | 1 | SBR 40 A ... |
| | 50 | 75.0 | 587805 | 621981 | 587812 | 587829 | 587836 | 607251 | - | 1 | SBR 50 A ... |
| | 100 | 75.0 | 587980 | - | 587997 | 588000 | 588017 | - | - | 1 | SBR 100 A ... |

## Paper, aluminium oxide A type




The abrasive material aluminium oxide A is the low-cost alternative for normal workloads when working on painted wooden and metal surfaces.

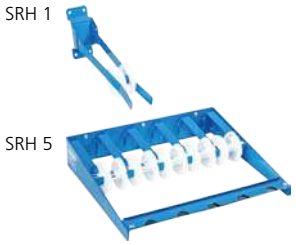
**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

| Length [m] | T [mm] | D [mm] | Grit size | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 40 | 60 | 80 | 100 | 120 | 150 | | |
| | | | EAN 4007220 | | | | | | | |
| 25 | 115 | 75.0 | 667774 | 667781 | 622858 | 622865 | 667798 | 667804 | 1 | SBR-P 115 A ... |

# Shop roll holder SRH

## SRH 1 and SRH 5 types




Holder for wall-mounting: for storing and tearing off to the required length as necessary.
With the variant SRH 5, various roll sizes can be combined with each other as desired.

**Advantages:**
- Enable shop rolls to be stored correctly.

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

# POLINOX non-woven shop rolls VBR

## Aluminium oxide A and silicon carbide SiC types


Suitable for very fine grinding on small to large surfaces and contours, and for manually cleaning metal and painted surfaces. Achieve matt and satin-finished surfaces.
Highly open structure.

**Advantages:**
- Highly flexible, enabling optimal adjustment to the contour.
- Hard-to-reach areas can be accessed.
- Can be used for wet and dry grinding.

**Abrasive:**
Aluminium oxide A
Silicon carbide SiC

**Recommendations for use:**
- Cut to the necessary size if required.

**Ordering notes:**
- Please complete the description with the desired grit size.

| Length [m] | T [mm] | Abrasives | Grit size | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | 80 | 100 | 180 | 280 | 400 | | |
| | | | EAN 4007220 | | | | | | |
| 10 | 100 | A | 095690 | 622711 | 622728 | 622735 | - | 1 | VBR 100 A ... |
| | | SiC | - | - | - | - | 951385 | 1 | VBR 100 SiC ... |

## SS type

High flexibility, therefore ideal for very fine deburring and finishing work in hard-to-reach places.

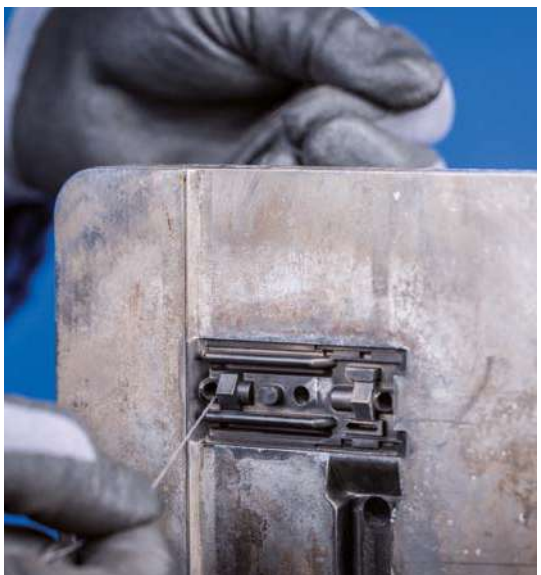
Especially recommended for work on very small holes, grooves and cut-outs in tool- and mould-making.

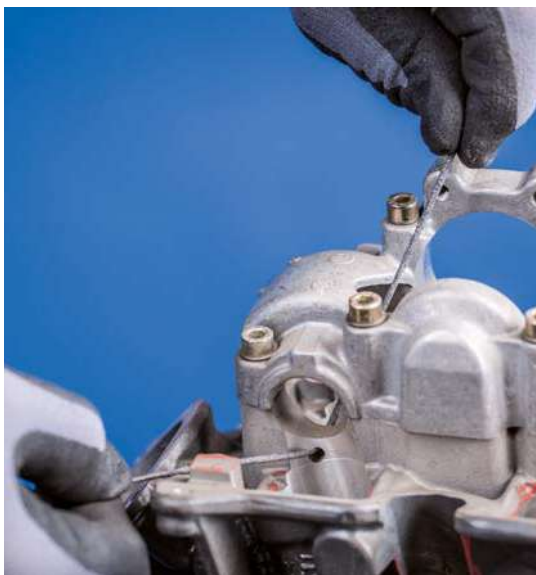
**Explanation of the abbreviations:**
D = Abrasive cord diameter

**Abrasive:**
Aluminium oxide A
Silicon carbide SiC

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | Length [m] | Grit size | | | | | Description |
|---|---|---|---|---|---|---|---|
| | | 120 | 150 | 180 | 200 | | |
| | | EAN 4007220 | | | | | |
| **Aluminium oxide A** | | | | | | | |
| 0.8 | 15 | - | - | - | 037614 | 1 | SS 0,8mm x 15m A ... |
| 1 | 15 | - | - | 037638 | - | 1 | SS 1,0mm x 15m A ... |
| 1.4 | 15 | - | 037645 | - | - | 1 | SS 1,4mm x 15m A ... |
| 1.8 | 15 | - | - | 037652 | - | 1 | SS 1,8mm x 15m A ... |
| 2.1 | 15 | 037676 | - | - | - | 1 | SS 2,1mm x 15m A ... |
| **Silicon carbide SiC** | | | | | | | |
| 0.5 | 15 | - | - | - | 037607 | 1 | SS 0,5mm x 15m SiC ... |





Velcro-backed abrasive discs are suitable for fine-grinding large surfaces using eccentric orbital sanders and can be universally used on metal, wood, plastic and paintwork.

The velcro-backed abrasive discs with extraction holes are realized in shape A in compliance with ISO 21951:

**O L:** Without extraction holes
**Dia. 125 8 L:** 8 extraction holes, dia. 10 mm, reference circle 65 mm, ISO 21951 – nominal size 6
**Dia. 150 8 L:** 8 extraction holes, dia. 10 mm, reference circle 65 mm, ISO 21951 – nominal size 9
**Dia. 150 6 L:** 6 extraction holes, dia. 10 mm, reference circle 80 mm, ISO 21951 – nominal size 10

## Advantages:

- High profitability thanks to quick tool changes and high abrasive performance.
- Longest possible tool life thanks to low clogging.

## Applications:

- Roughening
- Surface work
- Cleaning
- Step-by-step fine grinding

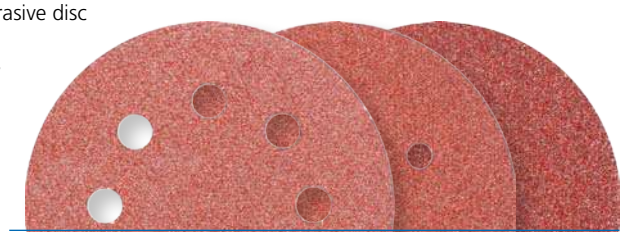
## Matching tool drives:

- Eccentric orbital sanders

## Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**599297**
  KSS 125 8 L A **60**
- **Ordering example explanation:**
  KSS = Velcro-backed abrasive disc
  125 = Diameter
  8 L = 8 extraction holes
  A = Abrasive
  **60** = Grit size

## Safety notes:





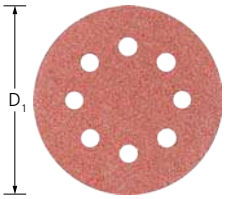
## Velcro-backed abrasive discs KSS

### Aluminium oxide A type

For universal grinding work from coarse to fine grinding in industry and professional trades.

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.




| $D_1$ [mm] | Holes | Grit size | | | | | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 40 | 60 | 80 | 100 | 120 | 150 | 180 | 240 | 320 | 400 | | |
| | | EAN 4007220 | | | | | | | | | | | |
| 125 | 0 | 599273 | 599297 | 599303 | 599310 | 599426 | 599327 | - | - | - | - | 25 | KSS 125 O L A ... |
| | 8 | 588024 | 588031 | 588048 | 588055 | 588062 | 588079 | 588086 | 588093 | 588109 | 588116 | 25 | KSS 125 8 L A ... |
| 150 | 0 | 599341 | 599358 | 599365 | 599372 | 599389 | 599396 | 599402 | 599419 | - | - | 25 | KSS 150 O L A ... |
| | 8 | 599105 | 599112 | 599129 | 599136 | 599143 | 599150 | - | - | - | - | 25 | KSS 150 8 L A ... |
| | 6 | 588123 | 588130 | 588147 | 588154 | 588161 | 588178 | 588185 | 588192 | 588208 | 588215 | 25 | KSS 150 6 L A ... |


# Coated abrasives

## General information – Velcro-backed abrasive discs KSS-NET

Velcro-backed abrasive discs in the NET type feature a netting fabric, to which the abrasive grain is bonded with a high-performance bond system, which makes it very durable.

The range comprises various diameters that have been adapted to the drives common on the market, and also a comprehensive choice of grains, from 80 to 1,000.

### Advantages:

- Very long tool life and high stock removal rate.
- Very fine, even surfaces can be achieved.
- Dust-free work thanks to good extraction capability.
- No clogging thanks to netting structure.
- Durable netting structure with high tear strength and edge stability.

### Materials that can be worked:

- Aluminium
- Additional non-ferrous metals
- Stainless steel (INOX)
- Wood
- Plastics
- Steel, cast steel

### Applications:

- Roughening
- Surface grinding
- Cleaning
- Step-by-step fine grinding

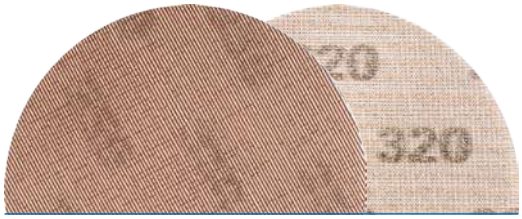
### Matching tool drives:

- Eccentric orbital sanders

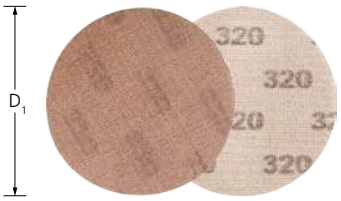
### Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**105207**
  KSS NET 125 A **80**
- **Ordering example explanation:**
  KSS NET = Velcro-backed abrasive disc, NET type
  125 = Diameter
  A = Abrasive
  **80** = Grit size

### Safety notes:




## Velcro-backed abrasive discs KSS-NET




### KSS-NET type

For dust-free, universal grinding work on medium-sized and large surfaces.

**Abrasive:**
Aluminium oxide A

**Recommendations for use:**
- Use the extraction connection on the machine to effectively remove the grinding dust.

**Ordering notes:**
- Please complete the description with the desired grit size.

| $D_1$ [mm] | Grit size | | | | | | | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 80 | 100 | 120 | 150 | 180 | 240 | 320 | 400 | 600 | 800 | 1000 | | |
| | EAN 4007220 | | | | | | | | | | | | |
| 125 | 105207 | 105214 | 105221 | 105238 | 105245 | 105252 | 105269 | 105276 | 105283 | 105290 | 105306 | 25 | KSS NET 125 A ... |
| 150 | 105313 | 105320 | 105337 | 105344 | 105351 | 105368 | 105375 | 105382 | 105399 | 105405 | 105412 | 25 | KSS NET 150 A ... |

The comprehensive range of abrasive spiral bands offers the best tool solution for every application, from fine grinding through to aggressive grinding.

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

In ISO 2421, abrasive spiral bands are designated as "cylindrical abrasive sleeves".

In ISO 15637-1, cylindrical rubber drum holders are designated as "holding fixtures for cylindrical abrasive sleeves".

**KSB** = Small pack of abrasive spiral bands
**GSB** = Bulk pack of abrasive spiral bands

## Advantages:

- Abrasive spiral band fits securely on the rubber drum holder as the holder expands during use.
- Outstanding tool life thanks to special manufacturing process – even under the toughest work conditions.
- Highest possible profitability thanks to particularly high stock removal and aggressiveness of the abrasive.

## Applications:

- Roughening
- Levelling
- Deburring
- Surface work
- Work on edges
- Sharpening
- Work on weld seams
- Step-by-step fine grinding

## Recommendations for use:

- To change the abrasive spiral bands easily, raise and lower them while turning slightly to the right. When doing so, leave the rubber drum holder engaged in the tool drive.
- Adhere to the minimum speed for the rubber drum holder to ensure that the abrasive spiral band fits securely.
- For best performance, use with a recommended cutting speed of 20–30 m/s.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

## Matching tool drives:

- Flexible shaft drives
- Straight grinders

## Ordering notes:

- Please order rubber drum holders separately.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**148426**
  GSB 4530 Z-COOL **36**
- **Ordering example explanation:**
  GSB = Bulk pack of abrasive spiral bands
  4530 = Inner diameter D x width T [mm]
  Z = Abrasive
  COOL = Bond type
  **36** = Grit size

## Safety notes:

- The maximum permitted peripheral speed is 30 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- Do not allow abrasive spiral bands to protrude beyond the rubber drum holder.

## Accessories:

- Rubber drum holder

## Recommended rotational speed range

**Example:**
KSB 4530 A 60
Cutting speed: 20–30 m/s
**Rotational speed: 8,400–12,700 RPM**

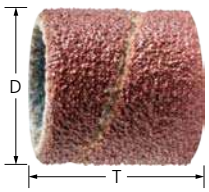
| Tool dia. [mm] | Cutting speed [m/s] | | |
|---|---|---|---|
| | 20 | 25 | 30 |
| | Rotational speeds [RPM] | | |
| 4 | 95,400 | 119,300 | 143,200 |
| 6 | 63,600 | 79,500 | 95,400 |
| 8 | 47,700 | 59,600 | 71,600 |
| 10 | 38,100 | 47,700 | 57,200 |
| 13 | 29,300 | 36,700 | 44,000 |
| 15 | 25,400 | 31,800 | 38,100 |
| 19 | 20,100 | 25,100 | 30,100 |
| 22 | 17,300 | 21,700 | 26,000 |
| 25 | 15,200 | 19,000 | 22,900 |
| 30 | 12,700 | 15,900 | 19,000 |
| 38 | 10,000 | 12,500 | 15,000 |
| 45 | 8,400 | 10,600 | 12,700 |
| 51 | 7,400 | 9,300 | 11,200 |
| 60 | 6,300 | 7,900 | 9,500 |
| 75 | 5,000 | 6,300 | 7,600 |
| 100 | 3,800 | 4,700 | 5,700 |

## The fast way to the best tool

| Material group ▼ | | Abrasive ▶ | Aluminium oxide A | Zirconia alumina Z | Zirconia alumina Z-COOL | Ceramic oxide grain CO-COOL | Silicon carbide SiC |
|---|---|---|---|---|---|---|---|
| Steel, cast steel | Non-hardened, non-heat-treated steels | Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel | ● | ❍ | | ● | |
| | Hardened, heat-treated steels | Tool steels, tempering steels, alloyed steels, cast steel | ❍ | ● | | ● | |
| Stainless steel (INOX) | Rust- and acid-resistant steels | Austenitic and ferritic stainless steels | | ❍ | ● | ● | |
| Non-ferrous metals | Soft non-ferrous metals, non-ferrous metals | Soft aluminium alloys | ❍ | | ❍ | ❍ | |
| | | Brass, copper, zinc | ● | ❍ | ❍ | | |
| | Hard non-ferrous metals | Hard aluminium alloys | ● | ❍ | ❍ | | ❍ |
| | | Bronze, titanium | | ❍ | ● | ● | ● |
| | High-temperature-resistant materials | Nickel-based and cobalt-based alloys | | ❍ | ● | ● | |
| Cast iron | Grey cast iron, white cast iron | Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS) | ● | ❍ | | | |
| Plastics, other materials | | Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork | ● | | | | ● |

● = Highly suitable ❍ = Suitable

## Small pack KSB




### Aluminium oxide A type

For universal applications from coarse to fine grinding.

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
■ Please complete the description with the desired grit size.

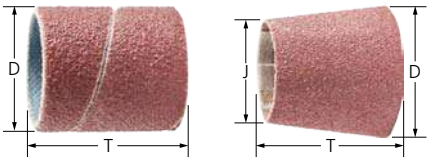
| D [mm] | T [mm] | Grit size 40 | 50 | 60 | 80 | 150 | 240 | Opt. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | EAN 4007220 | | | | | | | | |
| **Cylindrical shape** | | | | | | | | | | |
| 10 | 10 | - | - | - | 148921 | 148938 | - | 30,000–44,000 | 25 | KSB 1010 A ... |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

## Aluminium oxide A type

For universal applications from coarse to fine grinding.

**Abrasive:**
Aluminium oxide A

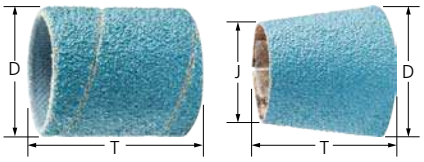
**Ordering notes:**
■ Please complete the description with the desired grit size.




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



# Abrasive spiral bands
## Bulk pack GSB



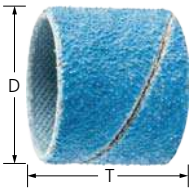

### Zirconia alumina Z type

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

**Abrasive:**
Zirconia alumina Z

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | J [mm] | T [mm] | Grit size | | | | | | Opt. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 36 | 40 | 50 | 60 | 80 | 120 | | | |
| | | | EAN 4007220 | | | | | | | | |
| **Cylindrical shape** | | | | | | | | | | | |
| 13 | - | 25 | - | - | 804827 | 804872 | 804889 | 949757 | 30,000–44,000 | 100 | GSB 1325 Z ... |
| 19 | - | 25 | - | 804896 | 804902 | 804940 | 804957 | 949764 | 20,000–30,000 | 100 | GSB 1925 Z ... |
| 25 | - | 25 | 949771 | 805022 | 805077 | 805084 | 805091 | 949788 | 16,000–22,900 | 100 | GSB 2525 Z ... |
| 30 | - | 30 | 949795 | 805145 | 805152 | 805176 | 805183 | - | 13,000–19,100 | 100 | GSB 3030 Z ... |
| 38 | - | 25 | 949801 | 805190 | 949818 | 805206 | 949825 | 949832 | 10,000–15,900 | 100 | GSB 3825 Z ... |
| 45 | - | 30 | - | 805664 | 805671 | 805725 | 805732 | - | 8,500–12,700 | 100 | GSB 4530 Z ... |
| 51 | - | 25 | 949849 | 803943 | 949856 | 803950 | 803967 | 949863 | 7,500–11,200 | 100 | GSB 5125 Z ... |
| **Conical shape** | | | | | | | | | | | |
| 20 | 14 | 63 | 950050 | - | 950074 | 950081 | 950098 | 950104 | 19,000–26,000 | 100 | GSB 201463 Z ... |
| 29 | 22 | 30 | 950067 | - | 950128 | 950135 | 950142 | 950159 | 13,000–19,100 | 100 | GSB 292230 Z ... |
| 36 | 22 | 60 | 950166 | - | 950241 | 950258 | 950265 | 950289 | 10,000–15,900 | 100 | GSB 362260 Z ... |




### Zirconia alumina Z-COOL type

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

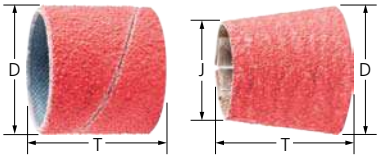
Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

**Abrasive:**
Zirconia alumina Z-COOL

**Ordering notes:**
- Grit size 150 is supplied with aluminium oxide A-COOL (brown).
- Please complete the description with the desired grit size.

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

## Ceramic oxide grain CO-COOL type




For aggressive grinding with maximum stock removal rate on hard and tough materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

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

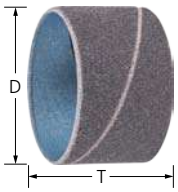
The packaging size is ideally suited to industrial requirements.

**Abrasive:**
Ceramic oxide grain CO-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | J [mm] | T [mm] | Grit size 36 | Grit size 60 | Grit size 80 | Grit size 120 | Opt. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | | |
| **Cylindrical shape** | | | | | | | | | |
| 13 | - | 25 | - | 088074 | 092415 | 088227 | 30,000–44,000 | 100 | GSB 1325 CO-COOL ... |
| 15 | - | 30 | - | 772195 | 772201 | 772218 | 26,000–36,000 | 100 | GSB 1530 CO-COOL ... |
| 19 | - | 25 | 088234 | 088333 | 088340 | 088432 | 20,000–30,000 | 100 | GSB 1925 CO-COOL ... |
| 22 | - | 20 | - | 772225 | 772232 | 772249 | 18,000–26,000 | 100 | GSB 2220 CO-COOL ... |
| 25 | - | 25 | 088456 | 772256 | 772263 | 772270 | 16,000–22,900 | 100 | GSB 2525 CO-COOL ... |
| 30 | - | 30 | 772287 | 772294 | 772317 | 772331 | 13,000–19,100 | 100 | GSB 3030 CO-COOL ... |
| 38 | - | 25 | 088494 | 088500 | 088579 | 088586 | 10,000–15,900 | 100 | GSB 3825 CO-COOL ... |
| 45 | - | 30 | 772355 | 772362 | 772393 | 772409 | 8,500–12,700 | 100 | GSB 4530 CO-COOL ... |
| 51 | - | 25 | 088661 | 088678 | 088753 | 088760 | 7,500–11,200 | 100 | GSB 5125 CO-COOL ... |
| 60 | - | 30 | 772416 | 772423 | 772430 | 772447 | 6,500–9,500 | 100 | GSB 6030 CO-COOL ... |
| **Conical shape** | | | | | | | | | |
| 20 | 14 | 63 | 950302 | 950319 | 950326 | 950340 | 19,000–26,000 | 100 | GSB 201463 CO-COOL ... |
| 29 | 22 | 30 | 950364 | 950388 | 950395 | 950418 | 13,000–19,100 | 100 | GSB 292230 CO-COOL ... |
| 36 | 22 | 60 | 950432 | 950456 | 950463 | 950487 | 10,000–15,900 | 100 | GSB 362260 CO-COOL ... |

## Silicon carbide SiC type




For universal grinding work on components made from aluminium, copper, bronze, titanium and fibre-reinforced plastics.

Particularly recommended for use on titanium alloys.

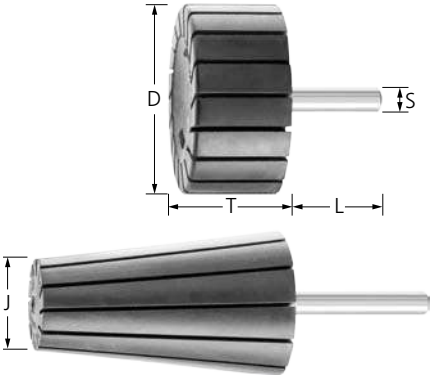
Ideally suited to use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.

**Abrasive:**
Silicon carbide SiC

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | Grit size 60 | Grit size 80 | Grit size 100 | Grit size 150 | Opt. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| | | EAN 4007220 | | | | | | |
| **Cylindrical shape** | | | | | | | | |
| 10 | 20 | 066270 | 066294 | 066300 | 066317 | 30,000–44,000 | 100 | GSB 1020 SiC ... |
| 13 | 25 | 066324 | 066348 | 066355 | 066362 | 30,000–44,000 | 100 | GSB 1325 SiC ... |
| 15 | 30 | 066379 | 066386 | 066393 | 066409 | 26,000–36,000 | 100 | GSB 1530 SiC ... |
| 22 | 20 | 066416 | 066423 | 066430 | 066447 | 18,000–26,000 | 100 | GSB 2220 SiC ... |
| 30 | 30 | 066454 | 066461 | 066478 | 066485 | 13,000–19,100 | 100 | GSB 3030 SiC ... |
| 45 | 30 | 066492 | 066508 | 066515 | 066522 | 8,500–12,700 | 100 | GSB 4530 SiC ... |

# Abrasive spiral bands
## Rubber drum holders GK




### Conical and cylindrical types

Matching rubber drum holder for conical and cylindrical abrasive spiral bands.

Rubber drum holders marked "H" are the harder type and permit grinding at higher contact pressure. They are extremely well-suited to work on weld seams.

| D [mm] | J [mm] | T [mm] | S [mm] | L [mm] | Hardness [Shore A] | EAN 4007220 | Acc. to ISO standards | Max. RPM | Minimum rotational speed [RPM] | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Cylindrical shape** | | | | | | | | | | | |
| 4 | - | 10 | 3 | 40 | 65–70 | 146729 | - | 55,000 | 30,000 | 5 | GK 0410/3 |
| | | | 6 | 40 | 65–70 | 146712 | - | 55,000 | 30,000 | 5 | GK 0410/6 |
| 6 | - | 10 | 3 | 40 | 65–70 | 146743 | - | 55,000 | 30,000 | 5 | GK 0610/3 |
| | | | 6 | 40 | 65–70 | 146736 | - | 55,000 | 30,000 | 5 | GK 0610/6 |
| 8 | - | 10 | 3 | 40 | 65–70 | 146767 | - | 55,000 | 30,000 | 5 | GK 0810/3 |
| | | | 6 | 40 | 65–70 | 146750 | - | 55,000 | 30,000 | 5 | GK 0810/6 |
| 10 | - | 10 | 6 | 35 | 65–70 | 146774 | 15637-1 | 44,000 | 30,000 | 5 | GK 1010/6 |
| | | 20 | 6 | 35 | 65–70 | 146781 | 15637-1 | 44,000 | 30,000 | 5 | GK 1020/6 |
| 13 | - | 10 | 6 | 35 | 65–70 | 146798 | - | 44,000 | 30,000 | 5 | GK 1310/6 |
| | | 25 | 6 | 35 | 65–70 | 146804 | - | 44,000 | 30,000 | 5 | GK 1325/6 |
| 15 | - | 10 | 6 | 35 | 65–70 | 146811 | 15637-1 | 36,000 | 26,000 | 5 | GK 1510/6 |
| | | 30 | 6 | 35 | 65–70 | 146828 | 15637-1 | 36,000 | 26,000 | 5 | GK 1530/6 |
| 19 | - | 25 | 6 | 35 | 65–70 | 146835 | - | 30,000 | 20,000 | 5 | GK 1925/6 |
| 22 | - | 20 | 6 | 35 | 65–70 | 146842 | 15637-1 | 26,000 | 18,000 | 5 | GK 2220/6 |
| | | | | | 80 | 146859 | 15637-1 | 26,000 | 18,000 | 5 | GK 2220/6 H |
| 25 | - | 25 | 6 | 35 | 65–70 | 146866 | - | 22,900 | 16,000 | 5 | GK 2525/6 |
| 30 | - | 20 | 6 | 35 | 65–70 | 146873 | 15637-1 | 19,100 | 13,000 | 5 | GK 3020/6 |
| | | 30 | 6 | 35 | 65–70 | 146880 | 15637-1 | 19,100 | 13,000 | 5 | GK 3030/6 |
| | | 30 | 6 | 35 | 80 | 146897 | 15637-1 | 19,100 | 13,000 | 5 | GK 3030/6 H |
| 38 | - | 25 | 6 | 35 | 65–70 | 146903 | - | 15,900 | 10,000 | 5 | GK 3825/6 |
| 45 | - | 30 | 6 | 35 | 65–70 | 146927 | 15637-1 | 12,700 | 8,500 | 5 | GK 4530/6 |
| | | | | | 80 | 146934 | 15637-1 | 12,700 | 8,500 | 5 | GK 4530/6 H |
| 51 | - | 25 | 6 | 35 | 65–70 | 146941 | - | 11,200 | 7,500 | 5 | GK 5125/6 |
| 60 | - | 30 | 6 | 35 | 65–70 | 146958 | 15637-1 | 9,500 | 6,500 | 5 | GK 6030/6 |
| | | | 8 | 35 | 65–70 | 146965 | 15637-1 | 9,500 | 6,500 | 5 | GK 6030/8 |
| 75 | - | 30 | 8 | 35 | 65–70 | 146972 | 15637-1 | 7,600 | 5,000 | 5 | GK 7530/8 |
| 100 | - | 40 | 8 | 35 | 65–70 | 146989 | 15637-1 | 5,700 | 4,000 | 5 | GK 10040/8 |
| **Conical shape** | | | | | | | | | | | |
| 20 | 14 | 63 | 6 | 40 | 65–70 | 147078 | - | 26,000 | 19,000 | 5 | GK 201463/6 |
| 29 | 22 | 30 | 6 | 40 | 65–70 | 147085 | - | 19,100 | 13,000 | 5 | GK 292230/6 |
| 36 | 22 | 60 | 6 | 40 | 65–70 | 147092 | - | 15,900 | 10,000 | 5 | GK 362260/6 |

POLIROLL and POLICO tools are suited for work in hard-to-access places.

They consist of spirally wound, coated abrasives. The abrasive grain is embedded in the resinoid coating on the sturdy backing material, which achieves the best possible abrasive performance.

## Advantages:

- Constantly high abrasive performance throughout the entire tool life thanks to fresh abrasive grain being constantly freed up in operation.
- Secure fit of the POLIROLL/POLICO when in use due to self-tensioning provided by grooved, conical arbor.
- Easy tool changing.

## Applications:

- Levelling
- Deburring
- Work on edges
- Sharpening
- Work on weld seams
- Step-by-step fine grinding

## Recommendations for use:

- Grind with the tip instead of the flat surface so as not to damage the bond through exposure to heat.
- Mount POLIROLL with the bonded side facing towards the arbor.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

## Matching tool drives:

- Flexible shaft drives
- Straight grinders

## Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**803394**
  PR 1225 A **80**
- **Ordering example explanation:**
  PR = POLIROLL cylindrical cartridge rolls
  1225 = Outer diameter D x width T [mm]
  A = Abrasive
  **80** = Grit size

## Safety notes:

- The maximum permitted peripheral speed is 11 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

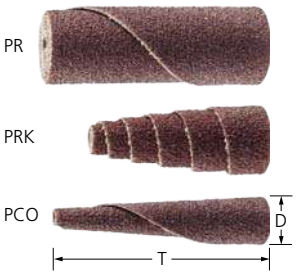
## Accessories:

- Arbor for POLIROLL and POLICO

## Recommended rotational speed range

**Example:**
PR 1225 A 80
Cutting speed: 8 m/s
**Rotational speed: 12,700 RPM**

| Tool dia. [mm] | Cutting speed [m/s] | | |
|---|---|---|---|
| | 5 | 8 | 11 |
| | Rotational speeds [RPM] | | |
| 6 | 15,900 | 25,400 | 35,000 |
| 9 | 10,600 | 16,900 | 23,300 |
| 12 | 7,900 | 12,700 | 17,500 |
| 14 | 6,800 | 10,900 | 15,000 |
| 18 | 5,300 | 8,400 | 11,600 |




## Aluminium oxide A type

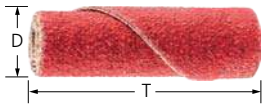
For universal grinding work on metals and other materials.

**Materials that can be worked:**
aluminium, copper, brass, grey/nodular cast iron (GG/GJL, GGG/GJS), annealed cast iron, steel, cast steel, hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

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




## Ceramic oxide grain CO-COOL type

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

Consistently high performance due to self-sharpening ceramic oxide grain. Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

**Materials that can be worked:**
aluminium, cobalt-based alloys, nickel-based alloys (e.g. Inconel and Hastelloy), titanium, stainless steel (INOX)

**Abrasive:**
Ceramic oxide grain CO-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.

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

## Arbors BO


Arbors for POLIROLL and POLICO tools.

**Advantages:**
- Tool can be changed without unclamping the arbor from the tool drive collet.

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

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

## POLIROLL set

Set of different POLIROLL cartridge rolls with matching arbors.

**Contents:**
150 POLIROLL cartridge rolls with matching 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

**Advantages:**
- Coordinated selection of the most common versions.

| L x B x H [mm] | EAN 4007220 | | Description |
|---|---|---|---|
| 180 x 145 x 40 | 335727 | 1 | PRS 151 |

# POLICAP
## General information

The broad, material-specific range of POLICAP abrasive cap and spiral band products offers tool solutions with the highest possible stock removal rate for universal and specific grinding applications alike.

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

Perfectly matching, reusable holders are available for using abrasive caps and spiral bands.

### Advantages:

- Abrasive caps and spiral bands fit securely on the holder as it expands during use.
- High standards of shape accuracy and excellent fine grinding thanks to a special manufacturing process.
- Easy tool changing.

### Applications:

- Levelling
- Surface work
- Step-by-step fine grinding

### Recommendations for use:

- To change the abrasive caps and spiral bands easily, raise and lower them while turning slightly to the right. When doing so, leave the tool carrier engaged in the tool drive and fix in place.
- For best performance, use with a recommended cutting speed of 10–20 m/s.

### Matching tool drives:

- Flexible shaft drives
- Straight grinders

### Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**150849**
  PC ZYA 1015 A **60**
- **Ordering example explanation:**
  PC = POLICAP abrasive caps
  ZYA = Cylindrical shape
  1015 = Outer diameter D x width T [mm]
  A = Abrasive
  **60** = Grit size

### Safety notes:

- The maximum permitted peripheral speed is 25 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

### Accessories:

- Abrasive cap and rubber drum holder

| Type | Application |
|---|---|
| **Aluminium oxide A**<br>  <br>A60/80 A150 A280 | For universal use on steel materials (hardened, heat-treated, non-hardened). Especially developed for specific applications, e.g. in tool- and mould-making, in addition to corresponding repair tasks. Also suitable for work on plastics, wood and fillers in model-making applications. |
| **SiC-COOL**<br>(Silicon carbide with active grinding layer)<br>  | Ideal for work on components made from titanium, aluminium and their respective alloys. Ideally suited to use in aircraft and turbine construction, in addition to associated maintenance tasks.<br>The special grain selection and the active grinding additive in the bond facilitate cool grinding, reduce the workpiece temperature and prevent chips from adhering. |
| **CO-COOL**<br>(Ceramic oxide grain with active grinding layer)<br>  | The specific structure of the ceramic oxide grain and the active-grinding bond components make this ideal for work on stainless steels (INOX) and the high-temperature-resistant nickel-based and cobalt-based alloys that are frequently used in turbine construction, e.g. Inconel, Hastelloy. The active grinding additives prevent clogging and facilitate cooler grinding with considerably higher stock removal rate. |

## The fast way to the best tool

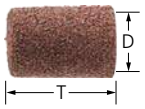
| Material group ▼ | | Abrasive ▶ | Aluminium oxide A | Ceramic oxide grain CO-COOL | Silicon carbide SiC-COOL |
|---|---|---|---|---|---|
| Steel, cast steel | Non-hardened, non-heat-treated steels | Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel | ● | ❍ | |
| | Hardened, heat-treated steels | Tool steels, tempering steels, alloyed steels, cast steel | ❍ | ● | |
| Stainless steel (INOX) | Rust- and acid-resistant steels | Austenitic and ferritic stainless steels | | ● | |
| Non-ferrous metals | Soft non-ferrous metals, non-ferrous metals | Soft aluminium alloys | ❍ | ❍ | ● |
| | | Brass, copper, zinc | ● | | |
| | Hard non-ferrous metals | Hard aluminium alloys | ❍ | | ● |
| | | Bronze, titanium | | ❍ | ● |
| | High-temperature-resistant materials | Nickel-based and cobalt-based alloys | | ● | |
| Cast iron | Grey cast iron, white cast iron | Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS) | ● | ❍ | |
| Plastics, other materials | | Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork | ❍ | | ● |

● = Highly suitable ❍ = Suitable

## Recommended rotational speed range

**Example:**
PC ZYA 1015 A 150
Cutting speed: 10–20 m/s
**Rotational speed: 19,000–38,100 RPM**

| Tool dia. [mm] | Cutting speed [m/s] | | | |
|---|---|---|---|---|
| | 10 | 15 | 20 | 25 |
| | Rotational speeds [RPM] | | | |
| 5 | 38,100 | 57,200 | 76,300 | 95,400 |
| 7 | 27,200 | 40,900 | 54,500 | 68,200 |
| 10 | 19,000 | 28,600 | 38,100 | 47,700 |
| 11 | 17,300 | 26,000 | 34,700 | 43,400 |
| 16 | 11,900 | 17,900 | 23,800 | 29,800 |
| 21 | 9,000 | 13,600 | 18,100 | 22,700 |
| 29 | 6,500 | 9,800 | 13,100 | 16,400 |
| 36 | 5,300 | 7,900 | 10,600 | 13,200 |



A 60/80


A 150


A 280

## Abrasive caps PC ZYA

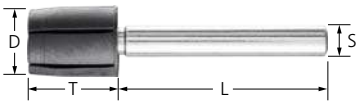
POLICAP abrasive caps in cylindrical shape ZYA (previously shape A).

**Abrasive:**
Aluminium oxide A
Grit size colour code:
60 and 80 = brown
150 = black
280 = red-brown

**Ordering notes:**
- Please complete the description with the desired grit size.

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

# PCT, shape ZYA




## Abrasive cap holders PCT ZYA

Matching POLICAP abrasive cap holder in cylindrical shape ZYA (previously shape A).

| D [mm] | T [mm] | S [mm] | L [mm] | EAN 4007220 | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|
| 5 | 10 | 3 | 25 | 147139 | 95,000 | 5 | PCT ZYA 0510/3 |
| 7 | 12 | 3 | 25 | 147146 | 65,000 | 5 | PCT ZYA 0712/3 |
| 10 | 15 | 3 | 25 | 147153 | 45,000 | 5 | PCT ZYA 1015/3 |
| 13 | 17 | 6 | 40 | 147221 | 35,000 | 5 | PCT ZYA 1317/6 |
| 16 | 26 | 6 | 40 | 147238 | 30,000 | 5 | PCT ZYA 1626/6 |

# PCS, shape ZYA

## Set PCS ZYA

Set of various POLICAP abrasive caps with matching holder in cylindrical shape ZYA (previously shape A).

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

**Advantages:**
- Sturdy, reusable plastic packaging.

**Abrasive:**
Aluminium oxide A
60 and 80 = brown
150 = black
280 = red-brown

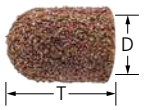
| Shape | L x B x H [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|
| ZYA | 180 x 145 x 40 | 355404 | 1 | PCS ZYA 110 |

## Abrasive caps PC WRC

POLICAP abrasive caps in cylindrical shape with radius end WRC (previously shape C).

**Abrasive:**
Aluminium oxide A
Silicium carbide SiC-COOL (grey)
Ceramic oxide grain CO-COOL (red)
Grit size colour code for aluminium oxide A:
60 and 80 = brown
150 = black
280 = red-brown

**Ordering notes:**
- Please complete the description with the desired grit size.



A 60/80


A 150


A 280


SiC-COOL

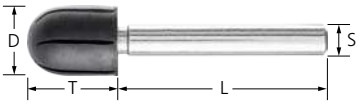

CO-COOL

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



## Abrasive cap holders PCT WRC

Matching POLICAP abrasive cap holder in cylindrical shape with radius end WRC (previously shape C).




| D [mm] | T [mm] | S [mm] | L [mm] | EAN 4007220 | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|
| 5 | 11 | 2.35 | 40 | 621820 | 30,000 | 5 | PCT WRC 0511/2,35 |
| | | 3 | 25 | 147160 | 95,000 | 5 | PCT WRC 0511/3 |
| 7 | 13 | 2.35 | 40 | 621837 | 24,500 | 5 | PCT WRC 0713/2,35 |
| | | 3 | 25 | 147177 | 65,000 | 5 | PCT WRC 0713/3 |
| 10 | 15 | 2.35 | 40 | 621844 | 17,500 | 5 | PCT WRC 1015/2,35 |
| | | 3 | 25 | 147184 | 45,000 | 5 | PCT WRC 1015/3 |
| 13 | 17 | 2.35 | 40 | 621851 | 13,750 | 5 | PCT WRC 1317/2,35 |
| | | 6 | 40 | 147245 | 35,000 | 5 | PCT WRC 1317/6 |
| 16 | 26 | 6 | 40 | 147252 | 30,000 | 5 | PCT WRC 1626/6 |

# POLICAP
## PCS, shape WRC

### Set PCS WRC

Set of various POLICAP abrasive caps with matching holder in cylindrical shape with radius end WRC (previously shape C).

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

**Advantages:**
- Sturdy, reusable plastic packaging.

**Abrasive:**
Aluminium oxide A
Grit size colour code:
60 and 80 = brown
150 = black
280 = red-brown

| Shape | L x B x H [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|
| WRC | 180 x 145 x 40 | 355411 | 1 | PCS WRC 110 |

## Abrasive caps PC WKG

A 60/80 A 150 A 280

POLICAP abrasive caps in tapered conical shape with radius end WKG (previously shape G).
The taper angle of the cone is 30°.

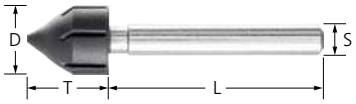
**Abrasive:**
Aluminium oxide A
Grit size colour code:
60 and 80 = brown
150 = black
280 = red-brown

**Ordering notes:**
- Please complete the description with the desired grit size.

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



## Abrasive cap holders PCT WKG




Matching POLICAP abrasive cap holder in tapered conical shape with radius end WKG (previously shape G).

| D [mm] | T [mm] | S [mm] | L [mm] | EAN 4007220 | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|
| 5 | 11 | 3 | 25 | 147191 | 95,000 | 5 | PCT WKG 0511/3 |
| 7 | 13 | 3 | 25 | 147207 | 65,000 | 5 | PCT WKG 0713/3 |
| 10 | 15 | 3 | 25 | 147214 | 45,000 | 5 | PCT WKG 1015/3 |
| 13 | 17 | 2.35 | 40 | 434338 | 13,750 | 5 | PCT WKG 1317/2,35 |
| | | 6 | 40 | 147269 | 35,000 | 5 | PCT WKG 1317/6 |
| 16 | 26 | 6 | 40 | 147276 | 30,000 | 5 | PCT WKG 1626/6 |



## Set PCS WKG

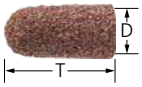
Set of various POLICAP abrasive caps with matching holder in tapered conical shape with radius end WKG (previously shape G).

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

**Advantages:**
- Sturdy, reusable plastic packaging.

**Abrasive:**
Aluminium oxide A
60 and 80 = brown
150 = black
280 = red-brown

| Shape | L x B x H [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|
| WKG | 180 x 145 x 40 | 355428 | 1 | PCS WKG 110 |



A 60/80


A 150


A 280


SiC-COOL


CO-COOL

## Abrasive caps PC KEL

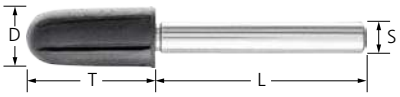
POLICAP abrasive caps in conical shape with radius end KEL (previously shape L).

**Abrasive:**
Aluminium oxide A
Silicon carbide SiC-COOL (grey)
Ceramic oxide grain CO-COOL (red)
Grit size colour code for aluminium oxide A:
60 and 80 = brown
150 = black
280 = red-brown

**Ordering notes:**
- Please complete the description with the desired grit size.

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

# PCT, shape KEL




## Abrasive cap holders PCT KEL

Matching POLICAP abrasive cap holder in conical shape with radius end KEL (previously shape L).

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

## Set PCS 650

Set of various POLICAP abrasive caps with matching holder.

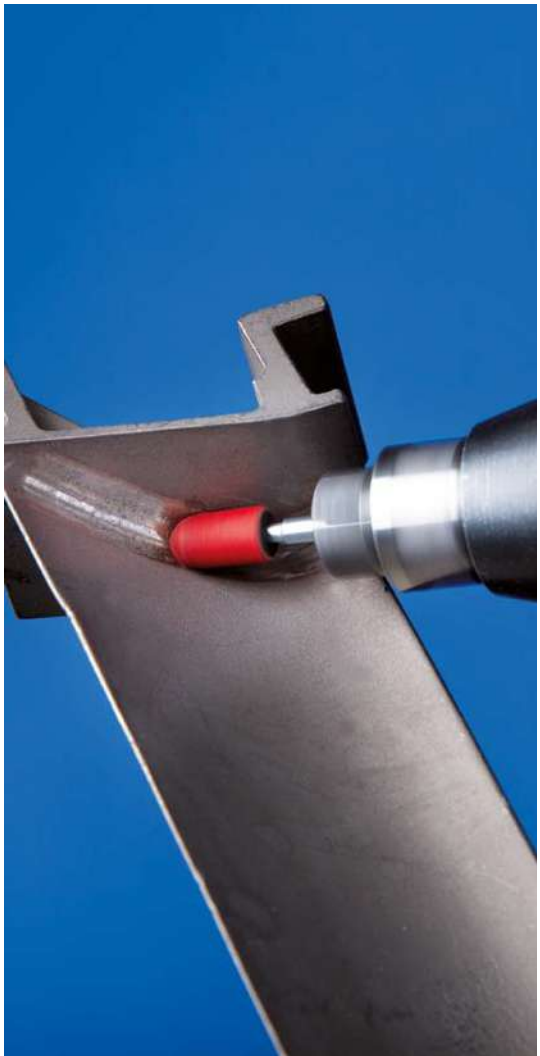
**Contents:**
- 10 pcs. each of POLICAP abrasive caps PC ZYA 1626 A and PC WKG 1626 A (grit size 150 and 280)
- 25 pcs. each of POLICAP abrasive caps PC ZYA 1015 A, PC ZYA 1317 A, PC WKG 1015 A and PC WKG 1317 A (grit size 150 and 280)
- 50 pcs. each of POLICAP abrasive caps PC ZYA 0510 A, PC ZYA 0712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

**Advantages:**
- Sturdy, reusable plastic packaging.

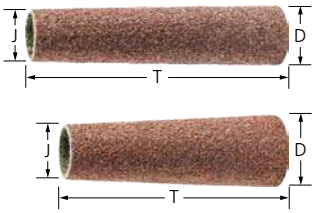
**Abrasive:**
Aluminium oxide A
Grit size colour code:
150 = black
280 = red-brown

| Shape | L x B x H [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|
| ZYA, WKG | 332 x 235 x 50 | 355435 | 1 | SET PCS 650 |





# POLICAP
## PCH, conical shape




### Abrasive cones PCH

POLICAP abrasive cones with a conical shape.

**Abrasive:**
Aluminium oxide A
Grit size colour code:
60 = brown
150 = black
280 = red-brown

**Ordering notes:**
- Please complete the description with the desired grit size.

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

## PCT, shape KEL

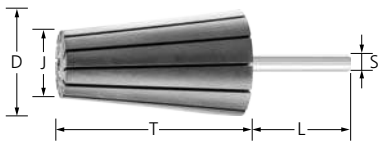

### Rubber abrasive cone holders PCT KEL

Matching POLICAP rubber abrasive cone holder in conical shape with radius end KEL (previously shape L).

**Advantages:**
- The abrasive spiral bands are firmly held in place on the holder as the rubber surface offers excellent adhesion.

| D [mm] | T [mm] | S [mm] | L [mm] | EAN 4007220 | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|
| 8 | 85 | 6 | 40 | 147320 | 20,000 | 5 | PCT KEL 0585/6 |
| 13 | 85 | 6 | 40 | 147337 | 15,000 | 5 | PCT KEL 1185/6 |
| 18 | 85 | 6 | 40 | 147344 | 13,000 | 5 | PCT KEL 1685/6 |
| 23 | 85 | 6 | 30 | 147351 | 12,000 | 5 | PCT KEL 2185/6 |

## GK, conical shape




### Rubber drum holders GK

Matching POLICAP rubber drum holder with a conical shape.

**Advantages:**
- The abrasive spiral bands are firmly held in place on the holder as the holder expands during use.

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

On mounted flap wheels, the flaps made of coated abrasive are arranged radially around the tool axis in a fan-type structure. Their flexibility enables them to adapt perfectly to the contours of the workpiece. The abrasive grain is embedded in the sturdy, flexible cloth backing material by means of a resinoid bond.

In ISO 3919, mounted flap wheels are designated as "flap wheels with shaft".

**Factors that influence working results:**

- **Tool wear and thermal load:**
  Tool wear and the thermal load of the workpiece are reduced by decreasing the contact pressure and peripheral speed, and adding grinding oil.
- **Stock removal:**
  Stock removal rate should be increased by using a coarser granulation and not by increasing the contact pressure. This avoids unnecessary tool wear and prevents the thermal load of the workpiece.
- **Surface roughness:**
  Increasing the cutting speed achieves a slightly finer surface. Increasing the contact pressure makes the surface slightly more coarse. The softer the material to be finished, the coarser the surface (when using the same grit sizes).

## Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Consistently high stock removal throughout the entire tool life as new, aggressive abrasive material is constantly freed up.
- Face-down use very close to edges and in corners is possible thanks to the flat, moulded-core design.

## Applications:

- Levelling
- Deburring
- Surface work
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding

## Recommendations for use:

- For best performance, use with 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.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.

## Matching tool drives:

- Flexible shaft drives
- Straight grinders

## Ordering notes:

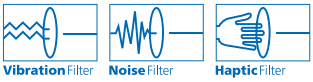
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**155455**
  F 6030/6 A **120**
- **Ordering example explanation:**
  F = Mounted flap wheel
  6030 = Outer diameter D x width T [mm]
  6 = Shank diameter $S_d$ [mm]
  A = Abrasive
  **120** = Grit size

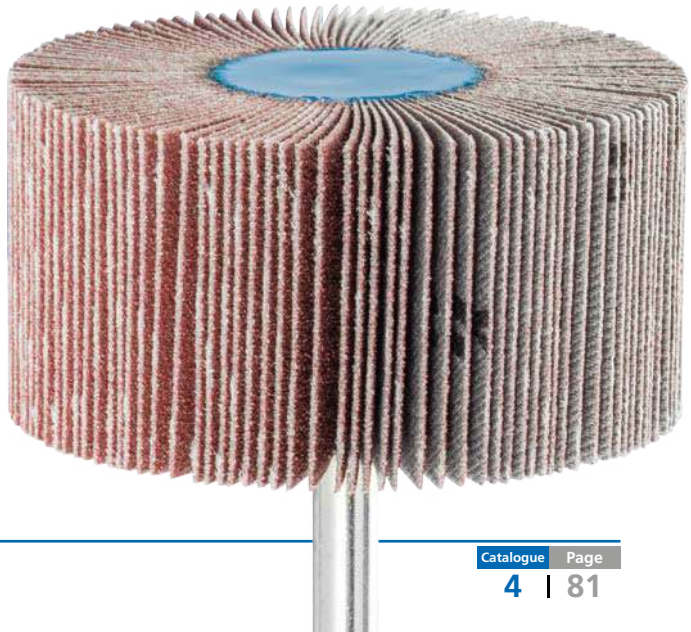
## Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The contact pressure has to be reduced significantly when the optimum rotational speed is exceeded.
- Safety is only guaranteed when:
  - The clamping length is at least 15 mm.
  - The specified maximum rotational speed is not exceeded with unsupported shank lengths.

## PFERDVALUE:

**PFERD**ERGONOMICS recommends mounted flap wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.



## The fast way to the best tool

| Material group ▼ | | Abrasive ▶ | Aluminium oxide A | Zirconia alumina Z-COOL | Ceramic oxide grain CO-COOL | Silicon carbide SiC-COOL |
|---|---|---|---|---|---|---|
| Steel, cast steel | Non-hardened, non-heat-treated steels | Construction steels, carbon steels, tool steels, non-alloyed steels, cast steel | ● | ❍ | ❍ | |
| | Hardened, heat-treated steels | Tool steels, tempering steels, alloyed steels, cast steel | ❍ | ● | ● | |
| Stain-less steel (INOX) | Rust- and acid-resistant steels | Austenitic and ferritic stainless steels | | ● | ● | |
| Non-ferrous metals | Soft non-ferrous metals, non-ferrous metals | Soft aluminium alloys | ❍ | | | ● |
| | | Brass, copper, zinc | ● | ❍ | ❍ | |
| | Hard non-ferrous metals | Hard aluminium alloys | ❍ | | | ● |
| | | Bronze, titanium | | ❍ | ❍ | ● |
| | High-temperature-resistant materials | Nickel-based and cobalt-based alloys | | ❍ | ● | |
| Cast iron | Grey cast iron, white cast iron | Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS) | ● | ❍ | ● | |
| Plastics, other materials | | Fibre-reinforced plastics, thermoplastics, wood, chipboard, paintwork | ❍ | | | ● |

● = Highly suitable ❍ = Suitable

## Recommended rotational speed range

**Example:**
F 6030/6 A 120
Cutting speed: 15–20 m/s
**Rotational speed: 4,700–6,300 RPM**

| Tool dia. [mm] | Cutting speed [m/s] | | |
|---|---|---|---|
| | 15 | 20 | 40 |
| | Rotational speeds [RPM] | | |
| 10 | 28,600 | 38,100 | 76,300 |
| 15 | 19,000 | 25,400 | 50,900 |
| 20 | 14,300 | 19,000 | 38,100 |
| 25 | 11,400 | 15,200 | 30,500 |
| 30 | 9,500 | 12,700 | 25,400 |
| 40 | 7,100 | 9,500 | 19,000 |
| 50 | 5,700 | 7,600 | 15,200 |
| 60 | 4,700 | 6,300 | 12,700 |
| 80 | 3,500 | 4,700 | 9,500 |

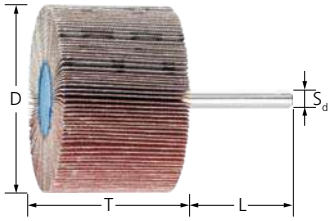
## Aluminium oxide A type

For universal applications from coarse to fine grinding.

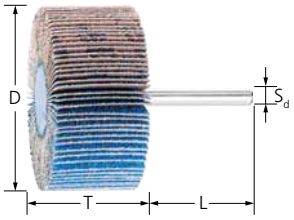
**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter | Noise Filter | Haptic Filter




| D [mm] | T [mm] | Grit size 40 | 60 | 80 | 120 | 150 | 180 | 240 | 320 | 400 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | EAN 4007220 | | | | | | | | | | | | |
| **Shank dia. 3 x 40 mm [$S_d$ x L]** | | | | | | | | | | | | | | |
| 10 | 10 | - | 661529 | 661635 | 661642 | 661659 | 661673 | - | 661680 | - | 38,000 | 75,000 | 10 | F 1010/3 A ... |
| | 15 | - | 661697 | 661703 | 661710 | 661727 | 661734 | - | 661741 | - | 38,000 | 75,000 | 10 | F 1015/3 A ... |
| 15 | 5 | - | 661758 | 661765 | 661772 | 661796 | 661802 | - | 661819 | - | 25,000 | 50,000 | 10 | F 1505/3 A ... |
| | 10 | - | 661871 | 661918 | 661925 | 661932 | 661963 | - | 661987 | - | 25,000 | 50,000 | 10 | F 1510/3 A ... |
| | 15 | - | 661994 | 662014 | 662038 | 662045 | 662052 | - | 662069 | - | 25,000 | 50,000 | 10 | F 1515/3 A ... |
| 20 | 10 | - | - | 336892 | 154113 | 154120 | 292563 | 378663 | 378670 | - | 19,000 | 38,100 | 10 | F 2010/3 A ... |
| 30 | 5 | - | 154137 | 154151 | 154175 | 154199 | 292693 | 154212 | 154236 | - | 12,000 | 25,400 | 10 | F 3005/3 A ... |
| | 10 | - | 154250 | 154274 | 154298 | 154311 | 292716 | 154335 | 154359 | - | 12,000 | 25,400 | 10 | F 3010/3 A ... |
| **Shank dia. 6 x 40 mm [$S_d$ x L]** | | | | | | | | | | | | | | |
| 20 | 10 | - | 235478 | 292594 | 292617 | 292624 | 292631 | - | - | - | 19,000 | 38,100 | 10 | F 2010/6 A ... |
| 25 | 10 | - | - | 536896 | 536902 | - | 536919 | - | - | - | 15,000 | 30,500 | 10 | F 2510/6 A ... |
| | 15 | - | - | 154557 | 154564 | 154571 | 292648 | - | - | - | 15,000 | 30,500 | 10 | F 2515/6 A ... |
| | 20 | - | - | 536926 | 536933 | - | 536940 | - | - | - | 15,000 | 30,500 | 10 | F 2520/6 A ... |
| | 25 | - | 557440 | 292655 | 292662 | 292679 | 292686 | - | - | - | 15,000 | 30,500 | 10 | F 2525/6 A ... |
| 30 | 3 | - | - | 950838 | 950845 | 950852 | 950869 | 950876 | 950883 | - | 12,000 | 25,400 | 10 | F 3003/6 A ... |
| | 5 | - | 154144 | 154168 | 154182 | 154205 | 292709 | 154229 | 154243 | - | 12,000 | 25,400 | 10 | F 3005/6 A ... |
| | 10 | - | 154267 | 154281 | 154304 | 154328 | 292723 | 154342 | 154366 | 533017 | 12,000 | 25,400 | 10 | F 3010/6 A ... |
| | 15 | - | 154687 | 154694 | 154700 | 154717 | 292730 | 154724 | 154731 | - | 12,000 | 25,400 | 10 | F 3015/6 A ... |
| | 20 | 035153 | 035160 | - | - | 035177 | 035184 | 035191 | 035207 | - | 12,000 | 25,400 | 10 | F 3020/6 A ... |
| | 30 | - | 292747 | 292754 | 292761 | 292778 | 292785 | 292792 | 292808 | - | 12,000 | 25,400 | 10 | F 3030/6 A ... |
| 40 | 10 | - | 154373 | 154380 | 154403 | 154410 | 292815 | 154427 | - | - | 9,600 | 19,100 | 10 | F 4010/6 A ... |
| | 15 | - | 154441 | 154458 | 154465 | 154489 | 292822 | 154496 | 154519 | - | 9,600 | 19,100 | 10 | F 4015/6 A ... |
| | 20 | 800607 | 154625 | 154632 | 154649 | 154656 | 292839 | 154663 | - | - | 9,600 | 19,100 | 10 | F 4020/6 A ... |
| 50 | 5 | - | 950968 | 951019 | 951026 | 951033 | 951040 | 951057 | 951064 | - | 7,000 | 15,200 | 10 | F 5005/6 A ... |
| | 10 | - | 155189 | 155196 | 155202 | 155219 | 292846 | 155226 | 155233 | - | 7,000 | 15,200 | 10 | F 5010/6 A ... |
| | 15 | - | 155240 | 155257 | 155264 | 155271 | 292853 | 155288 | 155295 | - | 7,000 | 15,200 | 10 | F 5015/6 A ... |
| | 20 | - | 155127 | 155134 | 155141 | 155158 | 292860 | - | 155172 | - | 7,000 | 15,200 | 10 | F 5020/6 A ... |
| | 30 | 800591 | 155066 | 155073 | 155080 | 155097 | 292877 | 155103 | 155110 | - | 7,000 | 15,200 | 10 | F 5030/6 A ... |
| 60 | 5 | - | 951071 | 951088 | 951095 | 951101 | 951118 | 951125 | 951132 | - | 6,300 | 12,700 | 10 | F 6005/6 A ... |
| | 15 | - | 155301 | 155318 | 155325 | 155332 | - | 155349 | 155356 | - | 6,300 | 12,700 | 10 | F 6015/6 A ... |
| | 20 | - | 155363 | 155370 | 155387 | 155394 | - | 155400 | 155417 | - | 6,300 | 12,700 | 10 | F 6020/6 A ... |
| | 30 | 155424 | 155431 | 155448 | 155455 | 155462 | 292907 | 155479 | 155486 | 533024 | 6,300 | 12,700 | 10 | F 6030/6 A ... |
| | 40 | - | 155493 | 155509 | 155516 | 155523 | - | 155530 | - | - | 6,300 | 12,700 | 10 | F 6040/6 A ... |
| | 50 | 155554 | 155561 | 155578 | 155585 | 155592 | - | 155608 | 155615 | - | 6,300 | 12,700 | 10 | F 6050/6 A ... |
| 80 | 5 | - | 549780 | 373743 | 463062 | 403396 | 958889 | 102114 | 102121 | - | 4,800 | 9,500 | 10 | F 8005/6 A ... |
| | 10 | - | 422120 | 262184 | 422137 | 065877 | 065907 | 065914 | 048412 | - | 4,800 | 9,500 | 10 | F 8010/6 A ... |
| | 15 | - | 155622 | 155639 | 155646 | 155653 | - | - | - | - | 4,800 | 9,500 | 10 | F 8015/6 A ... |
| | 20 | - | 155684 | 155691 | 155707 | 155714 | - | - | - | - | 4,800 | 9,500 | 10 | F 8020/6 A ... |
| | 30 | 155745 | 155752 | 155769 | 155776 | 155783 | - | 155790 | 155806 | - | 4,800 | 9,500 | 10 | F 8030/6 A ... |
| | 40 | - | 155813 | 155820 | 155837 | 155844 | - | 155851 | - | - | 4,800 | 9,500 | 10 | F 8040/6 A ... |
| | 50 | 155875 | 155882 | 155899 | 155905 | 155912 | - | 155929 | 155936 | - | 4,800 | 9,500 | 10 | F 8050/6 A ... |




## Zirconia alumina Z-COOL type

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

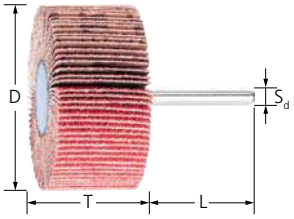
Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.

**Abrasive:**
Zirconia alumina Z-COOL

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

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




## Ceramic oxide grain CO-COOL type

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

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

**Abrasive:**
Ceramic oxide grain CO-COOL

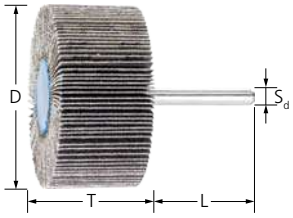
**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

| D [mm] | T [mm] | Grit size 40 | Grit size 60 | Grit size 80 | Grit size 120 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | EAN 4007220 | | | | | | | |
| **Shank dia. 6 x 40 mm [$S_d$ x L]** | | | | | | | | | |
| 20 | 10 | - | 065938 | 884751 | 884775 | 19,000 | 38,100 | 10 | F 2010/6 CO-COOL ... |
| 30 | 10 | 803738 | 803745 | 803752 | 803769 | 12,000 | 25,400 | 10 | F 3010/6 CO-COOL ... |
| | 15 | 803776 | 803783 | 803790 | 803806 | 12,000 | 25,400 | 10 | F 3015/6 CO-COOL ... |
| | 20 | 035009 | 035016 | 035023 | 962046 | 12,000 | 25,400 | 10 | F 3020/6 CO-COOL ... |
| 40 | 20 | 803813 | 803820 | 803837 | 803844 | 9,600 | 19,100 | 10 | F 4020/6 CO-COOL ... |
| 50 | 30 | 803868 | 803875 | 803899 | 803882 | 7,000 | 15,200 | 10 | F 5030/6 CO-COOL ... |
| 60 | 15 | 065945 | 065952 | 000137 | 065969 | 6,300 | 12,700 | 10 | F 6015/6 CO-COOL ... |
| | 30 | 803905 | 803912 | 803929 | 803936 | 6,300 | 12,700 | 10 | F 6030/6 CO-COOL ... |

## Silicon carbide SiC type

For universal grinding work on components made from aluminium, copper, bronze, titanium and fibre-reinforced plastics.
Particularly recommended for use on titanium alloys.
Ideally suited to use in the aeronautical industry, especially where SiC is the only approved abrasive, e.g. for use on engine components.




**Abrasive:**
Silicon carbide SiC

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | Grit size 60 | 80 | 120 | 150 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | EAN 4007220 | | | | | | | |
| **Shank dia. 6 x 40 mm [$S_d$ x L]** | | | | | | | | | |
| 20 | 10 | 102145 | 102176 | 102183 | 102206 | 19,000 | 38,100 | 10 | F 2010/6 SiC ... |
| 30 | 10 | 154588 | 154595 | 154601 | 154618 | 12,000 | 25,400 | 10 | F 3010/6 SiC ... |
| | 15 | 102213 | 102220 | 102268 | 102275 | 12,000 | 25,400 | 10 | F 3015/6 SiC ... |
| | 20 | 102299 | 102343 | 102367 | 102398 | 12,000 | 25,400 | 10 | F 3020/6 SiC ... |
| 40 | 20 | 102411 | 102442 | 102459 | 102480 | 9,600 | 19,100 | 10 | F 4020/6 SiC ... |
| 50 | 30 | 102510 | 102572 | 102626 | 102633 | 7,000 | 15,200 | 10 | F 5030/6 SiC ... |
| 60 | 15 | 102657 | 102664 | 102701 | 102718 | 6,300 | 12,700 | 10 | F 6015/6 SiC ... |
| | 30 | 155943 | 155950 | 155967 | 155974 | 6,300 | 12,700 | 10 | F 6030/6 SiC ... |



## Mounted flap wheel set

### FSO

Set of different mounted flap wheels in the aluminium oxide A type with a shank diameter of 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

**Advantages:**
- Getting to know and testing the comprehensive range.
- Coordinated selection of the most common versions.
- Promotional display box.

**Abrasive:**
Aluminium oxide A

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

| L x B x H [mm] | EAN 4007220 | | Description |
|---|---|---|---|
| 240 x 145 x 240 | 156087 | 1 | FSO 5400 |

# Flap tools
## Unmounted flap wheels

On unmounted flap wheels, the flaps made of coated abrasive are arranged radially around the tool axis in a fan-type structure.
Their flexibility enables them to adapt perfectly to the contours of the workpiece. The abrasive grain is embedded in the sturdy, flexible cloth backing material by means of a resinoid bond.

In ISO 5429, unmounted flap wheels are designated as "flap wheels".

**Factors that influence working results:**

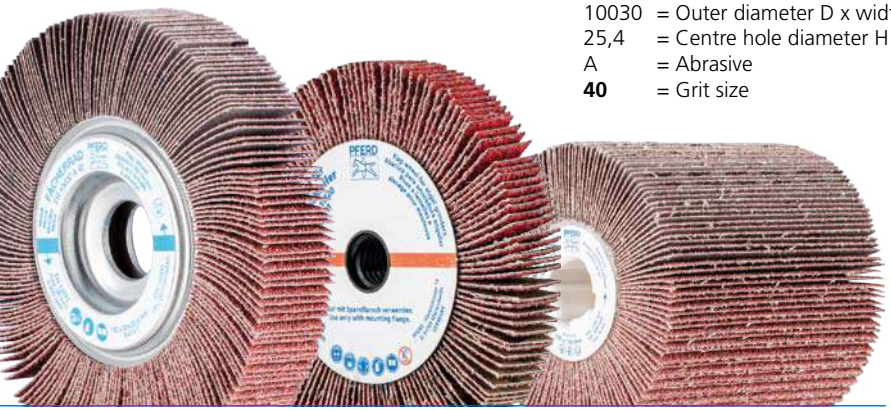
- **Tool wear and thermal load:**
  Tool wear and the thermal load of the workpiece are reduced by decreasing the contact pressure and peripheral speed, and adding grinding oil.
- **Stock removal:**
  Stock removal rate should be increased by using a coarser granulation and not by increasing the contact pressure. This avoids unnecessary tool wear and prevents the thermal load of the workpiece.
- **Surface roughness:**
  Increasing the cutting speed achieves a slightly finer surface. Increasing the contact pressure makes the surface slightly more coarse. The softer the material to be finished, the coarser the surface (when using the same grit sizes).

### Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Consistently high stock removal throughout the entire tool life as new, aggressive abrasive material is constantly freed up.
- Face-down use very close to edges and in corners is possible thanks to the special clamping system.

### Applications:

- Levelling
- Deburring
- Surface work
- Work on weld seams
- Structuring surfaces
- Step-by-step fine grinding



### Recommendations for use:

- For best performance, use with a recommended cutting speed of 15–30 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.
- Use grinding oil which is suitable for the material in order to considerably increase the tool life and abrasive performance of the tools. More detailed information and ordering data for grinding oils can be found on page 155.
- For best performance, use a tool drive with 1,000–1,500 watts.

### Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**469040**
  FR 10030/25,4 A **40**
- **Ordering example explanation:**
  FR = Unmounted flap wheels
  10030 = Outer diameter D x width T [mm]
  25,4 = Centre hole diameter H [mm]
  A = Abrasive
  **40** = Grit size

### Safety notes:

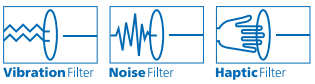
- Unmounted flap wheels are generally to be used with the matching clamping flanges.
- The maximum permitted peripheral speed is defined as follows:
  - Unmounted flap wheels = 50 m/s
  - Unmounted flap wheels for angle grinders = 80 m/s
  - Flap drums = 32 m/s
- The contact pressure has to be reduced significantly when the optimum rotational speed is exceeded.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

### Accessories:

- Arbors with clamping flange
- Reducing flanges for unmounted flap wheels

### PFERDVALUE:

**PFERD**ERGONOMICS recommends unmounted flap wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.



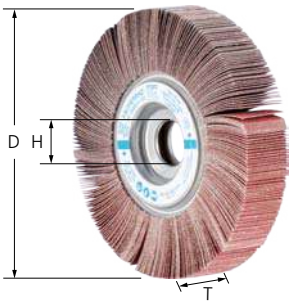

### Recommended rotational speed range

**Example:**
FR 16550/25,4 A 80
Cutting speed: 15–30 m/s
**Rotational speed: 1,700–3,400 RPM**

| Tool dia. [mm] | Cutting speed [m/s] | | | | | | |
|---|---|---|---|---|---|---|---|
| | 15 | 20 | 25 | 30 | 40 | 50 | 80 |
| | Rotational speeds [RPM] | | | | | | |
| 100 | 2,800 | 3,800 | 4,700 | 5,700 | 7,600 | 9,500 | 15,200 |
| 115 | 2,400 | 3,300 | 4,100 | 4,900 | 6,600 | 8,300 | 13,200 |
| 125 | 2,200 | 3,000 | 3,800 | 4,500 | 6,100 | 7,600 | 12,200 |
| 150 | 1,900 | 2,500 | 3,100 | 3,800 | 5,000 | 6,300 | 10,100 |
| 165 | 1,700 | 2,300 | 2,800 | 3,400 | 4,600 | 5,700 | 9,200 |
| 200 | 1,400 | 1,900 | 2,300 | 2,800 | 3,800 | 4,700 | 7,600 |
| 250 | 1,100 | 1,500 | 1,900 | 2,200 | 3,000 | 3,800 | 6,100 |

## Aluminium oxide A type

For universal applications from coarse to fine grinding.




**Abrasive:**
Aluminium oxide A

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please order the matching arbor separately.
- Matching arbor for a diameter of 100, 150 and 165 mm:
  FR/VR 12/25,4 (EAN 4007220479643)
- Matching arbor for a diameter of 200 mm and 250 mm:
  FR/VR 12/44,0 (EAN 4007220479650)
- Please complete the description with the desired grit size.

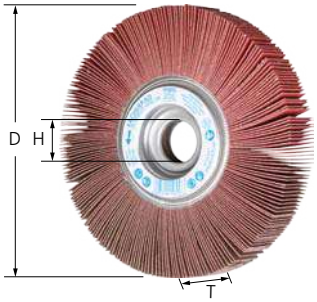
**PFERD**VALUE:


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

## Ceramic oxide grain CO-COOL type

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

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




**Abrasive:**
Ceramic oxide grain CO-COOL

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please order the matching arbor separately.
- Matching arbor for a diameter of 150 and 165 mm:
  FR/VR 12/25,4 (EAN 4007220479643)
- Please complete the description with the desired grit size.

**PFERD**VALUE:


| D [mm] | T [mm] | H [mm] | Grit size | | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 40 | 60 | 80 | 120 | | | | |
| | | | EAN 4007220 | | | | | | | |
| 150 | 30 | 25.4 | 104859 | 104873 | 104880 | 104903 | 3,500 | 6,300 | 2 | FR 15030/25,4 CO-COOL ... |
| | 50 | 25.4 | 105467 | 105474 | 105481 | 105498 | 3,500 | 6,300 | 2 | FR 15050/25,4 CO-COOL ... |
| 165 | 30 | 25.4 | 105504 | 105511 | 105528 | 105535 | 3,200 | 5,700 | 2 | FR 16530/25,4 CO-COOL ... |
| | 50 | 25.4 | 105542 | 105559 | 105566 | 105573 | 3,200 | 5,700 | 2 | FR 16550/25,4 CO-COOL ... |

## SET FR

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

**Contents:**
1 pc. each of:
- Electric straight grinder UGER 15/60 SI with electronic rotational speed control (2,800–5,900 RPM)
- Collet with diameter 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 A 100
- Arbor FR/VR 12/25,4 100-165
- Arbor PCLB 8/13/26

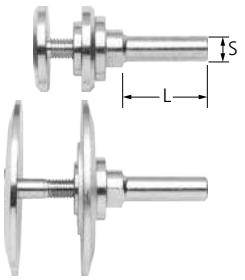
2 pcs. each of:
- POLICLEAN wheels PCLS 15013/13

**Advantages:**
- Optimal, stepless rotational speed regulation for the use of unmounted flap wheels and POLINOX wheels.
- Coordinated selection of the most common versions.

**Ordering notes:**
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

| D [mm] | L x B x H [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|
| 150 | 587 x 285 x 162 | 777350 | 1 | SET FR 15030 UGER 15/60 230 V |

# Arbors FR/VR



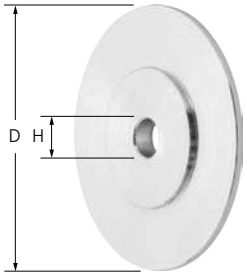

## Type with clamping flange

For mounting PFERD unmounted flap wheels.
The clamping flanges are designed to lie countersunk in the tool.

**Advantages:**
- Can be used face-down very close to edges and in angles thanks to special clamping system.

**Ordering notes:**
- Included in delivery: Arbor, clamping diameter of 12 mm, 2 flanges and matching screws (for different unmounted flap wheel widths).
- We manufacture arbors with morse cones on request.

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




## Reducing flanges for unmounted flap wheels

For mounting unmounted flap wheels and POLINOX unmounted flap wheels on drive spindles.
The clamping flanges are designed to lie countersunk in the tool.

**Advantages:**
- Can be adapted to an existing drive spindle by drilling.
- Can be used face-down very close to edges and in angles thanks to special clamping system.

**Ordering notes:**
- Included in delivery: 1 pair

| Suitable for tool dia. [mm] | D [mm] | H [mm] | Max. H [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|---|---|
| 150, 165 | 40 | 12 | 22.2 | 509876 | 1 | RF FR 150-165 Bo. 12-22,2 |
| 200, 250 | 83 | 12 | 40 | 498460 | 1 | RF FR 200-250 Bo. 12-40 |

## Aluminium oxide A type


The ideal tool for use on angle grinders in assembly shop operations.
For universal applications from coarse to fine grinding.

**Advantages:**
- Can be mounted directly on the angle grinder without additional clamping devices.

**Abrasive:**
Aluminium oxide A

**Recommendations for use:**
- For the best results, use at a recommended cutting speed of 40–50 m/s.

**Matching tool drives:**
angle grinder, cordless angle grinder

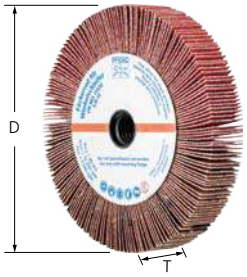
**Ordering notes:**
- Please complete the description with the desired grit size.

**Safety notes:**
- As a rule, unmounted flap wheels should be used with the appropriate clamping flanges for the angle grinder.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

| D [mm] | T [mm] | Thread | Grit size | | | | | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 40 | 60 | 80 | 120 | 180 | 240 | 320 | | | | |
| | | | EAN 4007220 | | | | | | | | | | |
| 115 | 20 | M14 | 752364 | 752388 | 752395 | 752401 | 023617 | 023624 | 023631 | 7,500 | 13,300 | 2 | FR WS 11520 M14 A ... |
| | | 5/8-11 | 759417 | 759424 | 759431 | 759448 | 023679 | 023686 | 023693 | 7,500 | 13,300 | 2 | FR WS 11520 5/8-11 A ... |
| 125 | 20 | M14 | 752418 | 752425 | 752432 | 752449 | 023648 | 023655 | 023662 | 6,850 | 12,200 | 2 | FR WS 12520 M14 A ... |
| | | 5/8-11 | 847688 | 847701 | 847718 | 847725 | 023709 | 023716 | 023723 | 6,850 | 12,200 | 2 | FR WS 12520 5/8-11 A ... |

## Ceramic oxide grain CO-COOL type




The ideal tool for use on angle grinders in assembly shop operations.
For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain.

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

**Advantages:**
- Can be mounted directly on the angle grinder without additional clamping devices.

**Abrasive:**
Ceramic oxide grain CO-COOL

**Recommendations for use:**
- For the best results, use at a recommended cutting speed of 40–50 m/s.

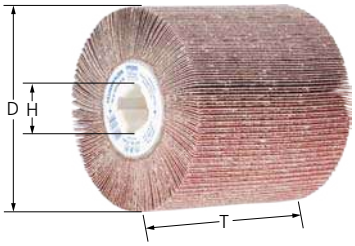
**Matching tool drives:**
angle grinder, cordless angle grinder

**Ordering notes:**
- Please complete the description with the desired grit size.

**Safety notes:**
- As a rule, unmounted flap wheels should be used with the appropriate clamping flanges for the angle grinder.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

| D [mm] | T [mm] | Thread | Grit size | | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 40 | 60 | 80 | 120 | | | | |
| | | | EAN 4007220 | | | | | | | |
| 115 | 20 | M14 | 025611 | 025635 | 025642 | 025659 | 7,500 | 13,300 | 2 | FR WS 11520 M14 CO-COOL ... |
| | | 5/8-11 | 025697 | 025703 | 025710 | 025727 | 7,500 | 13,300 | 2 | FR WS 11520 5/8-11 CO-COOL ... |
| 125 | 20 | M14 | 025628 | 025666 | 025673 | 025680 | 6,850 | 12,200 | 2 | FR WS 12520 M14 CO-COOL ... |
| | | 5/8-11 | 025734 | 025741 | 025765 | 025789 | 6,850 | 12,200 | 2 | FR WS 12520 5/8-11 CO-COOL ... |




## FR-W type

Can be used for universal work on medium-sized and large metallic surfaces, e.g. fine grinding work on large radii in container, kitchen and apparatus construction, and achieving homogeneous finishes (grinding patterns) on large surfaces and contours in manual applications.

Suitable for all conventional keyway systems.

**Abrasive:**
Aluminium oxide A

**Recommendations for use:**
- For the best results, use at a recommended cutting speed of 15–30 m/s.

**Matching tool drives:**
drum grinders

**Ordering notes:**
- The centre hole diameter of 19 mm with 4 wedge keyways fits on all conventional drum drives.
- Other drum tools can be found on pages 116–117 of this catalogue and in catalogue section 8.
- Please complete the description with the desired grit size.

**PFERD**VALUE:

Vibration Filter | Noise Filter | Haptic Filter

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

## Drums, set FR-W

## SET FR-W

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

**Contents:**
1 pc. each of:
- Electric grinding drum drive UWER 15/40 A-SI D19 with electronic rotational speed control (900–3,500 RPM)
- Flap drum FR-W 100100 A 80
- POLINOX grinding drum PNL-W 100100 A 180
- Three empty storage compartments provide space for further drum tools from the PFERD range.

**Advantages:**
- Optimal, stepless rotational speed regulation for the use of unmounted flap wheels and POLINOX drums.
- Coordinated selection of the most common versions.

**Ordering notes:**
- Detailed information and ordering data on tool drives can be found in catalogue section 9.
- Different types of wheel brushes for burnishing machines can be found in catalogue section 8.

| D [mm] | L x B x H [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|
| 100 | 594 x 561 x 161 | 777299 | 1 | SET FR-W 100100 UWER 15/40 230 V |

POLIFLAP tools are ideal for blending and restoring surface textures, fine grinding of radii, contours, curved areas or large surfaces.

## Safety notes:

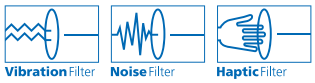
- The maximum permitted peripheral speed is 32 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

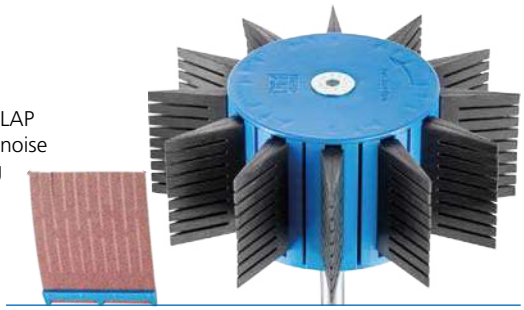
## Accessories:

- POLIFLAP abrasive flaps
- POLIFLAP rubber flaps

## PFERDVALUE:

**PFERD**ERGONOMICS recommends POLIFLAP tools to sustainably reduce vibration and noise levels during use and to improve working comfort.

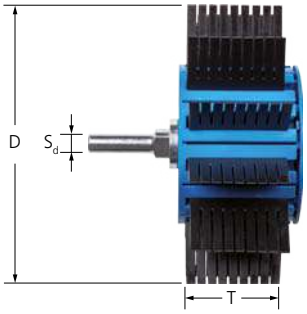




## Grinding wheel PFL

The grinding wheel consists of a shank-mounted support and rubber flaps. It must be completed with appropriate abrasive flaps.
The combination and arrangement of the abrasive and rubber flaps results in a highly flexible tool.




**Advantages:**
- Optimal harmonization of different surface structures.
- Creates a consistently high surface quality over the entire tool life as new, sharp abrasive is steadily released.
- Comfortable to use thanks to particularly lightweight design.

**Recommendations for use:**
- For optimum results on stainless steel (INOX), use at a rotational speed between 1,400–1,700 RPM.
- In the event of excessive wear, we recommend replacing the flaps early.

**Matching tool drives:**
flexible shaft drive, straight grinder

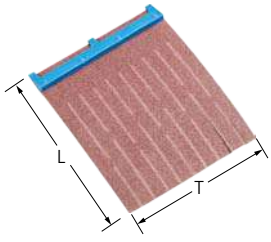
**Ordering notes:**
- Supplied without abrasive flaps. Please order abrasive flaps separately in the desired grit size.

**PFERD**VALUE:


| D [mm] | T [mm] | $S_d$ [mm] | EAN 4007220 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|
| 170 | 60 | 12 | 725405 | 1,500 | 3,500 | 1 | PFL 17060/12 |

## Abrasive flaps PFL-SL

Abrasive flaps suitable for POLIFLAP grinding wheels, for achieving visual effects ranging from coarse to very fine.

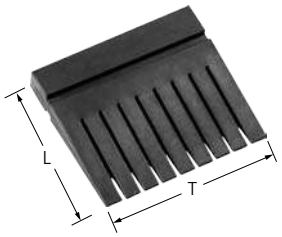



**Advantages:**
- Comfortable to use as easy to replace once worn.

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- The packaging unit corresponds to a complete POLIFLAP grinding wheel.
- Please complete the description with the desired grit size.

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




## Rubber flaps PFL-GL

Rubber flaps to match the POLIFLAP grinding wheel. They lie between the abrasive flaps, and support the abrasive effect and the flexibility of the tool.

**Advantages:**
- Comfortable to use as easy to replace once worn.

**Ordering notes:**
- The packaging unit corresponds to a complete POLIFLAP grinding wheel.

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

# POLIFLAP, set PFL

## SET PFL

Set with high-output electric straight grinder and PFERD tools for brush matting and for pattern blending on medium-sized and large surfaces on stainless steel (INOX) components.

**Contents:**
1 pc. each of:
- Electric straight grinder UGER 15/30 SI with electronic rotational speed control (750–3,000 RPM)
- Collet with diameter 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 fine grinding point PF ZY 10030/8 CU 16 PU-STRUC

2 pcs. each of:
- Single-head spanner SW 22

**Advantages:**
- Optimal, stepless rotational speed regulation for the use of POLIFLAP tools.
- Coordinated selection of the most common versions.

**Ordering notes:**
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

| D [mm] | L x B x H [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|
| 170 | 594 x 561 x 161 | 777343 | 1 | SET PFL 17060 UGER 15/30 SI 230 V |

Overlap slotted discs are ideally suited to side grinding.

## Safety notes:

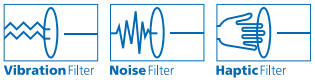
- The maximum permitted peripheral speed is 20 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

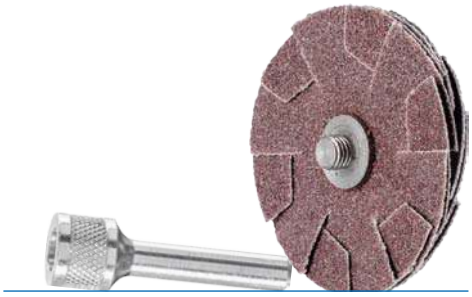
## Accessories:

- Arbors for overlap slotted discs

## PFERDVALUE:

**PFERD**ERGONOMICS recommends overlap slotted discs to sustainably reduce vibration and noise levels during use and to improve working comfort.



# Overlap slotted discs KS



## KS type

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

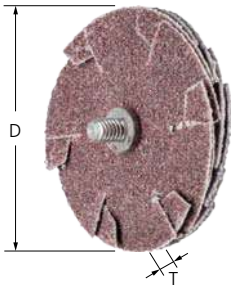
**Advantages:**
- Hard-to-reach areas can be accessed as the tool provides abrasive action on its top and bottom sides.
- High economic efficiency as the tool can be changed quickly.

**Abrasive:**
Aluminium oxide A

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

**Ordering notes:**
- Please order the matching arbor separately.

**PFERD**VALUE:

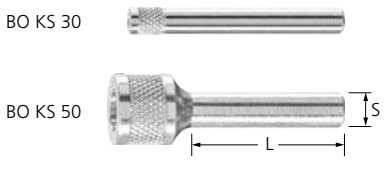

| D [mm] | T [mm] | Grit size | No. of layers | EAN 4007220 | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|
| 30 | 5 | 80 | 4 | 152706 | 6,500 | 12,000 | BO KS 30 | 20 | KS 30-4 A 80 |
| 50 | 5 | 80 | 4 | 152768 | 4,000 | 8,000 | BO KS 50 | 20 | KS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

# Arbors for overlap slotted discs BO KS

## BO KS type

Matching arbor for overlap slotted discs.

**Advantages:**
- Reduced set-up work as the overlap slotted discs can be changed without unclamping the arbor from the collet.




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

# Flap tools
## General information – POLISTAR

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

### Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Most effective work on small inner diameters, particularly in the range of 7–40 mm, due to tool dimensions.

### Recommendations for use:

- For best performance, use with a recommended cutting speed of 15–20 m/s.
- POLISTAR products can be stacked in several layers. Arrange so that the layers are offset to ensure that the abrasive is applied as effectively as possible.
  - 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

### Matching tool drives:

- Flexible shaft drives
- Straight grinders

### Ordering notes:

- Please order arbors separately.
- POLISTAR products are supplied in sheets. Sheet contents:
  Dia. 20 and 30 mm = 25 pcs.
  Dia. 40 and 50 mm = 10 pcs

### Safety notes:

- The maximum permitted peripheral speed is 20 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

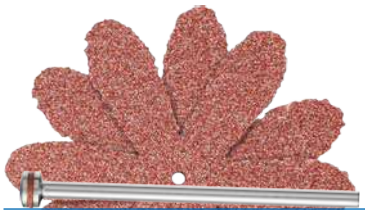
### Accessories:

- Arbors for POLISTAR and POLISTAR-TUBE

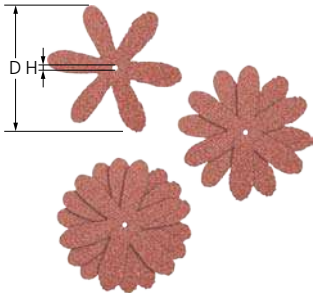
### PFERDVALUE:

**PFERD**ERGONOMICS recommends POLISTAR to sustainably reduce vibration and noise levels during use and to improve working comfort.

Vibration Filter | Noise Filter | Haptic Filter



## POLISTAR




### PST type

The flexible tools are particularly suitable for work on inner surfaces.

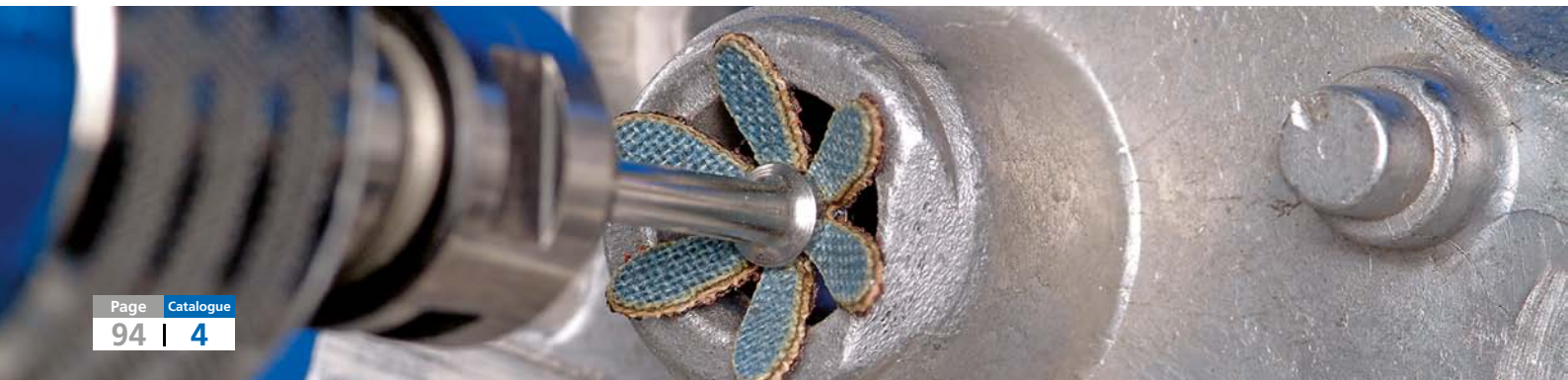
**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:

Vibration Filter | Noise Filter | Haptic Filter

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



POLISTAR-TUBE are multi-layered tools that are riveted together. They are used especially for working on the inner surfaces of pipes and pipe bends.

They are used in combination with the matching flexible shafts from catalogue section 9:
- 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:

- Optimum adaptation to contours thanks to high flexibility.
- For achieving very fine surface quality grades of up to $R_a$ 0.2 µm.
- Prevention of corrosion formation on stainless steel (INOX) pipes thanks to use of stainless steel rivets.

## Recommendations for use:

- For best performance, use with a recommended cutting speed of 15–20 m/s.
- Select the tool diameter based on the respective pipe's inner diameter:
  - 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
- Select the appropriate grit size for the desired roughness value:
  - 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 $R_a$

## Matching tool drives:

- Flexible shaft drives
- Straight grinders

## Ordering notes:

- Please order arbors separately.
- PST-T with a grit size of 60 are always supplied with 4 layers.

## Safety notes:

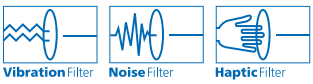
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

## Accessories:

- Arbors for POLISTAR and POLISTAR-TUBE

## PFERDVALUE:

**PFERD**ERGONOMICS recommends POLISTAR-TUBE to sustainably reduce vibration and noise levels during use and to improve working comfort.






# POLISTAR-TUBE

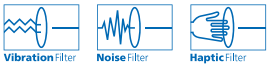
## PST-T type

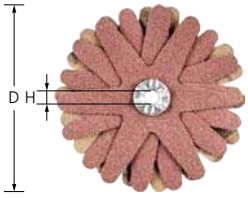
The flexible tools are ideal for use in pipes and pipe bends.

**Abrasive:**
Aluminium oxide A

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:

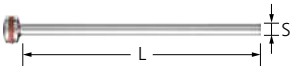


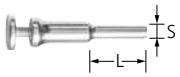

| D [mm] | H [mm] | No. of layers [pcs.] | Grit size 60 | 120 | 180 | 240 | 320 | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | | | | | |
| 50 | 4 | 6 | 834398 | 834404 | 834411 | 834435 | 834442 | 3,000 | 7,650 | BO 6/4 0-10 | 10 | PST-T 50/4 6 A ... |
| 60 | 4 | 6 | 834596 | 834718 | 834725 | 834732 | 834749 | 2,500 | 6,350 | BO 6/4 0-10 | 10 | PST-T 60/4 6 A ... |
| 70 | 4 | 6 | 834756 | 834763 | 834770 | 834787 | 834794 | 2,200 | 5,450 | BO 6/4 0-10 | 10 | PST-T 70/4 6 A ... |
| 80 | 4 | 6 | 834800 | 834817 | 834824 | 834831 | 834848 | 1,900 | 4,750 | BO 6/4 0-10 | 10 | PST-T 80/4 6 A ... |
| 90 | 5 | 8 | 834855 | 834862 | 834879 | 834886 | 834893 | 1,700 | 4,250 | BO 6/5 0-10 | 10 | PST-T 90/5 8 A ... |
| 100 | 5 | 8 | 834909 | 834916 | 834923 | 834947 | 834954 | 1,500 | 3,820 | BO 6/5 0-10 | 10 | PST-T 100/5 8 A ... |

# Flap tools
## Arbor for POLISTAR and POLISTAR-TUBE

BO 2,3/1,6 1-5
BO 3/1,6 1-5




BO 6/3 1-6
BO 6/4 0-10
BO 6/5 0-10



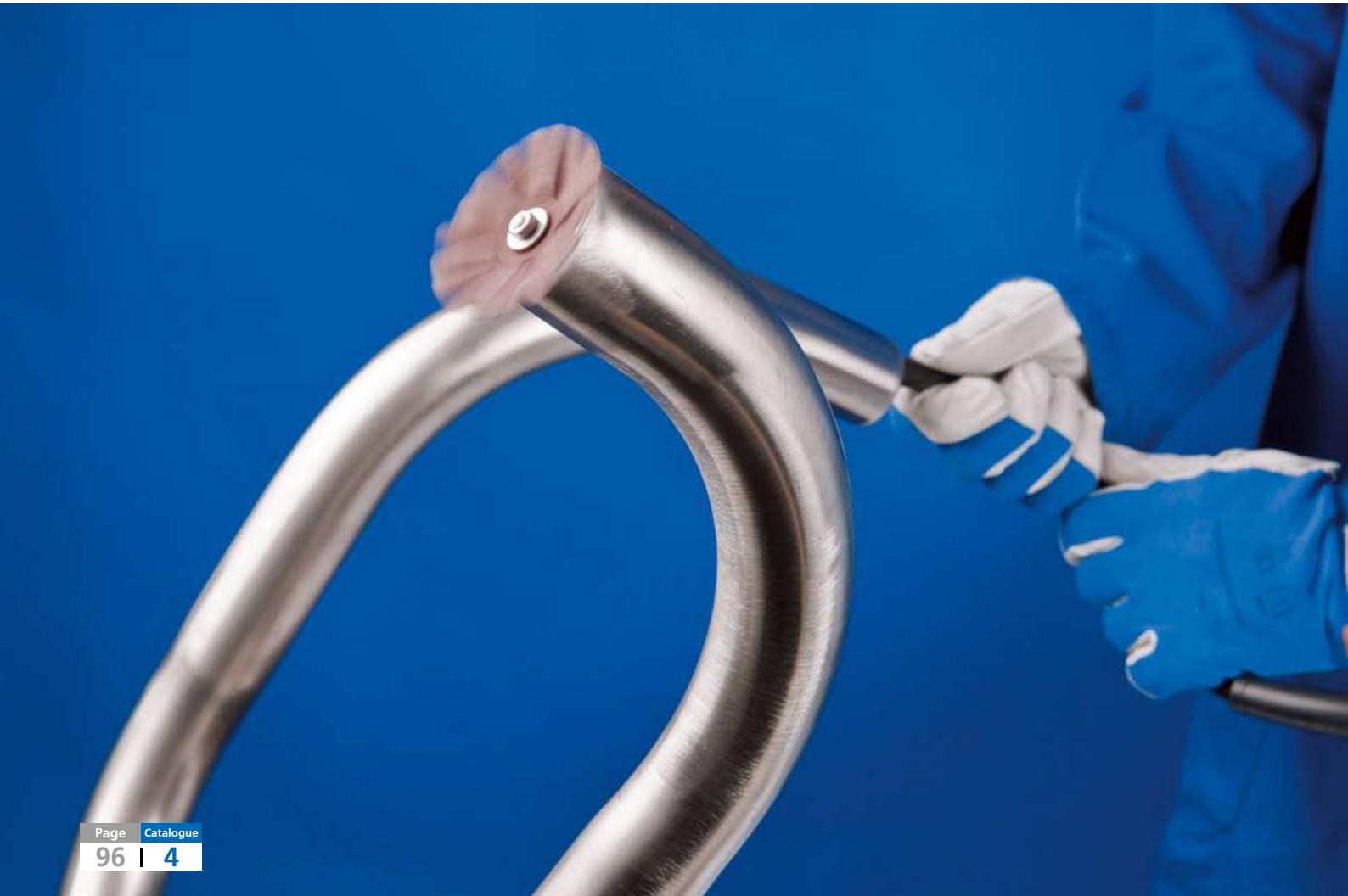

### BO type

Matching arbor for POLISTAR and POLISTAR-TUBE.

**Advantages:**

- High economic efficiency as the tool can be changed quickly.

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



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

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

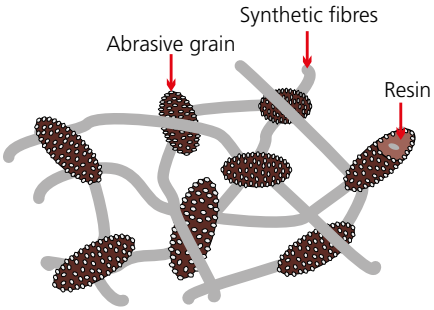
Non-woven abrasives consist of polyamide fibres, synthetic resins and abrasive grain.

The non-woven fibre structure is impregnated or interspersed with resin and abrasive grain. The very loose connection between the individual fibres ensures a high level of flexibility and gives a strong spring-type effect to the non-woven material. It is flexible and supple, and leaves behind a very distinctive surface structure.

The satin-finished grinding result is unique and cannot be achieved with other abrasives. The consistent distribution of the abrasive grain in the non-woven structure guarantees a continuous supply of new, fresh and sharp abrasive grain throughout the entire grinding application.

Although non-woven abrasives have a completely differently structure to coated abrasives, the same abrasive materials are used for both groups of tools:

- Aluminium oxide ($Al_2O_3$) is very durable, features an extremely long tool life and has very high aggressiveness on hardened steel. The achieved surface finish is distinguished by its increased shine. Discolouration is prevented when working on aluminium.
- Silicon carbide (SiC) is even sharper, harder and cuts very easily. In no time at all, it produces a finer grinding pattern on the surfaces of many materials which remains slightly matt for a long time.




The user selects a specific grit size for conventionally bonded abrasives or coated abrasives. The designation system for non-woven abrasives is outlined in the following table:

| Designation at PFERD | Comparable grit size [mesh] |
|---|---|
| Very coarse | 50– 80 |
| Coarse | 80–100 |
| Medium | 100–180 |
| Fine | 180–220 |
| Very fine | 220–400 |




## Use

The use of non-woven abrasives begins where other grinding tools reach their limits or no longer achieve the desired results. The elastic properties of the polyamide fibres and the positive effect of the non-woven abrasives result in finishing tools which produce outstanding results yet work gently.

Non-woven abrasives are water-tight, washable and very durable. They don't clog, leave no rust behind on surfaces and are non-conductive.

Non-woven abrasive can be used to outstanding effect for deburring, cleaning and for work on the surfaces of many metals, including aluminium, brass, copper, nickel, stainless steel (INOX) and titanium. It is also suitable for work on other materials which are difficult to grind, such as ceramic, glass and plastic. Non-woven abrasive can be used for wet or dry grinding.

## Non-woven tools

Non-woven abrasives are suitable for manufacturing a wide range of different tools, such as hand pads, drums, discs, belts, points and mounted grinding wheels.

The abrasive properties of these tools are tailored to a variety of applications and represent outstanding solutions for numerous metal machining and processing tasks.

The PFERD range comprises:
- COMBICLICK/COMBIDISC non-woven discs VRW
- Non-woven shop rolls, hand pads
- POLINOX mounted flap wheels, grinding discs, grinding wheels and grinding drums (PNL, PNZ, PNR, PNG, PNST, PNK and PNER)

**Additional types**
Non-woven abrasive can also be manufactured with a fabric reinforcement. The non-woven abrasive material gains considerably higher aggressiveness and stability as a result.

Fabric-reinforced, non-woven abrasive is suitable for manufacturing discs and non-woven belts.

The PFERD range comprises:
- COMBICLICK/COMBIDISC non-woven discs VRH
- POLIVLIES flap discs and self-adhesive discs
- Short and long belts, non-woven type

## PFERD designation

| | | |
|---|---|---|
| **PNER** |  | Thanks to different combinations of compaction, fibres, grain and the appropriate bond, this tool can be used for a wide range of surface finishing applications, from relatively coarse grinding to preparing the surface for polishing. |
| **PNK** |  | The non-woven abrasive is wound around a core and foamed up. The tools can be optimized for a variety of applications by implementing different foam, fibre, grain and bond combinations. The spectrum of application ranges from fine deburring through to preparations for polishing. |
| **PNL** |  | Made of radially arranged flaps of non-woven abrasive material. The flaps are very tightly packed, which achieves a longer tool life.<br>The tool's main area of application is surface work. |
| **PNZ** |  | The non-woven abrasive is arranged in multiple radial flaps, with one abrasive cloth interlayer between each set of flaps. This flap combination facilitates greater stock removal and a coarser surface finish. |
| **PNG** |  | The non-woven abrasive comprises several very wavy strips of non-woven material wound around a core. The wavy structure of the non-woven material permits seamless brush matting of surfaces. |
| **PNR** |  | The non-woven abrasive is arranged in multiple (axial) disc layers. Since the individual non-woven discs are not interconnected, the abrasive surface adapts easily to different workpiece contours, e.g. when working on profiles or pipes. |
| **PNST** |  | The non-woven abrasive is star-shaped and stacked in layers which are connected in the centre.<br>It offers outstanding performance, specifically when used for tight work areas such as holes, recesses and hard-to-reach places. |

POLINOX unitized wheels PNER and unitized discs PNER consist of multiple heavily compressed, non-woven layers, which are bonded together by a special grain/resin system.

This particular bond results in non-woven products with a very good surface finish, high stock removal rate and long tool life. These properties are particularly apparent when deburring, blending, finishing and polishing soft metals, alloyed and high-alloy steels, in addition to titanium alloys.

**Four different types are available:**

| Type | Colour code | Properties |
|---|---|---|
| Soft | W | Soft variant with outstanding adaptability. At the same time, durability, abrasive performance and very high surface quality are all maintained. Ideally suited to machining contours. |
| Medium-soft | MW | Medium-soft variant with increased edge strength and extended tool life, for tough blending and polishing applications. Well suited to machining contours. |
| Medium-hard | MH | Medium-hard variant with increased edge strength and extended tool life, for tough deburring and cleaning applications. |
| Hard | H | Hard variant with very high stock removal rate, good edge strength and long tool life, for tough deburring and polishing applications. |



## Comparison table

| PFERD PNER | | | | 3M | Standard Abrasives | Norton | BIBIELLE |
|---|---|---|---|---|---|---|---|
| Type | Colour code | Abrasive | Grain | | | | |
| Soft | W | SiC | Fine | EXL 2S fine | 532 | UW1-2SF or Nex-2SF | BUH 2SF |
| | | A | Coarse | EXL 2A medium | 521 | UW1-2AM or Nex-2AM | BUH 2AM |
| Medium-soft | MW | SiC | Fine | EXL 4S fine or SST 3S fine | 632 | UW1-4SF | BUH 3SF |
| | | A | Fine | EXL 4A fine or SST 3A fine | 631 | UW1-4AF | - |
| Medium-hard | MH | A | Fine | Cut & polish 5A fine or SST 5A fine | 731 | UW1-6AF or Nex-6AF | - |
| Hard | H | A | Fine | Cut & polish 7A medium or 9A medium | 821 | UW1-8AM or Nex-8AM | BUH 6AM |
| | | A | Coarse | Cut & polish 7A coarse or 9A coarse | 811 | UW1-8AC or Nex-8AC | BUH 8AC |

# Non-woven tools

## General information – POLINOX unitized wheels and discs PNER

### Advantages:

- High profitability thanks to high abrasive performance and long tool life.
- For achieving very good surface quality standards.
- Perfect adaptation to contours thanks to free profiling.

### Applications:

**Cleaning**
- Universal cleaning before painting.
- Removal of rust, scratches, coatings, heavy scaling, oxide layers of aluminium and heat discolouration.

**Deburring**
- Deburring of gear components, aircraft wing spars and turbine blade edges.
- Removal of heavy burrs, in addition to moderate blemishes and scratches.
- Edge breaking and rounding.

**Blending**
- Blending and finishing work on engine blade surfaces, turbine blades and rotor blades.
- Removal of smaller blemishes, scratches and joints on cast workpieces.

**Polishing**
- Polishing of fillet welds on turbine blades and aircraft parts.
- Polishing of soft metals before the coating process, and of hardened steel when repairing moulds and dies.
- Polishing and finishing of surgical instruments and implants.

### Recommendations for use:

- Considerably reduce cutting speed for work on materials with poor heat-conducting properties, e.g. titanium and stainless steel.
- For best performance, use with a recommended cutting speed of 15–35 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

### Matching tool drives:

- Flexible shaft drives
- Straight grinders
- Bench grinders

### Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**355473**
  PNER-H 7506-6 A G
- **Ordering example explanation:**

| | |
|---|---|
| PNER | = POLINOX unitized wheels |
| H | = Type |
| 7506 | = Outer diameter D x width T [mm] |
| 6 | = Centre hole diameter H [mm] |
| A | = Abrasive |
| G | = Grit size |

### Safety notes:

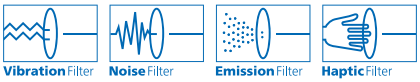
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

### Accessories:

- Arbor for POLINOX unitized wheels

### PFERDVALUE:

**PFERD**ERGONOMICS recommends POLINOX unitized wheels and unitized discs PNER to sustainably reduce vibration, noise and dust levels produced by tools and to improve working comfort.





### Recommended rotational speed range

**Example:**
PNER-H 7506-6 A G
Cutting speed: 25 m/s
**Rotational speed: 6,300 RPM**

| Tool dia. [mm] | Cutting speed [m/s] | | | | | | |
|---|---|---|---|---|---|---|---|
| | 15 | 20 | 25 | 30 | 32 | 35 | 50 |
| | Rotational speeds [RPM] | | | | | | |
| 25 | 11,400 | 15,200 | 19,000 | 22,900 | 24,400 | 26,700 | 38,100 |
| 50 | 5,700 | 7,600 | 9,500 | 11,400 | 12,200 | 13,300 | 19,000 |
| 75 | 3,800 | 5,000 | 6,300 | 7,600 | 8,100 | 8,900 | 12,700 |
| 100 | 2,800 | 3,800 | 4,700 | 5,700 | 6,100 | 6,600 | 9,500 |
| 115 | 2,400 | 3,300 | 4,100 | 4,900 | 5,300 | 5,800 | 8,300 |
| 125 | 2,200 | 3,000 | 3,800 | 4,500 | 4,800 | 5,300 | 7,600 |
| 150 | 1,900 | 2,500 | 3,100 | 3,800 | 4,000 | 4,400 | 6,300 |

## PNER type

**Type for straight grinders, flexible shafts and bench grinders:**
Particularly suitable for work on smaller surfaces.

**Type for speed-adjustable angle grinders and fillet weld grinders:**
They are especially suitable for work on fillet welds and very hard-to-reach slots or indentations.

**Abrasive:**
Aluminium oxide A
Silicon carbide SiC

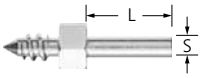
**Recommendations for use:**
- Grinding wheels with a diameter of 150 mm can also be used on bench grinders, for reworking surgical instruments, for example.

**Ordering notes:**
- An adapter is included with the 150 x 25 mm diameter grinding wheels, which allows the centre hole diameter to be reduced from 25.4 mm to 20 mm.
- Please complete the description with the desired hardness grade.

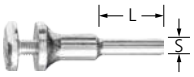
**PFERD**VALUE:



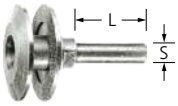
| D [mm] | T [mm] | H [mm] | Grit size | Abra-sives | Type W (soft) | Type MW (me-dium-soft) | Type MH (me-dium-hard) | Type H (hard) | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | EAN 4007220 | | | | | | | | |
| **Type for straight grinders, flexible shafts and bench grinders** | | | | | | | | | | | | | |
| 25 | 25 | 6 | coarse | A | - | - | - | 440438 | 19,000 | 30,500 | BO PNER 25 S6 | 10 | PNER-... 2525-6 A G |
| | | | fine | A | - | - | 440452 | 440445 | 19,000 | 30,500 | BO PNER 25 S6 | 10 | PNER-... 2525-6 A F |
| 50 | 3 | 6 | fine | A | - | - | - | 505700 | 9,500 | 15,300 | BO 6/6 3-10 | 10 | PNER-... 5003-6 A F |
| 75 | 3 | 6 | fine | A | - | - | - | 505717 | 6,400 | 10,200 | BO 6/6 3-10 | 10 | PNER-... 7503-6 A F |
| | 6 | 6 | coarse | A | 476307 | - | - | 355473 | 6,400 | 10,200 | BO 6/6 3-10 | 5 | PNER-... 7506-6 A G |
| | 6 | 6 | fine | A | - | 355534 | 355503 | - | 6,400 | 10,200 | BO 6/6 3-10 | 5 | PNER-... 7506-6 A F |
| | 6 | 6 | fine | SiC | 355626 | 355558 | - | - | 6,400 | 10,200 | BO 6/6 3-10 | 5 | PNER-... 7506-6 SiC F |
| | 13 | 6 | coarse | A | 476314 | - | - | 355480 | 6,400 | 10,200 | BO 6/6 3-10 | 5 | PNER-... 7513-6 A G |
| | 13 | 6 | fine | A | - | 355565 | 355510 | - | 6,400 | 10,200 | BO 6/6 3-10 | 5 | PNER-... 7513-6 A F |
| | 13 | 6 | fine | SiC | 476338 | 355589 | - | - | 6,400 | 10,200 | BO 6/6 3-10 | 5 | PNER-... 7513-6 SiC F |
| 150 | 25 | 25.4 | coarse | A | - | - | - | 355497 | 3,200 | 5,100 | BO 12/20 10-50 | 1 | PNER-... 15025-25,4 A G |
| | | | fine | A | - | 476291 | 355527 | - | 3,200 | 5,100 | BO 12/20 10-50 | 1 | PNER-... 15025-25,4 A F |
| | | | fine | SiC | 355633 | 355602 | - | - | 3,200 | 5,100 | BO 12/20 10-50 | 1 | PNER-... 15025-25,4 SiC F |
| **Type for angle grinders and fillet weld grinders** | | | | | | | | | | | | | |
| 125 | 6 | 22.23 | coarse | A | - | - | - | 833179 | 4,500 | 6,100 | - | 5 | PNER-... 12506-22,2 A G |
| | | | fine | A | - | 833148 | 833155 | 833162 | 4,500 | 6,100 | - | 5 | PNER-... 12506-22,2 A F |
| | | | fine | SiC | - | 833131 | - | - | 4,500 | 6,100 | - | 5 | PNER-... 12506-22,2 SiC F |
| 150 | 3 | 25.4 | fine | A | - | - | - | 895733 | 3,800 | 5,100 | - | 5 | PNER-... 15003-25,4 A F |
| | 3 | 25.4 | fine | SiC | - | 895719 | 895726 | - | 3,800 | 5,100 | - | 5 | PNER-... 15003-25,4 SiC F |
| | 6 | 25.4 | fine | A | - | - | - | 895764 | 3,800 | 5,100 | - | 5 | PNER-... 15006-25,4 A F |
| | 6 | 25.4 | fine | SiC | 895740 | 895757 | - | - | 3,800 | 5,100 | - | 5 | PNER-... 15006-25,4 SiC F |



BO PNER 25 S6



BO 6/6 3-10



BO 12/20 10-50


BO MK 1/20 10-50

## Arbors BO

Matching arbor for POLINOX unitized wheels.

**Advantages:**
- High economic efficiency as the tool can be changed quickly.

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

## POLINOX unitized discs PNER


### PNER discs

POLINOX unitized discs are used for face-down grinding on speed-adjustable angle grinders. Especially well-suited to work on larger surfaces. The compressed, non-woven material is bonded to a glass-fabric base.

**Abrasive:**
Silicon carbide SiC

**PFERD**VALUE:
Vibration Filter · Noise Filter · Emission Filter · Haptic Filter

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

## SET PNER

Set with handy electric fillet weld grinder and PFERD tools for brushing, cleaning, weld dressing and very fine grinding of fillet welds and hard-to-reach places on stainless steel (INOX) components.

**Contents:**
1 pc. each of:
- Electric fillet weld grinder KNER 5/34 V-SI with electronic rotational speed control (1,400–3,200 RPM)
- 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

**Advantages:**
- Optimal, stepless rotational speed regulation for the use of different tools.
- Coordinated selection of the most common versions.

**Recommendations for use:**
- Please note the different recommended rotational speeds: 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

**Ordering notes:**
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

**PFERD**VALUE:


| D [mm] | L x B x H [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|
| 150 | 587 x 285 x 162 | 936306 | 1 | SET PNER 15003/06 KNER 5/34 230 V |

# Non-woven tools
## General information – POLINOX convolute wheels PNK

POLINOX convolute wheels PNK consist of spiral-shaped, non-woven abrasive which is wound around a core and foamed up. The foam supports the non-woven component and positively impacts its tool life and abrasive performance.

This particular bond results in non-woven wheels with a very good surface finish, high stock removal rate and long tool life. These properties are particularly apparent when deburring, blending, finishing and polishing soft metals, alloyed and high-alloy steels, in addition to titanium alloys. The wheels can be used on automated appliances and bench grinders, in addition to portable tool drives such as straight grinders. By dressing the wheels, they can also be adapted to the geometry of special workpieces.

**Five different types are available:**

| Type | Colour code | Properties |
|---|---|---|
| Soft | W | Soft variant with very good abrasive performance on contours. Very good for blending surfaces. |
| Medium-soft | MW | Medium-soft variant with increased flexibility and extended tool life for tough blending applications and for light deburring and polishing work. Well suited to machining contours. |
| Medium-hard | MH | Medium-hard variant with increased edge strength and extended tool life, for tough deburring applications and other deburring, blending and cleaning work. |
| Hard | H | Hard variant with very high stock removal rate, good edge strength and long tool life, for moderate to heavy-duty deburring and polishing applications. |
| Extra-hard | EH | Extra-hard variant with very high edge strength for demanding deburring work. |

## Comparison table

| PFERD PNK | | | | 3M | Standard Abrasives | Norton | BIBIELLE |
|---|---|---|---|---|---|---|---|
| Type | Colour code | Abrasive | Grain | | | | |
| Soft | W | A | Coarse | CP-WL 5AM | MF CV 5AM | MF CF 5AM | BCW-MF 5AM |
| Medium-soft | MW | SiC | Fine | LDW 7SF | LDW 7SF | Series 2000 7SF | BCW-DB 7SF |
| Medium-hard | MH | SiC | Fine | EXL Deburring 8SF | Deburring 8SF | Series 1000 8SF | BCW-DB 8SF |
| | | A | Coarse | EXL Deburring 8AM | GP Plus 8AM | Series 1000 8AM | BCW-DB 8AM |
| Hard | H | SiC | Fine | Deburring 9SF | EXL Deburring 9SF | Series 1000 9SF | BCW-DB 9SF |
| Extra-hard | EH | SiC | Fine | XP-WL 10SF | GP Plus 10SF | Series 4000 9SF | BCW-DB 9SF-R |

## Advantages:

- High profitability thanks to high abrasive performance and long tool life.
- For achieving very good surface quality standards.
- Perfect adaptation to contours thanks to free profiling.

## Abrasive:

- Aluminium oxide A
- Silicon carbide SiC

## Applications:

- Rounding of edges.
- Fine grinding of implants.
- Matt finishing of flat surfaces.
- Removing joints on cast and forged parts.
- Weld dressing of intersections on turbine blades.
- Polishing moulds and dies.
- Removal of processing traces on surgical instruments.

## Recommendations for use:

- Considerably reduce cutting speed for work on materials with poor heat-conducting properties, e.g. titanium and stainless steel.
- For best performance, use with a recommended cutting speed of 20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

## Matching tool drives:

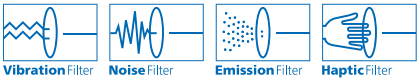
- Flexible shaft drives
- Straight grinders
- Bench grinders

## Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The wound construction of the tool requires that the indicated tool running direction is strictly adhered to. Non-compliance with the tool running direction will lead to destruction of the tool, and carries an increased risk of accidents.

## PFERDVALUE:

**PFERD**ERGONOMICS recommends POLINOX convolute wheels PNK to sustainably reduce vibration, noise and dust levels produced by tools and to improve working comfort.

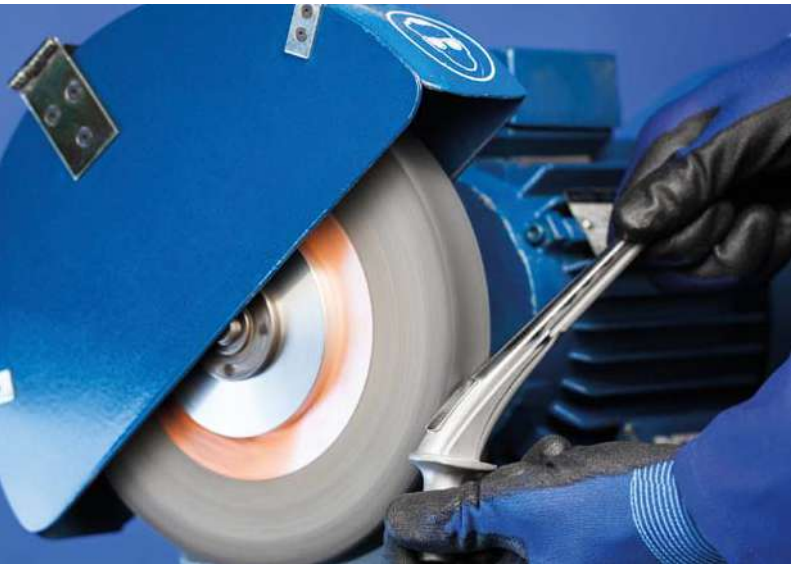




## Recommended rotational speed range

**Example:**
PNK-MW 15013-25.4 SiC F
Cutting speed: 20 m/s
**Rotational speed: 2,500 RPM**

| Tool dia. [mm] | Cutting speed [m/s] | | | | |
|---|---|---|---|---|---|
| | 15 | 20 | 25 | 30 | 40 |
| | Rotational speeds [RPM] | | | | |
| 150 | 1,900 | 2,500 | 3,100 | 3,800 | 5,000 |
| 200 | 1,400 | 1,900 | 2,300 | 2,800 | 3,800 |
| 250 | 1,100 | 1,500 | 1,900 | 2,200 | 3,000 |




## PNK type

Varied application options, for example:
- Rounding of edges
- Fine grinding of implants
- Weld dressing of intersections on turbine blades
- Removal of processing traces on surgical instruments

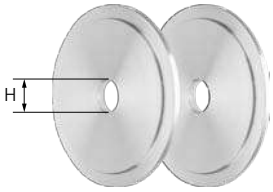
They create matt surface finishes.

**Abrasive:**
Aluminium oxide A
Silicon carbide SiC

**PFERD**VALUE:


| D [mm] | T [mm] | H [mm] | Grit size | Type | Abrasives | EAN 4007220 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| 150 | 13 | 25.4 | fine | medium-soft | SiC | 841846 | 2,500 | 5,100 | 1 | PNK-MW 15013-25,4 SiC F |
| | 13 | 25.4 | fine | medium-hard | SiC | 841860 | 2,500 | 5,100 | 1 | PNK-MH 15013-25,4 SiC F |
| | 13 | 25.4 | coarse | medium-hard | A | 841853 | 2,500 | 5,100 | 1 | PNK-MH 15013-25,4 A G |
| | 13 | 25.4 | fine | hard | SiC | 841877 | 2,500 | 5,100 | 1 | PNK-H 15013-25,4 SiC F |
| | 13 | 25.4 | fine | extra-hard | SiC | 091357 | 2,500 | 5,100 | 1 | PNK-EH 15013-25,4 SiC F |
| | 25 | 25.4 | coarse | soft | A | 896501 | 2,500 | 5,100 | 1 | PNK-W 15025-25,4 A G |
| | 25 | 25.4 | fine | medium-soft | SiC | 841884 | 2,500 | 5,100 | 1 | PNK-MW 15025-25,4 SiC F |
| | 25 | 25.4 | fine | medium-hard | SiC | 841907 | 2,500 | 5,100 | 1 | PNK-MH 15025-25,4 SiC F |
| | 25 | 25.4 | coarse | medium-hard | A | 841891 | 2,500 | 5,100 | 1 | PNK-MH 15025-25,4 A G |
| | 25 | 25.4 | fine | hard | SiC | 841914 | 2,500 | 5,100 | 1 | PNK-H 15025-25,4 SiC F |
| | 25 | 25.4 | fine | extra-hard | SiC | 091395 | 2,500 | 5,100 | 1 | PNK-EH 15025-25,4 SiC F |
| 200 | 13 | 76.2 | fine | medium-soft | SiC | 841921 | 1,900 | 3,850 | 1 | PNK-MW 20013-76,2 SiC F |
| | 13 | 76.2 | fine | medium-hard | SiC | 841945 | 1,900 | 3,850 | 1 | PNK-MH 20013-76,2 SiC F |
| | 13 | 76.2 | coarse | medium-hard | A | 841938 | 1,900 | 3,850 | 1 | PNK-MH 20013-76,2 A G |
| | 13 | 76.2 | fine | hard | SiC | 841952 | 1,900 | 3,850 | 1 | PNK-H 20013-76,2 SiC F |
| | 13 | 76.2 | fine | extra-hard | SiC | 067819 | 1,900 | 3,850 | 1 | PNK-EH 20013-76,2 SiC F |
| | 25 | 76.2 | coarse | soft | A | 091333 | 1,900 | 3,850 | 1 | PNK-W 20025-76,2 A G |
| | 25 | 76.2 | fine | medium-soft | SiC | 841969 | 1,900 | 3,850 | 1 | PNK-MW 20025-76,2 SiC F |
| | 25 | 76.2 | fine | medium-hard | SiC | 841983 | 1,900 | 3,850 | 1 | PNK-MH 20025-76,2 SiC F |
| | 25 | 76.2 | coarse | medium-hard | A | 841976 | 1,900 | 3,850 | 1 | PNK-MH 20025-76,2 A G |
| | 25 | 76.2 | fine | hard | SiC | 841990 | 1,900 | 3,850 | 1 | PNK-H 20025-76,2 SiC F |
| | 25 | 76.2 | fine | extra-hard | SiC | 067765 | 1,900 | 3,850 | 1 | PNK-EH 20025-76,2 SiC F |
| | 50 | 76.2 | coarse | soft | A | 896525 | 1,900 | 3,850 | 1 | PNK-W 20050-76,2 A G |
| | 50 | 76.2 | fine | medium-soft | SiC | 842003 | 1,900 | 3,850 | 1 | PNK-MW 20050-76,2 SiC F |
| | 50 | 76.2 | fine | medium-hard | SiC | 842027 | 1,900 | 3,850 | 1 | PNK-MH 20050-76,2 SiC F |
| | 50 | 76.2 | coarse | medium-hard | A | 842010 | 1,900 | 3,850 | 1 | PNK-MH 20050-76,2 A G |
| | 50 | 76.2 | fine | hard | SiC | 842034 | 1,900 | 3,850 | 1 | PNK-H 20050-76,2 SiC F |
| | 50 | 76.2 | fine | extra-hard | SiC | 067758 | 1,900 | 3,850 | 1 | PNK-EH 20050-76,2 SiC F |

# Clamping flanges for POLINOX convolute wheels PNK




## RF PNK

For mounting POLINOX convolute wheels PNK with a diameter of 200 mm on stationary machines such as double grinding machines (bench grinders).

**Advantages:**
- High accuracy of fit.
- Hole can be expanded as desired.

**Ordering notes:**
- Included in delivery: 1 pair

| Suitable for centre hole dia. [mm] | H [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|
| 76.2 | 16.1 | 880623 | 1 | RF PNK 200 Bo. 16,1 |
| | 25.4 | 880630 | 1 | RF PNK 200 Bo. 25,4 |
| | 31.8 | 880647 | 1 | RF PNK 200 Bo. 31,8 |

POLINOX mounted and unmounted grinding wheels and cross buffs consist of non-woven polyamide abrasive, into which abrasive grain is integrated.

The wide range of hardness grades and different tool designs allow a variety of surface structures and roughness levels to be achieved.

## Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Cool grinding and low thermal load of the workpiece.
- No tool clogging due to open structure and high flexibility of the non-woven material.

## Recommendations for use:

- For best performance, use with a recommended cutting speed of 10–20 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.

## Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**157060**
  PNL 4020/6 A **100**
- **Ordering example explanation:**
  PNL = POLINOX mounted grinding wheel
  4020 = Outer diameter D x width T [mm]
  6 = Shank diameter $S_d$ [mm]
  A = Abrasive
  **100** = Grit size

## Accessories:

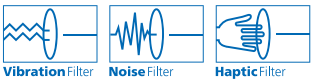
- Arbors for POLINOX cross buffs and unmounted flap wheels

## Safety notes:

- The maximum permitted peripheral speed is 32 m/s.
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

## PFERDVALUE:

**PFERD**ERGONOMICS recommends POLINOX mounted and unmounted grinding wheels to sustainably reduce vibration and noise levels during use and to improve working comfort.

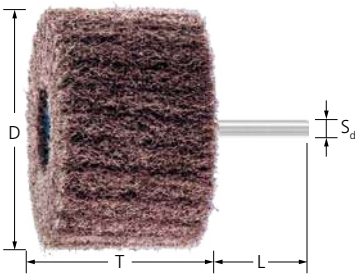





## Recommended rotational speed range

**Example:**
PNL 6050/6 A 100
Cutting speed: 15 m/s
**Rotational speed: 4,700 RPM**

| Tool dia. [mm] | Cutting speed [m/s] | | | | |
|---|---|---|---|---|---|
| | 10 | 15 | 20 | 30 | 32 |
| | Rotational speeds [RPM] | | | | |
| 30 | 6,300 | 9,500 | 12,700 | 19,000 | 20,300 |
| 40 | 4,700 | 7,100 | 9,500 | 14,300 | 15,200 |
| 50 | 3,800 | 5,700 | 7,600 | 11,400 | 12,200 |
| 60 | 3,100 | 4,700 | 6,300 | 9,500 | 10,100 |
| 100 | 1,900 | 2,800 | 3,800 | 5,700 | 6,100 |
| 125 | 1,500 | 2,200 | 3,000 | 4,500 | 4,800 |
| 150 | 1,200 | 1,900 | 2,500 | 3,800 | 4,000 |
| 200 | 900 | 1,400 | 1,900 | 2,800 | 3,000 |




## PNL type

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

The tool is particularly used for surface work.

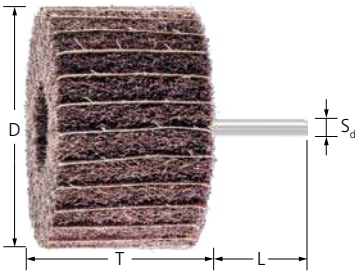
**Abrasive:**
Aluminium oxide A
Silicon carbide SiC

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

| D [mm] | T [mm] | $S_d$ [mm] | L [mm] | Grit size 100 | Grit size 180 | Grit size 280 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | | |
| **Aluminium oxide A** | | | | | | | | | | |
| 30 | 25 | 6 | 40 | 087824 | 087831 | 087923 | 10,000 | 20,000 | 10 | PNL 3025/6 A ... |
| 40 | 20 | 6 | 40 | 157060 | 157077 | 157084 | 7,500 | 15,000 | 10 | PNL 4020/6 A ... |
| 50 | 30 | 6 | 40 | 157107 | 157114 | 157121 | 6,000 | 12,000 | 10 | PNL 5030/6 A ... |
| 60 | 25 | 6 | 40 | 892879 | 892886 | 892893 | 5,000 | 10,000 | 10 | PNL 6025/6 A ... |
| | 50 | 6 | 40 | 157213 | 157220 | 157237 | 5,000 | 10,000 | 10 | PNL 6050/6 A ... |
| 80 | 25 | 6 | 40 | 892978 | 892992 | 893005 | 4,000 | 7,500 | 10 | PNL 8025/6 A ... |
| | 50 | 6 | 40 | 157183 | 157190 | 157206 | 4,000 | 7,500 | 10 | PNL 8050/6 A ... |
| **Silicon carbide (SiC)** | | | | | | | | | | |
| 40 | 20 | 6 | 40 | 803455 | 293669 | 293676 | 7,500 | 15,000 | 10 | PNL 4020/6 SiC ... |
| 50 | 30 | 6 | 40 | 803493 | 293683 | 293690 | 6,000 | 12,000 | 10 | PNL 5030/6 SiC ... |
| 60 | 50 | 6 | 40 | 803509 | 293706 | 293713 | 5,000 | 10,000 | 10 | PNL 6050/6 SiC ... |
| 80 | 50 | 6 | 40 | 803516 | 293720 | 293737 | 4,000 | 7,500 | 10 | PNL 8050/6 SiC ... |




## PNZ type

The non-woven abrasive material is arranged in multiple radial flaps, with abrasive cloth interlayers.

This flap structure facilitates improved stock removal and achieves a coarser surface finish.

**Abrasive:**
Aluminium oxide A
Silicon carbide SiC

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

| D [mm] | T [mm] | $S_d$ [mm] | L [mm] | Grit size 100 | Grit size 180 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | |
| **Aluminium oxide A** | | | | | | | | | |
| 30 | 25 | 6 | 40 | 087930 | 088067 | 10,000 | 20,000 | 10 | PNZ 3025/6 A ... |
| 40 | 20 | 6 | 40 | 157053 | 294697 | 7,500 | 15,000 | 10 | PNZ 4020/6 A ... |
| 50 | 30 | 6 | 40 | 803158 | 803165 | 6,000 | 12,000 | 10 | PNZ 5030/6 A ... |
| 60 | 25 | 6 | 40 | 892909 | 892916 | 5,000 | 10,000 | 10 | PNZ 6025/6 A ... |
| | 50 | 6 | 40 | 157138 | 294703 | 5,000 | 10,000 | 10 | PNZ 6050/6 A ... |
| 80 | 25 | 6 | 40 | 893012 | 893029 | 4,000 | 7,500 | 10 | PNZ 8025/6 A ... |
| | 50 | 6 | 40 | 157176 | 294710 | 4,000 | 7,500 | 10 | PNZ 8050/6 A ... |
| 100 | 50 | 6 | 40 | 294666 | 294673 | 3,000 | 6,000 | 5 | PNZ 10050/6 A ... |
| **Silicon carbide (SiC)** | | | | | | | | | |
| 80 | 50 | 6 | 40 | 617571 | 617588 | 4,000 | 7,500 | 10 | PNZ 8050/6 SiC ... |

## PNG type

Made of several very wavily arranged strips of non-woven abrasive material, wound around a core.

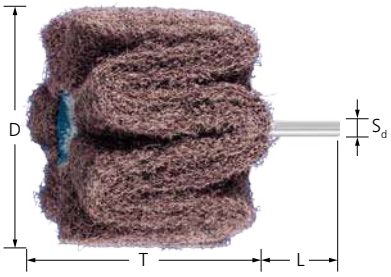
The wavy structure of the non-woven abrasive material permits seamless brush matting of surfaces.

**Abrasive:**
Aluminium oxide A
Silicon carbide SiC

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter




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

## PNR type

The non-woven abrasive material is arranged in multiple (axial) disc layers.

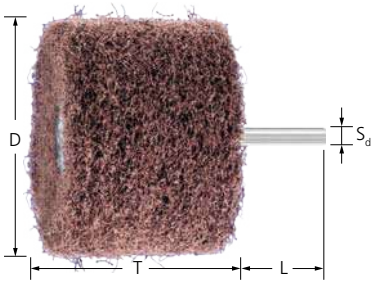
Since the individual non-woven discs are not interconnected, the abrasive surface adapts easily to different workpiece contours, e.g. when working on profiles or pipes.

**Abrasive:**
Aluminium oxide A

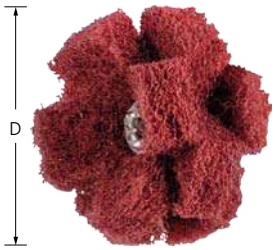
**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter




| D [mm] | T [mm] | $S_d$ [mm] | L [mm] | Grit size 100 | Grit size 180 | Grit size 280 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | | |
| **Shank dia. 2.35 mm** | | | | | | | | | | |
| 25 | 15 | 2.35 | 40 | 034705 | 034712 | 034729 | 7,600 | 12,300 | 10 | PNR 2515/2,35 A ... |
| **Shank dia. 3 mm** | | | | | | | | | | |
| 25 | 15 | 3 | 40 | 034736 | 034743 | 034750 | 7,600 | 12,300 | 10 | PNR 2515/3 A ... |
| 30 | 20 | 3 | 40 | 034767 | 034774 | 034781 | 6,500 | 10,200 | 10 | PNR 3020/3 A ... |
| **Shank dia. 6 mm** | | | | | | | | | | |
| 60 | 50 | 6 | 40 | 157145 | 157152 | 157169 | 5,000 | 10,000 | 10 | PNR 6050/6 A ... |
| 80 | 50 | 6 | 40 | 157244 | 157251 | 157268 | 4,000 | 7,500 | 10 | PNR 8050/6 A ... |




## PNST type

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

**Abrasive:**
Aluminium oxide A

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

| D [mm] | No. of layers [pcs.] | Grit size 80 | Grit size 100 | Grit size 280 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| | | EAN 4007220 | | | | | | |
| 19 | 2 | - | 899199 | 899205 | 15,000 | 25,100 | 20 | PNST 19-2 A ... |
| 25 | 2 | 899212 | 441138 | 441145 | 10,000 | 19,100 | 20 | PNST 25-2 A ... |
| 38 | 3 | 899229 | 441152 | 441169 | 7,500 | 12,600 | 20 | PNST 38-3 A ... |
| 50 | 2 | 899410 | 899427 | 899434 | 5,500 | 9,500 | 20 | PNST 50-2 A ... |


## BO PNST

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

**Advantages:**
- High economic efficiency as the tool can be changed quickly.

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

# POLINOX, set PNL/Z/R

## SET PNL/Z/R

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

**Contents:**
- Electric straight grinder UGER 5/90 SI with electronic rotational speed control (4,000–9,000 RPM)
- 2 different mounted flap wheels
- 10 POLINOX mounted grinding wheels in different types and grit sizes
- POLIFAN flap disc PFC 115 A-COOL 60 SG INOX+ALU

**Advantages:**
- Optimal, stepless rotational speed regulation for the use of different tools.
- Coordinated selection of the most common versions.

**Ordering notes:**
- Detailed information and ordering data on tool drives can be found in catalogue section 9.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

| D [mm] | EAN 4007220 | | Description |
|---|---|---|---|
| 60 | 323274 | 1 | SET PNL/Z/R 6050 UGER 5/90 230 V |

## PNL type

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

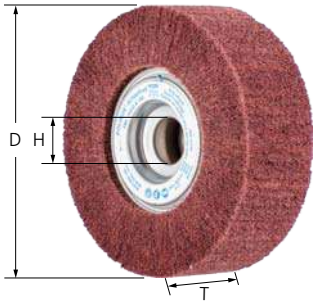
This tool is mainly used for work on large surfaces.

**Abrasive:**
Aluminium oxide A

**Matching tool drives:**
flexible shaft drive, straight grinder, bench grinder

**Ordering notes:**
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter Noise Filter Haptic Filter




| D [mm] | T [mm] | H [mm] | Grit size 100 | 180 | 280 | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | | | |
| 150 | 50 | 25.4 | 479667 | 479674 | 479681 | 2,000 | 4,000 | FR/VR 12/25,4 | 1 | PNL 15050/25,4 A ... |
| 200 | 50 | 44 | 479698 | 479704 | 479711 | 1,500 | 3,000 | FR/VR 12/44,0 | 1 | PNL 20050/44 A ... |

## PNZ type

The non-woven abrasive material is arranged in multiple radial flaps, with abrasive cloth interlayers.
This flap structure facilitates improved stock removal and achieves a coarser surface finish.

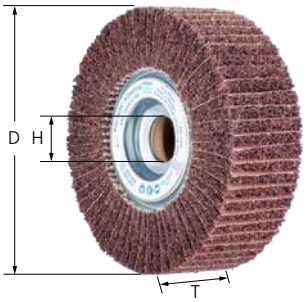
This tool is mainly used for work on large surfaces.

**Abrasive:**
Aluminium oxide A

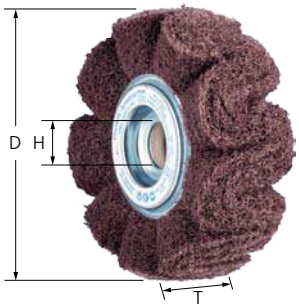
**Matching tool drives:**
flexible shaft drive, straight grinder, bench grinder

**Ordering notes:**
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter Noise Filter Haptic Filter




| D [mm] | T [mm] | H [mm] | Grit size 100 | 180 | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | | |
| 150 | 50 | 25.4 | 479728 | 479735 | 2,000 | 4,000 | FR/VR 12/25,4 | 1 | PNZ 15050/25,4 A ... |
| 200 | 50 | 44 | 479759 | 479766 | 1,500 | 3,000 | FR/VR 12/44,0 | 1 | PNZ 20050/44 A ... |




## PNG type

Made of several very wavily arranged strips of non-woven abrasive material, wound around a core.

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

**Abrasive:**
Aluminium oxide A

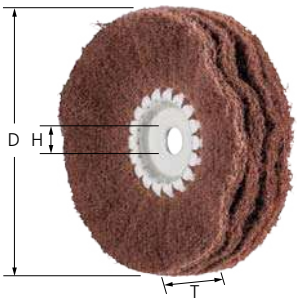
**Matching tool drives:**
flexible shaft drive, straight grinder, bench grinder

**Ordering notes:**
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

**PFERD**VALUE:

Vibration Filter | Noise Filter | Haptic Filter

| D [mm] | T [mm] | H [mm] | Grit size | | | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 100 | 180 | 280 | | | | | |
| | | | EAN 4007220 | | | | | | | |
| 150 | 50 | 25.4 | 479780 | 479797 | 479803 | 2,000 | 4,000 | FR/VR 12/25,4 | 1 | PNG 15050/25,4 A ... |
| 200 | 50 | 44 | 479810 | 479827 | 479834 | 1,500 | 3,000 | FR/VR 12/44,0 | 1 | PNG 20050/44 A ... |




## PNR type

Made of several slightly wavily arranged strips of non-woven abrasive material, wound around a metal core.

The open arrangement and high flexibility of the non-woven abrasive material enables exceptional adaptation to contours. Suitable for seamless brush matting of surfaces, profiles and pipes.

**Abrasive:**
Aluminium oxide A

**Matching tool drives:**
flexible shaft drive, straight grinder, bench grinder

**Ordering notes:**
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

**PFERD**VALUE:

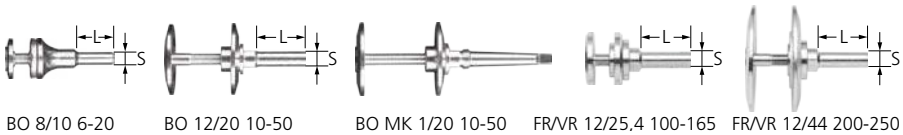
Vibration Filter | Noise Filter | Haptic Filter

| D [mm] | T [mm] | H [mm] | Grit size | | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | 180 | 280 | | | | | |
| | | | EAN 4007220 | | | | | | |
| 100 | 35 | 10 | 293546 | 293560 | 2,500 | 5,500 | BO 8/10 6-20 | 1 | PNR 10035/10 A ... |
| 150 | 40 | 20 | 293577 | 293584 | 2,000 | 4,000 | BO 12/20 10-50, BO MK 1/20 10-50 | 1 | PNR 15040/20 A ... |

## Arbors

Matching arbor for POLINOX unmounted grinding wheels.

**Advantages:**
- High economic efficiency as the tool can be changed quickly.




BO 8/10 6-20 | BO 12/20 10-50 | BO MK 1/20 10-50 | FR/VR 12/25,4 100-165 | FR/VR 12/44 200-250

| Suitable for centre hole dia. [mm] | S [mm] | L [mm] | Clamping width [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|---|---|
| 10 | 8 | 30 | 6–20 | 297667 | 1 | BO 8/10 6-20 |
| 20 | 12 | 35 | 10–50 | 297674 | 1 | BO 12/20 10-50 |
| | - | - | 10–50 | 297681 | 1 | BO MK 1/20 10-50 |
| 25.4 | 12 | 40 | 25–50 | 479643 | 1 | FR/VR 12/25,4 100-165 |
| 44 | 12 | 40 | 25–50 | 479650 | 1 | FR/VR 12/44,0 200-250 |

# Reducing flanges for POLINOX grinding wheels FR

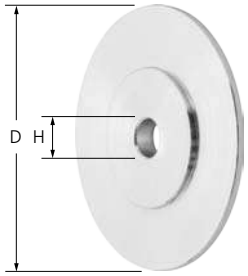


## RF FR

For mounting unmounted flap wheels and POLINOX unmounted grinding wheels on drive spindles.
The clamping flanges are designed to lie countersunk in the tool.

**Advantages:**
- Can be adapted to an existing drive spindle by drilling.
- Can be used face-down very close to edges and in angles thanks to special clamping system.

**Ordering notes:**
- Included in delivery: 1 pair




| Suitable for tool dia. [mm] | D [mm] | H [mm] | Max. H [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|---|---|
| 150 | 40 | 12 | 22.2 | 509876 | 1 | RF FR 150-165 Bo. 12-22,2 |
| 200 | 83 | 12 | 40 | 498460 | 1 | RF FR 200-250 Bo. 12-40 |

# POLINOX unmounted grinding wheels with thread

## PNL type

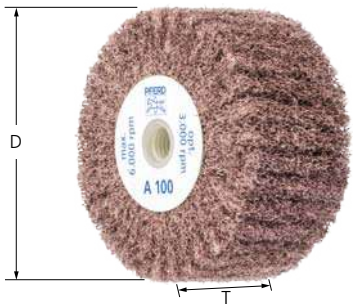
Made of radially arranged flaps of non-woven abrasive material. A long tool life is achieved through the dense packing of the flaps.
The tool is designed for working on medium-sized surfaces with speed-adjustable angle grinders and fillet weld grinders, and can be mounted directly onto the drive system's spindle without the need for additional clamping devices.

**Abrasive:**
Aluminium oxide A

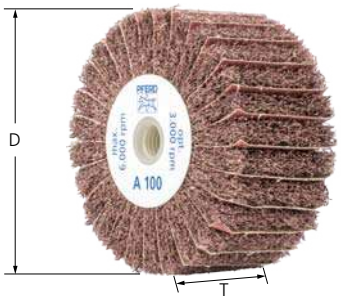
**Matching tool drives:**
angle grinder, cordless angle grinder

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:


| D [mm] | T [mm] | Thread | Grit size | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | 100 | 180 | 280 | | | | |
| | | | EAN 4007220 | | | | | | |
| 100 | 50 | M14 | 003329 | 003336 | 003343 | 3,000 | 6,000 | 5 | PNL 10050 M14 A ... |
| | | 5/8-11 | 003367 | 003374 | 003381 | 3,000 | 6,000 | 5 | PNL 10050 5/8-11 A ... |




## PNZ type

The non-woven abrasive material is arranged in multiple radial flaps, with abrasive cloth interlayers. This flap structure facilitates improved stock removal and achieves a coarser surface finish.

The tool is designed for working on medium-sized surfaces with speed-adjustable angle grinders and fillet weld grinders, and can be mounted directly onto the drive system's spindle without the need for additional clamping devices.

**Abrasive:**
Aluminium oxide A

**Matching tool drives:**
angle grinder, cordless angle grinder

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

| D [mm] | T [mm] | Thread | Grit size | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| | | | 100 | 180 | | | | |
| | | | EAN 4007220 | | | | | |
| 100 | 50 | M14 | 003411 | 003428 | 3,000 | 6,000 | 5 | PNZ 10050 M14 A ... |
| | | 5/8-11 | 003398 | 003404 | 3,000 | 6,000 | 5 | PNZ 10050 5/8-11 A ... |


## PNG type

Made of several very wavily arranged strips of non-woven abrasive material, wound around a core. The wavy structure of the non-woven abrasive material permits seamless brush matting of surfaces.

The tool is designed for working on medium-sized surfaces with speed-adjustable angle grinders and fillet weld grinders, and can be mounted directly onto the drive system's spindle without the need for additional clamping devices.

**Abrasive:**
Aluminium oxide A

**Matching tool drives:**
angle grinder, cordless angle grinder

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

| D [mm] | T [mm] | Thread | Grit size | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | 100 | 180 | 280 | | | | |
| | | | EAN 4007220 | | | | | | |
| 100 | 50 | M14 | 003268 | 003275 | 003282 | 3,000 | 6,000 | 5 | PNG 10050 M14 A ... |
| | | 5/8-11 | 003299 | 003305 | 003312 | 3,000 | 6,000 | 5 | PNG 10050 5/8-11 A ... |
| 125 | 50 | M14 | 002643 | 002650 | 002667 | 2,300 | 3,800 | 2 | PNG 12550 M14 A ... |
| | | 5/8-11 | 002674 | 002681 | 002698 | 2,300 | 3,800 | 2 | PNG 12550 5/8-11 A ... |

## PNL type


The non-woven abrasive flaps are stuck to a glass-fabric backing pad, meaning that the discs can be used face-down. A long tool life is achieved through the dense packing of the flaps.

The tool is designed for working on large surfaces with speed-adjustable angle grinders.

**Abrasive:**
Aluminium oxide A

**Matching tool drives:**
angle grinder, cordless angle grinder

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:

Vibration Filter Noise Filter Haptic Filter

| D [mm] | T [mm] | H [mm] | Grit size | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | 100 | 180 | 280 | | | | |
| | | | EAN 4007220 | | | | | | |
| 115 | 20 | 22.23 | 104224 | 104231 | 104248 | 2,500 | 5,300 | 5 | PNL 115-22,23 A ... |
| 125 | 20 | 22.23 | 104286 | 104293 | 104309 | 2,300 | 4,850 | 5 | PNL 125-22,23 A ... |

## PNZ type


The non-woven and abrasive-cloth flaps are stuck to a glass-fabric backing pad, meaning that the discs can be used face-down on large surfaces. A long tool life is achieved through the dense packing of the flaps.

The tool is designed for working on large surfaces with speed-adjustable angle grinders.

**Abrasive:**
Aluminium oxide A

**Matching tool drives:**
angle grinder, cordless angle grinder

**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:

Vibration Filter Noise Filter Haptic Filter

| D [mm] | T [mm] | H [mm] | Grit size | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| | | | 100 | 180 | | | | |
| | | | EAN 4007220 | | | | | |
| 115 | 20 | 22.23 | 104316 | 104323 | 2,500 | 5,300 | 5 | PNZ 115-22,23 A ... |
| 125 | 20 | 22.23 | 104330 | 104347 | 2,300 | 4,850 | 5 | PNZ 125-22,23 A ... |

POLINOX grinding drums are especially suited to work on flat surfaces.

## Advantages:

- Long tool life due to tightly packed flaps.
- Cool grinding and low thermal load of the workpiece.
- No tool clogging due to open structure and high flexibility of the non-woven material.

## Materials that can be worked:

- Can be used on nearly all materials.

## Applications:

- Roughening
- Deburring
- Surface work
- Cleaning
- Structuring (matt finishing, brush matting and satin finishing)
- Step-by-step fine grinding

## Matching tool drives:

- Drum grinders

## Ordering notes:

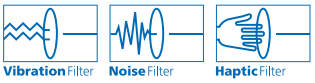
- The 19 mm centre hole diameter with 4 keyways fits all conventional drum grinders.
- Additional drum tools can be found on pages 90, 134 as well as in catalogue section 8.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**593523**
  PNL-W 100100 A **100**
- **Ordering example explanation:**
  PNL-W = POLINOX grinding drums
  100100 = Outer diameter D x width T [mm]
  A = Abrasive
  **100** = Grit size

## Safety notes:

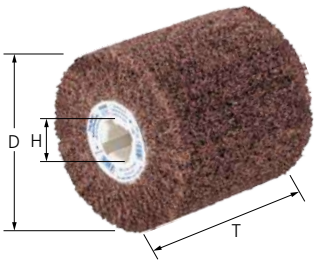
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.

## PFERDVALUE:

**PFERD**ERGONOMICS recommends POLINOX grinding drums to sustainably reduce vibration and noise levels during use and to improve working comfort.




## POLINOX grinding drums




### PNL-W type

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

**Abrasive:**
Aluminium oxide A

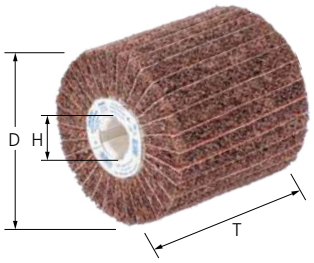
**Ordering notes:**
- Please complete the description with the desired grit size.

**PFERD**VALUE:


| D [mm] | T [mm] | H [mm] | Grit size | | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 80 | 100 | 180 | 280 | | | | |
| | | | EAN 4007220 | | | | | | | |
| 100 | 100 | 19 | 855904 | 593523 | 593530 | 593547 | 2,500 | 4,800 | 1 | PNL-W 100100 A ... |

## PNZ-W type

Made of radially arranged flaps of non-woven abrasive material. There is also abrasive cloth situated between the flaps. The flap structure facilitates improved stock removal and achieves a coarser surface finish.




**Abrasive:**
Aluminium oxide A

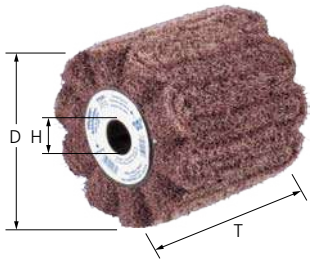
**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | H [mm] | Grit size 60 | Grit size 80 | Grit size 120 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | | |
| 100 | 100 | 19 | 593554 | 593561 | 593578 | 2,500 | 4,800 | 1 | PNZ-W 100100 A ... |

## PNG-W type

Made of several very wavily arranged strips of non-woven abrasive material, wound around a core.
The wavy structure of the non-woven abrasive material permits seamless brush matting of large surfaces.



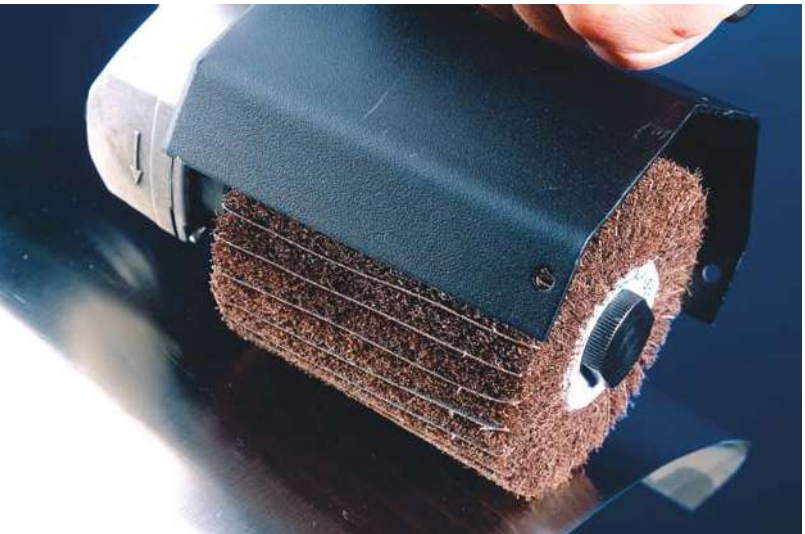

**Abrasive:**
Aluminium oxide A

**PFERD**VALUE:
Vibration Filter · Noise Filter · Haptic Filter

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | H [mm] | Grit size 100 | Grit size 180 | Grit size 280 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | | |
| 100 | 100 | 19 | 002612 | 002629 | 002636 | 2,500 | 4,800 | 1 | PNG-W 100100 A ... |





POLINOX discs are suited to flexible work on complicated tool contours, and are used in peripheral grinding applications.

## Advantages:

- Optimum adaptation to contours thanks to high flexibility with a very long tool life.
- Accessing hard-to-reach places such as deep slots or recesses.
- No tool clogging due to open structure and high flexibility of the non-woven material.

## Materials that can be worked:

- Can be used on nearly all materials.

## Applications:

- Roughening
- Levelling
- Surface work
- Cleaning
- Removing heat discolouration
- Removing paint
- Derusting
- Removing oxide layers
- Work on weld seams
- Structuring (matt finishing, brush matting and satin finishing)
- Step-by-step fine grinding

## Matching tool drives:

- Flexible shaft drives
- Straight grinders

## Ordering notes:

- Please order arbors separately.
- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**505847**
  PVR 15008-13 A **100**
- **Ordering example explanation:**
  PVR = POLINOX discs
  15008 = Outer diameter D x width T [mm]
  13 = Centre hole diameter H [mm]
  A = Abrasive
  **100** = Grit size

## Accessories:

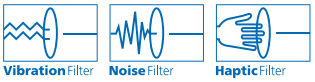
- Arbors for POLINOX discs

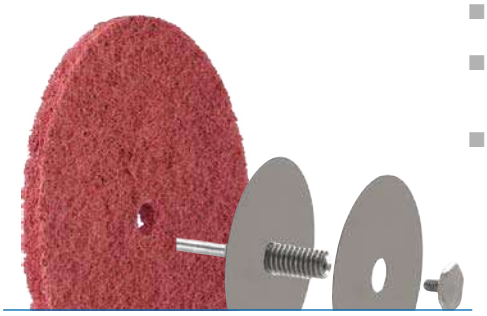
## Safety notes:

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

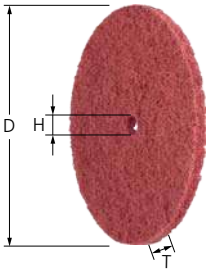
## PFERDVALUE:

**PFERD**ERGONOMICS recommends POLINOX discs to sustainably reduce vibration and noise levels during use and to improve working comfort.



## POLINOX discs




### PVR

POLINOX discs are suited to flexible work on complicated tool contours, and are used in peripheral grinding applications.

**Abrasive:**
Aluminium oxide A

**Recommendations for use:**
- Clamp up to three discs behind one another to increase the usage width.
- For the best results, use at a recommended cutting speed of 10–25 m/s.

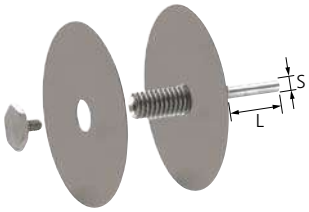
**Ordering notes:**
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

**PFERD**VALUE:


| D [mm] | T [mm] | H [mm] | Grit size 100 | Grit size 280 | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | | |
| 50 | 10 | 6 | 955796 | 955802 | 3,500–9,500 | 12,250 | BO 6/6 3-10 | 10 | PVR 5008-6 A ... |
| 75 | 10 | 6 | 955819 | 955826 | 2,500–6,400 | 8,150 | BO 6/6 3-10 | 10 | PVR 7508-6 A ... |
| 100 | 10 | 13 | 955833 | 955840 | 1,900–4,700 | 6,150 | PVR 6/13 1-25 | 10 | PVR 10008-13 A ... |
| 125 | 10 | 13 | 955857 | 955864 | 1,500–3,800 | 4,900 | PVR 6/13 1-25 | 10 | PVR 12508-13 A ... |
| 150 | 10 | 13 | 505847 | 505861 | 1,300–3,100 | 4,100 | PVR 6/13 1-25 | 10 | PVR 15008-13 A ... |

## PVR

Arbors for POLINOX discs.




**Advantages:**
- High economic efficiency as the tool can be changed quickly.

**Recommendations for use:**
- Preset the clamping depth via the hexagonal nut on the shank side of the arbor.
- Use the supplied side discs with a diameter of 50 and 80 mm in order to vary the lateral flexibility.
- To simplify the changeover, slacken the mounting screw on the front. When doing so, leave the arbor clamped in the tool drive.

| Suitable for centre hole dia. [mm] | S [mm] | L [mm] | Clamping width [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|---|---|
| 13 | 6 | 35 | 1–25 | 505878 | 1 | PVR 6/13 1-25 |



## ADB

The self-adhesive masking tape is used to preserve the clear separation between different grinding patterns in adjacent areas. The masking tape protects surfaces which have already been worked on, or which are not supposed to be worked on.


**Advantages:**
- ADB 20: High elasticity and tear strength.
- ADB 50 INOX: Reusable and extremely high durability.
- High edge stability.

**Materials that can be worked:**
aluminium, stainless steel (INOX)

**Recommendations for use:**
- ADB 20: Use only during finish machining with soft, flexible tools, e.g. non-woven tools.
- To avoid its inadvertent removal, ensure that the masking tape is only loaded in the running direction of the tool.

| L [m] | T [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|
| 25 | 20 | 726372 | 1 | ADB 20 |
| 3 | 50 | 025352 | 1 | ADB 50 INOX |

POLINOX discs for marbling tool holders are special tools designed for marbling surfaces.

## Advantages:

- Water- and oil-tight.

## Materials that can be worked:

- Can be used on nearly all materials.

## Matching tool drives:

- Flexible shaft drives
- Power drills
- Column drills
- Straight grinders

## Ordering notes:

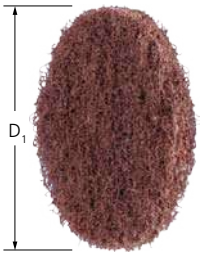
- Please order marbling tool holders separately.
- **Ordering example:**
  EAN 400722015**6964**
  MKRK 40 A **100**
- **Ordering example explanation:**
  MKRK = Marbling discs
  40 = Outer diameter $D_1$ [mm]
  A = Abrasive
  **100** = Grit size

## Safety notes:

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

## PFERDVALUE:

**PFERD**ERGONOMICS recommends POLINOX discs for marbling tool holders to sustainably reduce vibration and noise levels during use and to improve working comfort.


## POLINOX discs for marbling tool holder MKRK

Special tools for marbling surfaces.

**Advantages:**
- Highly flexible, enabling optimal adjustment to the contour.
- High economic efficiency due to high abrasive performance and tool life.
- The open structure and high flexibility of the non-woven material prevents tool clogging.

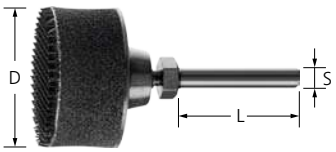
**Abrasive:**
Aluminium oxide A

**Recommendations for use:**
- POLINOX discs for marbling tool holders must be used with the matching marbling tool holder.

**Ordering notes:**
- Please order marbling tool holders separately.
- Please complete the description with the desired grit size.

**PFERD**VALUE:


| $D_1$ [mm] | Grit size | | | Opt. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|
| | 100 | 180 | 280 | | | | |
| | EAN 4007220 | | | | | | |
| 40 | 156964 | 156971 | 156988 | 600–1,400 | MK 6/40/6 | 100 | MKRK 40 A ... |
| 50 | 156995 | 157008 | 157015 | 600–1,400 | MK 6/50/6 | 100 | MKRK 50 A ... |
| 60 | 157022 | 157039 | 157046 | 600–1,400 | MK 6/60/6 | 100 | MKRK 60 A ... |




## POLINOX marbling tool holders MK

POLINOX marbling tool holders for marbling discs. A highly elastic intermediate layer carries the Velcro fastening system.

**Advantages:**
- Highly flexible, enabling optimal adjustment to the contour.
- High economic efficiency due to high abrasive performance and tool life.

| D [mm] | S [mm] | L [mm] | Suitable tool | EAN 4007220 | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|
| 40 | 6 | 40 | MKRK 40 | 156933 | 4,700 | 1 | MK 6/40/6 |
| 50 | 6 | 40 | MKRK 50 | 156940 | 3,800 | 1 | MK 6/50/6 |
| 60 | 6 | 40 | MKRK 60 | 156957 | 3,200 | 1 | MK 6/60/6 |

PFERD supplies POLIVLIES flap discs and self-adhesive discs in various grit sizes, diameters and types. These are particularly suited to work on large surfaces made from stainless steel (INOX).

## Advantages:

- High profitability thanks to high abrasive performance and long tool life.
- Creates a consistently high surface quality throughout the entire tool life as new, sharp abrasive material is constantly freed up.
- Optimum adaptation to contours thanks to high flexibility.

## Materials that can be worked:

- Can be used on nearly all materials.

## Matching tool drives:

- Angle grinders
- Cordless angle grinders

## Ordering notes:

- When ordering, please state the EAN or the full description. Please complete the description with the desired grit size.
- **Ordering example:**
  EAN 4007220**748343**
  PVL 115 A **180 M**
- **Ordering example explanation:**
  PVL = POLIVLIES flap discs
  115 = Outer diameter D [mm]
  A = Abrasive
  **180 M** = Grit size

## Safety notes:

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



## Flap discs PVL

For universal coarse to fine grinding applications in industry and professional trades.


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

**Recommendations for use:**
- For the best results, use at a recommended cutting speed of 30–35 m/s.

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | H [mm] | Grit size | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | 100 G | 180 M | 240 F | | | | |
| | | | EAN 4007220 | | | | | | |
| 115 | 18 | 22.23 | 748336 | 748343 | 748350 | 5,000–5,800 | 13,300 | 5 | PVL 115 A ... |
| 125 | 18 | 22.23 | 748367 | 748374 | 748381 | 4,600–5,300 | 12,200 | 5 | PVL 125 A ... |

## Flap discs PVZ

For aggressive grinding with maximum stock removal rate on hard materials which do not conduct heat well. Consistently high performance due to self-sharpening ceramic oxide grain. Active grinding additives in the coating substantially improve the stock removal rate, prevent clogging and result in cooler grinding.


**Abrasive:**
Abrasive flap: Ceramic oxide grain CO-COOL
Non-woven material: Aluminium oxide A
Available POLIVLIES grit sizes:
100 G = coarse (yellow-brown)
180 M = medium (red-brown)
240 F = fine (blue)

**Recommendations for use:**
- For the best results, use at a recommended cutting speed of 30–35 m/s.

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | H [mm] | Grit size | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | CO-COOL 60 / A 100 G | CO-COOL 80 / A 180 M | CO-COOL 120 / A 240 F | | | | |
| | | | EAN 4007220 | | | | | | |
| 115 | 18 | 22.23 | 106334 | 106341 | 106358 | 5,000–5,800 | 13,300 | 5 | PVZ 115 CO-COOL ... |
| 125 | 18 | 22.23 | 106365 | 106372 | 106389 | 4,600–5,300 | 12,200 | 5 | PVZ 125 CO-COOL ... |


## Self-adhesive discs PVKR

POLIVLIES self-adhesive discs are suited to grinding larger surfaces. The flexible system comprising a POLIVLIES self-adhesive disc and the associated POLIVLIES self-adhesive disc holder enables use on contours. The pre-punched holes mean that they can be ideally centred on and used with various backing pads.

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

**Recommendations for use:**
- For the best results, use at a recommended cutting speed of 15–20 m/s.
- Use with POLIVLIES self-adhesive disc holder.
- Break out the pre-punched centring hole if required.

**Ordering notes:**
- Please order POLIVLIES self-adhesive disc holders separately.
- Please complete the description with the desired grit size.

| $D_1$ [mm] | Grit size | | | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|
| | 100 G | 180 M | 240 F | | | | | |
| | EAN 4007220 | | | | | | | |
| 115 | 354230 | 297469 | 354254 | 3,300 | 5,300 | PVKRH 115 | 10 | PVKR 115 A ... |
| 125 | 354261 | 297452 | 354278 | 3,000 | 4,850 | PVKRH 125 | 10 | PVKR 125 A ... |
| 180 | 354285 | 354292 | 354308 | 2,200 | 3,500 | PVKRH 180 | 10 | PVKR 180 A ... |

# Self-adhesive disc holders PVKRH


## Self-adhesive disc holders PVKRH

Arbors for POLIVLIES self-adhesive discs.

**Advantages:**
- High economic efficiency as the tool can be changed quickly.
- Enables surface finishing without visible transitions.
- PVKRH-22: Enables faster central clamping.

| D [mm] | Thread | EAN 4007220 | Max. RPM | | Description |
|---|---|---|---|---|---|
| **Without centring pin** | | | | | |
| 115 | M14 | 316962 | 5,300 | 1 | PVKRH 115 M14 |
| 125 | M14 | 316979 | 4,850 | 1 | PVKRH 125 M14 |
| 180 | M14 | 354223 | 3,500 | 1 | PVKRH 180 M14 |
| **With centring pin** | | | | | |
| 115 | M14 | 095713 | 5,300 | 1 | PVKRH 115-22 M14 |
| 125 | M14 | 095775 | 4,850 | 1 | PVKRH 125-22 M14 |
| 180 | M14 | 095782 | 3,500 | 1 | PVKRH 180-22 M14 |

POLICLEAN is a coarsely structured, abrasive, non-woven cleaning fabric that was developed from a special combination of synthetic fibres and abrasive grain.

The comprehensive range of POLICLEAN tools contains:
- POLICLEAN wheels
- POLICLEAN mounted tools
- COMBIDISC POLICLEAN discs (see COMBIDISC tools, page 38)
- POLICLEAN discs

## Advantages:

- High flexibility and open structure mean ideal adaptation to contours and no clogging of the tool itself.
- The standard type (black) achieves finer surface finishes and is more flexible.
- The PLUS type (blue) exhibits considerably higher stock removal rates with a very long tool life, and is also very aggressive.

## Materials that can be worked:

- Can be used on nearly all materials.

## Applications:

- Roughening
- Surface work
- Cleaning
- Removing heat discolouration
- Removing paint
- Derusting
- Descaling
- Removing oxide layers

## Abrasive:

- Standard (black) = Silicon carbide SiC
- PLUS (blue) = Aluminium oxide A

## Recommendations for use:

- For best performance, use with 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.

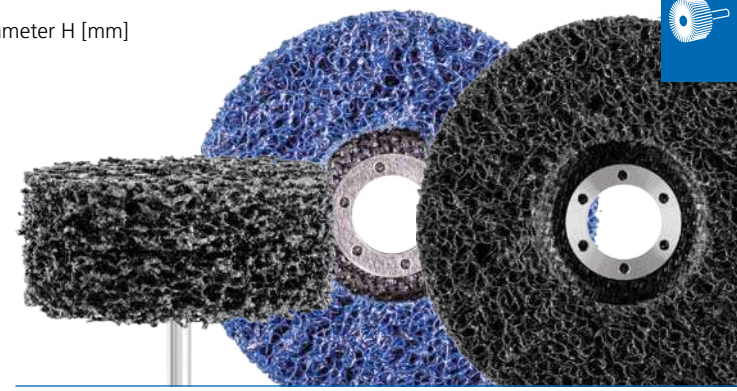
## Ordering notes:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**471470**
  PCLS 7513/6
- **Ordering example explanation:**
  PCLS = POLICLEAN wheels
  75 = Outer diameter D [mm]
  13 = Width T [mm]
  6 = Centre hole diameter H [mm]

## Safety notes:

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

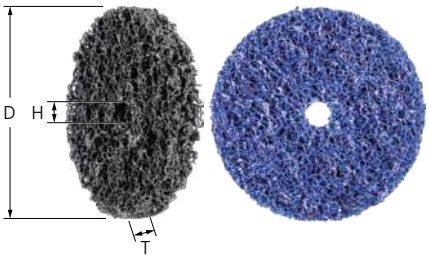




## Recommended rotational speed range

**Example:**
PCLS 7513/6
Cutting speed: 15–20 m/s
**Rotational speed: 3,800–5,000 RPM**

| Tool dia. [mm] | Cutting speed [m/s] | | | | |
|---|---|---|---|---|---|
| | 10 | 15 | 20 | 30 | 40 |
| | Rotational speeds [RPM] | | | | |
| 75 | 2,500 | 3,800 | 5,000 | 7,600 | 10,100 |
| 100 | 1,900 | 2,800 | 3,800 | 5,700 | 7,600 |
| 115 | 1,600 | 2,400 | 3,300 | 4,900 | 6,600 |
| 125 | 1,500 | 2,200 | 3,000 | 4,500 | 6,100 |
| 150 | 1,200 | 1,900 | 2,500 | 3,800 | 5,000 |




## POLICLEAN wheels PCLS, POLICLEAN wheels PCLS PLUS

For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues in peripheral grinding.

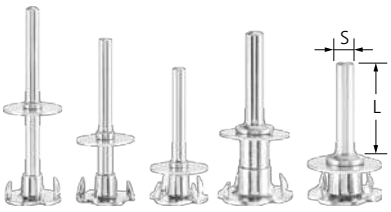
POLICLEAN PLUS discs exhibit a higher stock removal rate with a very long tool life.

**Recommendations for use:**
- For work on larger surfaces, pack several POLICLEAN wheels with the appropriate arbor.

**Matching tool drives:**
flexible shaft drive, power drill, straight grinder

**Ordering notes:**
- Please order the matching arbor separately.

| D [mm] | T [mm] | H [mm] | EAN 4007220 | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|
| **PCLS type (black)** | | | | | | | | |
| 75 | 13 | 6 | 471470 | 4,000–5,100 | 10,000 | PCLB 6/6/13, PCLB 6/6/26, PCLB 6/6/39 | 6 | PCLS 7513/6 |
| 100 | 13 | 13 | 471487 | 3,000–3,800 | 7,500 | PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26 | 4 | PCLS 10013/13 |
| 150 | 13 | 13 | 471494 | 2,000–2,500 | 5,100 | PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26 | 4 | PCLS 15013/13 |
| **PCLS PLUS type (blue)** | | | | | | | | |
| 75 | 13 | 6 | 069257 | 4,000–5,100 | 10,000 | PCLB 6/6/13, PCLB 6/6/26, PCLB 6/6/39 | 6 | PCLS PLUS 7513/6 |
| 100 | 13 | 13 | 069264 | 3,000–3,800 | 7,500 | PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26 | 4 | PCLS PLUS 10013/13 |
| 150 | 13 | 13 | 069271 | 2,000–2,500 | 5,100 | PCLB 6/13/13, PCLB 6/13/26, PCLB 8/13/13, PCLB 8/13/26 | 4 | PCLS PLUS 15013/13 |




## POLICLEAN arbors PCLB

Arbors for POLICLEAN wheels. The different variants provide space for 1, 2 or 3 wheels.

**Advantages:**
- High economic efficiency as the tool can be changed quickly.

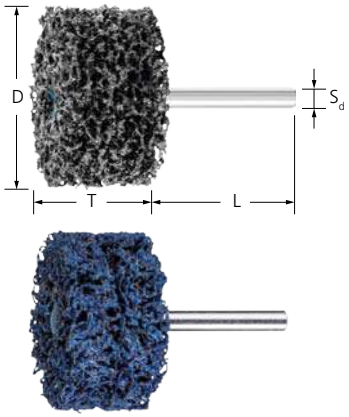
**Recommendations for use:**
- When replacing the wheels, leave the arbor clamped in the tool drive.

| Suitable for centre hole dia. [mm] | S [mm] | L [mm] | Suitable tool | EAN 4007220 | Packaging | | Description |
|---|---|---|---|---|---|---|---|
| 6 | 6 | 40 | PCLS 7513/6 | 471562 | 1 wheel | 1 | PCLB 6/6/13 |
| | | | | 471579 | 2 wheels | 1 | PCLB 6/6/26 |
| | | | | 471586 | 3 wheels | 1 | PCLB 6/6/39 |
| 13 | 6 | 40 | PCLS 10013/13, PCLS 15013/13 | 532928 | 1 wheel | 1 | PCLB 6/13/13 |
| | 6 | 40 | PCLS 10013/13, PCLS 15013/13 | 532935 | 2 wheels | 1 | PCLB 6/13/26 |
| | 8 | 40 | PCLS 10013/13, PCLS 15013/13 | 471593 | 1 wheel | 1 | PCLB 8/13/13 |
| | 8 | 40 | PCLS 10013/13, PCLS 15013/13 | 471609 | 2 wheels | 1 | PCLB 8/13/26 |

## POLICLEAN mounted tools PCLZY, POLICLEAN mounted tools PCLZY PLUS

For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues in peripheral grinding.

**Matching tool drives:**
flexible shaft drive, power drill, straight grinder




| D [mm] | T [mm] | $S_d$ [mm] | L [mm] | EAN 4007220 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| **PCLZY type (black)** | | | | | | | | |
| 50 | 13 | 6 | 40 | 661321 | 6,000–7,000 | 15,000 | 5 | PCLZY 5013/6 |
| | 26 | 6 | 40 | 661369 | 6,000–7,000 | 15,000 | 5 | PCLZY 5026/6 |
| 75 | 13 | 6 | 40 | 661376 | 4,000–5,100 | 10,000 | 5 | PCLZY 7513/6 |
| | 26 | 6 | 40 | 661383 | 4,000–5,100 | 10,000 | 5 | PCLZY 7526/6 |
| 100 | 13 | 6 | 40 | 661406 | 3,000–3,800 | 7,500 | 5 | PCLZY 10013/6 |
| **PCLZY PLUS type (blue)** | | | | | | | | |
| 50 | 13 | 6 | 40 | 098547 | 6,000–7,000 | 15,000 | 5 | PCLZY PLUS 5013/6 |
| | 26 | 6 | 40 | 098639 | 6,000–7,000 | 15,000 | 5 | PCLZY PLUS 5026/6 |
| 75 | 13 | 6 | 40 | 098905 | 4,000–5,100 | 10,000 | 5 | PCLZY PLUS 7513/6 |
| | 26 | 6 | 40 | 101025 | 4,000–5,100 | 10,000 | 5 | PCLZY PLUS 7526/6 |
| 100 | 13 | 6 | 40 | 101032 | 3,000–3,800 | 7,500 | 5 | PCLZY PLUS 10013/6 |

## POLICLEAN discs PCLD, POLICLEAN discs PCLD PLUS

The non-woven cleaning material is glued onto a glass-fabric base. This makes POLICLEAN discs suitable for use in face-down grinding.

For coarse cleaning work such as removing paint, scale, heat discolouration, rust and adhesive residues.

POLICLEAN PLUS DISCS exhibit a high stock removal rate with a very long tool life.

**Recommendations for use:**
- Preferably for use on slow-running angle grinders.
- For the best results, use at a recommended cutting speed of 30–35 m/s.

**Matching tool drives:**
angle grinder, cordless angle grinder


| D [mm] | T [mm] | H [mm] | EAN 4007220 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|
| **PCLD type (black)** | | | | | | | |
| 115 | 13 | 22.23 | 515280 | 5,000–7,000 | 10,000 | 5 | PCLD 115-13 |
| 125 | 13 | 22.23 | 515297 | 5,000–7,000 | 10,000 | 5 | PCLD 125-13 |
| **PCLD PLUS type (blue)** | | | | | | | |
| 100 | 13 | 16 | 069202 | 5,000–7,000 | 10,000 | 5 | PCLD PLUS 100-13 |
| 115 | 13 | 22.23 | 069233 | 5,000–7,000 | 10,000 | 5 | PCLD PLUS 115-13 |
| 125 | 13 | 22.23 | 069240 | 5,000–7,000 | 10,000 | 5 | PCLD PLUS 125-13 |

# Poliflex tools
## General information

Poliflex fine grinding tools are manufactured with high shape accuracy, outstandingly consistent quality and tight dimensional tolerances.

They are ideally suited to fine grinding, structuring and preparations for polishing work, and are very frequently used for tool- and mould-making applications.

### Advantages:

- For achieving very good surface quality standards.
- High profitability thanks to long tool life and high stock removal rate.
- Outstanding working comfort thanks to precise concentricity.

### Applications:

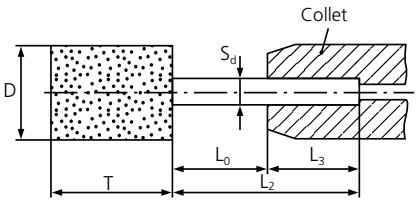
- Structuring (matt finishing, brush matting and satin finishing)
- Step-by-step fine grinding

### Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.

### Explanation of the code system according to EN 12413:

| | |
|---|---|
| D | = Grinding point outer diameter |
| T | = Grinding point width |
| $S_d$ | = Shank diameter |
| $L_0$ | = Unsupported shank length |
| $L_2$ | = Shank length |
| $L_3$ | = Clamping length of shank |




### Recommended rotational speed range

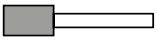
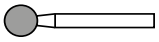
**Example:**
PF KU 15/6 AR 120 GR
Tool dia.: 15 mm
Cutting speed: 15 m/s
**Rotational speed: 19,000 RPM**

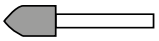
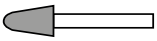
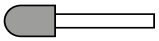
| Tool dia. [mm] | Cutting speed [m/s] | | | | | | |
|---|---|---|---|---|---|---|---|
| | 10 | 12 | 15 | 20 | 25 | 30 | 50 |
| | Rotational speeds [RPM] | | | | | | |
| 4 | 47,700 | 57,200 | 71,600 | 95,400 | 119,300 | 143,200 | 238,700 |
| 6 | 31,800 | 38,100 | 47,700 | 63,600 | 79,500 | 95,400 | 159,100 |
| 8 | 23,800 | 28,600 | 35,800 | 47,700 | 59,600 | 71,600 | 119,300 |
| 10 | 19,000 | 22,900 | 28,600 | 38,100 | 47,700 | 57,200 | 95,400 |
| 12 | 15,900 | 19,000 | 23,800 | 31,800 | 39,700 | 47,700 | 79,500 |
| 15 | 12,700 | 15,200 | 19,000 | 25,400 | 31,800 | 38,100 | 63,600 |
| 20 | 9,500 | 11,400 | 14,300 | 19,000 | 23,800 | 28,600 | 47,700 |
| 25 | 7,600 | 9,100 | 11,400 | 15,200 | 19,000 | 22,900 | 38,100 |
| 30 | 6,300 | 7,600 | 9,500 | 12,700 | 15,900 | 19,000 | 31,800 |
| 32 | 5,900 | 7,100 | 8,900 | 11,900 | 14,900 | 17,900 | 29,800 |
| 40 | 4,700 | 5,700 | 7,100 | 9,500 | 11,900 | 14,300 | 23,800 |
| 50 | 3,800 | 4,500 | 5,700 | 7,600 | 9,500 | 11,400 | 19,000 |
| 60 | 3,100 | 3,800 | 4,700 | 6,300 | 7,900 | 9,500 | 15,900 |
| 75 | 2,500 | 3,000 | 3,800 | 5,000 | 6,300 | 7,600 | 12,700 |
| 100 | 1,900 | 2,200 | 2,800 | 3,800 | 4,700 | 5,700 | 9,500 |
| 125 | 1,500 | 1,800 | 2,200 | 3,000 | 3,800 | 4,500 | 7,600 |
| 150 | 1,200 | 1,500 | 1,900 | 2,500 | 3,100 | 3,800 | 6,300 |


**PF ZY 2030 6 AR 120 GR**
**❶ ❷ ❸ ❹ ❺ ❻ ❼**

## ❶ Product code
PF = Abbreviation of Poliflex

## ❷ Shapes

SC = Wheel 
LI = Lens 
ZY = Cylindrical 
KU = Ball 

W = Roller 
SP = Pointed tree 
KE = Conical with radius end 
WR = Cylindrical with radius end 

## ❸ Dimensions
Grinding point outer diameter D x grinding point width T [mm]
20 mm x 30 mm = 2030

## ❹ Mounting options

**Poliflex fine grinding points**
Shank diameter $S_d$ 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 respective wheel dimension, the centre hole diameters are either 2, 3, 6, 10 or 20 mm.

**Poliflex marbling tools**
Female thread M8

## ❺ Abrasive
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)

The following abbreviations are used in order to specify the grain mixture more precisely, beyond ISO 525:

| | | | | | |
|---|---|---|---|---|---|
| AW | = Aluminium oxide, white | CN | = Silicon carbide, green | ANCN | = Mixture of AN + CN |
| AR | = Aluminium oxide, pink | CU | = Silicon carbide, grey | | |
| AN | = Aluminium oxide, standard | AWCN | = Mixture of AW + CN | | |

## ❻ Grit sizes according to ISO 525 and ISO 8486
The grit sizes used in PFERD fine grinding points are determined by the shape and diameter of the fine grinding point.

## ❼ Bond
The following bonds are available:

| | | | | | |
|---|---|---|---|---|---|
| PUR | = Polyurethane (soft, medium-hard) | PU-STRUC | = Polyurethane | TX | = Textile |
| GR | = Rubber | GHR | = Rubber, hard | | |
| LR | = Leather | LHR | = Leather, hard | | |

## Safety notes:
The following maximum operating speeds are permitted for Poliflex fine grinding tools:

| | |
|---|---|
| **PUR** | **15 m/s** |
| **GR** | **15 m/s** |
| **LR** | **30 m/s** |
| **TX** | **30 m/s** |
| **PUR-STRUC** | **15 m/s** |
| **GHR** | **30 m/s** |
| **LHR** | **50 m/s** |

The maximum rotational speeds for the various shank lengths and shank diameters are defined in DIN 69170 based on EN 12413. These must be adhered to in order to avoid buckling of the shank during use.

Regardless of the shank length, the clamping length ($L_3$) of the shank must be at least 10 mm.

The maximum permitted rotational speed calculated according to EN 12413 is determined by the following factors:
- Shape and dimensions of the grinding point
- Diameter of the steel shank $S_d$
- Unsupported shank length $L_0$

Each packaging unit of PFERD fine grinding points comes with rotational speed specifications for the unsupported shank length ($L_0$) of that wheel. Proper concentric accuracy and correct clamping of the tool drive must also be ensured.

Tables with the maximum permitted rotational speeds for the entire range of Poliflex fine grinding points are available on request.

# Poliflex tools
## The fast way to the best tool

To make it easier to choose the right Poliflex fine grinding tool, we have designed our range around material groups, main areas of application and special operational requirements.

The overview shows which variations of abrasives and bonds are recommended for the various materials with a view to the tasks at hand.

The differentiation of the selection criteria in terms of material, application and surface finish are necessary to find the best tool. The tool bond and grain mixture have a decisive impact on the abrasive performance, tool life and aggressiveness of the tools. What's more, they also determine the look of the surface.

**How do you find the best Poliflex fine grinding tool?**
**❶ Material**
The material of the component to be machined is generally known in advance. The various material groups are colour-coded and form the starting point for choosing the most appropriate fine grinding tool.

| ❶ Material group ▼ | | | ❷ Application ▼ | Bond ▶<br>Abrasive (grain mixtures) ▶<br>❹ Designation/ bond ▶<br>Recommended cutting speed ▶<br>❸ Surface finish ▼ |
|---|---|---|---|---|
| Steel, cast steel | Steels up to 1,200 N/mm² (< 38 HRC) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels, cast steel | **Surface grinding** | Matt surface |
| | | | | Shiny surface |
| | | | **Edge grinding** with high dimensional 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 dimensional 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 dimensional stability | Matt surface |
| | | | | Shiny surface |
| | | | **General use** | Structured 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 dimensional 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 dimensional 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 dimensional stability | Matt surface |
| | | | | Shiny surface |
| ● = Highly suitable | ❍ = Suitable | | | ❺ Catalogue page ▶ |

**❷ Application**
After the material, the application must be selected:
■ General use ■ Surface grinding ■ Edge grinding

**❸ Desired surface finish**
Next, the desired work result must be selected:
■ Matt surface ■ Shiny surface ■ Structured surface

**❹ Tool bond**
After determining the application and the desired surface finish, the appropriate bond can be selected from the options in the right-hand side of the overview. The "highly suitable" bond is indicated by a solid black dot (●). Further "suitable" bonds are indicated by an open dot (❍).

**❺ Reference to catalogue page**
Further information about the selected bond, tool shapes and dimensions, and grit sizes can be found on the corresponding catalogue pages stated in the table.

| Polyurethane bond | | | Elastomer bond | | | | Resinoid bond |
|---|---|---|---|---|---|---|---|
| CN | | | AR | ANCN | AW | AWCN | AN |
|  |  |  |  |  |  |  |  |
| PUR | | | | | | | |
| W (soft) | MH (medium-hard) | 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 |
| ❍ | ● | | ❍ | | | | |
| | | | ● | | ❍ | | |
| | ❍ | | ❍ | | | | ● |
| | | | | ● | | ❍ | |
| ❍ | ● | | ❍ | | | | |
| | | | ❍ | | ● | | |
| | ❍ | | | | | | ● |
| | | | | ❍ | | ● | |
| ● | ❍ | | | | | | |
| | | | ● | | ❍ | | |
| | ❍ | | | | | | ● |
| | | | | ● | ❍ | | |
| ❍ | ❍ | ● | | | | | |
| ● | ❍ | | | | | | ❍ |
| | | | ❍ | | ● | | |
| | | | | ❍ | | | ● |
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| | ❍ | | | | | | ● |
| | | | ❍ | ● | | | |
| | | | | ❍ | | | ● |
| | | | | ❍ | | ● | |
| | ❍ | | | | | | ● |
| | | | ● | ❍ | | | |
| | ❍ | | | ❍ | | | ● |
| | | | | ❍ | | ● | |
| 130–131 | 130–131 | 133–134 | 135–137 | 135–137 | 138–139 | 138–139 | 140–142 |

Poliflex fine grinding tools with the PUR bond are manufactured with green silicon carbide (SiC). The PUR bond is a very soft bond which is available in two hardness grades (PUR-W, PUR-MH). It is homogeneously interspersed with abrasive grain.

## Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Cool, very soft grinding thanks to open structure and elastic bond.
- For achieving a fine, matt surface finish.

## Abrasive:

- Silicon carbide SiC

## Recommendations for use:

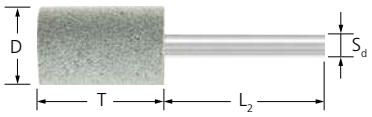
- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.
- For best performance, use with a recommended cutting speed of 10–15 m/s.

## Ordering notes:

- When ordering, please state the EAN or the full description.

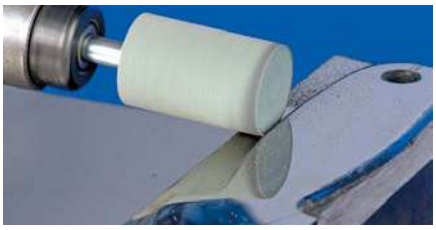
## Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 10 mm.




## Poliflex fine grinding points PF ZY PUR

Fine grinding point in cylindrical shape, for fine grinding of small surfaces.



**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Grit size 80 | Grit size 150 | Grit size 220 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | | |
| **Shank dia. 3 mm PUR-W** | | | | | | | | | | |
| 8 | 12 | 3 | 30 | 535004 | 535028 | - | 24,000 | 35,800 | 10 | PF ZY 0812/3 CN ... PUR-W |
| **Shank dia. 6 mm PUR-W** | | | | | | | | | | |
| 10 | 25 | 6 | 40 | 535042 | 535073 | - | 19,000 | 28,600 | 10 | PF ZY 1025/6 CN ... PUR-W |
| 15 | 30 | 6 | 40 | 535141 | 535165 | - | 12,500 | 19,000 | 10 | PF ZY 1530/6 CN ... PUR-W |
| 20 | 30 | 6 | 40 | 535233 | 535257 | - | 9,500 | 14,300 | 10 | PF ZY 2030/6 CN ... PUR-W |
| 25 | 30 | 6 | 40 | 297841 | 297865 | - | 7,500 | 11,400 | 10 | PF ZY 2530/6 CN ... PUR-W |
| **Shank dia. 3 mm PUR-MH** | | | | | | | | | | |
| 8 | 12 | 3 | 30 | - | 535011 | 535035 | 24,000 | 35,800 | 10 | PF ZY 0812/3 CN ... PUR-MH |
| **Shank diameter of 6 mm PUR-MH** | | | | | | | | | | |
| 10 | 25 | 6 | 40 | - | 535059 | 535080 | 19,000 | 28,600 | 10 | PF ZY 1025/6 CN ... PUR-MH |
| 15 | 30 | 6 | 40 | 535134 | 535158 | 535172 | 12,500 | 19,000 | 10 | PF ZY 1530/6 CN ... PUR-MH |
| 20 | 30 | 6 | 40 | 535325 | 535240 | - | 9,500 | 14,300 | 10 | PF ZY 2030/6 CN ... PUR-MH |
| 32 | 32 | 6 | 40 | 535288 | 535295 | - | 6,000 | 8,900 | 5 | PF ZY 3232/6 CN ... PUR-MH |

## Poliflex discs PFD PUR

For fine face-down grinding on large surfaces.


**Recommendations for use:**
- Preferably for use on slow-running angle grinders.

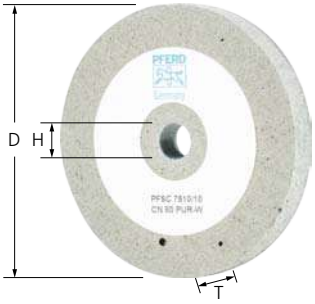
**Ordering notes:**
- Please complete the description with the desired grit size.

**Matching tool drives:**
angle grinder, cordless angle grinder

| D [mm] | T [mm] | H [mm] | Type | Grit size 60 | Grit size 150 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | |
| 115 | 14 | 22.23 | soft | 536377 | 536391 | 2,400 | 5,300 | 5 | PFD 115-22 CN ... PUR-W |
| | | | medium-hard | 536346 | 536360 | 2,400 | 5,300 | 5 | PFD 115-22 CN ... PUR-MH |

## Poliflex fine grinding wheels PF SC PUR

For fine peripheral grinding of medium-sized to large surfaces.




**Matching tool drives:**
flexible shaft drive, straight grinder

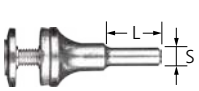
**Ordering notes:**
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | H [mm] | Grit size 80 | Grit size 150 | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | | |
| 75 | 10 | 10 | 144749 | - | 2,500 | 3,800 | BO 8/10 6-20 | 5 | PF SC 7510/10 CN ... PUR-W |
| 125 | 20 | 20 | 144794 | - | 1,500 | 2,300 | BO 12/20 10-50, BO MK 1/20 10-50 | 1 | PF SC 12520/20 CN ... PUR-W |
| 150 | 25 | 20 | 298428 | 298435 | 1,200 | 1,900 | BO 12/20 10-50, BO MK 1/20 10-50 | 1 | PF SC 15025/20 CN ... PUR-W |

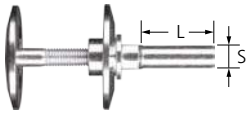
# Arbors

## Arbors BO

Matching arbor for Poliflex fine grinding wheels PF SC.



BO 8/10 6-20



BO 12/20 10-50


BO MK 1/20 10-50

**Advantages:**
- High economic efficiency as the tool can be changed quickly.

**Matching tool drives:**
flexible shaft drive, straight grinder

| Suitable for centre hole dia. [mm] | S [mm] | L [mm] | Clamping width [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|---|---|
| 10 | 8 | 30 | 6–20 | 297667 | 1 | BO 8/10 6-20 |
| 20 | 12 | 35 | 10–50 | 297674 | 1 | BO 12/20 10-50 |
| | - | - | 10–50 | 297681 | 1 | BO MK 1/20 10-50 |


## Poliflex blocks PUR

The rhomboidal shape even enables work to be effortlessly performed on hard-to-reach places such as corners.

With a diamond cut-off wheel, the blocks can be minimized and adapted to the respective application as required.

**Matching tool drives:**
manual application

**Ordering notes:**
- Please complete the description with the desired grit size.

| L [mm] | B [mm] | H [mm] | Grit size 60 | Grit size 120 | Grit size 240 | | Description |
|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | |
| 115 | 60 | 30 | 298671 | 298688 | 298695 | 5 | PFB 1156030 CU ... PUR |

## Poliflex block set PSO PUR

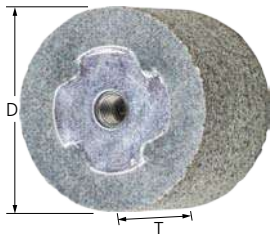
Set of different Poliflex blocks PUR.

**Contents:**
9 units in total, 3 Poliflex blocks from each category
- Grit 60 (coarse)
- Grit 120 (medium)
- Grit 240 (fine)

**Advantages:**
- Promotional display box.

**Matching tool drives:**
manual application

| L x B x H [mm] | EAN 4007220 | | Description |
|---|---|---|---|
| 285 x 150 x 60 | 298886 | 1 | PSO 11560 |




## Poliflex marbling tool holders PFZY PUR

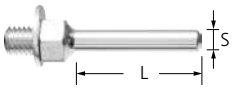
Tools with female thread M8 for marbling surfaces.

**Recommendations for use:**
- For face-down grinding, use at 1,000–4,000 RPM.

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | Thread | Grit size 30 | Grit size 80 | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | | |
| 50 | 40 | M8 | 146194 | 146200 | 1,000–4,000 | 5,700 | BO 6/8 | 5 | PF ZY 5040 M8 CN ... PUR |




## Arbors BO

Matching arbor for Poliflex marbling tool holders PFZY.

**Advantages:**
- High economic efficiency as the tool can be changed quickly.

| S [mm] | L [mm] | Thread | EAN 4007220 | | Description |
|---|---|---|---|---|---|
| 6 | 40 | M8 | 062104 | 1 | BO 6/8 |

Poliflex structuring tools with the PU-STRUC bond are manufactured with grey silicon carbide. They are ideally suited to work on components made from stainless steel (INOX).
The PU-STRUC bond is homogeneously interspersed with a high proportion of abrasive grain.

## Advantages:

- Optimum adaptation to contours thanks to high flexibility.
- Cool, soft grinding thanks to open structure and elastic bond.
- Quick and effective retouching of imperfections and transitions to directional textures.

## Abrasive:

- Silicon carbide SiC

## Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.
- For best performance, use with a recommended cutting speed of 5–10 m/s.

## Ordering notes:

- When ordering, please state the EAN or the full description.

## Safety notes:

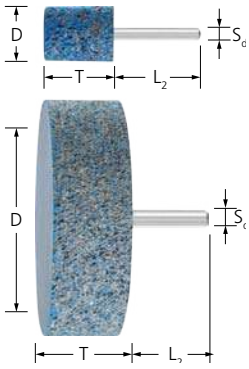
- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 10 mm.



## Poliflex mounted texturing points PF ZY PU-STRUC

Mounted texturing point in cylindrical shape, for structuring small to medium-sized surfaces.

**Matching tool drives:**
flexible shaft drive, straight grinder

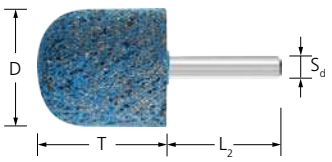



| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | EAN 4007220 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| **Shank dia. 6 mm** | | | | | | | | |
| 20 | 30 | 6 | 40 | 752029 | 4,750–9,550 | 14,000 | 10 | PF ZY 2030/6 CU 16 PU-STRUC |
| 25 | 30 | 6 | 40 | 752036 | 3,800–7,600 | 11,500 | 10 | PF ZY 2530/6 CU 16 PU-STRUC |
| 32 | 32 | 6 | 40 | 752043 | 3,000–6,000 | 9,000 | 5 | PF ZY 3232/6 CU 16 PU-STRUC |
| **Shank dia. 8 mm** | | | | | | | | |
| 100 | 30 | 8 | 40 | 752074 | 1,000–1,900 | 2,800 | 1 | PF ZY 10030/8 CU 16 PU-STRUC |

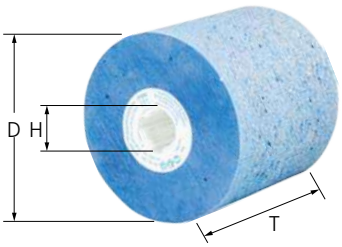
## Poliflex mounted texturing points PF WR PU-STRUC

Mounted texturing point in cylindrical shape with radius end, for structuring small surfaces, transitions and inner radii.

**Matching tool drives:**
flexible shaft drive, straight grinder




| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | EAN 4007220 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| 30 | 45 | 8 | 40 | 752081 | 3,150–6,350 | 9,500 | 5 | PF WR 3045/8 CU 16 PU-STRUC |
| 40 | 45 | 8 | 40 | 752104 | 2,350–4,750 | 7,000 | 5 | PF WR 4045/8 CU 16 PU-STRUC |
| 50 | 45 | 8 | 40 | 752111 | 1,900–3,800 | 5,700 | 5 | PF WR 5045/8 CU 16 PU-STRUC |




## Poliflex texturing rollers PF W PU-STRUC

For structuring large surfaces.

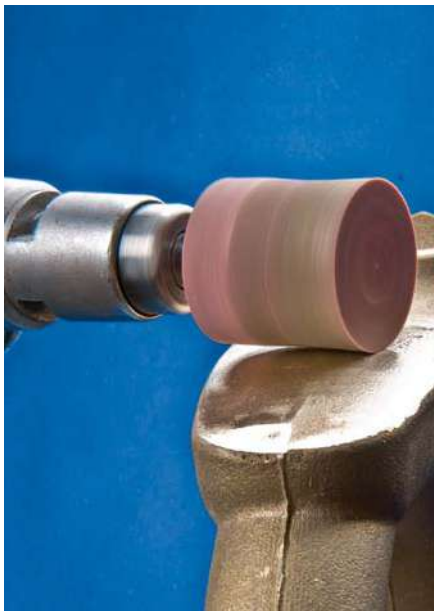
**Matching tool drives:**
drum grinders

**Ordering notes:**
- The centre hole diameter of 19 mm with 4 wedge keyways fits on all conventional drum drives.
- Other drum tools can be found in the set on page 90 as well as on pages 116–117 and in catalogue section 8.

| D [mm] | T [mm] | H [mm] | Abrasives | EAN 4007220 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| 100 | 100 | 19 | SiC | 752159 | 1,000–1,900 | 2,800 | 1 | PF W 100100/19 CU 16 PU-STRUC |

Poliflex fine grinding tools with the GR bond are manufactured with pink aluminium oxide. The GR bond is an elastomer-based soft bond. Suitable for use on surfaces.

Poliflex fine grinding tools with the GHR bond are manufactured with an abrasive grain mixture comprising aluminium oxide and silicon carbide (SiC). The GHR bond is likewise a soft yet sturdy elastomer-based bond. Suitable for use on edges.



## Advantages:

- For achieving a fine, shiny surface finish.
- **GR:** Soft grinding thanks to soft, elastic bond.
- **GHR:** Soft grinding with a longer tool life.

## Abrasive:

- White aluminium oxide AW
- Silicon carbide SiC

## Applications:

- Step-by-step fine grinding

## Matching tool drives:

- Flexible shaft drives
- Straight grinders

## Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.
- **GR:** For best performance, use with a recommended cutting speed of 10–12 m/s.
- **GHR:** For best performance, use with a recommended cutting speed of 20–25 m/s.

## Ordering notes:

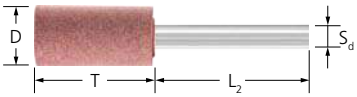
- When ordering, please state the EAN or the full description.

## Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 10 mm.



## Poliflex fine grinding points PF ZY GR/GHR




Fine grinding points in cylindrical shape, for fine grinding of small surfaces.

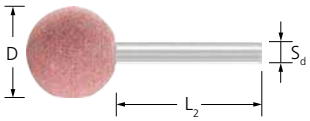
**Ordering notes:**

- Poliflex fine grinding points with a grit size of 400 are manufactured from the abrasive AW white aluminium oxide.
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Grit size 46 | 80 | 120 | 220 | 400 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | | | | |
| **Shank dia. 3 mm GR** | | | | | | | | | | | | |
| 4 | 8 | 3 | 30 | - | - | 144800 | - | - | 47,500 | 71,600 | 10 | PF ZY 0408/3 AR ... GR |
| 6 | 10 | 3 | 30 | - | - | 144824 | - | - | 32,000 | 47,700 | 10 | PF ZY 0610/3 AR ... GR |
| 8 | 8 | 3 | 30 | - | - | 144848 | 144855 | - | 24,000 | 35,800 | 10 | PF ZY 0808/3 AR ... GR |
| | 12 | 3 | 30 | - | - | 144886 | 144893 | - | 24,000 | 35,800 | 10 | PF ZY 0812/3 AR ... GR |
| 10 | 6 | 3 | 30 | - | - | 145838 | - | - | 19,000 | 28,600 | 10 | PF ZY 1006/3 AR ... GR |
| | 10 | 3 | 30 | - | - | 144947 | 144954 | - | 19,000 | 28,600 | 10 | PF ZY 1010/3 AR ... GR |
| | 15 | 3 | 30 | - | - | 145036 | 145043 | - | 19,000 | 28,600 | 10 | PF ZY 1015/3 AR ... GR |
| 12 | 8 | 3 | 30 | - | - | 145883 | - | - | 16,000 | 23,800 | 10 | PF ZY 1208/3 AR ... GR |
| | 12 | 3 | 30 | - | - | 145203 | - | - | 16,000 | 23,800 | 10 | PF ZY 1212/3 AR ... GR |
| | 20 | 3 | 30 | - | - | 145265 | - | - | 16,000 | 23,800 | 10 | PF ZY 1220/3 AR ... GR |
| **Shank diameter of 6 mm GR** | | | | | | | | | | | | |
| 10 | 10 | 6 | 40 | - | - | 144992 | - | - | 19,000 | 28,600 | 10 | PF ZY 1010/6 AR ... GR |
| | 15 | 6 | 40 | - | - | 145081 | 145098 | - | 19,000 | 28,600 | 10 | PF ZY 1015/6 AR ... GR |
| | 25 | 6 | 40 | - | 533925 | 145128 | 145135 | - | 19,000 | 28,600 | 10 | PF ZY 1025/6 AR ... GR |
| 12 | 8 | 6 | 40 | - | - | 145913 | - | - | 16,000 | 23,800 | 10 | PF ZY 1208/6 AR ... GR |
| | 12 | 6 | 40 | - | - | 145234 | - | - | 16,000 | 23,800 | 10 | PF ZY 1212/6 AR ... GR |
| | 20 | 6 | 40 | - | - | 145296 | 145302 | - | 16,000 | 23,800 | 10 | PF ZY 1220/6 AR ... GR |
| 15 | 15 | 6 | 40 | - | - | 145371 | - | - | 12,500 | 19,000 | 10 | PF ZY 1515/6 AR ... GR |

Continued on next page

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Grit size 46 | 80 | 120 | 220 | 400 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | | | | |
| 15 | 25 | 6 | 40 | - | - | 145418 | 145425 | - | 12,500 | 19,000 | 10 | PF ZY 1525/6 AR ... GR |
| | 30 | 6 | 40 | - | - | 145470 | 145487 | - | 12,500 | 19,000 | 10 | PF ZY 1530/6 AR ... GR |
| 20 | 12 | 6 | 40 | - | - | 145982 | - | - | 9,500 | 14,300 | 10 | PF ZY 2012/6 AR ... GR |
| | 20 | 6 | 40 | - | - | 145562 | 145579 | - | 9,500 | 14,300 | 10 | PF ZY 2020/6 AR ... GR |
| | 30 | 6 | 40 | - | 534113 | 145630 | - | - | 9,500 | 14,300 | 10 | PF ZY 2030/6 AR ... GR |
| 25 | 15 | 6 | 40 | - | - | 146026 | - | - | 7,500 | 14,300 | 10 | PF ZY 2515/6 AR ... GR |
| | 25 | 6 | 40 | - | - | 145708 | 145715 | - | 7,500 | 11,400 | 10 | PF ZY 2525/6 AR ... GR |
| 30 | 20 | 6 | 40 | - | - | 146057 | - | - | 6,500 | 9,500 | 5 | PF ZY 3020/6 AR ... GR |
| | 30 | 6 | 40 | - | - | 145760 | - | - | 6,500 | 9,500 | 5 | PF ZY 3030/6 AR ... GR |
| **Shank dia. 8 mm GR** | | | | | | | | | | | | |
| 40 | 25 | 8 | 40 | - | - | 146095 | - | - | 4,500 | 9,500 | 5 | PF ZY 4025/8 AR ... GR |
| **Shank dia. 3 mm GHR** | | | | | | | | | | | | |
| 4 | 8 | 3 | 30 | - | - | - | - | 533734 | 100,000 | 143,200 | 10 | PF ZY 0408/3 AW ... GHR |
| 8 | 12 | 3 | 30 | - | - | 533765 | - | - | 60,000 | 71,600 | 10 | PF ZY 0812/3 ANCN ... GHR |
| | | | | | | - | - | 533772 | 60,000 | 71,600 | 10 | PF ZY 0812/3 AW ... GHR |
| 10 | 10 | 3 | 30 | - | - | 533871 | - | - | 45,000 | 57,200 | 10 | PF ZY 1010/3 ANCN ... GHR |
| | 15 | 3 | 30 | - | - | 533895 | - | - | 45,000 | 52,000 | 10 | PF ZY 1015/3 ANCN ... GHR |
| **Shank dia. 6 mm GHR** | | | | | | | | | | | | |
| 10 | 25 | 6 | 40 | - | - | 533956 | - | - | 45,000 | 57,200 | 10 | PF ZY 1025/6 ANCN ... GHR |
| | | | | | | - | - | 533970 | 45,000 | 57,200 | 10 | PF ZY 1025/6 AW ... GHR |
| 15 | 30 | 6 | 40 | 145555 | 534069 | - | - | - | 32,000 | 47,700 | 10 | PF ZY 1530/6 ANCN ... GHR |
| 20 | 30 | 6 | 40 | 145692 | - | - | - | - | 24,000 | 28,600 | 10 | PF ZY 2030/6 ANCN ... GHR |
| 25 | 25 | 6 | 40 | 145753 | - | - | - | - | 19,000 | 22,900 | 10 | PF ZY 2525/6 ANCN ... GHR |




## Poliflex fine grinding points PF KU GR/GHR

Fine grinding points in ball shape for fine grinding inner radii, contours and transitions.

**Ordering notes:**
- Please complete the description with the desired grit size.

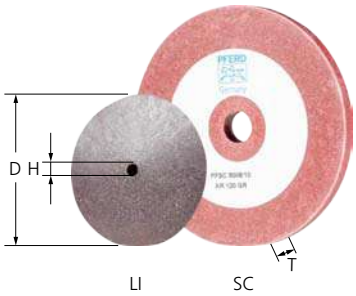
| D [mm] | $S_d$ [mm] | $L_2$ [mm] | Grit size 120 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | |
| **Shank dia. 3 mm** | | | | | | | |
| 8 | 3 | 30 | 146217 | 24,000 | 35,800 | 10 | PF KU 08/3 AR ... GR |
| 10 | 3 | 30 | 146231 | 19,000 | 28,600 | 10 | PF KU 10/3 AR ... GR |
| **Shank dia. 6 mm** | | | | | | | |
| 12 | 6 | 40 | 146255 | 16,000 | 23,800 | 10 | PF KU 12/6 AR ... GR |
| 15 | 6 | 40 | 146279 | 12,500 | 19,000 | 10 | PF KU 15/6 AR ... GR |
| 20 | 6 | 40 | 146293 | 9,500 | 14,300 | 10 | PF KU 20/6 AR ... GR |
| 25 | 6 | 40 | 146316 | 7,500 | 11,400 | 10 | PF KU 25/6 AR ... GR |
| 30 | 6 | 40 | 146323 | 6,500 | 9,500 | 5 | PF KU 30/6 AR ... GR |

## Poliflex fine grinding discs/lenses PF SC/LI GR/GHR

Ideally suited to very fine grinding on all metallic materials, e.g. in tool- and mould-making, in the dental sector and in the jewellery sector.

Due to their construction, the small diameter variants are particularly suited to work on tight and hard-to-reach places.

**Ordering notes:**
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

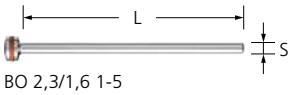



| D [mm] | T [mm] | H [mm] | Grit size 120 | Grit size 220 | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | | |
| **Disc shape GR** | | | | | | | | | |
| 25 | 3 | 2 | 146699 | - | 7,500 | 11,400 | BO 2,3/1,6 1-5, BO 3/1,6 1-5 | 100 | PF SC 2503/2 AR ... GR |
| 30 | 6 | 6 | 144695 | - | 6,300 | 9,500 | BO 6/6 3-10 | 5 | PF SC 3006/6 AR ... GR |
| 50 | 6 | 6 | 144718 | - | 3,800 | 5,700 | BO 6/6 3-10 | 5 | PF SC 5006/6 AR ... GR |
| 80 | 6 | 10 | 144756 | - | 2,400 | 3,500 | BO 8/10 6-20 | 5 | PF SC 8006/10 AR ... GR |
| 100 | 20 | 10 | 144787 | - | 1,900 | 2,800 | BO 8/10 6-20 | 1 | PF SC 10020/10 AR ... GR |
| **Disc shape GHR** | | | | | | | | | |
| 25 | 3 | 2 | - | 146705 | 7,500 | 11,400 | BO 2,3/1,6 1-5, BO 3/1,6 1-5 | 100 | PF SC 2503/2 CU ... GHR |
| **Lens shape GHR** | | | | | | | | | |
| 16 | 4 | 2 | - | 146675 | 12,000 | 17,900 | BO 2,3/1,6 1-5, BO 3/1,6 1-5 | 100 | PF LI 1604/2 CU ... GHR |
| 24 | 3 | 2 | - | 146682 | 8,000 | 12,000 | BO 2,3/1,6 1-5, BO 3/1,6 1-5 | 100 | PF LI 2403/2 CU ... GHR |

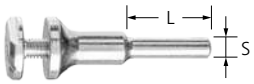
## Arbors BO

Matching arbor for Poliflex fine grinding discs and lenses PF SC/LI.

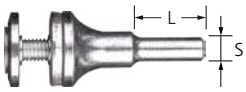
**Advantages:**
- High economic efficiency as the tool can be changed quickly.



BO 2,3/1,6 1-5
BO 3/1,6 1-5



BO 6/6 3-10



BO 8/10 6-20

| Suitable for centre hole dia. [mm] | S [mm] | L [mm] | Clamping width [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|---|---|
| 1.6 | 2.34 | 43 | 1–5 | 151570 | 10 | BO 2,3/1,6 1-5 |
| | 3 | 43 | 1–5 | 151587 | 10 | BO 3/1,6 1-5 |
| 6 | 6 | 25 | 3–10 | 297650 | 1 | BO 6/6 3-10 |
| 10 | 8 | 30 | 6–20 | 297667 | 1 | BO 8/10 6-20 |

Poliflex fine grinding tools with the LR bond are manufactured with white aluminium oxide. The LR bond is a hard, sturdy bond. Suitable for use on surfaces.

Poliflex fine grinding tools with the LHR bond are manufactured with an abrasive grain mixture comprising white aluminium oxide and a portion of green silicon carbide. The LHR bond is a hard, sturdy bond. Suitable for use on edges.

## Advantages:

- For achieving a fine, shiny surface finish.
- High profitability thanks to high abrasive performance and long tool life.

## Abrasive:

- Aluminium oxide A
- Silicon carbide SiC

## Applications:

- Step-by-step fine grinding

## Matching tool drives:

- Flexible shaft drives
- Straight grinders

## Recommendations for use:

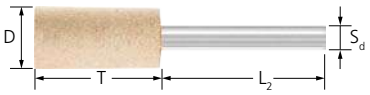
- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.
- **LR:** For best performance, use with a recommended cutting speed of 15–20 m/s.
- **LHR:** For best performance, use with a recommended cutting speed of 30–40 m/s.

## Ordering notes:

- When ordering, please state the EAN or the full description.

## Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 10 mm.




## Poliflex fine grinding points PF ZY LR/LHR

Fine grinding points in cylindrical shape, for fine grinding of small surfaces.

**Ordering notes:**

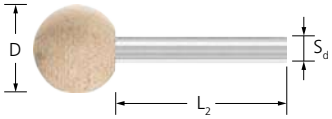
- Poliflex fine grinding points LHR with a grit size of 60 are manufactured from an abrasive mixture of AWCN white aluminium oxide and green silicon carbide.
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Grit size 60 | Grit size 120 | Grit size 220 | Grit size 400 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | | | |
| **Shank dia. 3 mm LR** | | | | | | | | | | | |
| 4 | 8 | 3 | 30 | - | 144817 | - | 533697 | 95,000 | 143,200 | 10 | PF ZY 0408/3 AW ... LR |
| 6 | 10 | 3 | 30 | - | 144831 | - | - | 64,000 | 95,400 | 10 | PF ZY 0610/3 AW ... LR |
| 8 | 8 | 3 | 30 | - | 144862 | - | - | 47,500 | 71,600 | 10 | PF ZY 0808/3 AW ... LR |
| | 12 | 3 | 30 | - | 144909 | 144916 | 533758 | 47,500 | 71,600 | 10 | PF ZY 0812/3 AW ... LR |
| 10 | 10 | 3 | 30 | - | 144961 | 144978 | - | 38,000 | 57,200 | 10 | PF ZY 1010/3 AW ... LR |
| | 15 | 3 | 30 | - | 145050 | - | - | 38,000 | 57,200 | 10 | PF ZY 1015/3 AW ... LR |
| 12 | 12 | 3 | 30 | - | 145210 | - | - | 32,000 | 47,700 | 10 | PF ZY 1212/3 AW ... LR |
| | 20 | 3 | 30 | - | 145272 | - | - | 32,000 | 47,700 | 10 | PF ZY 1220/3 AW ... LR |
| **Shank diameter of 6 mm LR** | | | | | | | | | | | |
| 10 | 10 | 6 | 40 | - | 145012 | - | - | 38,000 | 57,200 | 10 | PF ZY 1010/6 AW ... LR |
| | 15 | 6 | 40 | - | 145104 | - | - | 38,000 | 57,200 | 10 | PF ZY 1015/6 AW ... LR |
| | 25 | 6 | 40 | - | 145142 | 145159 | - | 38,000 | 57,200 | 10 | PF ZY 1025/6 AW ... LR |
| 12 | 12 | 6 | 40 | - | 145258 | - | - | 32,000 | 47,700 | 10 | PF ZY 1212/6 AW ... LR |
| | 20 | 6 | 40 | - | 145319 | - | - | 32,000 | 47,700 | 10 | PF ZY 1220/6 AW ... LR |
| 15 | 15 | 6 | 40 | - | 145395 | - | - | 25,500 | 38,100 | 10 | PF ZY 1515/6 AW ... LR |
| | 25 | 6 | 40 | - | 145449 | - | - | 25,500 | 38,100 | 10 | PF ZY 1525/6 AW ... LR |
| | 30 | 6 | 40 | - | 145500 | - | - | 25,500 | 38,100 | 10 | PF ZY 1530/6 AW ... LR |

Continued on next page

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Grit size 60 | Grit size 120 | Grit size 220 | Grit size 400 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | | | |
| 20 | 20 | 6 | 40 | - | 145593 | - | - | 19,000 | 28,600 | 10 | PF ZY 2020/6 AW ... LR |
| 20 | 30 | 6 | 40 | - | 145661 | - | - | 19,000 | 28,600 | 10 | PF ZY 2030/6 AW ... LR |
| 25 | 25 | 6 | 40 | - | 145739 | - | - | 15,000 | 22,900 | 10 | PF ZY 2525/6 AW ... LR |
| 30 | 30 | 6 | 40 | - | 145791 | - | - | 12,500 | 19,000 | 5 | PF ZY 3030/6 AW ... LR |
| **Shank dia. 3 mm LHR** | | | | | | | | | | | |
| 8 | 12 | 3 | 30 | - | 144923 | - | - | 47,000 | 76,700 | 10 | PF ZY 0812/3 AW ... LHR |
| **Shank dia. 6 mm LHR** | | | | | | | | | | | |
| 10 | 25 | 6 | 40 | 145166 | - | - | - | 75,000 | 83,200 | 10 | PF ZY 1025/6 AWCN ... LHR |
| | | | | - | 145173 | - | - | 75,000 | 83,200 | 10 | PF ZY 1025/6 AW ... LHR |
| 20 | 20 | 6 | 40 | - | 145616 | - | - | 38,000 | 47,700 | 10 | PF ZY 2020/6 AW ... LHR |

## Poliflex fine grinding points PF KU LR/LHR




Fine grinding points in ball shape for fine grinding inner radii, contours and transitions.

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | $S_d$ [mm] | $L_2$ [mm] | Grit size 120 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | |
| **Shank dia. 3 mm** | | | | | | | |
| 8 | 3 | 30 | 146224 | 47,000 | 71,600 | 10 | PF KU 08/3 AW ... LR |
| 10 | 3 | 30 | 146248 | 38,000 | 57,200 | 10 | PF KU 10/3 AW ... LR |
| **Shank dia. 6 mm** | | | | | | | |
| 15 | 6 | 40 | 146286 | 29,500 | 38,100 | 10 | PF KU 15/6 AW ... LR |
| 20 | 6 | 40 | 146309 | 19,000 | 28,600 | 10 | PF KU 20/6 AW ... LR |

Poliflex fine grinding tools with the TX bond are manufactured with standard aluminium oxide. The textile fabric inlays make the TX bond a very hard, sturdy bond. Suitable for use on edges.

## Advantages:

- For achieving a fine, matt surface finish.
- High profitability thanks to high abrasive performance and long tool life.

## Abrasive:

- Aluminium oxide A

## Applications:

- Step-by-step fine grinding

## Matching tool drives:

- Flexible shaft drives
- Straight grinders

## Recommendations for use:

- Depending on the application, profile with a diamond dresser or with ceramic dressing stones at a low rotational speed. Please refer to catalogue section 3 for detailed information and ordering data for dressing tools.
- For best performance, use with a recommended cutting speed of 20–30 m/s.
- The 19 x 2.5 mm dimension variant is ideally suited to grinding tracks.

## Ordering notes:

- When ordering, please state the EAN or the full description.

## Safety notes:

- For safety reasons, the specified maximum permitted rotational speed must never be exceeded.
- The clamping length of the shank must be at least 10 mm.


## Poliflex fine grinding points PF ZY TX

Fine grinding points in cylindrical shape, for fine grinding of small surfaces.

**Recommendations for use:**

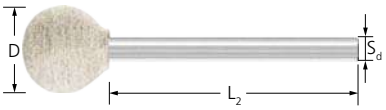
- The dimensions of 19 x 2.5 mm have been specifically designed for cleaning and slot grinding applications. Seat mounting rails (tracks) in passenger aircraft can be cleaned and rust removed.

**Ordering notes:**

- Please complete the description with the desired grit size.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Grit size | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 80 | 120 | | | | |
| | | | | EAN 4007220 | | | | | |
| **Shank dia. 3 mm** | | | | | | | | | |
| 6 | 10 | 3 | 30 | 298060 | 298077 | 63,000 | 95,400 | 10 | PF ZY 0610/3 AN ... TX |
| 8 | 12 | 3 | 30 | 298084 | 298091 | 47,500 | 71,600 | 10 | PF ZY 0812/3 AN ... TX |
| **Shank dia. 6 mm** | | | | | | | | | |
| 10 | 25 | 6 | 40 | 297780 | 297889 | 38,000 | 57,200 | 10 | PF ZY 1025/6 AN ... TX |
| 16 | 32 | 6 | 40 | 297919 | 297940 | 24,000 | 35,800 | 10 | PF ZY 1632/6 AN ... TX |
| 19 | 2.5 | 6 | 40 | 067857 | - | 20,000 | 30,100 | 10 | PF ZY 192,5 6 AN ... TX |
| 20 | 32 | 6 | 40 | 297957 | 297964 | 19,000 | 28,600 | 10 | PF ZY 2032/6 AN ... TX |
| 25 | 32 | 6 | 40 | 297988 | 297995 | 15,000 | 22,900 | 10 | PF ZY 2532/6 AN ... TX |

## Poliflex fine grinding points PF KU TX




Fine grinding points in ball shape for fine grinding inner radii, contours and transitions.

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | $S_d$ [mm] | $L_2$ [mm] | Grit size | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| | | | 80 | 120 | | | | |
| | | | EAN 4007220 | | | | | |
| **Shank dia. 3 mm** | | | | | | | | |
| 6 | 3 | 30 | 298145 | 298152 | 63,000 | 95,400 | 10 | PF KU 06/3 AN ... TX |
| 8 | 3 | 30 | - | 298176 | 47,500 | 71,600 | 10 | PF KU 08/3 AN ... TX |
| 10 | 3 | 30 | - | 298190 | 38,000 | 57,200 | 10 | PF KU 10/3 AN ... TX |

## Poliflex fine grinding points PF KE TX


Fine grinding points in conical shape for fine grinding inner radii, contours and transitions.

**Ordering notes:**
- Please complete the description with the desired grit size.

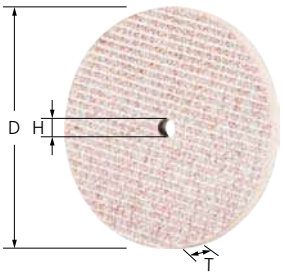
| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Grit size | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 80 | 120 | | | | |
| | | | | EAN 4007220 | | | | | |
| **Shank dia. 6 mm** | | | | | | | | | |
| 10 | 25 | 6 | 40 | 298121 | 298138 | 38,000 | 57,200 | 10 | PF KE 1025/6 AN ... TX |
| 16 | 45 | 6 | 40 | 298015 | - | 24,000 | 38,800 | 10 | PF KE 1645/6 AN ... TX |
| 25 | 70 | 6 | 40 | 298008 | - | 15,000 | 22,900 | 10 | PF KE 2570/6 AN ... TX |

## Poliflex fine grinding points PF SP TX


Fine grinding points in pointed tree shape for fine grinding inner radii, contours and transitions.

**Ordering notes:**
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Grit size | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 80 | 120 | | | | |
| | | | | EAN 4007220 | | | | | |
| **Shank dia. 3 mm** | | | | | | | | | |
| 10 | 20 | 3 | 30 | 298107 | 298114 | 38,000 | 57,200 | 10 | PF SP 1020/3 AN ... TX |
| **Shank dia. 6 mm** | | | | | | | | | |
| 20 | 32 | 6 | 40 | 298039 | 298046 | 19,000 | 28,600 | 10 | PF SP 2032/6 AN ... TX |

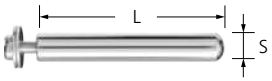



## Poliflex fine grinding discs PF SC TX

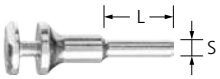
For fine peripheral grinding of small surfaces.

**Ordering notes:**
- Please order the matching arbor separately.
- Please complete the description with the desired grit size.

| D [mm] | T [mm] | H [mm] | Grit size 80 | Grit size 120 | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | | |
| 25 | 3 | 3 | 505502 | 505519 | 15,000 | 22,900 | BO 6/3 1-6 | 20 | PF SC 2503/3 A ... TX |
| | 6 | 3 | - | 505540 | 15,000 | 22,900 | BO 6/3 1-6 | 20 | PF SC 2506/3 A ... TX |
| 40 | 3 | 3 | 505564 | 505571 | 9,500 | 14,300 | BO 6/3 1-6 | 10 | PF SC 4003/3 A ... TX |
| | 6 | 6 | - | 505618 | 9,500 | 14,300 | BO 6/6 3-10 | 10 | PF SC 4006/6 A ... TX |




BO 6/3 1-6




BO 6/6 3-10

## Arbors BO

Matching arbor for Poliflex fine grinding discs PF SC.

**Advantages:**
- High economic efficiency as the tool can be changed quickly.

| Suitable for centre hole dia. [mm] | S [mm] | L [mm] | Clamping width [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|---|---|
| 3 | 6 | 40 | 1–6 | 505694 | 1 | BO 6/3 1-6 |
| 6 | 6 | 25 | 3–10 | 297650 | 1 | BO 6/6 3-10 |

Ceramic fibre files are made of high-grade ceramic fibres directionally embedded in a special resinoid bond. Suitable for use on surfaces and in hard-to-reach areas in tool- and mould-making.

## Advantages:

- High profitability thanks to high abrasive performance and long tool life.
- For achieving very good surface quality standards.

## Abrasive:

- Ceramic fibres
- Grit size colour code:
  180 = Gold
  280 = Light brown
  400 = Orange
  700 = Blue

## Materials that can be worked:

- Aluminium
- Copper
- Stainless steel (INOX)
- Steel, cast steel

## Applications:

- Surface work
- Finishing
- Step-by-step fine grinding

## Matching tool drives:

- Manual application
- Manual filing tool

## Recommendations for use:

- Use the files at a 45° angle for the highest stock removal rate.

## Safety notes:



## KFF

The various shapes enable work on difficult geometries in tool-making applications.

**Ordering notes:**
- Please complete the description with the desired grit size.


| H [mm] | B [mm] | L [mm] | Grit size 180 | 280 | 400 | 700 | | Description |
|---|---|---|---|---|---|---|---|---|
| | | | EAN 4007220 | | | | | |
| **Flat** ▭ | | | | | | | | |
| 0.5 | 4 | 150 | 668887 | 668894 | 668900 | 668917 | 1 | KFF 0,5 x 4 x 150 A ... |
| 1 | 4 | 150 | 668924 | 668931 | 668948 | 668955 | 1 | KFF 1,0 x 4 x 150 A ... |
| 2 | 4 | 150 | 668962 | 668979 | 668986 | 668993 | 1 | KFF 2,0 x 4 x 150 A ... |
| 0.5 | 6 | 150 | 669006 | 669013 | 669020 | 669037 | 1 | KFF 0,5 x 6 x 150 A ... |
| 1 | 6 | 150 | 669044 | 669051 | 669068 | 669075 | 1 | KFF 1,0 x 6 x 150 A ... |
| 2 | 6 | 150 | 669082 | 669099 | 669105 | 669112 | 1 | KFF 2,0 x 6 x 150 A ... |
| 1 | 10 | 150 | 669129 | 669136 | 669143 | 669150 | 1 | KFF 1,0 x 10 x 150 A ... |
| **Round** ○ | | | | | | | | |
| 2.35 | - | 150 | 026724 | 026748 | 026755 | 026762 | 1 | KFF RD 2,35 x 150 A ... |
| 3 | - | 150 | 026779 | 026786 | 026793 | 026809 | 1 | KFF RD 3 x 150 A ... |
| **Three square** △ | | | | | | | | |
| 3 | 3 | 150 | 026816 | 026823 | 026830 | 026847 | 1 | KFF DKT 3 x 3 x 3 x 150 A ... |

Detailed information on grinding and polishing stones can be found in catalogue section 3.

# Polishing tools
## General information

The comprehensive range of polishing tools contains:
- Felt points
- Mounted felt flap wheels
- Felt wheels
- Felt flap discs
- Cloth rings

Felt points and discs are available in two types:
- **Felt points/discs without metal inlay:**
  These are predominantly used for high-gloss polishing
- **Felt points/discs with metal inlay (MS):**
  These are used for increased stock removal when pre-polishing with diamond grinding pastes.

### Advantages:

- Felt points and discs: Precise retention of geometric shapes due to the hardness of these tools.
- Felt flap discs, cloth rings and mounted felt flap wheels: Optimum adaptation to contours thanks to high flexibility.
- Can be freely shaped, meaning they can be used for tools with complicated geometries.

### Materials that can be worked:

- Can be used on nearly all materials.

### Applications:

- Polishing

### Recommendations for use:

- For best performance, use with a recommended cutting speed of 5–10 m/s. This provides an ideal compromise between stock removal rate, surface quality, thermal load on the workpiece and tool wear.
- **Felt points and discs:**
  Use diamond polishing pastes and polishing paste bars.
- **Cloth rings and mounted felt flap wheels:**
  Use polishing and grinding pastes.
- When changing the polishing paste, use a brand-new polishing tool.

### Ordering instructions:

- When ordering, please state the EAN or the full description.
- **Ordering example:**
  EAN 4007220**295243**
  FK ZYA 0610/3 M
- **Ordering example explanation:**
  FK = Felt point
  ZYA = Cylindrical shape
  0610 = Outer diameter D x width T [mm]
  3 = Shank diameter $S_d$ [mm]
  M = Medium hardness

### Safety notes:

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

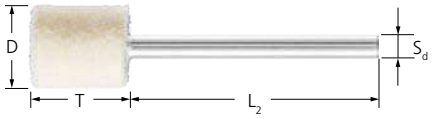
### Recommended rotational speed range

**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: 1,900-2,800 RPM**

| Tool dia. [mm] | Cutting speed [m/s] | | | | | |
|---|---|---|---|---|---|---|
| | 5 | 10 | 15 | 20 | 25 | 32 |
| | Rotational speeds [RPM] | | | | | |
| 6 | 15,900 | 31,800 | 47,700 | 63,600 | 79,500 | 101,800 |
| 8 | 11,900 | 23,800 | 35,800 | 47,700 | 59,600 | 76,300 |
| 10 | 9,500 | 19,000 | 28,600 | 38,100 | 47,700 | 61,100 |
| 12 | 7,900 | 15,900 | 23,800 | 31,800 | 39,700 | 50,900 |
| 15 | 6,300 | 12,700 | 19,000 | 25,400 | 31,800 | 40,700 |
| 20 | 4,700 | 9,500 | 14,300 | 19,000 | 23,800 | 30,500 |
| 25 | 3,800 | 7,600 | 11,400 | 15,200 | 19,000 | 24,400 |
| 30 | 3,100 | 6,300 | 9,500 | 12,700 | 15,900 | 20,300 |
| 45 | 2,100 | 4,200 | 6,300 | 8,400 | 10,600 | 13,500 |
| 60 | 1,500 | 3,100 | 4,700 | 6,300 | 7,900 | 10,100 |
| 80 | 1,100 | 2,300 | 3,500 | 4,700 | 5,900 | 7,600 |
| 100 | 900 | 1,900 | 2,800 | 3,800 | 4,700 | 6,100 |
| 115 | 800 | 1,600 | 2,400 | 3,300 | 4,100 | 5,300 |
| 125 | 700 | 1,500 | 2,200 | 3,000 | 3,800 | 4,800 |
| 150 | 600 | 1,200 | 1,900 | 2,500 | 3,100 | 4,000 |
| 200 | 400 | 900 | 1,400 | 1,900 | 2,300 | 3,000 |

## Shape ZYA



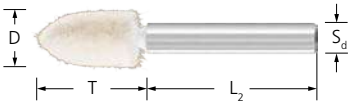

The cylindrical shape ZYA is mainly used peripherally. The variant with end hole (ST-BO) is particularly suitable for face-down use.

Felt points with metal inserts (MS) are used for increased stock removal when pre-polishing with diamond polishing pastes.

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please complete the description with the desired type.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Type M (medium) | Type H (hard) | Type MS (metal insert) | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | | |
| **Shank dia. 2.35 mm** | | | | | | | | | | |
| 4 | 12 | 2.35 | 34 | 035757 | - | - | 23,000–47,000 | 119,000 | 10 | FK ZYA 0412/2,35 ... |
| 6 | 10 | 2.35 | 35 | 035771 | 035788 | - | 16,000–32,000 | 79,500 | 10 | FK ZYA 0610/2,35 ... |
| 8 | 10 | 2.35 | 35 | 035818 | 035825 | - | 12,000–24,000 | 59,500 | 10 | FK ZYA 0810/2,35 ... |
| **Shank dia. 3 mm** | | | | | | | | | | |
| 4 | 12 | 3 | 37 | 035764 | - | - | 23,000–47,000 | 119,000 | 10 | FK ZYA 0412/3 ... |
| 6 | 10 | 3 | 35 | 295243 | 035795 | - | 16,000–32,000 | 79,500 | 10 | FK ZYA 0610/3 ... |
| 8 | 10 | 3 | 35 | 295250 | 035832 | - | 12,000–24,000 | 59,500 | 10 | FK ZYA 0810/3 ... |
| 10 | 12 | 3 | 34 | 035849 | 035856 | - | 10,000–20,000 | 47,500 | 10 | FK ZYA 1012/3 ... |
| | 15 | 3 | 32 | 153871 | 035887 | 295304 | 10,000–20,000 | 47,500 | 10 | FK ZYA 1015/3 ... |
| 12 | 20 | 3 | 28 | 035917 | 035924 | - | 7,950–15,900 | 39,500 | 10 | FK ZYA 1220/3 ... |
| **Shank dia. 3 mm – end hole** | | | | | | | | | | |
| 15 | 20 | 3 | 28 | 035955 | 035962 | - | 6,000–12,000 | 31,500 | 10 | FK ZYA 1520/3 ... ST-BO |
| **Shank dia. 6 mm** | | | | | | | | | | |
| 10 | 12 | 6 | 42 | 035863 | 035870 | - | 10,000–20,000 | 47,500 | 10 | FK ZYA 1012/6 ... |
| | 15 | 6 | 40 | 153772 | 035894 | - | 10,000–20,000 | 47,500 | 10 | FK ZYA 1015/6 ... |
| 12 | 20 | 6 | 36 | 035931 | 035948 | - | 7,950–15,900 | 39,500 | 10 | FK ZYA 1220/6 ... |
| **Shank dia. 6 mm – end hole** | | | | | | | | | | |
| 15 | 20 | 6 | 38 | 294727 | 035979 | 295311 | 6,000–12,000 | 31,500 | 10 | FK ZYA 1520/6 ... ST-BO |
| 20 | 25 | 6 | 43 | 153802 | 035986 | 295328 | 5,000–10,000 | 23,500 | 10 | FK ZYA 2025/6 ... ST-BO |
| 25 | 30 | 6 | 40 | 153888 | 036006 | 295335 | 4,000–8,000 | 19,000 | 10 | FK ZYA 2530/6 ... ST-BO |



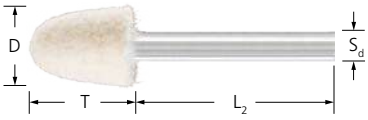

## Shape SPK

The conical pointed shape SPK is mainly used for work on radii and contours.

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please complete the description with the desired type.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Type M (medium) | Type H (hard) | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | |
| **Shank dia. 2.35 mm** | | | | | | | | | |
| 6 | 10 | 2.35 | 37 | 036013 | 036020 | 16,000–32,000 | 79,500 | 10 | FK SPK 0610/2,35 ... |
| | 18 | 2.35 | 33 | 036044 | 036068 | 16,000–32,000 | 79,500 | 10 | FK SPK 0618/2,35 ... |
| 8 | 12 | 2.35 | 36 | 036099 | 036105 | 12,000–24,000 | 59,500 | 10 | FK SPK 0812/2,35 ... |
| **Shank dia. 3 mm** | | | | | | | | | |
| 6 | 10 | 3 | 37 | 588666 | 036037 | 16,000–32,000 | 79,500 | 10 | FK SPK 0610/3 ... |
| | 18 | 3 | 33 | 036051 | 036075 | 16,000–32,000 | 79,500 | 10 | FK SPK 0618/3 ... |
| 8 | 12 | 3 | 36 | 295267 | 036112 | 12,000–24,000 | 59,500 | 10 | FK SPK 0812/3 ... |
| 10 | 18 | 3 | 33 | 153925 | 036129 | 10,000–20,000 | 47,500 | 10 | FK SPK 1018/3 ... |
| 12 | 18 | 3 | 33 | 295274 | - | 8,000–16,000 | 39,500 | 10 | FK SPK 1218/3 ... |
| **Shank dia. 6 mm** | | | | | | | | | |
| 10 | 18 | 6 | 41 | 153796 | 036136 | 10,000–20,000 | 47,500 | 10 | FK SPK 1018/6 ... |
| 15 | 20 | 6 | 42 | 153932 | - | 6,000–12,000 | 31,500 | 10 | FK SPK 1520/6 ... |
| | 30 | 6 | 45 | 153949 | - | 6,000–12,000 | 31,500 | 10 | FK SPK 1530/6 ... |
| 20 | 25 | 6 | 47 | 294734 | - | 5,000–10,000 | 23,500 | 10 | FK SPK 2025/6 ... |
| 25 | 30 | 6 | 45 | 588710 | - | 4,000–8,000 | 19,000 | 10 | FK SPK 2530/6 ... |
| 30 | 35 | 6 | 42 | 588727 | - | 3,200–6,350 | 15,500 | 10 | FK SPK 3035/6 ... |




## Shape KEL

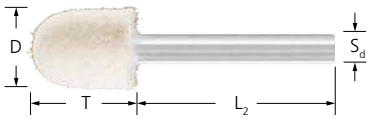
The conical shape KEL is mainly used for work on radii.

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please complete the description with the desired type.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Type M (medium) | Type H (hard) | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | |
| **Shank dia. 2.35 mm** | | | | | | | | | |
| 6 | 10 | 2.35 | 37 | 036143 | - | 16,000–32,000 | 79,500 | 10 | FK KEL 0610/2,35 ... |
| **Shank dia. 3 mm** | | | | | | | | | |
| 6 | 10 | 3 | 37 | 588734 | - | 16,000–32,000 | 79,500 | 10 | FK KEL 0610/3 ... |
| 10 | 15 | 3 | 34 | 588765 | - | 10,000–20,000 | 47,500 | 10 | FK KEL 1015/3 ... |
| **Shank dia. 6 mm** | | | | | | | | | |
| 10 | 15 | 6 | 40 | 588840 | - | 10,000–20,000 | 47,500 | 10 | FK KEL 1015/6 ... |
| 15 | 20 | 6 | 42 | 294741 | - | 6,000–12,000 | 31,500 | 10 | FK KEL 1520/6 ... |
| 20 | 25 | 6 | 47 | 153956 | 036150 | 5,000–10,000 | 23,500 | 10 | FK KEL 2025/6 ... |
| | 30 | 6 | 45 | 036167 | 036174 | 5,000–10,000 | 23,500 | 10 | FK KEL 2030/6 ... |
| 25 | 30 | 6 | 45 | 153819 | - | 4,000–8,000 | 19,000 | 10 | FK KEL 2530/6 ... |
| 30 | 35 | 6 | 42 | 153826 | - | 3,200–6,350 | 15,500 | 10 | FK KEL 3035/6 ... |

## Shape WRC



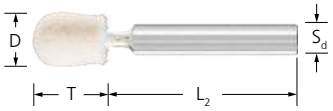

The cylindrical shape with radius end WRC is mainly used for work on small, concave contours.

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
■ Please complete the description with the desired type.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Type M (medium) EAN 4007220 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| **Shank dia. 2.35 mm** | | | | | | | | |
| 6 | 10 | 2.35 | 37 | 036181 | 16,000–32,000 | 79,500 | 10 | FK WRC 0610/2,35 ... |
| 8 | 12 | 2.35 | 36 | 036204 | 12,000–24,000 | 59,500 | 10 | FK WRC 0812/2,35 ... |
| 10 | 14 | 2.35 | 35 | 036211 | 10,000–20,000 | 47,500 | 10 | FK WRC 1014/2,35 ... |
| **Shank dia. 3 mm** | | | | | | | | |
| 6 | 10 | 3 | 36 | 588451 | 16,000–32,000 | 79,500 | 10 | FK WRC 0610/3 ... |
| 8 | 12 | 3 | 43 | 295281 | 12,000–24,000 | 59,500 | 10 | FK WRC 0812/3 ... |
| 10 | 14 | 3 | 35 | 295298 | 10,000–20,000 | 47,500 | 10 | FK WRC 1014/3 ... |
| **Shank dia. 6 mm** | | | | | | | | |
| 15 | 20 | 6 | 42 | 153895 | 6,000–12,000 | 31,500 | 10 | FK WRC 1520/6 ... |
| 20 | 25 | 6 | 47 | 153901 | 5,000–10,000 | 23,500 | 10 | FK WRC 2025/6 ... |
| 25 | 30 | 6 | 45 | 153918 | 4,000–8,000 | 19,000 | 10 | FK WRC 2530/6 ... |

## Shape TRE

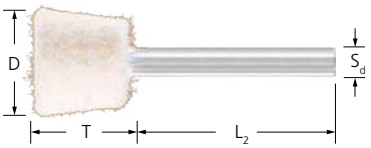



The oval shape TRE is mainly used for work on small radii.

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
■ Please complete the description with the desired type.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Type M (medium) EAN 4007220 | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| **Shank dia. 2.35 mm** | | | | | | | | |
| 6 | 10 | 2.35 | 37 | 036228 | 16,000–32,000 | 79,500 | 10 | FK TRE 0610/2,35 ... |
| 8 | 12 | 2.35 | 36 | 036242 | 12,000–24,000 | 59,500 | 10 | FK TRE 0812/2,35 ... |
| 10 | 14 | 2.35 | 35 | 036266 | 10,000–20,000 | 47,500 | 10 | FK TRE 1014/2,35 ... |
| **Shank dia. 3 mm** | | | | | | | | |
| 6 | 10 | 3 | 37 | 036235 | 16,000–32,000 | 79,500 | 10 | FK TRE 0610/3 ... |
| 8 | 12 | 3 | 36 | 036259 | 12,000–24,000 | 59,500 | 10 | FK TRE 0812/3 ... |
| 10 | 14 | 3 | 35 | 036273 | 10,000–20,000 | 47,500 | 10 | FK TRE 1014/3 ... |
| **Shank dia. 6 mm** | | | | | | | | |
| 10 | 14 | 6 | 43 | 153789 | 10,000–20,000 | 47,500 | 10 | FK TRE 1014/6 ... |




## Shape WKN

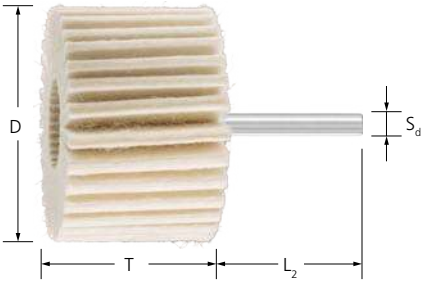
The tapered shape WKN is mainly used for work on interior angles.

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please complete the description with the desired type.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Type M (medium) | Type H (hard) | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | |
| **Shank dia. 2.35 mm** | | | | | | | | | |
| 10 | 15 | 2.35 | 32 | 036280 | - | 10,000–20,000 | 47,500 | 10 | FK WKN 1015/2,35 ... |
| 12 | 12 | 2.35 | 34 | 036303 | 036327 | 8,000–16,000 | 39,500 | 10 | FK WKN 1212/2,35 ... |
| **Shank dia. 3 mm** | | | | | | | | | |
| 10 | 15 | 3 | 32 | 036297 | - | 10,000–20,000 | 47,500 | 10 | FK WKN 1015/3 ... |
| 12 | 12 | 3 | 36 | 036310 | 036334 | 8,000–16,000 | 39,500 | 10 | FK WKN 1212/3 ... |
| 15 | 15 | 3 | 32 | 036341 | 036358 | 6,000–12,000 | 31,500 | 10 | FK WKN 1515/3 ... |
| 20 | 16 | 3 | 28 | 036365 | - | 5,000–10,000 | 23,500 | 10 | FK WKN 2016/3 ... |
| **Shank dia. 6 mm** | | | | | | | | | |
| 20 | 16 | 6 | 38 | 294758 | - | 5,000–10,000 | 23,500 | 10 | FK WKN 2016/6 ... |

# Mounted felt flap wheels FLS




## FLS

Mounted felt flap wheels are used for pre-polishing and high-gloss polishing on small to medium-sized components.

**Advantages:**
- Low thermal load on the workpiece.

**Recommendations for use:**
- Use the hard type for pre-polishing flat surfaces, and the soft type 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.

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please complete the description with the desired type.

| D [mm] | T [mm] | $S_d$ [mm] | L [mm] | Type W (soft) | Type H (hard) | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|
| | | | | EAN 4007220 | | | | | |
| 30 | 20 | 6 | 40 | 936160 | 936177 | 6,300 | 20,000 | 5 | FLS 3020/6 ... |
| 40 | 20 | 6 | 40 | 936184 | 936191 | 4,750 | 15,000 | 5 | FLS 4020/6 ... |
| 50 | 30 | 6 | 40 | 936207 | 936214 | 3,800 | 12,000 | 5 | FLS 5030/6 ... |
| 60 | 40 | 6 | 40 | 936221 | 936238 | 3,150 | 10,000 | 5 | FLS 6040/6 ... |
| 80 | 50 | 6 | 40 | 936245 | 936252 | 2,400 | 7,500 | 5 | FLS 8050/6 ... |

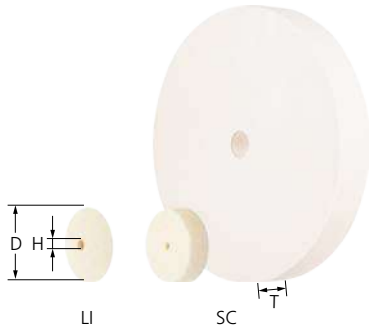
## FK SC/LI

Felt wheels and lenses are mainly used peripherally.

Felt wheels with metal inserts (MS) are used for increased stock removal when pre-polishing with diamond grinding pastes.

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please order the matching arbor separately.
- Please complete the description with the desired type.




| D [mm] | T [mm] | H [mm] | Type | | | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | M (medium) | H (hard) | MS (metal insert) | | | | | |
| | | | EAN 4007220 | | | | | | | |
| **Lenses** | | | | | | | | | | |
| 17 | 5 | 2 | - | 036402 | - | 5,600–11,000 | 28,000 | BO 2,3/1,6 1-5, BO 3/1,6 1-5 | 10 | FK LI 1705/2 ... |
| 22 | 5 | 2 | - | 036419 | - | 4,300–8,650 | 21,700 | BO 2,3/1,6 1-5, BO 3/1,6 1-5 | 10 | FK LI 2205/2 ... |
| **Wheels** | | | | | | | | | | |
| 17 | 5 | 2 | 036372 | - | - | 5,600–11,000 | 28,000 | BO 2,3/1,6 1-5, BO 3/1,6 1-5 | 10 | FK SC 1705/2 ... |
| 20 | 5 | 2 | 036389 | - | - | 5,000–10,000 | 23,500 | BO 2,3/1,6 1-5, BO 3/1,6 1-5 | 10 | FK SC 2005/2 ... |
| 30 | 5 | 2 | 036396 | - | - | 3,000–6,000 | 20,000 | BO 2,3/1,6 1-5, BO 3/1,6 1-5 | 10 | FK SC 3005/2 ... |
| | 7 | 6 | 153864 | - | - | 3,000–6,000 | 20,000 | BO 6/6 3-10 | 5 | FK SC 3007/6 ... |
| 45 | 9 | 6 | 153840 | - | - | 2,000–4,000 | 13,500 | BO 6/6 3-10 | 5 | FK SC 4509/6 ... |
| 60 | 10 | 6 | 297605 | - | - | 1,500–3,000 | 10,000 | BO 6/6 3-10 | 5 | FK SC 6010/6 ... |
| 80 | 10 | 10 | 154069 | - | 295342 | 1,000–2,000 | 7,500 | BO 8/10 6-20 | 5 | FK SC 8010/10 ... |
| 100 | 20 | 10 | 297612 | - | 295359 | 900–1,800 | 6,100 | BO 8/10 6-20 | 1 | FK SC 10020/10 ... |
| 125 | 20 | 20 | 297629 | - | 295366 | 750–1,500 | 4,900 | BO 12/20 10-50, BO MK 1/20 10-50 | 1 | FK SC 12520/20 ... |
| 150 | 25 | 20 | 297636 | - | - | 600–1,200 | 4,000 | BO 12/20 10-50, BO MK 1/20 10-50 | 1 | FK SC 15025/20 ... |
| 200 | 30 | 20 | 297643 | - | - | 500–1,000 | 3,000 | BO 12/20 10-50, BO MK 1/20 10-50 | 1 | FK SC 20030/20 ... |

## Felt flap discs FFS

### FFS

Felt flap discs are used for pre-polishing and high-gloss polishing on medium-sized to large components.

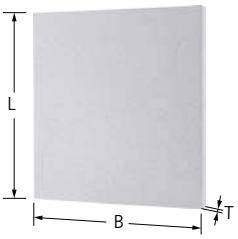
**Advantages:**
- Low thermal load on the workpiece.

**Recommendations for use:**
- Use the hard type for pre-polishing flat surfaces, and the soft type 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.

**Matching tool drives:**
angle grinder, cordless angle grinder

**Ordering notes:**
- Please complete the description with the desired type.


| D [mm] | T [mm] | H [mm] | Type | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|
| | | | W (soft) | H (hard) | | | | |
| | | | EAN 4007220 | | | | | |
| 115 | 22 | 22.23 | 936085 | 936139 | 1,650 | 8,350 | 5 | FFS 115/22,23 ... |
| 125 | 22 | 22.23 | 936146 | 936153 | 1,500 | 7,650 | 5 | FFS 125/22,23 ... |




## FK P

Felt sheets are suited to a very wide variety of polishing applications. The two different hardness grades available only multiply the number of potential applications.

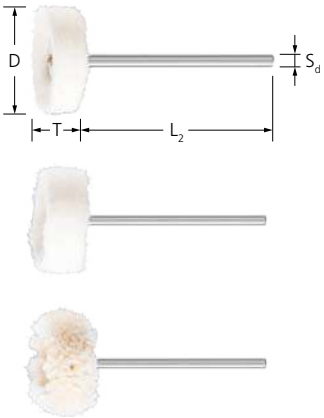
**Advantages:**
- Depending on the requirements, can be cut or punched into any shape (e.g. rectangle, square, stick or wheel) quickly and easily.

**Matching tool drives:**
manual application

**Ordering notes:**
- Please complete the description with the desired type.

| L [mm] | B [mm] | T [mm] | Type | | | Description |
|---|---|---|---|---|---|---|
| | | | M (medium) | H (hard) | | |
| | | | EAN 4007220 | | | |
| 250 | 250 | 3 | 036433 | - | 1 | FK P 250-250-3 ... |
| | | 6 | 036440 | 036457 | 1 | FK P 250-250-6 ... |
| | | 12 | 036464 | 036471 | 1 | FK P 250-250-12 ... |

# Cloth rings




## Shank-mounted cloth rings TR

Shank-mounted cloth rings are used with polishing pastes for pre-polishing, gloss polishing and high-gloss polishing in tool- and mould-making applications.

Shank-mounted cloth rings are available in three types:
BW (cotton) = Very fine high-gloss polishing, dust removal and buffing
FZ (felt cloth) = Pre-polishing and gloss polishing in combination with appropriate polishing pastes
FL (flannel) = Buffing, gloss polishing and high-gloss polishing in combination with the appropriate polishing pastes

**Recommendations for use:**
- Make sure that the tool does not overheat when polishing.
- Use a sufficient amount of polishing paste.

**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Detailed information and ordering data on polishing pastes can be found on pages 153–154.
- Please complete the description with the desired type.

| D [mm] | T [mm] | $S_d$ [mm] | $L_2$ [mm] | Type | | | Opt. RPM | Max. RPM | | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BW | FZ | FL | | | | |
| | | | | EAN 4007220 | | | | | | |
| **Shank dia. 2.35 mm** | | | | | | | | | | |
| 22 | 10 | 2.35 | 40 | 034538 | 034545 | 034552 | 13,000 | 17,350 | 10 | TR 2210/2,35 ... |
| **Shank dia. 3 mm** | | | | | | | | | | |
| 22 | 10 | 3 | 40 | 034569 | 034576 | 034583 | 13,000 | 17,350 | 10 | TR 2210/3 ... |

## Cloth rings with centre hole TR


Cloth rings are used for pre-polishing and high-gloss polishing with polishing pastes.
If the intention is to achieve very smooth surface finishes, use several or even all variants successively.

Cloth rings are available in four types:
ST (sisal cloth) = 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 STEELOX.
- Pre-polishing of aluminium and brass: Cloth rings ST or TH with polishing paste PP 2 VP ALU.
- Pre-polishing of non-ferrous metals: Cloth rings ST or TH with polishing paste PP 3 VP NON-FERROUS.
- High-gloss polishing on all metals: Cloth rings TW or FL with polishing paste PP 4 UNIVERSAL.
- High-gloss polishing on plastics: Cloth rings TW or FL with polishing paste PP 5 HGP PLAST.
- Type TW and FL cloth rings achieve their best performance at a recommended cutting speed of 5–15 m/s.
- Type ST and TH cloth rings achieve their best performance at a recommended cutting speed of 10–15 m/s.

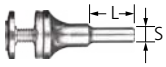
**Matching tool drives:**
flexible shaft drive, straight grinder

**Ordering notes:**
- Please order arbor separately.
- TR 12510 type ST: 10 mm hole (25.4/6-edge, arbor FR/VR 12/25,4).
- Please complete the description with the desired type.

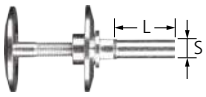
| D [mm] | Used width [mm] | H [mm] | Type | | | | Opt. RPM | Max. RPM | Suitable arbors | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ST | TH | TW | FL | | | | | |
| | | | EAN 4007220 | | | | | | | | |
| 50 | 10 | 6 | - | 804315 | 804322 | 804339 | 3,800 | 12,000 | BO 6/6 3-10 | 5 | TR 5010-6 ... |
| 80 | 10 | 10 | 294086 | 294093 | 294109 | 294116 | 2,500 | 7,500 | BO 8/10 6-20 | 5 | TR 8010-10 ... |
| 100 | 10 | 10 | 294123 | 294130 | 294147 | 294154 | 1,900 | 6,100 | BO 8/10 6-20 | 5 | TR 10010-10 ... |
| 125 | 10 | 20 | 294161 | 294178 | 294185 | 294192 | 1,300 | 4,900 | BO 12/20 10-50, BO MK 1/20 10-50 | 5 | TR 12510-20 ... |
| 150 | 10 | 20 | 294208 | 294215 | 294222 | 294239 | 1,250 | 4,000 | BO 12/20 10-50, BO MK 1/20 10-50 | 5 | TR 15010-20 ... |
| 200 | 10 | 20 | 294246 | 294253 | 294260 | 294277 | 950 | 3,000 | BO 12/20 10-50, BO MK 1/20 10-50 | 5 | TR 20010-20 ... |



BO 6/6 3-10




BO 8/10 6-20




BO 12/20 10-50

BO MK 1/20 10-50

## Arbors for felt wheels and cloth rings BO

Matching arbors for felt wheels and cloth rings.

**Advantages:**
- High economic efficiency as the tool can be changed quickly.

**Ordering notes:**
- Please complete the description with the desired type.

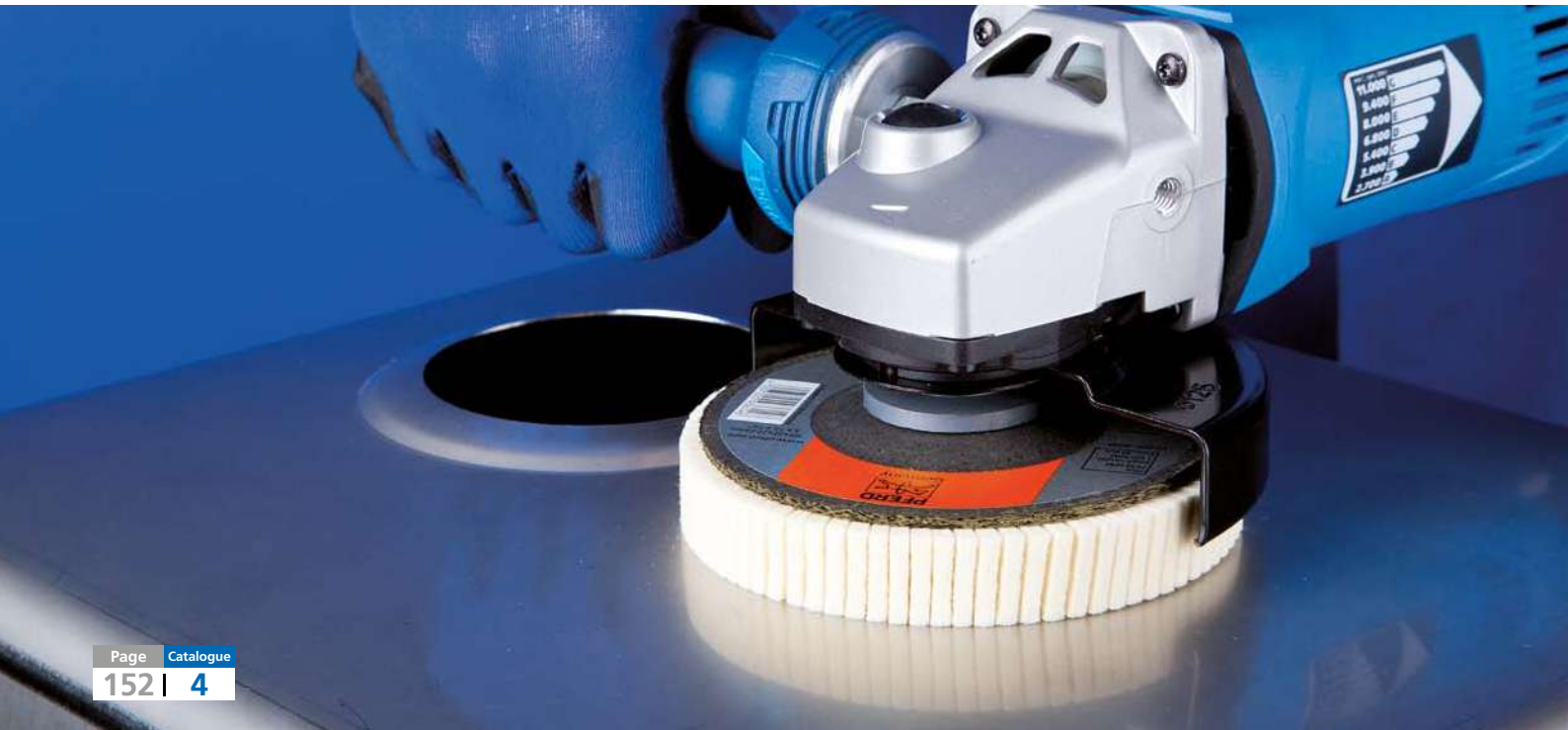
| Suitable for centre hole dia. [mm] | S [mm] | L [mm] | Clamping width [mm] | EAN 4007220 | | Description |
|---|---|---|---|---|---|---|
| 6 | 6 | 25 | 3–10 | 297650 | 1 | BO 6/6 3-10 |
| 10 | 8 | 30 | 6–20 | 297667 | 1 | BO 8/10 6-20 |
| 20 | 12 | 35 | 10–50 | 297674 | 1 | BO 12/20 10-50 |
| | - | - | 10–50 | 297681 | 1 | BO MK 1/20 10-50 |

You can find additional felt polishing tools in the following product families:


**COMBICLICK:**
CC-FR, page 18

**COMBIDISC:**
CD-FR, page 42

**Short belts:**
P-BA, page 51



PFERD offers grinding pastes for use in extremely fine grinding work, such as when grinding in valve seats, shaft bearings and as a preparation for polishing with felt polishing tools and cloth rings.

PFERD offers five different polishing paste bars that are marked with different colours, which enables them to be easily assigned to the respective application task. You can find the key for the respective colours in the table below.

## Advantages:

- High productivity.
- Quick results.
- Coordinated system.

## Materials that can be worked:

- Can be used on nearly all materials.

## Applications:

- Polishing
- Step-by-step fine grinding

## Grinding pastes SFP

Oil-soluble grinding pastes with sharp-edged SiC grain.

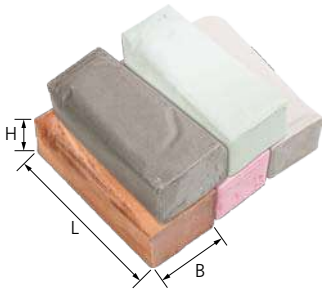
| Grit size | Contents [g] | EAN 4007220 | | Description |
|---|---|---|---|---|
| 90 | 250 | 153963 | 1 | SFP 90 |
| 150 | 250 | 153970 | 1 | SFP 150 |
| 280 | 250 | 153987 | 1 | SFP 280 |
| 360 | 250 | 153994 | 1 | SFP 360 |
| 600 | 250 | 298664 | 1 | SFP 600 |
| 800 | 250 | 154007 | 1 | SFP 800 |

## Polishing paste bars PP

Apart from being used with felt tools, polishing pastes are also used in combination with cloth rings for pre-polishing and high-gloss polishing. If the intention is to achieve very smooth surface finishes, use several or even all types successively.

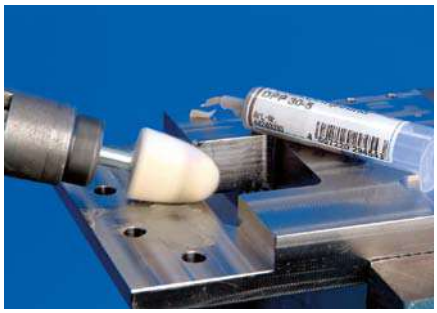
Intended applications for the different types:
ST (sisal cloth) = Coarse pre-polishing with PP 1, PP 2 or PP 3
TH (hard cloth) = Pre-polishing with PP 1, PP 2 or PP 3
TW (soft cloth) = High-gloss polishing with PP 4 or PP 5
FL (flannel) = High-gloss polishing/buffing with PP 4 or PP 5

Polishing paste bars are available in a small pack and a bulk pack.




| Type | Use for | Contents [g] | EAN 4007220 | Colour | B [mm] | H [mm] | L [mm] | | Description |
|---|---|---|---|---|---|---|---|---|---|
| **Bulk pack** | | | | | | | | | |
| pre-polishing | Steel + stainless steel (INOX) | 1,100 | 294567 | green | 70 | 50 | 140 | 1 | G-PP 1 VP STEELOX |
| | Aluminium + brass | 1,300 | 294574 | grey | 70 | 50 | 140 | 1 | G-PP 2 VP ALU |
| | Non-ferrous metals | 1,150 | 294581 | brown | 70 | 50 | 140 | 1 | G-PP 3 VP NON-FERROUS |
| high-gloss polishing | All metals | 1,150 | 294598 | pink | 70 | 50 | 140 | 1 | G-PP 4 HGP UNIVERSAL |
| | plastics | 1,100 | 294604 | beige | 70 | 50 | 140 | 1 | G-PP 5 HGP PLAST |
| **Small pack** | | | | | | | | | |
| pre-polishing | Steel + stainless steel (INOX) | 108 | 955666 | green | 25 | 30 | 90 | 1 | K-PP 1 VP STEELOX |
| | Aluminium + brass | 142 | 955673 | grey | 25 | 30 | 90 | 1 | K-PP 2 VP ALU |
| | Non-ferrous metals | 111 | 955680 | brown | 25 | 30 | 90 | 1 | K-PP 3 VP NON-FERROUS |
| high-gloss polishing | All metals | 132 | 955697 | pink | 25 | 30 | 90 | 1 | K-PP 4 HGP UNIVERSAL |
| | plastics | 104 | 955703 | beige | 25 | 30 | 90 | 1 | K-PP 5 HGP PLAST |

# Grinding oils and polishing pastes
## Diamond polishing pastes



Diamond polishing pastes are used for work on very hard materials, such as tungsten carbide and hardened steels. They are used in combination with felt polishing elements or discs.
Diamond polishing pastes can be diluted and dissolved with water and alcohol.

Diamond polishing pastes in the ECO type are a cheaper alternative.

Available grit sizes:
30 (coarse) = P 500
15 (medium) = P 1200
10 (medium-fine) = P 2000
7 (fine) = P 3000
3 (very fine) = P 5000
1 (ultra-fine) = P 14000
(P = Grit size according to ISO 6344)

### Advantages:

- High productivity.
- Quick results.
- Precisely coordinated granulation rows.

### Materials that can be worked:

- Can be used on almost all very hard materials, such as tungsten carbide and hardened steels.

### Applications:

- Polishing
- Step-by-step fine grinding

### Ordering notes:

- The grit sizes are specified in µm.
- Please complete the description with the desired contents.
- When ordering, please state the EAN or the full description.

### Diamond polishing pastes DPP, Diamond polishing pastes type ECO DPP

Diamond polishing pastes guarantee quick and efficient work, particularly in tool- and mould-making.

**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 wheel) is used.

**Ordering notes:**

- Please complete the description with the desired grit size.

| Grit size [µm] | Contents [g] | | | Colour of sealing cap | | Description |
|---|---|---|---|---|---|---|
| | 5 | 20 | 10 | | | |
| | EAN 4007220 | | | | | |
| **DPP** | | | | | | |
| 30 | 294543 | 535981 | - | brown | 1 | DPP 30-... |
| 15 | 294536 | 535998 | - | blue | 1 | DPP 15-... |
| 10 | 025468 | 025499 | - | light blue | 1 | DPP 10-... |
| 7 | 294505 | 536001 | - | red | 1 | DPP 7-... |
| 3 | 294499 | 536018 | - | green | 1 | DPP 3-... |
| 1 | 025451 | 025475 | - | yellow | 1 | DPP 1-... |
| **ECO DPP** | | | | | | |
| 30 | - | - | 025550 | brown | 1 | DPP ECO 30-... |
| 15 | - | - | 025543 | blue | 1 | DPP ECO 15-... |
| 10 | - | - | 025536 | light blue | 1 | DPP ECO 10-... |
| 7 | - | - | 025529 | red | 1 | DPP ECO 7-... |
| 3 | - | - | 025512 | green | 1 | DPP ECO 3-... |
| 1 | - | - | 025505 | yellow | 1 | DPP ECO 1-... |

## Special diluent for diamond polishing pastes PSP

The diluent is used to keep the lubricating layer between the support and the workpiece consistent during polishing work.

**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.

| Contents [ml] | EAN 4007220 | | Description |
|---|---|---|---|
| 125 | 294550 | 1 | PSP 125 |

## Grinding oils

Three types of grinding oil are supplied:
- **"Fe" for steel:** Offers protection against corrosion.
- **"NE" for non-ferrous metals and stainless steel (INOX):** Prevents unwelcome marks on the workpiece, particularly on stainless steel surfaces.
- **"ALU" for aluminium:** Prevents the grinding tool from clogging.

### Advantages:
- Longer tool life.
- Lower temperature development due to lubricating and cooling effect.
- Less adherence of chips to the abrasive coating.
- Improved surface finish.

### Applications:
- Polishing
- Step-by-step fine grinding

### Ordering notes:
- The transportation of the aerosol cans by air, sea and rail is not possible.

### Materials that can be worked:
- Can be used on nearly all materials.

## Grinding oils

Grinding oils are used in applications with coated abrasive tools.

| Use for | Contents [ml] | EAN 4007220 | | Description |
|---|---|---|---|---|
| **Spray can** | | | | |
| steel | 400 | 147597 | 1 | 410 Fe |
| non-ferrous metals, stainless steel (INOX) | 400 | 147603 | 1 | 411 NE |
| aluminium | 400 | 791332 | 1 | 412 ALU |
| **Canister 1 l** | | | | |
| steel | 1,000 | 294444 | 1 | 410/1 Fe |
| non-ferrous metals, stainless steel (INOX) | 1,000 | 294451 | 1 | 411/1 NE |
| aluminium | 1,000 | 791349 | 1 | 412/1 ALU |
| **Canister 5 l** | | | | |
| steel | 5,000 | 294468 | 1 | 410/5 Fe |
| non-ferrous metals, stainless steel (INOX) | 5,000 | 294475 | 1 | 411/5 NE |
| aluminium | 5,000 | 791356 | 1 | 412/5 ALU |

The highly effective cleaners and maintenance products are practically applied to a very wide range of components.

## Materials that can be worked:

- Can be used on nearly all materials.

## Applications:

- Cleaning
- Preserving
- Protecting

## Universal cleaner UC-S

Highly effective, universal workshop cleaner for cleaning and de-greasing components as a preparation for painting. Removes polishing paste residue, processing oils, corrosion-protection oils, light waxes and other types of contamination.

**Advantages:**
- Biodegradable surfactants.
- Short drying time.
- Non-combustible.
- Suitable for versatile use.

**Recommendations for use:**
- Spray, briefly leave on and wipe off with a suitable cloth.

| Contents [ml] | EAN 4007220 | | Description |
|---|---|---|---|
| 500 | 027349 | 1 | UC-S 500 |

## INOX SHINER IS-S maintenance product

Maintenance products for protecting and caring for stainless steel (INOX), aluminium, non-ferrous metals, glass and plastic. Removes dust, fingerprints, oil and light scale deposits.

**Advantages:**
- Leaves a dry, glossy protective film.
- Very easy to use.
- No cleaning marks.
- Suitable for versatile use.

**Recommendations for use:**
- Spray, apply evenly on the surface with a soft dry cloth or paper towel and wipe dry.
- Conduct a compatibility test beforehand on surfaces with a mirror finish.

| Contents [ml] | EAN 4007220 | | Description |
|---|---|---|---|
| 500 | 027332 | 1 | INOX SHINER IS-S 500 |

# VICTO GRAIN

**Further information about the high-performance abrasive grain VICTOGRAIN as well as an overview of all respective products can be found on the following pages.**

PFERD

www.pferd.com

**VICTO**GRAIN products are some of the most effective grinding tools in the world.

PFERD's triangular, precision-formed abrasive grain achieves uniquely high abrasive performance.

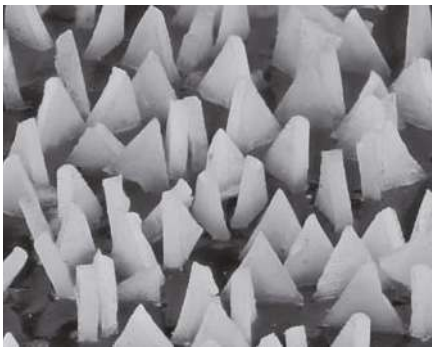
The **VICTO**GRAIN abrasive grain triangles are identical in shape and size and their cutting edges are applied to the workpiece at the optimum angle, meaning the grain needs very little energy to penetrate the workpiece. As such, the user benefits from an efficient machining process with

- fast working,
- a long tool life,
- less heat build-up in the workpiece, and
- a lower power output required for the tool drive.

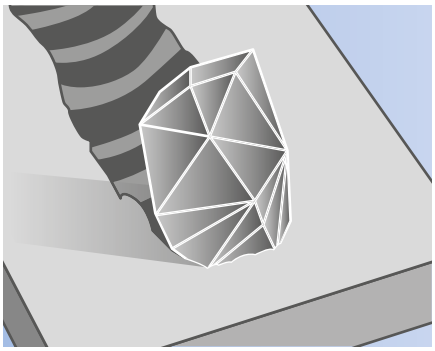
The **VICTO**GRAIN abrasive grain triangles are fixed to the substrate on one of their sides.
This means they are securely fixed in place and, together with their slim design, offer an extremely large chip space in order to further improve machining efficiency.

The structure of the triangular **VICTO**GRAIN has also been specially adapted to maximize results. The very small crystals inside the triangles ensure optimal wear characteristics as sharp cutting edges are always exposed, but only the minimum amount of abrasive grain/the triangle breaks off.

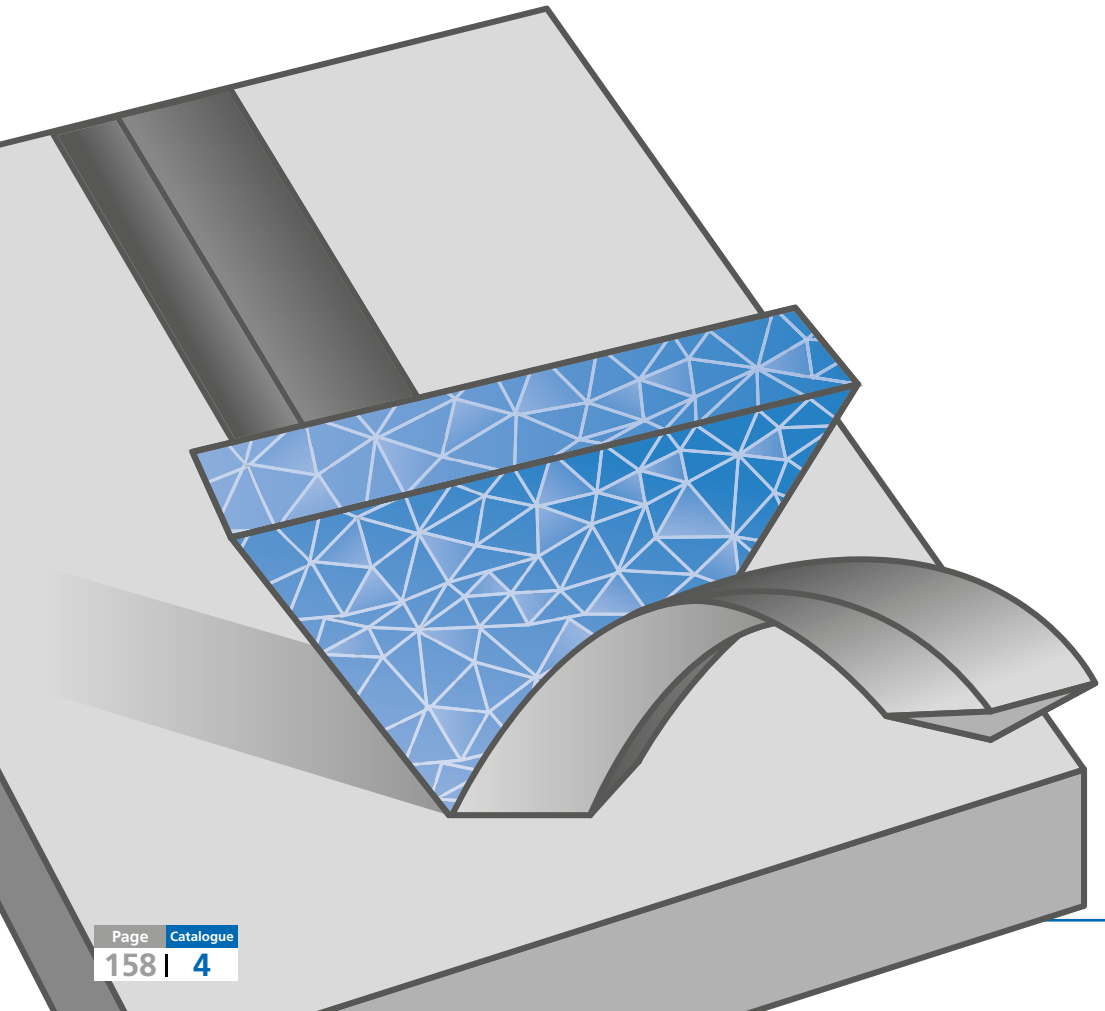
By combining all these properties together, users benefit from optimal, constant performance during cool grinding and an extremely long tool life together with consistent workpiece surface roughness.



The **VICTO**GRAIN abrasive grain is optimally aligned



Conventional abrasive grain

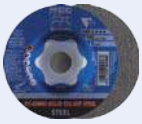


**VICTO**GRAIN abrasive grain

## Here is an overview of all VICTOGRAIN products which can be found in catalogue section 4:

| Picture | Description | Page |
|---|---|---|
|  | COMBICLICK fibre discs<br>**VICTO**GRAIN-COOL | 15 |
|  | Fibre discs<br>**VICTO**GRAIN-COOL | 23 |
|  | COMBIDISC abrasive discs<br>**VICTO**GRAIN-COOL | 36 |
|  | COMBIDISC midget fibre discs<br>**VICTO**GRAIN-COOL | 36 |

## Here is an overview of all VICTOGRAIN products which can be found in catalogue section 6:

| Picture | Description | Page |
|---|---|---|
|  | CC-GRIND grinding discs<br>CC-GRIND-SOLID SGP STEEL | 49 |
|  | CC-GRIND grinding discs<br>CC-GRIND-SOLID SGP INOX | 49 |
|  | CC-GRIND grinding discs<br>CC-GRIND-FLEX SGP STEEL | 50 |

# Quality tools from a single source


## Catalogue section 1

Files


## Catalogue section 2

Milling tools


## Catalogue section 3

Mounted points


## Catalogue section 4

Fine grinding and polishing tools


## Catalogue section 5

Diamond and CBN tools


## Catalogue section 6

Cut-off wheels, flap discs and grinding wheels


## Catalogue section 7

Cut-off wheels for stationary applications


## Catalogue section 8

Industrial power brushes


## Catalogue section 9

Tool drives

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