



Mounted points

3



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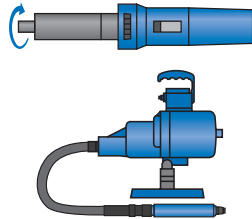


Mounted points

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| Drive spindle extensions | 8 |

Mounted points



For steel and cast steel

- STEEL 9
- STEEL EDGE 13

For materials that are difficult to machine

- TOUGH 22

For stainless steel (INOX)

- INOX 26
- INOX EDGE 28

For soft non-ferrous metals

- ALU 31

For grey and nodular cast iron

- CAST 32
- CAST EDGE 34

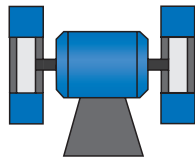
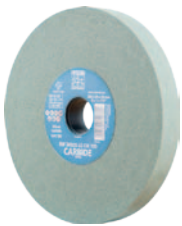
For foundries

- CAST EDGE 36
- CAST STEEL 38

For plastics

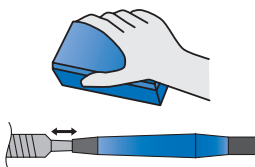
- RUBBER 40

Bench grinding wheels



- UNIVERSAL type 42
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- CARBIDE type 43

Grinding and polishing stones



- UNIVERSAL type 45
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Hand dressers



- Dressing stones 46
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- Diamond dressers 46

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 are happy to help.

Just get in touch! Our worldwide sales addresses can be found at: www.pferd.com



PFERD TOOL-CENTER

On the TOOL-CENTER, the point of sale from PFERD, you will find all the important information required for selecting the most appropriate tool.

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



3



PFERD packaging

Mounted points from PFERD are delivered in protective plastic pouches. The transparent front of the packaging enables you to immediately identify the shape, colour and grain of the tools. The European standard holes mean that all packs can be displayed on the **PFERD TOOL-CENTER**. CAST STEEL and CAST EDGE mounted points for foundries are delivered separately in robust industrial packaging (IP).

The packaging units (PU) for the individual tools are listed in the product tables. The packaging labels contain technical information, the description, the EAN code and the item number.



PFERD quality

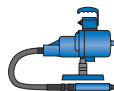
Mounted points, bench grinding wheels, hand dressers and grinding and polishing stones from PFERD are developed, manufactured and tested in accordance with stringent quality requirements.

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.

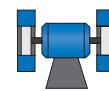
PFERD quality management is certified according to ISO 9001.



Straight grinder



Flexible shaft



Bench grinder



Manual filing tool



Manual application



Detailed information and ordering data for Poliflex fine grinding points can be found in catalogue section 4.



Detailed information and ordering data for diamond grinding points can be found in catalogue section 5.



All tools
and more information:
www.pferd.com

Mounted points

The fast way to the best tool

PFERD offers a very extensive range of ceramic-bonded and resinoid-bonded mounted points. Designed to meet individual grinding tool application needs, these products come in a broad range of grain types, grit sizes, hardness grades and shapes. The mounted points are manufactured on modern production lines to high standards of dimensional accuracy and stability, consistent quality and close tolerances. To select the correct mounted point, the material, main fields of application and specific operating requirements have to be taken into consideration. This overview shows which types (abrasives and bonds) are suitable for the various materials and the tasks at hand.

1 Material group

The various material groups are colour-coded and form the starting point for choosing the most appropriate mounted point.

2 Application

After the material, the application must be selected. This differentiation is necessary in order to find the optimum mounted point and correct bond type. The mounted point bond, hardness and grain mixture have a decisive impact on the abrasive performance, tool life and aggressiveness of the tools:

| 1 Material group | | | Bond ▶ |
|---------------------------|---|--|---|
| | | | 3 Mounted point type ▶ |
| | | | Abrasive ▶ |
| | | | Recommended cutting speed ▶ |
| | | | 2 Application ▼ |
| Steel, cast steel | Steels up to 1,200 N/mm ² (< 38 HRC) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels | General use on edge and surface Surface grinding with high stock removal rate Edge grinding with high dimensional stability |
| | Hardened, heat-treated steels over 1,200 N/mm ² (> 38 HRC) | Tool steels, tempering steels, alloyed steels | General use on edge and surface Surface grinding with high stock removal rate Edge grinding with high dimensional stability |
| | Cast steel | Non-alloyed cast steel, low-alloyed cast steel | General use on edge and surface Surface grinding with high stock removal rate Edge grinding with high dimensional stability |
| Stainless steel (INOX) | Rust and acid-resistant steels | Austenitic and ferritic stainless steels | Surface grinding with high stock removal rate Edge grinding with high dimensional stability |
| Non-ferrous metals | Soft non-ferrous metals, non-ferrous metals | Aluminium alloys, brass, copper, zinc | General use on edge and surface |
| | Hard non-ferrous metals | Bronze, titanium, titanium alloys, hard aluminium alloys | |
| | High-temperature-resistant materials | Nickel-based and cobalt-based alloys (engine and turbine construction) | |
| Cast iron | Grey cast iron, white cast iron | Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS) | Surface grinding with high stock removal rate Edge grinding and grinding out of metal contamination with high dimensional stability |
| Plastics, other materials | | Fibre-reinforced plastics, thermoplastics, rubber, wood | General use on edge and surface 4 Catalogue page ▶ |











- **General use:** For general use on surfaces and edges, the emphasis is on the balance between abrasive performance and tool life.
- **Surface grinding:** In surface grinding, the mounted points are subject to lower loads. The mounted point bond is therefore comparatively soft and has been designed to give high stock removal rates.
- **Edge grinding:** In edge grinding, the mounted points must be dimensionally stable. The mounted point bond is therefore comparatively hard and designed for a long tool life.

3 Mounted point type

After determining the application (see column ②), the type is selected in the horizontal row. The "highly suitable" types are indicated by a black dot (●). Further "suitable" types are indicated by an open dot (○).

4 Reference to catalogue page

Further information about the hardness grades, mounted point shapes and dimensions, as well as grit sizes, can be found on the corresponding catalogue pages stated in the table.

| Resinoid bond | | Vitrified bond | | | | | | | |
|---|---|---|---|---|---|--|---|---|---|
| INOX | INOX EDGE | RUBBER | ALU | TOUGH | CAST | CAST STEEL | STEEL | STEEL EDGE | CAST EDGE |
| ADW | AN | AH | CN | AWCO | ARN | ADR | ADW | AR | CU |
|  |  |  |  |  |  |  |  |  |  |
| 35–50 m/s | 35–50 m/s | 5–20 m/s | 20–40 m/s | 30–50 m/s | 30–50 m/s | 25–40 m/s | 30–50 m/s | 25–40 m/s | 30–50 m/s |
| | | | | | | | ● | | |
| ○ | | | | | | | ● | ○ | |
| | ○ | | | | | | ○ | ● | |
| | | | | | | | ● | | |
| | | | | ● | | | ○ | | |
| | | | | ● | | | | ○ | |
| | | | | | | ● | | | |
| ○ | | | | | ○ | ○ | ● | ○ | |
| | ○ | | | | | ○ | ○ | ● | |
| ● | ○ | | | | | | ○ | | |
| ○ | ● | | | | | | | ○ | |
| ○ | | | ● | | | | | | |
| ● | | | ○ | ● | | | ○ | | |
| ○ | | | | ● | | | | | |
| ○ | ○ | | | | ● | ○ | | ○ | ○ |
| ○ | ○ | | | | ○ | ○ | | ○ | ● |
| | | ● | ○ | | | | | | |
| 26 | 28 | 40 | 31 | 22 | 32 | 38 | 9 | 13 | 36 |

● = highly suitable

○ = suitable



| Mounted point dia. [mm] | Cutting speeds [m/s] | | | | | | |
|-------------------------|-------------------------|---------|---------|---------|---------|---------|---------|
| | 10 | 15 | 20 | 25 | 30 | 40 | 50 |
| | Rotational speeds [RPM] | | | | | | |
| 2 | 95,500 | 143,200 | 191,000 | 238,700 | 286,500 | 382,000 | 477,500 |
| 3 | 63,700 | 95,500 | 127,300 | 159,200 | 191,000 | 254,600 | 318,300 |
| 4 | 47,700 | 71,600 | 95,500 | 119,400 | 143,200 | 191,000 | 238,700 |
| 5 | 38,200 | 57,300 | 76,400 | 95,500 | 114,600 | 152,800 | 191,000 |
| 6 | 31,800 | 47,700 | 63,700 | 79,600 | 95,500 | 127,300 | 159,200 |
| 7 | 27,300 | 40,900 | 54,600 | 68,200 | 81,900 | 109,100 | 136,400 |
| 8 | 23,900 | 35,800 | 47,700 | 59,700 | 71,600 | 95,500 | 119,400 |
| 10 | 19,100 | 28,600 | 38,200 | 47,700 | 57,300 | 76,400 | 95,500 |
| 12 | 15,900 | 23,900 | 31,800 | 39,800 | 47,700 | 63,700 | 79,600 |
| 14 | 13,600 | 20,500 | 27,300 | 34,100 | 40,900 | 54,600 | 68,200 |
| 16 | 11,900 | 17,900 | 23,900 | 29,800 | 35,800 | 47,700 | 59,700 |
| 20 | 9,500 | 14,300 | 19,100 | 23,900 | 28,600 | 38,200 | 47,700 |
| 25 | 7,600 | 11,500 | 15,300 | 19,100 | 22,900 | 30,600 | 38,200 |
| 32 | 6,000 | 9,000 | 11,900 | 14,900 | 17,900 | 23,900 | 29,800 |
| 40 | 4,800 | 7,200 | 9,500 | 11,900 | 14,300 | 19,100 | 23,900 |
| 50 | 3,800 | 5,700 | 7,600 | 9,500 | 11,500 | 15,300 | 19,100 |

Recommended rotational speed range

Refer to the table for the recommended rotational speed based on the diameter and cutting speed of your tool. The recommended cutting speeds can be found in the introductory descriptions of the various hardness grades in this catalogue.

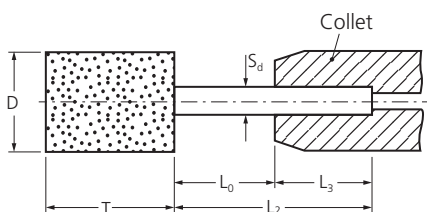
Note:

The optimum rotational speeds can be found in the product tables. These have been limited to 150,000 RPM, as conventional drives do not permit a higher rotational speed.

Example:

Mounted point dia. 20 mm
STEEL EDGE
Cutting speed: 30–50 m/s

Rotational speed: 28,600–47,700 RPM



Explanation of the code system according to EN 12413

D = Mounted point outer dia.
T = Mounted point width
 S_d = Shank dia.

L_0 = Unsupported shank length
 L_2 = Shank length
 L_3 = Clamping length of shank

Safety notes

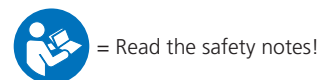
All PFERD mounted points are approved for a maximum operating speed of 50 m/s. The maximum permitted rotational speeds for the various shank lengths and shank diameters are defined in DIN 69170 based on EN 12413. These must be adhered to in order to avoid buckling of the shank during use. Regardless of the shank length, the clamping length (L_3) of the shank must be at least 10 mm.

The maximum permitted rotational speed calculated according to EN 12413 is determined by the following factors:

- Shape and dimensions of the mounted point
- Diameter of the steel shank S_d
- Unsupported shank length L_0

Each packaging unit of PFERD mounted points comes with rotational speed specifications for the unsupported shank length (L_0) of that mounted point. Proper concentric accuracy and correct clamping of the tool drive must also be ensured.

Tables with the maximum permitted rotational speeds for the entire PFERD mounted point product range are available on request.



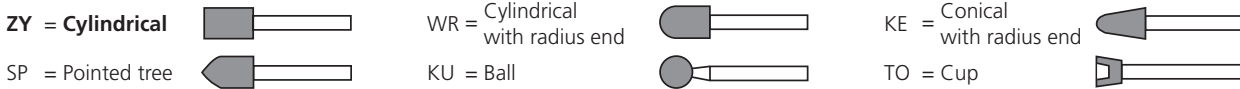
Applications of mounted points

- Work on edges (chamfering, rounding)
- Deburring
- Grinding out
- Levelling
- Surface work
- Work on weld seams
- Finishing
- Grouting
- Roughening (RUBBER type)

ZY 2025 6 ADW 30 M 5 V STEEL

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Shapes according to DIN 69170



US shapes according to ANSI B74.2

Series W (cylindrical mounted points in inch dimensions), series A and B (other shapes)

② Dimensions

The first digits of the description indicate the mounted point outer diameter D and mounted point width T in mm:
 3 mm x 6 mm = 0306 **20 mm x 25 mm = 2025** 50 mm x 13 mm = 5013

US dimensions

Series W cylindrical mounted points and series A and B shaped mounted points are specified by a number (e.g. W 143).

③ Shanks

Only the shank diameter is given in the description. The shank length is determined as follows:

Shank dia. 3 mm = 30 mm shank length Shank dia. 1/8" = 1 1/4" shank length
Shank dia. 6 mm = 40 mm shank length Shank dia. 1/4" = 1 1/2" shank length
 Shank dia. 8 mm = 40 mm shank length

④ Abrasives

In general, two grain types are used, with internationally defined descriptions according to ISO 525:
 A = Aluminium oxide (Al₂O₃) C = Silicon carbide (SiC)

The following abbreviations are used in order to specify the grain mixtures more precisely, beyond ISO 525:

AD = Aluminium oxide, dark red **ADW = Aluminium oxide mixture AD + AW**
 AW = Aluminium oxide, white ARN = Aluminium oxide mixture AR + AN
 AR = Aluminium oxide, pink ADR = Aluminium oxide mixture AD + AR
 AN = Aluminium oxide, regular AWCO = Aluminium oxide mixture AW + CO
 AH = Bubble grain aluminium oxide
 CN = Silicon carbide, green
 CU = Silicon carbide, grey
 CO = Ceramic oxide grain

⑤ Grit sizes according to ISO 525 and ISO 8486

The grit sizes used in PFERD mounted points are determined by the shape and diameter of the mounted point. In this example, **grit size 30** is used.

⑥ Hardness grades according to ISO 525

Hardness grades are classified using letters in alphabetical order to specify the hardness from soft to hard. This example concerns a mounted point with **hardness M**.

| Hardness grade coding | | | | Property |
|-----------------------|----------|---|---|----------------|
| A | B | C | D | Extremely soft |
| E | F | G | – | Very soft |
| H | I | J | K | Soft |
| L | M | N | O | Medium |
| P | Q | R | S | Hard |
| T | U | V | W | Very hard |
| X | Y | Z | – | Extremely hard |

⑦ Structure according to ISO 525

The internationally valid scale for structural density ranges from 1 = dense to 14 = open (porous) structure. In this example, the structural density is specified by the number **5**.

⑧ Bond according to ISO 525

Bond types are indicated with the following internationally standardized letters:
V = Vitrified bond
 B = Resinoid bond

⑨ Material-specific description

The material-specific description indicates the material to be processed.

STEEL = Universal for steel and cast steel
 STEEL EDGE = Specialist for use on edges for steel and cast steel





Mounted points with a shank diameter of 3, 6 and 8 mm can be extended with drive spindle extensions. They allow access to hard-to-reach areas. The drive spindle extension is mounted in the collet of the tool drive (air grinder or electric grinder), or in the handpiece of the flexible shaft. In some applications, spindle extensions are an economical alternative to customized mounted points with long shanks.

Safety notes:

- For safety reasons, it is not possible to use drive spindle extensions in combination with mounted points that have long shanks.
- For additional safety notes, please refer to catalogue section 9.



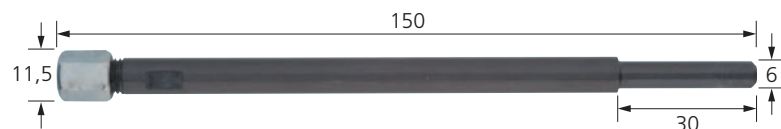
More detailed information and ordering data for drive spindle extensions can be found in catalogue section 9.



= Read the safety notes!

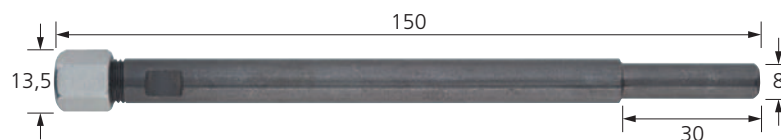
Extension SPV 150-3 S6 for shank diameter of 3 mm

EAN 4007220185308



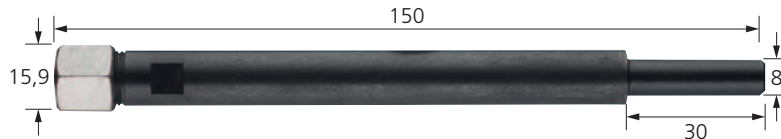
Extension SPV 150-6 S8 for shank diameter of 6 mm

EAN 4007220185315



Extension SPV 150-8 S8 for shank diameter of 8 mm

EAN 4007220184400



Extension SPV 100-6 S8 for shank diameter of 6 mm

EAN 4007220185261



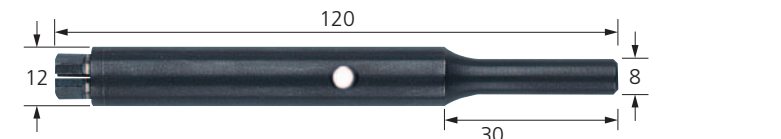
Extension SPV 100-6 SPG 6 for shank diameter of 6 mm

EAN 4007220656051



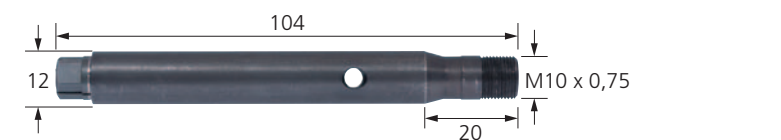
Extension SPV 75-6 S8 for shank diameter of 6 mm

EAN 4007220185278



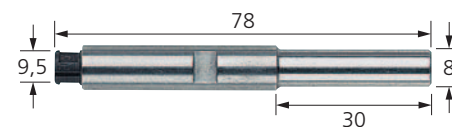
Extension SPV 75-6 SPG 6 for shank diameter of 6 mm

EAN 4007220333143



Extension SPV 50-3 S8 for shank diameter of 3 mm

EAN 4007220185254



STEEL mounted points

The STEEL type is the most universal bond for machining steel and cast steel. It is extremely well suited to grinding high-speed steel (HSS) moulded parts and weld dressing on steel constructions.

Advantages:

- Good grinding performance and stock removal rate in universal use on steel materials.
- Shortened grinding times and thus cost savings due to the high stock removal rate.
- Particularly suitable for work on surfaces and edges.

Materials that can be worked:

- Steel
- Cast steel

Type:

- Vitrified bond
- Aluminium oxide mixture of dark-red and white aluminium oxide

Recommendations for use:

- STEEL mounted points perform best at a cutting speed of 30 to 50 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Ordering notes:

- Please complete the description with the desired grit size.

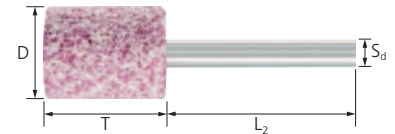
Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



STEEL, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.



| D x T [mm] | Grit size | | | | | | US shape | Opt. RPM | Max. RPM | | Description |
|-------------|-----------|----|----|----|----|-----|----------|----------|----------|--|-------------|
| | 24 | 30 | 46 | 60 | 80 | 100 | | | | | |
| EAN 4007220 | | | | | | | | | | | |

Shank dia. 3 x 30 mm [S_d x L₂]

| | | | | | | | | | | | |
|---------|---|---|--------|--------|--------|--------|-------|---------|---------|----|-----------------------------|
| 2 x 5 | - | - | - | - | - | 094365 | W 141 | 150,000 | 201,800 | 10 | ZY 0205 3 ADW ... M5V STEEL |
| 3 x 6 | - | - | - | - | - | 094518 | W 144 | 150,000 | 206,100 | 10 | ZY 0306 3 ADW ... M5V STEEL |
| 4 x 8 | - | - | - | 094679 | - | 094662 | - | 150,000 | 175,100 | 10 | ZY 0408 3 ADW ... M5V STEEL |
| 5 x 10 | - | - | - | 094877 | - | 094860 | W 153 | 130,000 | 130,700 | 10 | ZY 0510 3 ADW ... M5V STEEL |
| 6 x 13 | - | - | - | 095140 | - | 095133 | W 163 | 93,600 | 93,600 | 10 | ZY 0613 3 ADW ... M5V STEEL |
| 8 x 10 | - | - | 095331 | - | 095348 | - | W 169 | 87,600 | 87,600 | 10 | ZY 0810 3 ADW ... M5V STEEL |
| 8 x 16 | - | - | 095522 | - | 659878 | - | - | 61,000 | 61,000 | 10 | ZY 0816 3 ADW ... M5V STEEL |
| 10 x 2 | - | - | - | - | - | 098653 | W 172 | 85,000 | 95,400 | 10 | ZY 1002 3 ADW ... M5V STEEL |
| 10 x 13 | - | - | 095706 | - | - | - | W 176 | 58,400 | 58,400 | 10 | ZY 1013 3 ADW ... M5V STEEL |
| 13 x 3 | - | - | - | 098783 | - | 098776 | W 122 | 65,000 | 73,400 | 10 | ZY 1303 3 ADW ... M5V STEEL |


Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | | | | | | |
|---------|---|---|--------|--------|--------|--------|-------|---------|---------|----|-----------------------------|
| 3 x 6 | - | - | - | - | - | 094457 | W 144 | 150,000 | 206,100 | 10 | ZY 0306 6 ADW ... M5V STEEL |
| 4 x 8 | - | - | - | 094570 | - | - | - | 150,000 | 177,400 | 10 | ZY 0408 6 ADW ... M5V STEEL |
| 5 x 10 | - | - | - | 094754 | - | - | W 153 | 130,000 | 157,800 | 10 | ZY 0510 6 ADW ... M5V STEEL |
| 6 x 13 | - | - | - | 095034 | - | 095027 | W 163 | 131,500 | 131,500 | 10 | ZY 0613 6 ADW ... M5V STEEL |
| 8 x 10 | - | - | - | - | 095263 | - | W 169 | 110,000 | 119,300 | 10 | ZY 0810 6 ADW ... M5V STEEL |
| 8 x 16 | - | - | 095416 | - | 095423 | - | - | 110,000 | 119,300 | 10 | ZY 0816 6 ADW ... M5V STEEL |
| 10 x 13 | - | - | 095614 | - | 095621 | - | W 176 | 85,000 | 95,400 | 10 | ZY 1013 6 ADW ... M5V STEEL |
| 10 x 20 | - | - | 095850 | - | 095867 | - | W 177 | 85,000 | 95,400 | 10 | ZY 1020 6 ADW ... M5V STEEL |
| 10 x 25 | - | - | 095959 | - | 659892 | - | W 178 | 83,200 | 83,200 | 10 | ZY 1025 6 ADW ... M5V STEEL |
| 10 x 32 | - | - | 096017 | - | 659908 | - | W 179 | 62,800 | 62,800 | 10 | ZY 1032 6 ADW ... M5V STEEL |
| 13 x 13 | - | - | 096093 | - | - | - | W 185 | 65,000 | 73,400 | 10 | ZY 1313 6 ADW ... M5V STEEL |
| 13 x 20 | - | - | 096260 | - | 659915 | - | W 186 | 65,000 | 73,400 | 10 | ZY 1320 6 ADW ... M5V STEEL |
| 13 x 25 | - | - | 096345 | - | 096352 | - | W 187 | 65,000 | 66,000 | 10 | ZY 1325 6 ADW ... M5V STEEL |
| 13 x 40 | - | - | 098035 | - | - | - | W 188 | 42,400 | 42,400 | 10 | ZY 1340 6 ADW ... M5V STEEL |
| 16 x 4 | - | - | 098912 | - | 660003 | - | - | 55,000 | 59,600 | 10 | ZY 1604 6 ADW ... M5V STEEL |

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Mounted points

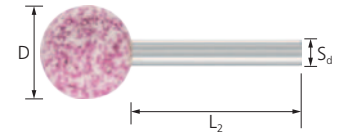
For universal use on steel and cast steel


| D x T [mm] | Grit size | | | | | | US shape | Opt. RPM | Max. RPM |  | Description |
|---|-----------|--------|--------|--------|--------|-----|-------------|-------------|-------------|---|-----------------------------|
| | 24 | 30 | 46 | 60 | 80 | 100 | | | | | |
| EAN 4007220 | | | | | | | | | | | |
| 16 x 20 | - | 096451 | - | 096468 | - | - | W 195 | 55,000 | 59,600 | 10 | ZY 1620 6 ADW ... M5V STEEL |
| 16 x 32 | - | 096598 | - | 096604 | - | - | - | 51,200 | 51,200 | 10 | ZY 1632 6 ADW ... M5V STEEL |
| 16 x 40 | - | 096727 | - | - | - | - | - | 40,500 | 40,500 | 10 | ZY 1640 6 ADW ... M5V STEEL |
| 16 x 50 | - | 659922 | - | - | - | - | W 197 | 31,300 | 31,300 | 10 | ZY 1650 6 ADW ... M5V STEEL |
| 20 x 6 | - | - | 099117 | - | 660010 | - | W 201 | 43,000 | 47,700 | 10 | ZY 2006 6 ADW ... M5V STEEL |
| 20 x 20 | - | 096895 | - | 659946 | - | - | W 204 | 43,000 | 47,700 | 10 | ZY 2020 6 ADW ... M5V STEEL |
| 20 x 25 | - | 096994 | - | 097007 | - | - | W 205 | 43,000 | 47,700 | 10 | ZY 2025 6 ADW ... M5V STEEL |
| 20 x 32 | - | 097106 | - | 659953 | - | - | W 206 | 41,100 | 41,100 | 10 | ZY 2032 6 ADW ... M5V STEEL |
| 20 x 40 | - | 097212 | - | 097229 | - | - | W 207 | 32,400 | 32,400 | 10 | ZY 2040 6 ADW ... M5V STEEL |
| 25 x 6 | - | - | 099322 | - | - | - | W 216 | 35,000 | 38,100 | 10 | ZY 2506 6 ADW ... M5V STEEL |
| 25 x 25 | - | 097335 | - | 659977 | - | - | W 220 | 35,000 | 38,100 | 10 | ZY 2525 6 ADW ... M5V STEEL |
| 25 x 32 | - | 097434 | - | - | - | - | - | 32,900 | 32,900 | 10 | ZY 2532 6 ADW ... M5V STEEL |
| 32 x 8 | - | 099575 | - | 660034 | - | - | W 226 | 27,000 | 29,800 | 5 | ZY 3208 6 ADW ... M5V STEEL |
| 32 x 16 | 099667 | - | - | - | - | - | - | 27,000 | 29,800 | 5 | ZY 3216 6 ADW ... M5V STEEL |
| 32 x 20 | 099773 | - | 660065 | - | - | - | W 228 | 27,000 | 29,800 | 5 | ZY 3220 6 ADW ... M5V STEEL |
| 32 x 32 | 097595 | - | 097601 | - | - | - | W 230 | 25,700 | 25,700 | 5 | ZY 3232 6 ADW ... M5V STEEL |
| 32 x 40 | 097717 | - | 659984 | - | - | - | W 231 | 20,300 | 20,300 | 5 | ZY 3240 6 ADW ... M5V STEEL |
| 40 x 6 | - | - | 100455 | - | - | - | W 235 | 22,000 | 23,800 | 5 | ZY 4006 6 ADW ... M5V STEEL |
| 40 x 10 | - | 099889 | - | - | - | - | W 236 | 22,000 | 23,800 | 5 | ZY 4010 6 ADW ... M5V STEEL |
| 40 x 20 | 100028 | - | 100035 | - | - | - | - | 22,000 | 23,800 | 5 | ZY 4020 6 ADW ... M5V STEEL |
| 40 x 40 | 097809 | - | 659991 | - | - | - | W 238 | 16,200 | 16,200 | 5 | ZY 4040 6 ADW ... M5V STEEL |
| 50 x 8 | - | 100509 | - | - | - | - | - | 17,000 | 19,000 | 5 | ZY 5008 6 ADW ... M5V STEEL |
| 50 x 13 | - | 100189 | - | - | - | - | - | 17,000 | 19,000 | 5 | ZY 5013 6 ADW ... M5V STEEL |
| 50 x 25 | - | - | 100325 | - | - | - | W 242 | 17,000 | 19,000 | 5 | ZY 5025 6 ADW ... M5V STEEL |
| Shank dia. 8 x 40 mm [S_a x L₂] | | | | | | | | | | | |
| 50 x 25 | 100554 | - | - | - | - | - | W 242 | 17,000 | 19,000 | 5 | ZY 5025 8 ADW ... M5V STEEL |



STEEL, ball type

The ball shape KU is often used for contour grinding and backside deburring.



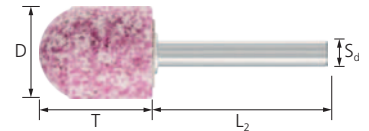
| D [mm] | Grit size | | | | Opt. RPM | Max. RPM |  | Description |
|-------------|-----------|----|----|----|-------------|-------------|---|-------------|
| | 24 | 30 | 46 | 60 | | | | |
| EAN 4007220 | | | | | | | | |


Shank dia. 6 x 40 mm [$S_d \times L_2$]

| | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|----|---------------------------|
| 13 | - | - | 101209 | - | 65,000 | 73,400 | 10 | KU 13 6 ADW ... M5V STEEL |
| 16 | - | 101261 | - | 660140 | 55,000 | 59,600 | 10 | KU 16 6 ADW ... M5V STEEL |
| 20 | - | 101339 | - | 101346 | 43,000 | 47,700 | 10 | KU 20 6 ADW ... M5V STEEL |
| 25 | - | - | - | 660164 | 35,000 | 38,100 | 10 | KU 25 6 ADW ... M5V STEEL |
| 32 | 660171 | - | 660188 | - | 27,000 | 29,800 | 5 | KU 32 6 ADW ... M5V STEEL |

STEEL, cylindrical with radius end type

The cylindrical shape with radius end WR is suitable for a variety of deburring and grinding jobs.



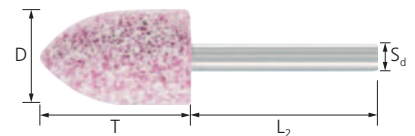
| D x T [mm] | Grit size | | | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|----|-------------|-------------|--|-------------|
| | 30 | 46 | 60 | | | | |
| EAN 4007220 | | | | | | | |


Shank dia. 6 x 40 mm [$S_d \times L_2$]

| | | | | | | | |
|---------|--------|--------|--------|--------|--------|----|-----------------------------|
| 13 x 20 | - | 660096 | - | 65,000 | 73,400 | 10 | WR 1320 6 ADW ... M5V STEEL |
| 20 x 25 | 660119 | - | 660126 | 43,000 | 47,700 | 10 | WR 2025 6 ADW ... M5V STEEL |

STEEL, pointed tree type

The pointed tree shape SP is suitable for machining small holes and bores.



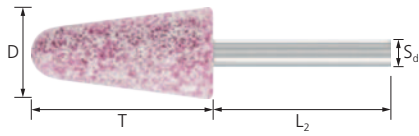
| D x T [mm] | Grit size | | | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|----|-------------|-------------|---|-------------|
| | 30 | 46 | 60 | | | | |
| EAN 4007220 | | | | | | | |

Shank dia. 6 x 40 mm [$S_d \times L_2$]

| | | | | | | | |
|---------|--------|--------|--------|---------|---------|----|-----------------------------|
| 8 x 16 | - | 102008 | - | 110,000 | 119,300 | 10 | SP 0816 6 ADW ... M5V STEEL |
| 13 x 20 | - | 102138 | - | 65,000 | 73,400 | 10 | SP 1320 6 ADW ... M5V STEEL |
| 20 x 32 | 102237 | - | 660256 | 43,000 | 47,700 | 10 | SP 2032 6 ADW ... M5V STEEL |
| 20 x 50 | 102312 | - | - | 30,500 | 30,500 | 10 | SP 2050 6 ADW ... M5V STEEL |
| 25 x 40 | 660270 | - | - | 35,000 | 35,000 | 10 | SP 2540 6 ADW ... M5V STEEL |


Mounted points

For universal use on steel and cast steel



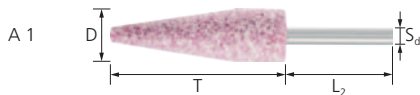
STEEL, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.

| D x T [mm] | Grit size | | | | | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|----|----|----|-------------|-------------|---|-------------|
| | 24 | 30 | 46 | 60 | 80 | | | | |
| EAN 4007220 | | | | | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]


| | | | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|--------|----|-----------------------------|
| 10 x 25 | - | - | 102763 | - | 102770 | 85,000 | 95,400 | 10 | KE 1025 6 ADW ... M5V STEEL |
| 16 x 45 | - | - | 102862 | - | 660300 | 52,000 | 52,000 | 10 | KE 1645 6 ADW ... M5V STEEL |
| 20 x 32 | - | 102671 | - | 660294 | - | 43,000 | 47,700 | 10 | KE 2032 6 ADW ... M5V STEEL |
| 20 x 40 | - | 102961 | - | 660348 | - | 43,000 | 47,700 | 10 | KE 2040 6 ADW ... M5V STEEL |
| 25 x 25 | - | 102534 | - | - | - | 35,000 | 38,100 | 10 | KE 2525 6 ADW ... M5V STEEL |
| 25 x 45 | - | 534687 | - | 660317 | - | 34,000 | 34,000 | 10 | KE 2545 6 ADW ... M5V STEEL |
| 25 x 70 | - | 103043 | - | - | - | 20,400 | 20,400 | 10 | KE 2570 6 ADW ... M5V STEEL |
| 32 x 32 | 660287 | - | 102596 | - | - | 27,000 | 29,800 | 5 | KE 3232 6 ADW ... M5V STEEL |



Series A STEEL

The shape A 1 is excellent for machining small holes and bores.
The shape A 11 is ideal for a variety of deburring and grinding jobs.



| US shape | D x T [mm] | Grit size | Opt. RPM | Max. RPM |  | Description |
|-------------|---------------|-----------|-------------|-------------|---|-------------|
| | | 30 | | | | |
| EAN 4007220 | | | | | | |

Shank dia. 6.35 x 40 mm [S_d x L₂]

| | | | | | | |
|------|---------|--------|--------|--------|----|---------------------------|
| A 1 | 19 x 64 | 114582 | 33,500 | 33,500 | 10 | A 1 6,3 ADW 30 M5V STEEL |
| A 11 | 22 x 50 | 114681 | 30,400 | 30,400 | 10 | A 11 6,3 ADW 30 M5V STEEL |



Mounted point set SSO 5300 STEEL

Contains 100 STEEL type mounted points with shank diameter 6 mm in the most common shapes and dimensions for the most common applications.

Delivered in sales-promoting display box for the point of sale in shops.

Contents:

10 pieces each of:

- ZY 1620
- ZY 2025
- ZY 2506
- ZY 2532
- ZY 3216
- ZY 3232
- ZY 4020
- SP 2032
- KE 2032
- KE 2570

| S _d [mm] | Grit size |  | Description |
|------------------------|-----------|---|----------------|
| | coarse | | |
| EAN 4007220 | | | |
| 6 | 114513 | 1 | SSO 5300 STEEL |

STEEL EDGE mounted points

The STEEL EDGE type is particularly well suited to edge grinding and deburring work on steel and cast steel components. Its applications also include grinding of chamfers in preparation for weld seams and grinding of contours.

Advantages:

- Long tool life and low tool wear due to hard, dimensionally stable bond.
- Economical to use due to the high edge stability even on low-speed tool drives.
- Particularly well suited to work on edges.

Materials that can be worked:

- Steel
- Cast steel

Type:

- Vitrified bond
- Pink aluminium oxide

Recommendations for use:

- STEEL EDGE mounted points perform best at a cutting speed of 25 to 40 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Ordering notes:

- Please complete the description with the desired grit size.

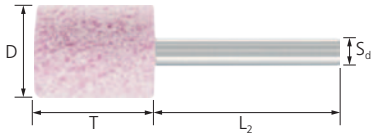
Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



Mounted points

For edge grinding on steel and cast steel



STEEL EDGE, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.

| D x T [mm] | Grit size | | | | | | US shape | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|----|----|----|-----|-------------|-------------|-------------|---|-------------|
| | 24 | 30 | 46 | 60 | 80 | 100 | | | | | |

EAN 4007220


Shank dia. 3 x 30 mm [S_d x L₂]

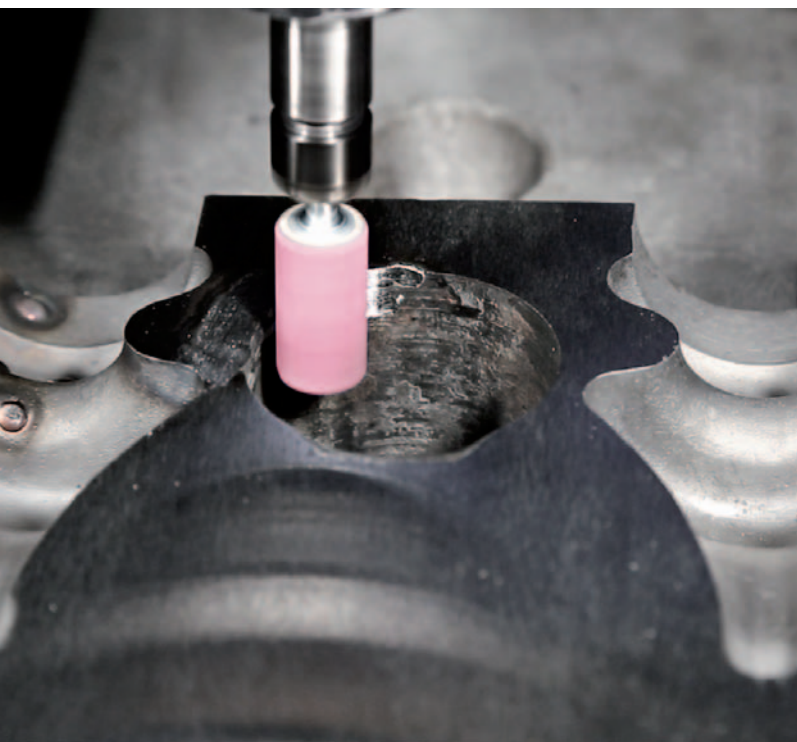
| | | | | | | | | | | | |
|---------|---|---|--------|--------|--------|--------|-------|---------|---------|----|---------------------------------|
| 2 x 5 | - | - | - | - | - | 094372 | W 141 | 150,000 | 201,800 | 10 | ZY 0205 3 AR ... 05V STEEL EDGE |
| 3 x 6 | - | - | - | - | - | 094525 | W 144 | 150,000 | 206,100 | 10 | ZY 0306 3 AR ... 05V STEEL EDGE |
| 3 x 10 | - | - | - | - | - | 118139 | W 145 | 131,400 | 131,400 | 10 | ZY 0310 3 AR ... 05V STEEL EDGE |
| 3 x 13 | - | - | - | - | - | 118146 | W 146 | 95,400 | 95,400 | 10 | ZY 0313 3 AR ... 05V STEEL EDGE |
| 4 x 8 | - | - | - | 094693 | - | 094686 | - | 150,000 | 175,100 | 10 | ZY 0408 3 AR ... 05V STEEL EDGE |
| 5 x 10 | - | - | - | 094891 | - | 094884 | W 153 | 130,000 | 130,700 | 10 | ZY 0510 3 AR ... 05V STEEL EDGE |
| 5 x 13 | - | - | - | - | - | 118238 | W 154 | 114,800 | 114,800 | 10 | ZY 0513 3 AR ... 05V STEEL EDGE |
| 5 x 15 | - | - | - | 534670 | - | - | - | 98,100 | 98,100 | 10 | ZY 0515 3 AR ... 05V STEEL EDGE |
| 6 x 10 | - | - | - | 118320 | - | 118313 | W 162 | 100,000 | 110,500 | 10 | ZY 0610 3 AR ... 05V STEEL EDGE |
| 6 x 13 | - | - | - | 095164 | - | 095157 | W 163 | 93,600 | 93,600 | 10 | ZY 0613 3 AR ... 05V STEEL EDGE |
| 6 x 19 | - | - | - | 118368 | - | 118351 | W 164 | 64,500 | 64,500 | 10 | ZY 0619 3 AR ... 05V STEEL EDGE |
| 6 x 25 | - | - | - | 534656 | - | - | - | 53,100 | 53,100 | 10 | ZY 0625 3 AR ... 05V STEEL EDGE |
| 8 x 2 | - | - | - | - | - | 098578 | W 165 | 85,000 | 119,300 | 10 | ZY 0802 3 AR ... 05V STEEL EDGE |
| 8 x 10 | - | - | 095355 | - | 095362 | - | W 169 | 85,000 | 87,600 | 10 | ZY 0810 3 AR ... 05V STEEL EDGE |
| 8 x 13 | - | - | 118399 | - | 118405 | - | W 170 | 74,400 | 74,400 | 10 | ZY 0813 3 AR ... 05V STEEL EDGE |
| 8 x 16 | - | - | 095546 | - | 095553 | - | - | 61,000 | 61,000 | 10 | ZY 0816 3 AR ... 05V STEEL EDGE |
| 10 x 2 | - | - | - | - | - | 098660 | W 172 | 65,000 | 95,400 | 10 | ZY 1002 3 AR ... 05V STEEL EDGE |
| 10 x 3 | - | - | - | 118429 | - | - | W 173 | 65,000 | 100,500 | 10 | ZY 1003 3 AR ... 05V STEEL EDGE |
| 10 x 10 | - | - | - | - | 118467 | - | W 175 | 65,000 | 77,500 | 10 | ZY 1010 3 AR ... 05V STEEL EDGE |
| 10 x 13 | - | - | 095720 | - | 095737 | - | W 176 | 58,400 | 58,400 | 10 | ZY 1013 3 AR ... 05V STEEL EDGE |
| 13 x 3 | - | - | - | 098806 | - | 098790 | W 182 | 50,000 | 73,400 | 10 | ZY 1303 3 AR ... 05V STEEL EDGE |
| 13 x 13 | - | - | 096154 | - | 096161 | - | W 185 | 45,300 | 45,300 | 10 | ZY 1313 3 AR ... 05V STEEL EDGE |
| 16 x 3 | - | - | - | 118580 | - | - | W 191 | 42,000 | 60,000 | 10 | ZY 1603 3 AR ... 05V STEEL EDGE |
| 16 x 4 | - | - | 098974 | - | 098981 | - | - | 42,000 | 59,600 | 10 | ZY 1604 3 AR ... 05V STEEL EDGE |
| 19 x 3 | - | - | - | 118627 | - | - | W 200 | 35,000 | 49,900 | 10 | ZY 1903 3 AR ... 05V STEEL EDGE |
| 20 x 6 | - | - | - | - | 100424 | - | W 201 | 33,000 | 47,700 | 10 | ZY 2006 3 AR ... 05V STEEL EDGE |
| 25 x 3 | - | - | - | - | - | 118696 | W 215 | 26,000 | 37,500 | 10 | ZY 2503 3 AR ... 05V STEEL EDGE |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | | | | | | |
|---------|---|--------|--------|--------|--------|--------|-------|---------|---------|----|---------------------------------|
| 3 x 6 | - | - | - | - | - | 094464 | W 144 | 150,000 | 206,100 | 10 | ZY 0306 6 AR ... 05V STEEL EDGE |
| 4 x 8 | - | - | - | 094594 | - | 094587 | - | 150,000 | 177,400 | 10 | ZY 0408 6 AR ... 05V STEEL EDGE |
| 5 x 10 | - | - | - | 094778 | - | 094761 | W 153 | 130,000 | 157,800 | 10 | ZY 0510 6 AR ... 05V STEEL EDGE |
| 6 x 13 | - | - | - | 095058 | - | 095041 | W 163 | 100,000 | 131,500 | 10 | ZY 0613 6 AR ... 05V STEEL EDGE |
| 6 x 25 | - | - | - | 534663 | - | - | - | 62,200 | 62,200 | 10 | ZY 0625 6 AR ... 05V STEEL EDGE |
| 8 x 10 | - | - | 095270 | - | 095287 | - | W 169 | 85,000 | 119,300 | 10 | ZY 0810 6 AR ... 05V STEEL EDGE |
| 8 x 16 | - | - | 095430 | - | 095447 | - | - | 85,000 | 119,300 | 10 | ZY 0816 6 AR ... 05V STEEL EDGE |
| 10 x 13 | - | - | 095638 | - | 095645 | - | W 176 | 65,000 | 95,400 | 10 | ZY 1013 6 AR ... 05V STEEL EDGE |
| 10 x 20 | - | - | 095874 | - | 095881 | - | W 177 | 65,000 | 95,400 | 10 | ZY 1020 6 AR ... 05V STEEL EDGE |
| 10 x 25 | - | - | 095966 | - | 095973 | - | W 178 | 65,000 | 83,200 | 10 | ZY 1025 6 AR ... 05V STEEL EDGE |
| 10 x 32 | - | - | 096024 | - | 096031 | - | W 179 | 62,800 | 62,800 | 10 | ZY 1032 6 AR ... 05V STEEL EDGE |
| 13 x 3 | - | - | - | 098745 | - | - | W 182 | 50,000 | 73,400 | 10 | ZY 1303 6 AR ... 05V STEEL EDGE |
| 13 x 13 | - | - | 096109 | - | 096116 | - | W 185 | 50,000 | 73,400 | 10 | ZY 1313 6 AR ... 05V STEEL EDGE |
| 13 x 20 | - | - | 096277 | - | 096284 | - | W 186 | 50,000 | 73,400 | 10 | ZY 1320 6 AR ... 05V STEEL EDGE |
| 13 x 25 | - | - | 096369 | - | 096376 | - | W 187 | 50,000 | 66,000 | 10 | ZY 1325 6 AR ... 05V STEEL EDGE |
| 13 x 40 | - | - | 098059 | - | - | - | W 188 | 42,400 | 42,400 | 10 | ZY 1340 6 AR ... 05V STEEL EDGE |
| 16 x 4 | - | - | 098929 | - | 098936 | - | - | 42,000 | 59,600 | 10 | ZY 1604 6 AR ... 05V STEEL EDGE |
| 16 x 10 | - | 099063 | - | - | - | - | W 193 | 42,000 | 59,600 | 10 | ZY 1610 6 AR ... 05V STEEL EDGE |
| 16 x 20 | - | 096475 | - | 096482 | - | - | W 195 | 42,000 | 59,600 | 10 | ZY 1620 6 AR ... 05V STEEL EDGE |
| 16 x 32 | - | 096611 | - | 096628 | - | - | - | 42,000 | 51,200 | 10 | ZY 1632 6 AR ... 05V STEEL EDGE |
| 16 x 40 | - | 096741 | - | 096758 | - | - | - | 40,500 | 40,500 | 10 | ZY 1640 6 AR ... 05V STEEL EDGE |

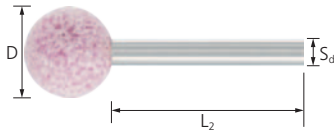
Continued on next page

| D x T [mm] | Grit size | | | | | | US shape | Opt. RPM | Max. RPM |  | Description |
|---|-----------|--------|--------|--------|--------|-----|-------------|-------------|-------------|---|---------------------------------|
| | 24 | 30 | 46 | 60 | 80 | 100 | | | | | |
| EAN 4007220 | | | | | | | | | | | |
| 16 x 50 | - | 096840 | - | - | - | - | W 197 | 31,300 | 31,300 | 10 | ZY 1650 6 AR ... O5V STEEL EDGE |
| 20 x 6 | - | - | 099124 | - | 099131 | - | W 201 | 33,000 | 47,700 | 10 | ZY 2006 6 AR ... O5V STEEL EDGE |
| 20 x 10 | - | 099216 | - | 099223 | - | - | W 202 | 33,000 | 47,700 | 10 | ZY 2010 6 AR ... O5V STEEL EDGE |
| 20 x 20 | - | 096901 | - | 096918 | - | - | W 204 | 33,000 | 47,700 | 10 | ZY 2020 6 AR ... O5V STEEL EDGE |
| 20 x 25 | - | 097014 | - | 097021 | - | - | W 205 | 33,000 | 47,700 | 10 | ZY 2025 6 AR ... O5V STEEL EDGE |
| 20 x 32 | - | 097113 | - | 097120 | - | - | W 206 | 33,000 | 41,100 | 10 | ZY 2032 6 AR ... O5V STEEL EDGE |
| 20 x 40 | - | 097236 | - | 097243 | - | - | W 207 | 32,400 | 32,400 | 10 | ZY 2040 6 AR ... O5V STEEL EDGE |
| 20 x 50 | - | 098080 | - | - | - | - | W 208 | 25,100 | 25,100 | 10 | ZY 2050 6 AR ... O5V STEEL EDGE |
| 25 x 6 | - | - | 099339 | - | 099346 | - | W 214 | 26,000 | 38,100 | 10 | ZY 2506 6 AR ... O5V STEEL EDGE |
| 25 x 10 | - | 099377 | - | - | - | - | W 217 | 26,000 | 38,100 | 10 | ZY 2510 6 AR ... O5V STEEL EDGE |
| 25 x 13 | - | 099438 | - | - | - | - | W 218 | 26,000 | 38,100 | 10 | ZY 2513 6 AR ... O5V STEEL EDGE |
| 25 x 16 | - | - | - | 099513 | - | - | - | 26,000 | 38,100 | 10 | ZY 2516 6 AR ... O5V STEEL EDGE |
| 25 x 25 | - | 097342 | - | 097359 | - | - | W 220 | 26,000 | 38,100 | 10 | ZY 2525 6 AR ... O5V STEEL EDGE |
| 25 x 32 | - | 097458 | - | 097465 | - | - | - | 26,000 | 32,900 | 10 | ZY 2532 6 AR ... O5V STEEL EDGE |
| 25 x 40 | - | 098127 | - | - | - | - | W 221 | 26,000 | 26,000 | 10 | ZY 2540 6 AR ... O5V STEEL EDGE |
| 32 x 6 | - | - | 119112 | - | - | - | W 225 | 21,000 | 30,000 | 5 | ZY 3206 6 AR ... O5V STEEL EDGE |
| 32 x 8 | - | 099582 | - | 099599 | - | - | - | 21,000 | 29,800 | 5 | ZY 3208 6 AR ... O5V STEEL EDGE |
| 32 x 20 | 099780 | - | 099797 | - | - | - | W 228 | 21,000 | 29,800 | 5 | ZY 3220 6 AR ... O5V STEEL EDGE |
| 32 x 32 | 097618 | - | 097625 | - | - | - | W 230 | 21,000 | 25,700 | 5 | ZY 3232 6 AR ... O5V STEEL EDGE |
| 32 x 40 | 097731 | - | 097748 | - | - | - | W 231 | 20,300 | 20,300 | 5 | ZY 3240 6 AR ... O5V STEEL EDGE |
| 40 x 6 | - | - | 100462 | - | - | - | W 235 | 16,000 | 23,800 | 5 | ZY 4006 6 AR ... O5V STEEL EDGE |
| 40 x 10 | - | 099896 | - | 099902 | - | - | W 236 | 16,000 | 23,800 | 5 | ZY 4010 6 AR ... O5V STEEL EDGE |
| 40 x 15 | - | 099957 | - | 099964 | - | - | - | 16,000 | 23,800 | 5 | ZY 4015 6 AR ... O5V STEEL EDGE |
| 40 x 20 | 100042 | - | 100059 | - | - | - | - | 16,000 | 23,800 | 5 | ZY 4020 6 AR ... O5V STEEL EDGE |
| 40 x 40 | 097816 | - | 097823 | - | - | - | W 238 | 16,000 | 16,200 | 5 | ZY 4040 6 AR ... O5V STEEL EDGE |
| 50 x 8 | - | 100516 | - | - | - | - | - | 13,000 | 19,000 | 5 | ZY 5008 6 AR ... O5V STEEL EDGE |
| 50 x 13 | - | 100202 | - | - | - | - | - | 13,000 | 19,000 | 5 | ZY 5013 6 AR ... O5V STEEL EDGE |
| 50 x 25 | 100332 | - | 100349 | - | - | - | W 242 | 13,000 | 19,000 | 5 | ZY 5025 6 AR ... O5V STEEL EDGE |
| Shank dia. 8 x 40 mm [S₀ x L₂] | | | | | | | | | | | |
| 32 x 40 | 098196 | - | - | - | - | - | W 231 | 21,000 | 29,800 | 5 | ZY 3240 8 AR ... O5V STEEL EDGE |
| 40 x 40 | 098271 | - | - | - | - | - | W 238 | 16,000 | 23,800 | 5 | ZY 4040 8 AR ... O5V STEEL EDGE |




Mounted points

For edge grinding on steel and cast steel



STEEL EDGE, ball type

The ball shape KU is often used for contour grinding and backside deburring.

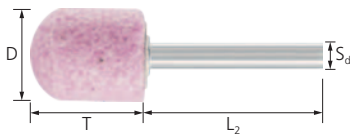
| D [mm] | Grit size | | | | | | Opt. RPM | Max. RPM |  | Description |
|-------------|-----------|----|----|----|----|-----|-------------|-------------|---|-------------|
| | 24 | 30 | 46 | 60 | 80 | 100 | | | | |
| EAN 4007220 | | | | | | | | | | |

Shank dia. 3 x 30 mm [S_d x L₂]

| | | | | | | | | | | |
|----|---|---|--------|--------|--------|--------|---------|---------|----|-------------------------------|
| 3 | - | - | - | - | - | 101018 | 150,000 | 300,200 | 10 | KU 03 3 AR ... O5V STEEL EDGE |
| 5 | - | - | - | 101100 | - | 101094 | 130,000 | 190,900 | 10 | KU 05 3 AR ... O5V STEEL EDGE |
| 8 | - | - | 101551 | - | 101568 | - | 85,000 | 116,200 | 10 | KU 08 3 AR ... O5V STEEL EDGE |
| 10 | - | - | 101520 | - | 101537 | - | 65,000 | 83,300 | 10 | KU 10 3 AR ... O5V STEEL EDGE |
| 13 | - | - | 101605 | - | 101612 | - | 50,000 | 54,000 | 10 | KU 13 3 AR ... O5V STEEL EDGE |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|---------|---------|----|-------------------------------|
| 3 | - | - | - | - | - | 100981 | 150,000 | 317,300 | 10 | KU 03 6 AR ... O5V STEEL EDGE |
| 5 | - | - | - | 101056 | - | 101049 | 130,000 | 190,900 | 10 | KU 05 6 AR ... O5V STEEL EDGE |
| 8 | - | - | 101148 | - | 101155 | - | 85,000 | 119,300 | 10 | KU 08 6 AR ... O5V STEEL EDGE |
| 10 | - | - | 101490 | - | 101506 | - | 65,000 | 95,400 | 10 | KU 10 6 AR ... O5V STEEL EDGE |
| 13 | - | - | 101216 | - | 101223 | - | 50,000 | 73,400 | 10 | KU 13 6 AR ... O5V STEEL EDGE |
| 16 | - | 101278 | - | 101285 | - | - | 42,000 | 59,600 | 10 | KU 16 6 AR ... O5V STEEL EDGE |
| 20 | - | 101353 | - | 101360 | - | - | 33,000 | 47,700 | 10 | KU 20 6 AR ... O5V STEEL EDGE |
| 25 | - | 101391 | - | 101407 | - | - | 26,000 | 38,100 | 10 | KU 25 6 AR ... O5V STEEL EDGE |
| 32 | 101445 | - | 101452 | - | - | - | 21,000 | 29,800 | 5 | KU 32 6 AR ... O5V STEEL EDGE |



STEEL EDGE, cylindrical with radius end type

The cylindrical shape with radius end WR is suitable for a variety of deburring and grinding jobs.

| D x T [mm] | Grit size | | | | | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|----|----|-----|-------------|-------------|---|-------------|
| | 30 | 46 | 60 | 80 | 100 | | | | |
| EAN 4007220 | | | | | | | | | |

Shank dia. 3 x 30 mm [S_d x L₂]

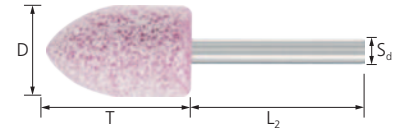
| | | | | | | | | | | |
|--------|---|---|--------|---|---|--------|---------|---------|----|---------------------------------|
| 3 x 6 | - | - | - | - | - | 100745 | 150,000 | 219,800 | 10 | WR 0306 3 AR ... O5V STEEL EDGE |
| 5 x 10 | - | - | 100837 | - | - | 100820 | 130,000 | 136,500 | 10 | WR 0510 3 AR ... O5V STEEL EDGE |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | | | | | |
|---------|--------|--------|--------|--------|---|---|---------|---------|----|---------------------------------|
| 5 x 10 | - | - | 100783 | - | - | - | 130,000 | 168,400 | 10 | WR 0510 6 AR ... O5V STEEL EDGE |
| 8 x 16 | - | 100851 | - | 100868 | - | - | 85,000 | 119,300 | 10 | WR 0816 6 AR ... O5V STEEL EDGE |
| 13 x 20 | - | 100905 | - | 100912 | - | - | 50,000 | 73,400 | 10 | WR 1320 6 AR ... O5V STEEL EDGE |
| 20 x 25 | 100943 | - | 100950 | - | - | - | 33,000 | 47,700 | 10 | WR 2025 6 AR ... O5V STEEL EDGE |

STEEL EDGE, pointed tree type

The pointed tree shape SP is excellent for machining small holes and bores.



| D x T [mm] | Grit size | | | | | Opt. RPM | Max. RPM | | Description |
|---------------|-----------|----|----|----|-----|-------------|-------------|--|-------------|
| | 30 | 46 | 60 | 80 | 100 | | | | |
| EAN 4007220 | | | | | | | | | |

Shank dia. 3 x 30 mm [$S_d \times L_2$]

| | | | | | | | | | |
|--------|---|--------|--------|--------|--------|---------|---------|----|---------------------------------|
| 3 x 6 | - | - | - | - | 101810 | 150,000 | 252,000 | 10 | SP 0306 3 AR ... O5V STEEL EDGE |
| 5 x 10 | - | - | 101940 | - | 101933 | 130,000 | 149,500 | 10 | SP 0510 3 AR ... O5V STEEL EDGE |
| 8 x 16 | - | 102084 | - | 102091 | - | 72,800 | 72,800 | 10 | SP 0816 3 AR ... O5V STEEL EDGE |

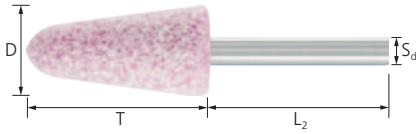
Shank dia. 6 x 40 mm [$S_d \times L_2$]

| | | | | | | | | | |
|---------|--------|--------|--------|--------|--------|---------|---------|----|---------------------------------|
| 3 x 6 | - | - | - | - | 101773 | 150,000 | 255,500 | 10 | SP 0306 6 AR ... O5V STEEL EDGE |
| 5 x 10 | - | - | 101872 | - | 101865 | 130,000 | 190,900 | 10 | SP 0510 6 AR ... O5V STEEL EDGE |
| 8 x 16 | - | 102015 | - | 102022 | - | 85,000 | 119,300 | 10 | SP 0816 6 AR ... O5V STEEL EDGE |
| 13 x 20 | - | 102152 | - | 102169 | - | 50,000 | 73,400 | 10 | SP 1320 6 AR ... O5V STEEL EDGE |
| 20 x 32 | 102244 | - | 102251 | - | - | 33,000 | 47,700 | 10 | SP 2032 6 AR ... O5V STEEL EDGE |
| 20 x 50 | 102329 | - | - | - | - | 30,500 | 30,500 | 10 | SP 2050 6 AR ... O5V STEEL EDGE |
| 25 x 40 | 102350 | - | - | - | - | 26,000 | 35,000 | 10 | SP 2540 6 AR ... O5V STEEL EDGE |




Mounted points

For edge grinding on steel and cast steel



STEEL EDGE, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position when smoothing out a ridge on a surface.

| D x T [mm] | Grit size | | | | | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|----|----|----|-------------|-------------|---|-------------|
| | 24 | 30 | 46 | 60 | 80 | | | | |
| EAN 4007220 | | | | | | | | | |

Shank dia. 3 x 30 mm [S_d x L₂]

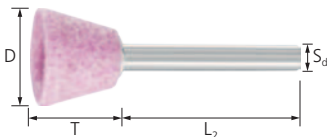
| | | | | | | | | | |
|---------|---|---|--------|---|---|--------|--------|----|---------------------------------|
| 10 x 10 | - | - | 102404 | - | - | 65,000 | 95,400 | 10 | KE 1010 3 AR ... O5V STEEL EDGE |
|---------|---|---|--------|---|---|--------|--------|----|---------------------------------|

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|--------|----|---------------------------------|
| 10 x 10 | - | - | 102374 | - | - | 65,000 | 95,400 | 10 | KE 1010 6 AR ... O5V STEEL EDGE |
| 10 x 25 | - | - | 102787 | - | 102794 | 65,000 | 95,400 | 10 | KE 1025 6 AR ... O5V STEEL EDGE |
| 13 x 13 | - | - | 102428 | - | - | 50,000 | 73,400 | 10 | KE 1313 6 AR ... O5V STEEL EDGE |
| 16 x 16 | - | 102466 | - | 102473 | - | 42,000 | 59,600 | 10 | KE 1616 6 AR ... O5V STEEL EDGE |
| 16 x 45 | - | - | 102879 | - | 102886 | 42,000 | 52,000 | 10 | KE 1645 6 AR ... O5V STEEL EDGE |
| 20 x 20 | - | 102497 | - | 102503 | - | 33,000 | 47,700 | 10 | KE 2020 6 AR ... O5V STEEL EDGE |
| 20 x 32 | - | 102688 | - | 102695 | - | 33,000 | 47,700 | 10 | KE 2032 6 AR ... O5V STEEL EDGE |
| 20 x 40 | - | 102978 | - | 102985 | - | 33,000 | 47,700 | 10 | KE 2040 6 AR ... O5V STEEL EDGE |
| 25 x 25 | - | 102541 | - | 102558 | - | 26,000 | 38,100 | 10 | KE 2525 6 AR ... O5V STEEL EDGE |
| 25 x 45 | - | 102923 | - | 102930 | - | 26,000 | 34,000 | 10 | KE 2545 6 AR ... O5V STEEL EDGE |
| 25 x 70 | - | 103067 | - | - | - | 20,400 | 20,400 | 10 | KE 2570 6 AR ... O5V STEEL EDGE |
| 32 x 32 | 102602 | - | 102619 | - | - | 21,000 | 29,800 | 5 | KE 3232 6 AR ... O5V STEEL EDGE |


Shank dia. 8 x 40 mm [S_d x L₂]

| | | | | | | | | | |
|---------|--------|---|---|---|---|--------|--------|---|---------------------------------|
| 32 x 50 | 103098 | - | - | - | - | 21,000 | 29,800 | 5 | KE 3250 8 AR ... O5V STEEL EDGE |
|---------|--------|---|---|---|---|--------|--------|---|---------------------------------|



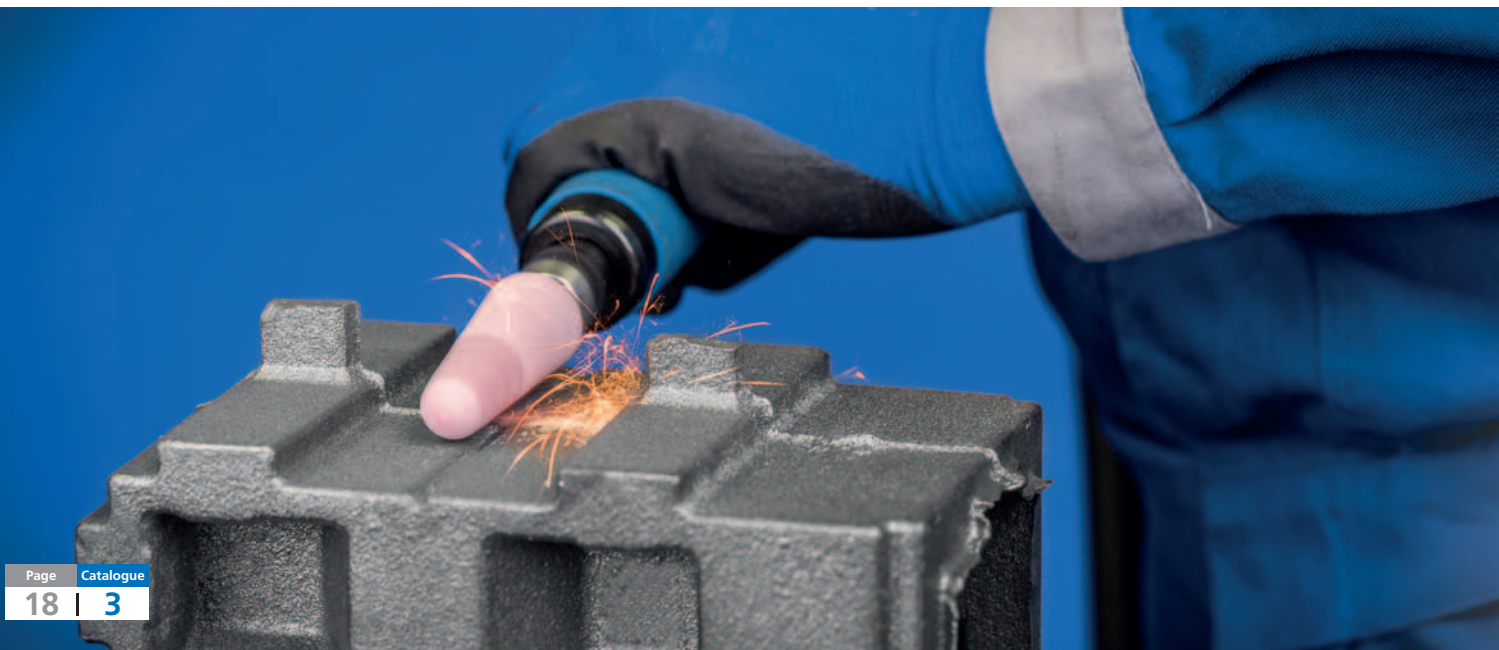
STEEL EDGE, cup type

The cup shape TO is ideal for work on profiles, planar surfaces and ledges, without the cylindrical surface being damaged.

| D x T [mm] | Grit size | | | | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|----|----|-------------|-------------|---|-------------|
| | 24 | 30 | 46 | 60 | | | | |
| EAN 4007220 | | | | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|----|---------------------------------|
| 20 x 16 | - | 103128 | - | 103135 | 33,000 | 47,700 | 10 | TO 2016 6 AR ... O5V STEEL EDGE |
| 25 x 20 | - | 103142 | - | - | 26,000 | 38,100 | 10 | TO 2520 6 AR ... O5V STEEL EDGE |
| 32 x 25 | 103173 | - | 103180 | - | 21,000 | 29,800 | 5 | TO 3225 6 AR ... O5V STEEL EDGE |



Series A STEEL EDGE


Series A mounted points are generally used on larger components. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours.

The applications range from grinding out slits and grooves in hard-to-reach areas to machining bores and small holes as well as smoothing.

Explanation of the code system:

- D = Mounted point outer dia.
- T = Mounted point width
- S_d = Shank dia.
- L₂ = Shank length



| US shape | D x T [mm] | Grit size | | | Opt. RPM | Max. RPM |  | Description |
|-------------|------------|-----------|----|-----|----------|----------|---|-------------|
| | | 30 | 60 | 100 | | | | |
| EAN 4007220 | | | | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | | | |
|------|---------|--------|--------|--------|---------|---------|----|------------------------------|
| A 1 | 19 x 64 | 117101 | - | - | 30,400 | 30,400 | 10 | A 6 AR 30 O5V STEEL EDGE |
| A 2 | 25 x 32 | 117125 | - | - | 26,000 | 37,500 | 10 | A 2 6 AR 30 O5V STEEL EDGE |
| A 3 | 25 x 70 | 117149 | - | - | 18,600 | 18,600 | 10 | A 3 6 AR 30 O5V STEEL EDGE |
| A 4 | 32 x 32 | 117163 | - | - | 21,000 | 30,000 | 5 | A 4 6 AR 30 O5V STEEL EDGE |
| A 5 | 19 x 29 | 117170 | - | - | 35,000 | 49,900 | 10 | A 5 6 AR 30 O5V STEEL EDGE |
| A 6 | 19 x 29 | 117187 | - | - | 35,000 | 49,900 | 10 | A 6 6 AR 30 O5V STEEL EDGE |
| A 11 | 22 x 50 | 117200 | - | - | 27,600 | 27,600 | 10 | A 11 6 AR 30 O5V STEEL EDGE |
| A 12 | 17 x 32 | 117224 | - | - | 40,000 | 54,500 | 10 | A 12 6 AR 30 O5V STEEL EDGE |
| A 14 | 17 x 22 | 117248 | - | - | 40,000 | 54,500 | 10 | A 14 6 AR 30 O5V STEEL EDGE |
| A 15 | 6 x 27 | - | 117262 | 117255 | 100,000 | 112,900 | 10 | A 15 6 AR ... O5V STEEL EDGE |
| A 21 | 25 x 25 | 117279 | - | - | 26,000 | 37,500 | 10 | A 21 6 AR 30 O5V STEEL EDGE |
| A 24 | 6 x 19 | - | 117316 | 117309 | 100,000 | 117,400 | 10 | A 24 6 AR ... O5V STEEL EDGE |
| A 25 | 25 | 117323 | - | - | 26,000 | 37,500 | 10 | A 25 6 AR 30 O5V STEEL EDGE |
| A 26 | 16 | 117330 | - | - | 42,000 | 60,000 | 10 | A 26 6 AR 30 O5V STEEL EDGE |
| A 34 | 38 x 10 | 117385 | - | - | 18,000 | 25,000 | 5 | A 34 6 AR 30 O5V STEEL EDGE |
| A 36 | 41 x 10 | - | 117415 | - | 16,000 | 23,100 | 5 | A 36 6 AR 60 O5V STEEL EDGE |
| A 37 | 32 x 6 | - | 117422 | - | 21,000 | 30,000 | 5 | A 37 6 AR 60 O5V STEEL EDGE |

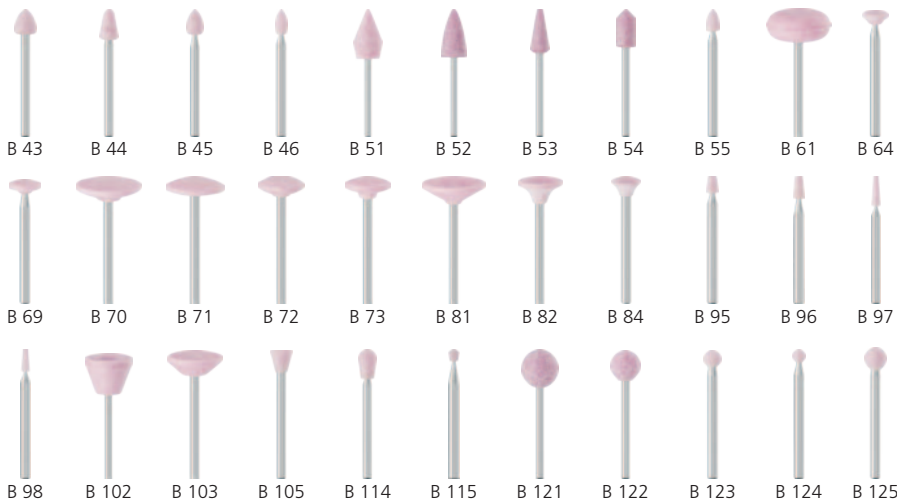
Shank dia. 6.35 x 40 mm [S_d x L₂]

| | | | | | | | | |
|------|---------|--------|--------|---|---------|---------|----|-------------------------------|
| A 1 | 19 x 64 | 114599 | - | - | 33,500 | 33,500 | 10 | A 1 6,3 AR 30 O5V STEEL EDGE |
| A 2 | 25 x 32 | 114612 | - | - | 26,000 | 37,500 | 10 | A 2 6,3 AR 30 O5V STEEL EDGE |
| A 3 | 25 x 70 | 114636 | - | - | 18,600 | 18,600 | 10 | A 3 6,3 AR 30 O5V STEEL EDGE |
| A 4 | 32 x 32 | 114650 | - | - | 21,000 | 30,000 | 5 | A 4 6,3 AR 30 O5V STEEL EDGE |
| A 5 | 19 x 29 | 114667 | - | - | 35,000 | 49,900 | 10 | A 5 6,3 AR 30 O5V STEEL EDGE |
| A 11 | 22 x 50 | 114698 | - | - | 30,400 | 30,400 | 10 | A 11 6,3 AR 30 O5V STEEL EDGE |
| A 12 | 17 x 32 | 114711 | - | - | 40,000 | 54,500 | 10 | A 12 6,3 AR 30 O5V STEEL EDGE |
| A 15 | 6 x 27 | - | 114759 | - | 100,000 | 112,900 | 10 | A 15 6,3 AR 60 O5V STEEL EDGE |
| A 24 | 6 x 19 | - | 114803 | - | 100,000 | 117,400 | 10 | A 24 6,3 AR 60 O5V STEEL EDGE |
| A 25 | 25 | 114810 | - | - | 26,000 | 37,500 | 10 | A 25 6,3 AR 30 O5V STEEL EDGE |
| A 36 | 41 x 10 | - | 114902 | - | 16,000 | 23,100 | 5 | A 36 6,3 AR 60 O5V STEEL EDGE |
| A 37 | 32 x 6 | - | 114919 | - | 21,000 | 30,000 | 5 | A 37 6,3 AR 60 O5V STEEL EDGE |



Mounted points

For edge grinding on steel and cast steel



Series B STEEL EDGE

Series B mounted points are generally used on smaller or more delicate components, such as in tool and mould construction. Due to the special shapes of series B mounted points, it is possible to grind in a variety of contours. The applications range from grinding out slits and grooves in hard-to-reach areas to machining bores and small holes as well as smoothing.

Explanation of the code system:

- D = Mounted point outer dia.
- T = Mounted point width
- S_d = Shank dia.
- L₂ = Shank length

| US shape | D x T [mm] | Grit size | | | | Opt. RPM | Max. RPM |  | Description |
|-------------|------------|-----------|----|----|-----|----------|----------|---|-------------|
| | | 46 | 60 | 80 | 100 | | | | |
| EAN 4007220 | | | | | | | | | |

Shank dia. 3 x 30 mm [S_d x L₂]

| | | | | | | | | | |
|-------|---------|--------|--------|--------|--------|---------|---------|----|-------------------------------|
| B 43 | 6 x 8 | - | - | - | 117453 | 100,000 | 149,200 | 10 | B 43 3 AR 100 O5V STEEL EDGE |
| B 44 | 6 x 10 | - | - | - | 117460 | 100,000 | 141,100 | 10 | B 44 3 AR 100 O5V STEEL EDGE |
| B 45 | 5 x 8 | - | - | - | 117477 | 130,000 | 181,900 | 10 | B 45 3 AR 100 O5V STEEL EDGE |
| B 46 | 3 x 8 | - | - | - | 117484 | 150,000 | 267,100 | 10 | B 46 3 AR 100 O5V STEEL EDGE |
| B 51 | 11 x 19 | - | - | 117507 | - | 60,000 | 63,600 | 10 | B 51 3 AR 80 O5V STEEL EDGE |
| B 52 | 10 x 19 | 117514 | - | 117521 | - | 65,000 | 66,200 | 10 | B 52 3 AR ... O5V STEEL EDGE |
| B 53 | 6 x 16 | - | 117545 | - | 117538 | 100,000 | 149,200 | 10 | B 53 3 AR ... O5V STEEL EDGE |
| B 54 | 6 x 13 | - | 117569 | - | 117552 | 100,000 | 101,500 | 10 | B 54 3 AR ... O5V STEEL EDGE |
| B 55 | 3 x 6 | - | - | - | 117576 | 150,000 | 257,000 | 10 | B 55 3 AR 100 O5V STEEL EDGE |
| B 61 | 19 x 8 | - | - | 117590 | - | 35,000 | 45,000 | 10 | B 61 3 AR 80 O5V STEEL EDGE |
| B 64 | 6 x 2 | - | - | - | 117637 | 100,000 | 149,200 | 10 | B 64 3 AR 100 O5V STEEL EDGE |
| B 69 | 8 x 2 | - | - | - | 117668 | 85,000 | 120,800 | 10 | B 69 3 AR 100 O5V STEEL EDGE |
| B 70 | 19 x 3 | - | - | - | 117675 | 35,000 | 49,900 | 10 | B 70 3 AR 100 O5V STEEL EDGE |
| B 71 | 16 x 2 | - | - | - | 117682 | 42,000 | 60,000 | 10 | B 71 3 AR 100 O5V STEEL EDGE |
| B 72 | 13 x 3 | - | - | - | 117699 | 50,000 | 75,100 | 10 | B 72 3 AR 100 O5V STEEL EDGE |
| B 73 | 13 x 3 | - | - | - | 117705 | 50,000 | 75,100 | 10 | B 73 3 AR 100 O5V STEEL EDGE |
| B 81 | 19 x 8 | - | - | - | 117712 | 35,000 | 49,900 | 10 | B 81 3 AR 100 O5V STEEL EDGE |
| B 82 | 13 x 6 | - | - | - | 117736 | 50,000 | 75,100 | 10 | B 82 3 AR 100 O5V STEEL EDGE |
| B 84 | 8 x 5 | - | - | - | 117750 | 85,000 | 120,800 | 10 | B 84 3 AR 100 O5V STEEL EDGE |
| B 95 | 3 x 5 | - | - | - | 117798 | 150,000 | 260,300 | 10 | B 95 3 AR 100 O5V STEEL EDGE |
| B 96 | 3 x 6 | - | - | - | 117804 | 150,000 | 236,100 | 10 | B 96 3 AR 100 O5V STEEL EDGE |
| B 97 | 2 x 10 | - | - | - | 117811 | 107,300 | 107,300 | 10 | B 97 3 AR 100 O5V STEEL EDGE |
| B 98 | 2 x 6 | - | - | - | 117828 | 150,000 | 168,300 | 10 | B 98 3 AR 100 O5V STEEL EDGE |
| B 102 | 16 x 13 | - | - | 117842 | - | 42,000 | 46,400 | 10 | B 102 3 AR 80 O5V STEEL EDGE |
| B 103 | 16 x 5 | - | - | 117866 | - | 42,000 | 60,000 | 10 | B 103 3 AR 80 O5V STEEL EDGE |
| B 105 | 6 x 6 | - | - | - | 117880 | 100,000 | 149,200 | 10 | B 105 3 AR 100 O5V STEEL EDGE |
| B 114 | 6 x 10 | - | - | - | 117958 | 100,000 | 136,900 | 10 | B 114 3 AR 100 O5V STEEL EDGE |
| B 115 | 2 x 3 | - | - | - | 117965 | 150,000 | 299,400 | 10 | B 115 3 AR 100 O5V STEEL EDGE |
| B 121 | 13 | 117972 | - | - | - | 50,000 | 56,200 | 10 | B 121 3 AR 46 O5V STEEL EDGE |
| B 122 | 10 | 117996 | - | 118009 | - | 65,000 | 90,200 | 10 | B 122 3 AR ... O5V STEEL EDGE |
| B 123 | 5 | - | - | - | 118016 | 130,000 | 198,900 | 10 | B 123 3 AR 100 O5V STEEL EDGE |
| B 124 | 3 | - | - | - | 118023 | 150,000 | 291,800 | 10 | B 124 3 AR 100 O5V STEEL EDGE |
| B 125 | 6 | - | - | - | 118030 | 100,000 | 149,200 | 10 | B 125 3 AR 100 O5V STEEL EDGE |

Shank dia. 3.17 x 30 mm [S_d x L₂]

| | | | | | | | | | |
|-------|---|---|---|---|--------|---------|---------|----|---------------------------------|
| B 123 | 5 | - | - | - | 115701 | 130,000 | 198,900 | 10 | B 123 3,1 AR 100 O5V STEEL EDGE |
| B 125 | 6 | - | - | - | 115732 | 100,000 | 149,200 | 10 | B 125 3,1 AR 100 O5V STEEL EDGE |

Mounted point set 2002 STEEL EDGE

Contains 15 small mounted points with shank diameter 3 mm in the most common shapes and dimensions for fine work.



Contents:

2 pieces each:

- ZY 0510
- ZY 0810
- ZY 1604

1 piece each:

- ZY 0408
- ZY 0613
- ZY 0802
- ZY 1013
- ZY 1303
- WR 0510
- KU 05
- SP 0306
- SP 0816

| S _d [mm] | Grit size |  | Description |
|------------------------|-------------|---|---------------------|
| | fine | | |
| | EAN 4007220 | | |
| 3 | 114476 | 1 | 2002 O F STEEL EDGE |



Mounted point set 2001 STEEL EDGE


Contains 10 mounted points with shank diameter 6 mm in the most common shapes and dimensions.



Contents:

1 piece each:

- ZY 1013
- ZY 1320
- ZY 2006
- ZY 2013
- ZY 2025
- KU 16
- WR 2025
- KE 2032
- SP 1320
- KE 2020

| S _d [mm] | Grit size |  | Description |
|------------------------|-------------|---|---------------------|
| | coarse | | |
| | EAN 4007220 | | |
| 6 | 114469 | 1 | 2001 O G STEEL EDGE |

Mounted points

For universal use on materials that are difficult to machine



TOUGH mounted points

The TOUGH type is specifically designed for use on titanium materials, nickel-based and cobalt-based alloys, hardened steel components and built-up weld deposits. Its applications include weld dressing on repair welds and reworking on turbine blades during aircraft maintenance and regrinding of repair welds in tool and mould-making.

Advantages:

- Cool grinding as the grain mixture is easy to break down.
- High stock removal rates and very long tool life.
- Constant stock removal rates through self-sharpening qualities of the ceramic oxide grain.

Materials that can be worked:

- Hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)
- Titanium alloys
- Titanium
- High-temperature-resistant materials
- Nickel-based and cobalt-based alloys

Type:

- Vitrified bond
- Aluminium oxide mixture of ceramic oxide grain and white aluminium oxide

Recommendations for use:

- TOUGH mounted points perform best at a cutting speed of 30 to 50 m/s.

Matching tool drives:

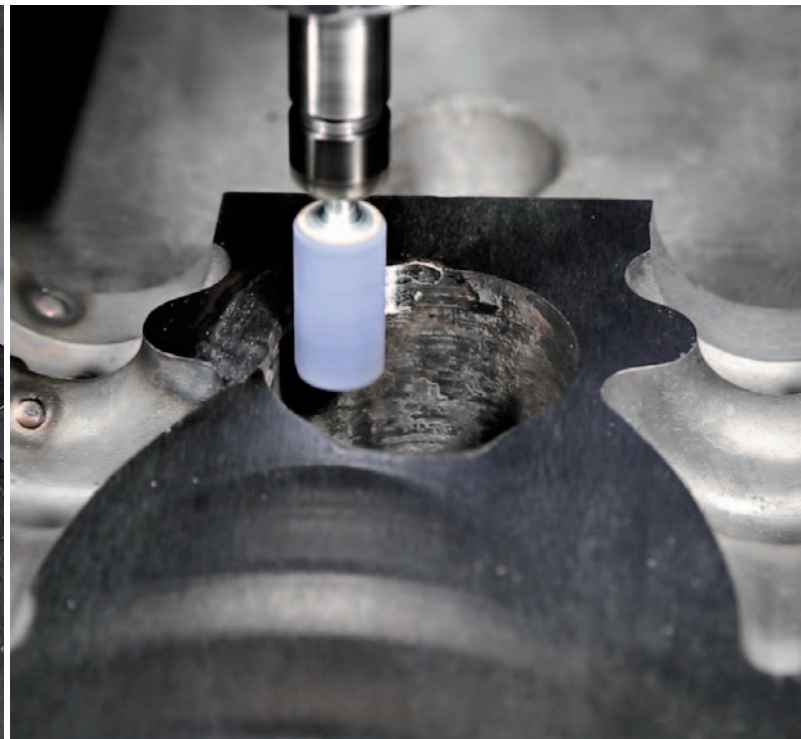
- Flexible shaft drive
- Straight grinder

Ordering notes:

- Please complete the description with the desired grit size.

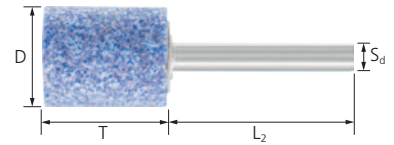
Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



TOUGH, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.



| D x T [mm] | Grit size | | | | | | | US shape | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|----|----|----|-----|-----|-------------|-------------|-------------|---|-------------|
| | 24 | 30 | 46 | 60 | 80 | 100 | 320 | | | | | |
| EAN 4007220 | | | | | | | | | | | | |

Shank dia. 3 x 30 mm [$S_d \times L_2$]

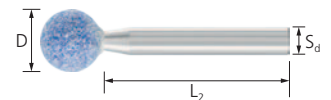
| | | | | | | | | | | | | |
|---------|---|---|--------|--------|--------|--------|--------|-------|---------|---------|----|-------------------------------|
| 1 x 5 | - | - | - | - | - | - | 898383 | - | 104,200 | 104,200 | 10 | ZY 0105 3 AWCO ... J5V TOUGH |
| 1.5 x 8 | - | - | - | - | - | - | 898390 | - | 104,700 | 104,700 | 10 | ZY 1,508 3 AWCO ... J5V TOUGH |
| 1.7 x 8 | - | - | - | - | - | - | 898406 | - | 112,300 | 112,300 | 10 | ZY 1,708 3 AWCO ... J5V TOUGH |
| 2 x 5 | - | - | - | - | 898413 | 898420 | - | W 141 | 150,000 | 201,800 | 10 | ZY 0205 3 AWCO ... J5V TOUGH |
| 3 x 6 | - | - | - | 898437 | 802106 | 802120 | - | W 144 | 150,000 | 206,100 | 10 | ZY 0306 3 AWCO ... J5V TOUGH |
| 4 x 8 | - | - | - | 898444 | 802137 | 802144 | - | - | 150,000 | 175,100 | 10 | ZY 0408 3 AWCO ... J5V TOUGH |
| 5 x 10 | - | - | - | 898451 | 802151 | 802168 | - | W 153 | 130,700 | 130,700 | 10 | ZY 0510 3 AWCO ... J5V TOUGH |
| 6 x 13 | - | - | 898468 | 802175 | 802182 | 802199 | - | W 163 | 93,600 | 93,600 | 10 | ZY 0613 3 AWCO ... J5V TOUGH |
| 8 x 10 | - | - | 947852 | - | - | - | - | W 169 | 87,600 | 87,600 | 10 | ZY 0810 3 AWCO ... J5V TOUGH |
| 8 x 16 | - | - | 898475 | 898499 | 898505 | - | - | - | 61,000 | 61,000 | 10 | ZY 0816 3 AWCO ... J5V TOUGH |
| 10 x 13 | - | - | - | - | 947869 | - | - | W 176 | 58,400 | 58,400 | 10 | ZY 1013 3 AWCO ... J5V TOUGH |
| 13 x 3 | - | - | - | 898574 | - | - | - | W 182 | 65,000 | 73,400 | 10 | ZY 1303 3 AWCO ... J5V TOUGH |
| 20 x 6 | - | - | 898581 | 898598 | - | - | - | W 201 | 45,000 | 47,700 | 10 | ZY 2006 3 AWCO ... J5V TOUGH |


Shank dia. 6 x 40 mm [$S_d \times L_2$]

| | | | | | | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|---|-------|---------|---------|----|------------------------------|
| 5 x 10 | - | - | - | - | - | 947876 | - | W 153 | 150,000 | 157,800 | 10 | ZY 0510 6 AWCO ... J5V TOUGH |
| 8 x 16 | - | - | 802205 | - | 802212 | - | - | - | 100,000 | 119,300 | 10 | ZY 0816 6 AWCO ... J5V TOUGH |
| 10 x 13 | - | - | 802229 | - | 802274 | - | - | W 176 | 85,000 | 95,400 | 10 | ZY 1013 6 AWCO ... J5V TOUGH |
| 10 x 20 | - | - | 898512 | - | 898550 | - | - | - | 85,000 | 95,400 | 10 | ZY 1020 6 AWCO ... J5V TOUGH |
| 13 x 25 | - | - | 802304 | - | 802311 | - | - | W 187 | 65,000 | 66,000 | 10 | ZY 1325 6 AWCO ... J5V TOUGH |
| 16 x 20 | - | 947883 | 802328 | 802335 | - | - | - | W 195 | 55,000 | 59,600 | 10 | ZY 1620 6 AWCO ... J5V TOUGH |
| 16 x 32 | - | 947890 | 802342 | 802366 | - | - | - | - | 51,200 | 51,200 | 10 | ZY 1632 6 AWCO ... J5V TOUGH |
| 20 x 25 | - | 947906 | 802373 | 802397 | - | - | - | W 205 | 45,000 | 47,700 | 10 | ZY 2025 6 AWCO ... J5V TOUGH |
| 20 x 40 | - | 947913 | 898604 | 898628 | - | - | - | W 207 | 32,400 | 32,400 | 10 | ZY 2040 6 AWCO ... J5V TOUGH |
| 25 x 25 | - | 947920 | - | - | - | - | - | W 220 | 35,000 | 38,100 | 10 | ZY 2525 6 AWCO ... J5V TOUGH |
| 32 x 16 | - | - | 947937 | - | - | - | - | - | 27,000 | 29,800 | 5 | ZY 3216 6 AWCO ... J5V TOUGH |
| 32 x 32 | 947944 | - | 802427 | - | - | - | - | W 230 | 25,700 | 25,700 | 5 | ZY 3232 6 AWCO ... J5V TOUGH |
| 40 x 10 | - | - | 898635 | 898642 | - | - | - | W 236 | 22,000 | 23,800 | 5 | ZY 4010 6 AWCO ... J5V TOUGH |
| 40 x 20 | - | - | 802434 | - | - | - | - | - | 22,000 | 23,800 | 5 | ZY 4020 6 AWCO ... J5V TOUGH |

TOUGH, ball type

The ball shape KU is often used for contour grinding and backside deburring.



| D [mm] | Grit size | | | | Opt. RPM | Max. RPM |  | Description |
|-------------|-----------|----|----|-----|-------------|-------------|---|-------------|
| | 46 | 60 | 80 | 100 | | | | |
| EAN 4007220 | | | | | | | | |

Shank dia. 3 x 30 mm [$S_d \times L_2$]

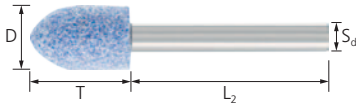
| | | | | | | | | |
|---|--------|--------|--------|--------|---------|---------|----|----------------------------|
| 3 | - | 898659 | 898666 | - | 150,000 | 300,200 | 10 | KU 03 3 AWCO ... J5V TOUGH |
| 6 | - | 898673 | 802465 | 802472 | 140,000 | 159,100 | 10 | KU 06 3 AWCO ... J5V TOUGH |
| 8 | 898680 | - | 802489 | 802519 | 100,000 | 116,200 | 10 | KU 08 3 AWCO ... J5V TOUGH |

Shank dia. 6 x 40 mm [$S_d \times L_2$]

| | | | | | | | | |
|----|--------|--------|--------|---|--------|--------|----|----------------------------|
| 13 | 802533 | 802557 | 802595 | - | 65,000 | 73,400 | 10 | KU 13 6 AWCO ... J5V TOUGH |
|----|--------|--------|--------|---|--------|--------|----|----------------------------|


Mounted points

For universal use on materials that are difficult to machine



TOUGH, pointed tree type

The pointed tree shape SP is excellent for machining small holes and bores.

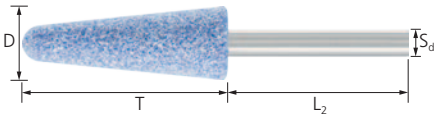
| D x T [mm] | Grit size | | | | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|----|-----|-------------|-------------|---|-------------|
| | 46 | 60 | 80 | 100 | | | | |
| EAN 4007220 | | | | | | | | |

Shank dia. 3 x 30 mm [$S_d \times L_2$]

| | | | | | | | | |
|--------|--------|--------|--------|--------|---------|---------|----|------------------------------|
| 3 x 6 | - | 898697 | 898703 | 898734 | 150,000 | 252,000 | 10 | SP 0306 3 AWCO ... J5V TOUGH |
| 4 x 8 | - | - | 898758 | 898765 | 150,000 | 195,400 | 10 | SP 0408 3 AWCO ... J5V TOUGH |
| 5 x 10 | - | - | - | 948071 | 149,500 | 149,500 | 10 | SP 0510 3 AWCO ... J5V TOUGH |
| 6 x 10 | - | 898789 | - | - | 134,100 | 134,100 | 10 | SP 0610 3 AWCO ... J5V TOUGH |
| 6 x 13 | 898772 | - | 802663 | 802670 | 108,100 | 108,100 | 10 | SP 0613 3 AWCO ... J5V TOUGH |
| 8 x 16 | 898796 | 802687 | 802694 | 802700 | 72,800 | 72,800 | 10 | SP 0816 3 AWCO ... J5V TOUGH |


Shank dia. 6 x 40 mm [$S_d \times L_2$]

| | | | | | | | | |
|---------|--------|--------|--------|---|--------|--------|----|------------------------------|
| 13 x 20 | 802717 | 802724 | 802731 | - | 65,000 | 73,400 | 10 | SP 1320 6 AWCO ... J5V TOUGH |
|---------|--------|--------|--------|---|--------|--------|----|------------------------------|



TOUGH, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.

| D x T [mm] | Grit size | | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|-------------|-------------|--|-------------|
| | 46 | 60 | | | | |
| EAN 4007220 | | | | | | |

Shank dia. 6 x 40 mm [$S_d \times L_2$]

| | | | | | | |
|---------|--------|--------|--------|--------|----|------------------------------|
| 10 x 25 | 802601 | 802618 | 85,000 | 95,400 | 10 | KE 1025 6 AWCO ... J5V TOUGH |
| 16 x 45 | 802625 | 802656 | 52,000 | 52,000 | 10 | KE 1645 6 AWCO ... J5V TOUGH |



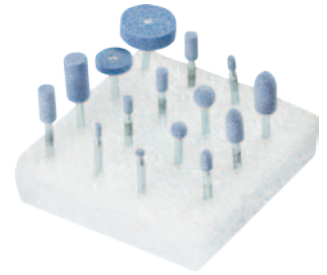
Mounted point set 2002 TOUGH

Contains 15 small mounted points with shank diameter 3 mm in the most common shapes and dimensions for fine work.

Contents:

1 piece each:

- ZY 0205
- ZY 0306
- ZY 0408
- ZY 0510
- ZY 0613
- ZY 0816
- ZY 1303
- ZY 2006
- KU 03
- KU 06
- KU 08
- SP 0306
- SP 0408
- SP 0613
- SP 0816



| | S _d [mm] | Grit size | | Description |
|--|------------------------|-------------|---|----------------|
| | | fine | | |
| | | EAN 4007220 | | |
| | 3 | 947616 | 1 | 2002 J F TOUGH |



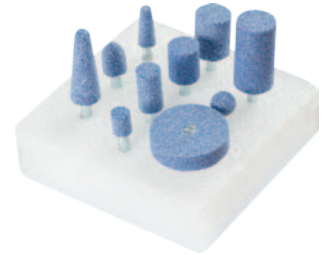
Mounted point set 2001 TOUGH

Contains 10 mounted points with shank diameter 6 mm in the most common shapes and dimensions.

Contents:

1 piece each:

- ZY 1013
- ZY 1325
- ZY 1620
- ZY 2025
- ZY 2040
- ZY 4010
- KU 13
- SP 1320
- KE 1025
- KE 1645



| | S _d [mm] | Grit size | | Description |
|--|------------------------|-------------|---|----------------|
| | | coarse | | |
| | | EAN 4007220 | | |
| | 6 | 947609 | 1 | 2001 J G TOUGH |

Mounted points

For universal use on stainless steel (INOX)



INOX mounted points

The INOX type is particularly well suited to surface work on stainless steel (INOX) and for universal use on non-ferrous metals and bronze. These tools are used for rough grinding of stainless steel (INOX) castings and grinding of moulded parts made of high-temperature-resistant alloys.

Advantages:

- Due to cool grinding, very suitable for use on temperature-sensitive materials.
- High level of grinding comfort due to low-vibration grinding.

Materials that can be worked:

- Stainless steel (INOX)
- Bronze
- Hard non-ferrous metals

Type:

- Resinoid bond
- Aluminium oxide mixture of dark-red and white aluminium oxide

Recommendations for use:

- INOX mounted points perform best at a cutting speed of 35 to 50 m/s.

Matching tool drives:

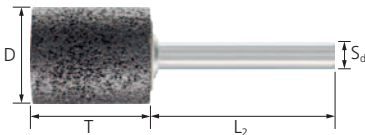
- Flexible shaft drive
- Straight grinder

Ordering notes:

- Please complete the description with the desired grit size.

Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



INOX, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.

| D x T [mm] | Grit size | | | | US shape | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|----|----|-------------|-------------|-------------|---|-------------|
| | 24 | 30 | 46 | 60 | | | | | |
| EAN 4007220 | | | | | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

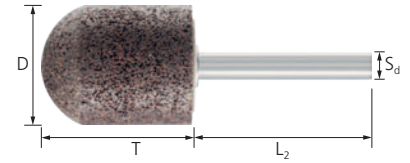
| | | | | | | | | | |
|---------|--------|--------|--------|--------|-------|---------|---------|----|----------------------------|
| 8 x 16 | - | - | 346877 | - | - | 100,000 | 119,300 | 10 | ZY 0816 6 ADW ... L6B INOX |
| 10 x 20 | - | - | 346891 | - | W 177 | 90,000 | 95,400 | 10 | ZY 1020 6 ADW ... L6B INOX |
| 10 x 32 | - | - | 346907 | - | W 179 | 62,800 | 62,800 | 10 | ZY 1032 6 ADW ... L6B INOX |
| 16 x 32 | - | 096697 | - | - | - | 51,200 | 51,200 | 10 | ZY 1632 6 ADW ... L6B INOX |
| 20 x 25 | - | 097083 | - | 346914 | W 205 | 45,000 | 47,700 | 10 | ZY 2025 6 ADW ... L6B INOX |
| 20 x 40 | - | 097304 | - | - | W 207 | 32,400 | 32,400 | 10 | ZY 2040 6 ADW ... L6B INOX |
| 25 x 13 | - | 099483 | - | - | W 218 | 37,000 | 38,100 | 10 | ZY 2513 6 ADW ... L6B INOX |
| 25 x 25 | - | 346938 | - | - | W 220 | 37,000 | 38,100 | 10 | ZY 2525 6 ADW ... L6B INOX |
| 25 x 32 | - | 097533 | - | - | - | 32,900 | 32,900 | 10 | ZY 2532 6 ADW ... L6B INOX |
| 32 x 16 | 099742 | - | - | - | - | 29,000 | 29,800 | 5 | ZY 3216 6 ADW ... L6B INOX |
| 32 x 40 | 097793 | - | - | - | W 231 | 20,300 | 20,300 | 5 | ZY 3240 6 ADW ... L6B INOX |
| 40 x 6 | - | - | - | 346976 | W 235 | 23,000 | 23,800 | 5 | ZY 4006 6 ADW ... L6B INOX |
| 40 x 10 | - | 099940 | - | - | W 236 | 23,000 | 23,800 | 5 | ZY 4010 6 ADW ... L6B INOX |
| 40 x 20 | 100127 | - | - | - | - | 23,000 | 23,800 | 5 | ZY 4020 6 ADW ... L6B INOX |
| 50 x 13 | - | 100271 | - | - | - | 19,000 | 19,000 | 5 | ZY 5013 6 ADW ... L6B INOX |
| 50 x 25 | 100394 | - | - | - | W 242 | 19,000 | 19,000 | 5 | ZY 5025 6 ADW ... L6B INOX |

Shank dia. 8 x 40 mm [S_d x L₂]

| | | | | | | | | | |
|---------|--------|---|---|---|-------|--------|--------|---|----------------------------|
| 32 x 40 | 098257 | - | - | - | W 231 | 28,500 | 29,800 | 5 | ZY 3240 8 ADW ... L6B INOX |
| 50 x 40 | 100653 | - | - | - | W 243 | 19,000 | 19,000 | 5 | ZY 5040 8 ADW ... L6B INOX |

INOX, cylindrical with radius end type

The cylindrical shape with radius end WR is suitable for a variety of deburring and grinding jobs.



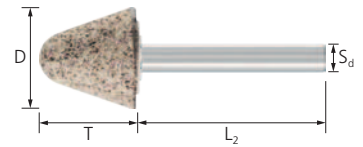
| D x T [mm] | Grit size | Opt. RPM | Max. RPM | | Description |
|---------------|-------------|-------------|-------------|--|-------------|
| | 30 | | | | |
| | EAN 4007220 | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | |
|---------|--------|--------|--------|----|---------------------------|
| 25 x 32 | 353813 | 37,000 | 37,300 | 10 | WR 2532 6 ADW 30 L6B INOX |
|---------|--------|--------|--------|----|---------------------------|

INOX, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



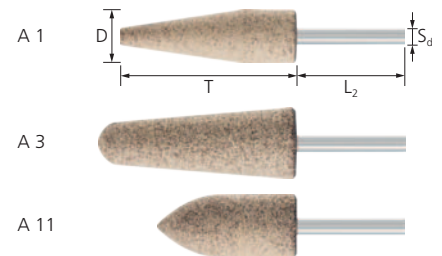
| D x T [mm] | Grit size | Opt. RPM | Max. RPM | | Description |
|---------------|-------------|-------------|-------------|--|-------------|
| | 30 | | | | |
| | EAN 4007220 | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | |
|---------|--------|--------|--------|----|---------------------------|
| 20 x 20 | 347034 | 45,000 | 47,700 | 10 | KE 2020 6 ADW 30 L6B INOX |
| 25 x 45 | 660331 | 34,000 | 34,000 | 10 | KE 2545 6 ADW 30 L6B INOX |

Series A INOX

Series A mounted points are generally used on larger, stainless steel components, such as in container construction. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours. The applications range from grinding in hard-to-reach areas to machining bores and small holes as well as smoothing.



| US shape | D x T [mm] | Grit size | Opt. RPM | Max. RPM | | Description |
|-------------|---------------|-------------|-------------|-------------|--|-------------|
| | | 60 | | | | |
| | | EAN 4007220 | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | |
|------|---------|--------|--------|--------|----|------------------------|
| A 1 | 19 x 64 | 347096 | 30,400 | 30,400 | 10 | A 1 6 ADW 60 L6B INOX |
| A 3 | 25 x 70 | 347119 | 18,600 | 18,600 | 10 | A 3 6 ADW 60 L6B INOX |
| A 11 | 22 x 50 | 347133 | 27,600 | 27,600 | 10 | A 11 6 ADW 60 L6B INOX |

Mounted points

For edge grinding on stainless steel (INOX)



INOX EDGE mounted points

The INOX EDGE type is particularly well suited to edge grinding on stainless steel (INOX). Its applications include weld dressing on fillet welds on stainless steel components, removing burrs on moulded parts made of high-temperature-resistant alloys, removing burrs on stainless steel castings and grinding chamfers in preparation for welding stainless steel profiles.

Advantages:

- Due to cool grinding, particularly suitable for use on temperature-sensitive materials.
- High level of grinding comfort due to low-vibration grinding.
- Economical to use due to the high edge stability even on low-speed tool drives.
- High dimensional stability on edges.

Materials that can be worked:

- Stainless steel (INOX)

Type:

- Resinoid bond
- Regular aluminium oxide

Recommendations for use:

- INOX EDGE mounted points perform best at a cutting speed of 35 to 50 m/s.

Matching tool drives:

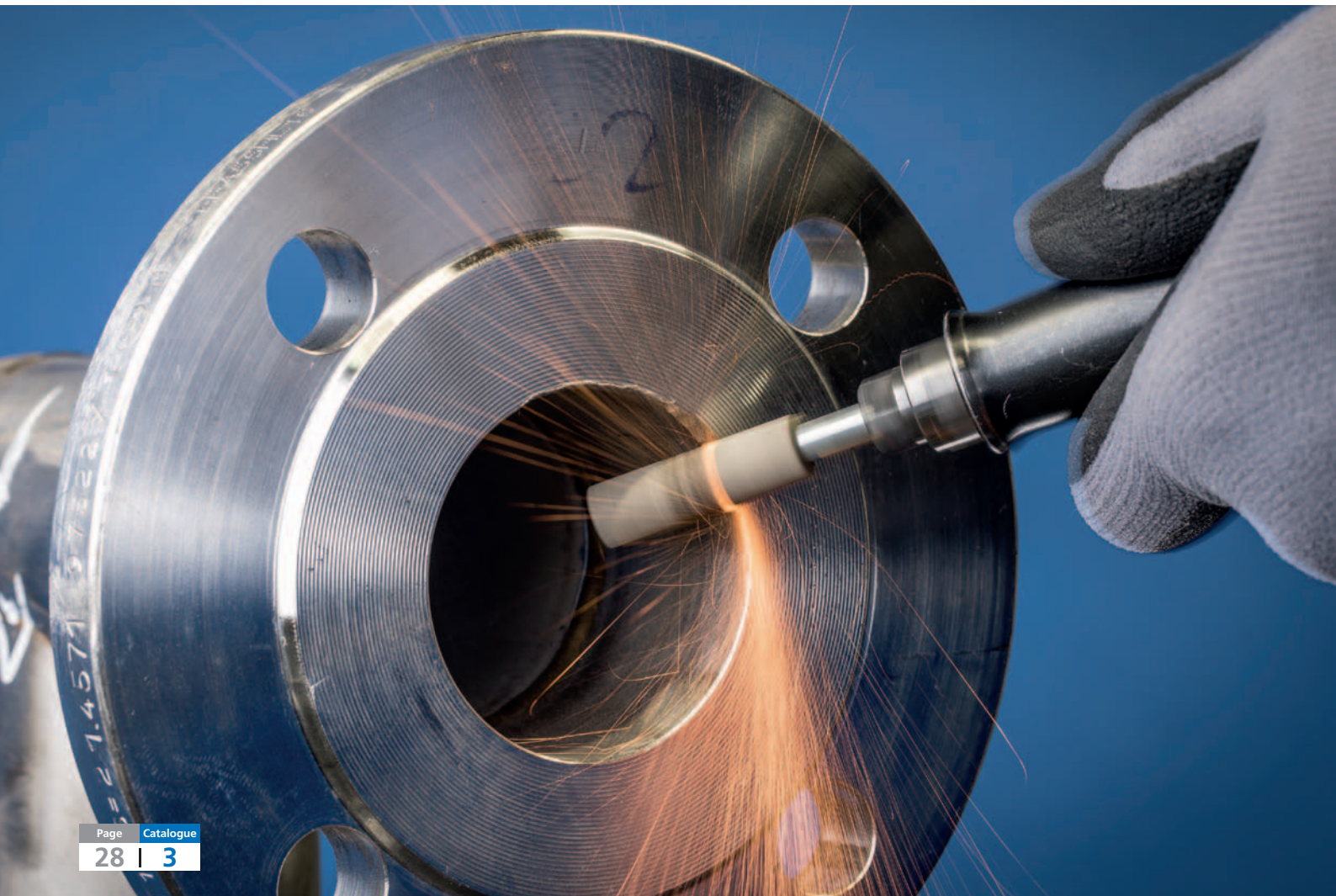
- Flexible shaft drive
- Straight grinder

Ordering notes:

- Please complete the description with the desired grit size.

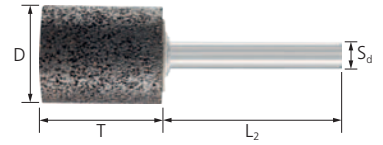
Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



INOX EDGE, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.



| D x T [mm] | Grit size | | | | US shape | Opt. RPM | Max. RPM | | Description |
|---------------|-----------|----|----|----|-------------|-------------|-------------|--|-------------|
| | 24 | 30 | 46 | 60 | | | | | |
| EAN 4007220 | | | | | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

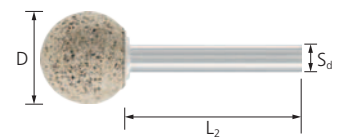
| | | | | | | | | | |
|---------|--------|--------|--------|--------|-------|---------|---------|----|--------------------------------|
| 8 x 16 | - | - | 346860 | - | - | 100,000 | 119,300 | 10 | ZY 0816 6 AN ... N5B INOX EDGE |
| 10 x 20 | - | - | 346884 | - | W 177 | 92,000 | 95,400 | 10 | ZY 1020 6 AN ... N5B INOX EDGE |
| 10 x 32 | - | - | 096062 | - | W 179 | 62,800 | 62,800 | 10 | ZY 1032 6 AN ... N5B INOX EDGE |
| 13 x 25 | - | - | 096420 | - | W 187 | 66,000 | 66,000 | 10 | ZY 1325 6 AN ... N5B INOX EDGE |
| 16 x 32 | - | 096673 | - | 096680 | - | 51,200 | 51,200 | 10 | ZY 1632 6 AN ... N5B INOX EDGE |
| 16 x 50 | - | 096871 | - | - | W 197 | 31,300 | 31,300 | 10 | ZY 1650 6 AN ... N5B INOX EDGE |
| 20 x 8 | - | 346952 | - | - | - | 46,000 | 47,700 | 10 | ZY 2008 6 AN ... N5B INOX EDGE |
| 20 x 25 | - | 097076 | - | - | W 205 | 46,000 | 47,700 | 10 | ZY 2025 6 AN ... N5B INOX EDGE |
| 20 x 40 | - | 097298 | - | - | W 207 | 32,400 | 32,400 | 10 | ZY 2040 6 AN ... N5B INOX EDGE |
| 25 x 6 | - | - | 346969 | - | W 216 | 37,000 | 38,100 | 10 | ZY 2506 6 AN ... N5B INOX EDGE |
| 25 x 13 | - | 099476 | - | - | W 218 | 37,000 | 38,100 | 10 | ZY 2513 6 AN ... N5B INOX EDGE |
| 25 x 32 | - | 097526 | - | - | - | 32,900 | 32,900 | 10 | ZY 2532 6 AN ... N5B INOX EDGE |
| 25 x 40 | - | 098141 | - | - | W 221 | 26,000 | 26,000 | 10 | ZY 2540 6 AN ... N5B INOX EDGE |
| 32 x 8 | - | 099629 | - | - | W 226 | 29,000 | 29,800 | 5 | ZY 3208 6 AN ... N5B INOX EDGE |
| 32 x 16 | 099735 | - | - | - | - | 29,000 | 29,800 | 5 | ZY 3216 6 AN ... N5B INOX EDGE |
| 32 x 20 | 099834 | - | - | - | W 228 | 29,000 | 29,800 | 5 | ZY 3220 6 AN ... N5B INOX EDGE |
| 32 x 32 | 097670 | - | - | - | W 230 | 25,700 | 25,700 | 5 | ZY 3232 6 AN ... N5B INOX EDGE |
| 32 x 40 | 097786 | - | - | - | W 231 | 20,300 | 20,300 | 5 | ZY 3240 6 AN ... N5B INOX EDGE |
| 40 x 6 | - | - | 100479 | - | W 235 | 23,000 | 23,800 | 5 | ZY 4006 6 AN ... N5B INOX EDGE |
| 40 x 10 | - | 099933 | - | - | - | 23,000 | 23,800 | 5 | ZY 4010 6 AN ... N5B INOX EDGE |
| 40 x 20 | 100110 | - | - | - | - | 23,000 | 23,800 | 5 | ZY 4020 6 AN ... N5B INOX EDGE |
| 40 x 40 | 346945 | - | - | - | W 238 | 16,200 | 16,200 | 5 | ZY 4040 6 AN ... N5B INOX EDGE |
| 50 x 8 | - | 100523 | - | - | - | 19,000 | 19,000 | 5 | ZY 5008 6 AN ... N5B INOX EDGE |
| 50 x 13 | - | 100264 | - | - | - | 19,000 | 19,000 | 5 | ZY 5013 6 AN ... N5B INOX EDGE |
| 50 x 25 | 100387 | - | - | - | W 242 | 19,000 | 19,000 | 5 | ZY 5025 6 AN ... N5B INOX EDGE |

Shank dia. 8 x 40 mm [S_d x L₂]

| | | | | | | | | | |
|---------|--------|---|---|---|-------|--------|--------|---|--------------------------------|
| 32 x 40 | 098240 | - | - | - | W 231 | 28,500 | 29,800 | 5 | ZY 3240 8 AN ... N5B INOX EDGE |
|---------|--------|---|---|---|-------|--------|--------|---|--------------------------------|

INOX EDGE, ball type

The ball shape KU is often used for contour grinding and backside deburring.



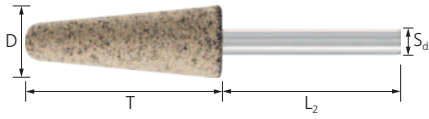
| D [mm] | Grit size | Opt. RPM | Max. RPM | | Description |
|-------------|-----------|-------------|-------------|--|-------------|
| | 30 | | | | |
| EAN 4007220 | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | |
|----|--------|--------|--------|----|-----------------------------|
| 16 | 347003 | 58,000 | 59,600 | 10 | KU 16 6 AN 30 N5B INOX EDGE |
| 20 | 347010 | 46,000 | 47,700 | 10 | KU 20 6 AN 30 N5B INOX EDGE |
| 25 | 347027 | 37,000 | 38,100 | 10 | KU 25 6 AN 30 N5B INOX EDGE |


Mounted points

For edge grinding on stainless steel (INOX)



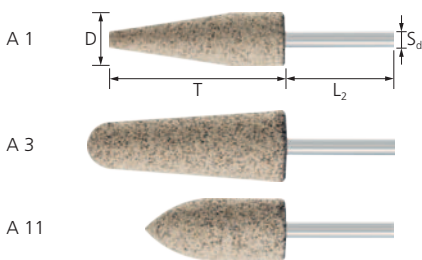
INOX EDGE, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.

| D x T [mm] | Grit size | | | Opt. RPM | Max. RPM |  | Description |
|-------------|-----------|----|----|----------|----------|---|-------------|
| | 24 | 30 | 46 | | | | |
| EAN 4007220 | | | | | | | |


Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | | |
|---------|--------|--------|--------|--------|--------|----|--------------------------------|
| 10 x 25 | - | - | 347041 | 92,000 | 95,400 | 10 | KE 1025 6 AN ... N5B INOX EDGE |
| 16 x 45 | - | - | 347065 | 52,000 | 52,000 | 10 | KE 1645 6 AN ... N5B INOX EDGE |
| 25 x 45 | - | 660324 | - | 34,000 | 34,000 | 10 | KE 2545 6 AN ... N5B INOX EDGE |
| 32 x 32 | 347072 | - | - | 29,000 | 29,800 | 5 | KE 3232 6 AN ... N5B INOX EDGE |



Series A INOX EDGE

Series A mounted points are generally used on larger, stainless steel components, such as in container construction. Due to the special shapes of series A mounted points, it is possible to grind in a variety of contours. The applications range from grinding in hard-to-reach areas to machining bores and small holes as well as smoothing.

| US shape | D x T [mm] | Grit size | Opt. RPM | Max. RPM |  | Description |
|-------------|------------|-----------|----------|----------|---|-------------|
| | | 30 | | | | |
| EAN 4007220 | | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | |
|------|---------|--------|--------|--------|----|----------------------------|
| A 1 | 19 x 64 | 347089 | 30,400 | 30,400 | 10 | A 1 6 AN 30 N5B INOX EDGE |
| A 3 | 25 x 70 | 347102 | 18,600 | 18,600 | 10 | A 3 6 AN 30 N5B INOX EDGE |
| A 11 | 22 x 50 | 347126 | 27,600 | 27,600 | 10 | A 11 6 AN 30 N5B INOX EDGE |

Shank dia. 6.35 x 40 mm [S_d x L₂]

| | | | | | | |
|------|---------|--------|--------|--------|----|------------------------------|
| A 11 | 22 x 50 | 347157 | 30,400 | 30,400 | 10 | A 11 6,3 AN 30 N5B INOX EDGE |
|------|---------|--------|--------|--------|----|------------------------------|



ALU mounted points

The ALU type is particularly well suited to universal use on aluminium and non-ferrous metals. It is used to remove burrs on cast aluminium parts and for chamfering on aluminium profiles for weld-seam preparation.

Advantages:

- The special impregnation means there is no clogging when working on soft, lubricating or tough materials.
- Good grinding performance and stock removal rate.

Materials that can be worked:

- Aluminium
- Copper
- Brass
- Zinc

Type:

- Vitrified bond
- Green silicon carbide

Recommendations for use:

- ALU mounted points perform best at a cutting speed of 20 to 40 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

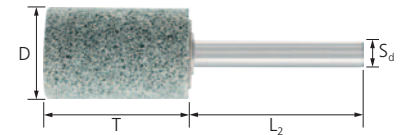
Safety notes:


- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



ALU, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours. It can be made into any desired shape with the aid of a dressing stone.



| D x T [mm] | Grit size | US shape | Opt. RPM | Max. RPM |  | Description |
|---|--------------------|----------|----------|----------|---|--------------------------|
| | 80 | | | | | |
| | EAN 4007220 | | | | | |
| Shank dia. 3 x 30 mm [$S_d \times L_2$] | | | | | | |
| 3 x 6 | 948101 | W 144 | 150,000 | 206,100 | 10 | ZY 0306 3 CN 80 F10V ALU |
| 6 x 13 | 948118 | W 163 | 93,600 | 93,600 | 10 | ZY 0613 3 CN 80 F10V ALU |
| Shank dia. 6 x 40 mm [$S_d \times L_2$] | | | | | | |
| 10 x 13 | 802908 | W 176 | 45,000 | 95,400 | 10 | ZY 1013 6 CN 80 F10V ALU |
| 13 x 20 | 802915 | W 186 | 35,000 | 73,400 | 10 | ZY 1320 6 CN 80 F10V ALU |
| 16 x 20 | 096512 | W 195 | 30,000 | 59,600 | 10 | ZY 1620 6 CN 80 F10V ALU |
| 16 x 32 | 802939 | - | 30,000 | 51,200 | 10 | ZY 1632 6 CN 80 F10V ALU |
| 20 x 32 | 097151 | W 206 | 24,000 | 41,100 | 10 | ZY 2032 6 CN 80 F10V ALU |
| 32 x 32 | 802946 | W 230 | 15,000 | 25,700 | 5 | ZY 3232 6 CN 80 F10V ALU |
| 40 x 20 | 100080 | - | 12,000 | 23,800 | 5 | ZY 4020 6 CN 80 F10V ALU |

Mounted points

For surface grinding on grey and nodular cast iron



CAST mounted points

The CAST type is particularly well suited to surface work on grey and nodular cast iron in combination with high peripheral speeds. Its applications include cleaning of workpieces and grinding out of shrinkage holes.

Advantages:

- Suitable for use on surfaces and edges.
- Good grinding performance and long tool life.
- High stock removal rates thanks to coarse grit size.

Materials that can be worked:

- Grey/nodular cast iron (GG/GJL, GGG/GJS)
- Annealed cast iron

Type:

- Vitrified bond
- Aluminium oxide mixture of pink aluminium oxide and regular aluminium oxide

Recommendations for use:

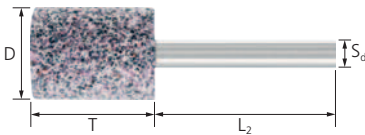
- CAST mounted points perform best at a cutting speed of 30 to 50 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder


Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



CAST, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.

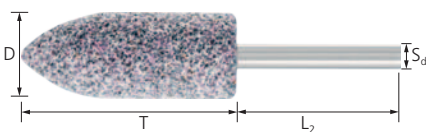
| D x T [mm] | Grit size | | US shape | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|----|-------------|-------------|-------------|---|-------------|
| | 24 | 30 | | | | | |
| EAN 4007220 | | | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | | |
|---------|--------|--------|-------|--------|--------|----|---------------------------|
| 16 x 32 | - | 096567 | - | 51,200 | 51,200 | 10 | ZY 1632 6 ARN 30 K5V CAST |
| 16 x 50 | - | 096819 | W 197 | 31,300 | 31,300 | 10 | ZY 1650 6 ARN 30 K5V CAST |
| 20 x 25 | - | 096963 | W 205 | 43,000 | 47,700 | 10 | ZY 2025 6 ARN 30 K5V CAST |
| 20 x 40 | - | 097199 | W 207 | 32,400 | 32,400 | 10 | ZY 2040 6 ARN 30 K5V CAST |
| 25 x 32 | - | 097410 | - | 32,900 | 32,900 | 10 | ZY 2532 6 ARN 30 K5V CAST |
| 32 x 32 | 097564 | - | W 230 | 25,700 | 25,700 | 5 | ZY 3232 6 ARN 24 K5V CAST |
| 32 x 40 | 097694 | - | W 231 | 20,300 | 20,300 | 5 | ZY 3240 6 ARN 24 K5V CAST |
| 40 x 10 | - | 099865 | W 236 | 22,000 | 23,800 | 5 | ZY 4010 6 ARN 30 K5V CAST |
| 40 x 20 | 100004 | - | - | 22,000 | 23,800 | 5 | ZY 4020 6 ARN 24 K5V CAST |
| 50 x 8 | - | 100493 | - | 18,000 | 19,000 | 5 | ZY 5008 6 ARN 30 K5V CAST |
| 50 x 13 | - | 100165 | - | 18,000 | 19,000 | 5 | ZY 5013 6 ARN 30 K5V CAST |


Shank dia. 8 x 40 mm [S_d x L₂]

| | | | | | | | |
|---------|--------|---|-------|--------|--------|---|---------------------------|
| 32 x 40 | 098158 | - | W 231 | 27,000 | 29,800 | 5 | ZY 3240 8 ARN 24 K5V CAST |
| 50 x 25 | 100530 | - | W 242 | 18,000 | 19,000 | 5 | ZY 5025 8 ARN 24 K5V CAST |



CAST, pointed tree type

The pointed tree shape SP is excellent for machining small holes and bores.

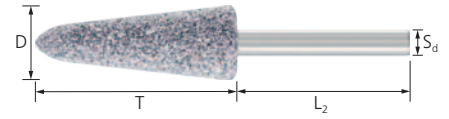
| D x T [mm] | Grit size | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|-------------|-------------|---|-------------|
| | 30 | | | | |
| EAN 4007220 | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | |
|---------|--------|--------|--------|----|---------------------------|
| 20 x 50 | 102305 | 30,500 | 30,500 | 10 | SP 2050 6 ARN 30 K5V CAST |
|---------|--------|--------|--------|----|---------------------------|

CAST, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



| D x T [mm] | Grit size | | Opt. RPM | Max. RPM |  | Description |
|-------------|-----------|----|----------|----------|---|-------------|
| | 24 | 46 | | | | |
| EAN 4007220 | | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

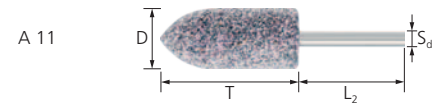
| | | | | | | |
|---------|--------|--------|--------|--------|----|---------------------------|
| 10 x 25 | - | 534649 | 85,000 | 95,400 | 10 | KE 1025 6 ARN 46 K5V CAST |
| 16 x 45 | - | 102848 | 52,000 | 52,000 | 10 | KE 1645 6 ARN 46 K5V CAST |
| 20 x 40 | 534694 | - | 43,000 | 47,700 | 10 | KE 2040 6 ARN 24 K5V CAST |


Shank dia. 8 x 40 mm [S_d x L₂]

| | | | | | | |
|---------|--------|---|--------|--------|---|---------------------------|
| 32 x 50 | 103081 | - | 27,000 | 29,800 | 5 | KE 3250 8 ARN 24 K5V CAST |
|---------|--------|---|--------|--------|---|---------------------------|

Series A CAST

The shape A 11 is excellent for machining small holes and bores.



| US shape | D x T [mm] | Grit size | Opt. RPM | Max. RPM |  | Description |
|-------------|------------|-----------|----------|----------|---|-------------|
| | | 30 | | | | |
| EAN 4007220 | | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | |
|------|---------|--------|--------|--------|----|------------------------|
| A 11 | 22 x 50 | 534700 | 27,600 | 27,600 | 10 | A 11 6 ARN 30 K5V CAST |
|------|---------|--------|--------|--------|----|------------------------|



Mounted points

For edge grinding on grey and nodular cast iron



CAST EDGE mounted points

The CAST EDGE type is particularly well suited to edge grinding and grinding out sand contamination and metal contamination on grey and nodular cast iron in combination with high cutting speeds. Its main applications include removal of sharp burrs and grinding of sand contamination and metal contamination on cast parts.

Advantages:

- Highly dimensionally stable due to the high bond content.
- Economical to use due to the high edge stability even on low-speed tool drives.

Materials that can be worked:

- Grey/nodular cast iron (GG/GJL, GGG/GJS)
- Annealed cast iron
- Casting scale with sand contamination and metal contamination

Type:

- Vitrified bond
- Grey silicon carbide

Recommendations for use:

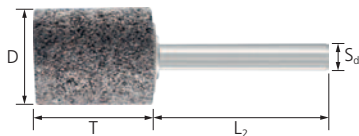
- CAST EDGE mounted points perform best at a cutting speed of 30 to 50 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder


Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



CAST EDGE, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.

| D x T [mm] | Grit size | | US shape | Opt. RPM | Max. RPM |  | Description |
|---------------|-------------|----|-------------|-------------|-------------|---|-------------|
| | 24 | 30 | | | | | |
| | EAN 4007220 | | | | | | |

Shank dia. 6 x 40 mm [$S_d \times L_2$]

| | | | | | | | |
|---------|--------|--------|-------|--------|--------|----|-------------------------------|
| 16 x 32 | - | 096666 | - | 47,000 | 51,200 | 10 | ZY 1632 6 CU 30 R5V CAST EDGE |
| 20 x 25 | - | 097069 | W 205 | 38,000 | 47,700 | 10 | ZY 2025 6 CU 30 R5V CAST EDGE |
| 20 x 40 | - | 097281 | - | 32,400 | 32,400 | 10 | ZY 2040 6 CU 30 R5V CAST EDGE |
| 20 x 50 | - | 098097 | W 208 | 25,100 | 25,100 | 10 | ZY 2050 6 CU 30 R5V CAST EDGE |
| 32 x 32 | 097663 | - | W 230 | 23,000 | 25,700 | 5 | ZY 3232 6 CU 24 R5V CAST EDGE |
| 40 x 20 | 100103 | - | - | 19,000 | 23,800 | 5 | ZY 4020 6 CU 24 R5V CAST EDGE |

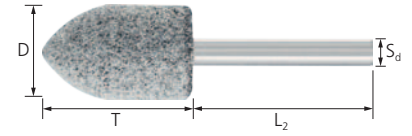
Shank dia. 8 x 40 mm [$S_d \times L_2$]

| | | | | | | | |
|---------|--------|---|-------|--------|--------|---|-------------------------------|
| 32 x 40 | 098233 | - | W 231 | 24,000 | 29,800 | 5 | ZY 3240 8 CU 24 R5V CAST EDGE |
| 40 x 40 | 098301 | - | W 238 | 19,000 | 23,800 | 5 | ZY 4040 8 CU 24 R5V CAST EDGE |



CAST EDGE, pointed tree type

The pointed tree shape SP is excellent for machining small holes and bores.



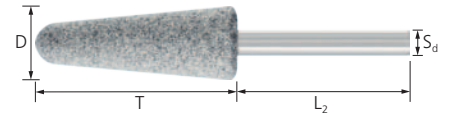
| D x T [mm] | Grit size | | Opt. RPM | Max. RPM | Description |
|---------------|-----------|-------------|-------------|-------------|-------------|
| | 30 | EAN 4007220 | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | |
|---------|--------|--|--------|--------|----|-------------------------------|
| 20 x 32 | 102282 | | 38,000 | 47,700 | 10 | SP 2032 6 CU 30 R5V CAST EDGE |
| 20 x 50 | 102336 | | 30,500 | 30,500 | 10 | SP 2050 6 CU 30 R5V CAST EDGE |

CAST EDGE, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



| D x T [mm] | Grit size | | Opt. RPM | Max. RPM | Description |
|---------------|-----------|----|-------------|-------------|-------------|
| | 30 | 46 | | | |

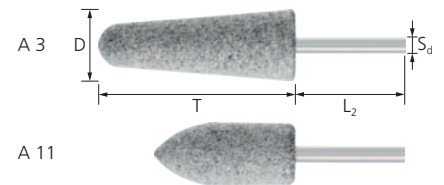
Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | |
|---------|--------|--------|--------|--------|----|-------------------------------|
| 16 x 45 | - | 102916 | 47,000 | 52,000 | 10 | KE 1645 6 CU 46 R5V CAST EDGE |
| 20 x 32 | 102725 | - | 38,000 | 47,700 | 10 | KE 2032 6 CU 30 R5V CAST EDGE |
| 25 x 45 | 102947 | - | 30,000 | 34,000 | 10 | KE 2545 6 CU 30 R5V CAST EDGE |

Series A CAST EDGE

The shape A 3 is designed for a comfortable working position during surface grinding and grinding of chamfers.

The shape A 11 is excellent for machining small holes and bores.



| US shape | D x T [mm] | Grit size | | Opt. RPM | Max. RPM | Description |
|-------------|---------------|-----------|-------------|-------------|-------------|-------------|
| | | 30 | EAN 4007220 | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | |
|------|---------|--------|--------|--------|----|----------------------------|
| A 3 | 25 x 70 | 117156 | 18,600 | 18,600 | 10 | A 3 6 CU 30 R5V CAST EDGE |
| A 11 | 22 x 50 | 117217 | 27,600 | 27,600 | 10 | A 11 6 CU 30 R5V CAST EDGE |

Mounted points

For edge grinding on grey and nodular cast iron



CAST EDGE mounted points for foundries

The CAST EDGE type for foundries is particularly well suited to universal use and for grinding out metal contamination and grinding of sand contamination and sand deposits on grey and nodular cast iron workpieces in conjunction with high cutting speeds.

Advantages:

- Excellent grinding performance and aggressiveness from the start.
- High stock removal rate in combination with a long tool life.
- Delivered in practical and environmentally friendly industrial packaging.

Materials that can be worked:

- Grey/nodular cast iron (GG/GJL, GGG/GJS)
- Annealed cast iron
- Casting scale with sand contamination and metal contamination

Type:

- Vitrified bond
- Grey silicon carbide

Recommendations for use:

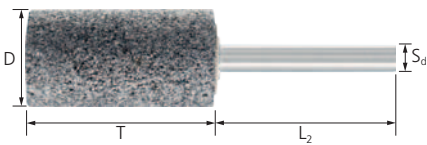
- CAST EDGE mounted points perform best at a cutting speed of 30 to 50 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



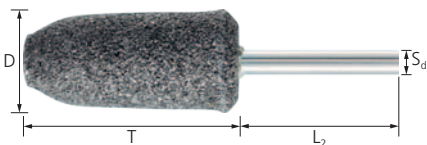
CAST EDGE, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.

| D x T [mm] | Grit size | US shape | Opt. RPM | Max. RPM | IP | Description |
|------------|-------------|----------|----------|----------|----|-------------|
| | 30 | | | | | |
| | EAN 4007220 | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | |
|---------|--------|-------|--------|--------|----|---------------------------------|
| 20 x 40 | 803028 | W 205 | 32,400 | 32,400 | 50 | ZY 2040 6 CU 30 R5V CAST EDGE N |
| 25 x 32 | 803035 | - | 30,000 | 32,900 | 50 | ZY 2532 6 CU 30 R5V CAST EDGE N |



CAST EDGE, pointed tree type

The pointed tree shape SP is excellent for machining small holes and bores.

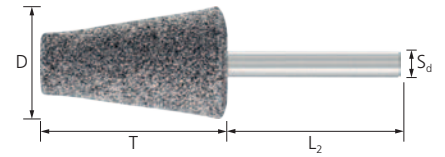
| D x T [mm] | Grit size | Opt. RPM | Max. RPM | IP | Description |
|------------|-------------|----------|----------|----|-------------|
| | 30 | | | | |
| | EAN 4007220 | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | |
|---------|--------|--------|--------|----|---------------------------------|
| 20 x 50 | 803042 | 14,100 | 14,100 | 50 | SP 2050 6 CU 30 R5V CAST EDGE N |
|---------|--------|--------|--------|----|---------------------------------|

CAST EDGE, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



| D x T [mm] | Grit size | | | Opt. RPM | Max. RPM | IP | Description |
|---------------|-----------|----|----|-------------|-------------|----|-------------|
| | 24 | 30 | 46 | | | | |
| EAN 4007220 | | | | | | | |

Shank dia. 6 x 40 mm [$S_d \times L_2$]

| | | | | | | | |
|---------|---|--------|--------|--------|--------|----|---------------------------------|
| 16 x 45 | - | - | 803059 | 24,000 | 24,000 | 50 | KE 1645 6 CU 46 R5V CAST EDGE N |
| 20 x 40 | - | 803066 | - | 20,900 | 20,900 | 50 | KE 2040 6 CU 30 R5V CAST EDGE N |

Shank dia. 8 x 40 mm [$S_d \times L_2$]

| | | | | | | | |
|---------|--------|---|---|--------|--------|----|---------------------------------|
| 35 x 50 | 642665 | - | - | 15,600 | 15,600 | 50 | KE 3550 8 CU 24 R5V CAST EDGE N |
|---------|--------|---|---|--------|--------|----|---------------------------------|



Mounted points

For universal use on cast steel



CAST STEEL mounted points for foundries

The CAST STEEL type is particularly well suited to tough universal work on cast steel. It is ideal for removing burrs on cast steel parts and for grinding of intersections after separating risers.

Advantages:

- Excellent grinding performance and aggressiveness from the start.
- High stock removal rate in combination with a long tool life.
- Delivered in practical and environmentally friendly industrial packaging.

Materials that can be worked:

- Cast steel

Type:

- Vitrified bond
- Aluminium oxide mixture of pink and dark-red aluminium oxide

Recommendations for use:

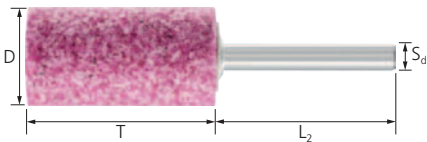
- CAST STEEL mounted points perform best at a cutting speed of 25 to 40 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.



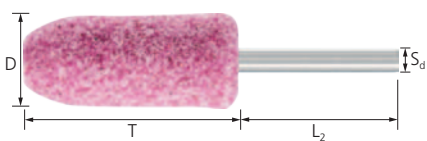
CAST STEEL, cylindrical type

The cylindrical shape ZY is ideal for grinding bores, radii and contours.

| D x T [mm] | Grit size | US shape | Opt. RPM | Max. RPM | IP | Description |
|------------|-------------|----------|----------|----------|----|-------------|
| | 30 | | | | | |
| | EAN 4007220 | | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | |
|---------|--------|-------|--------|--------|----|---------------------------------|
| 20 x 40 | 802953 | W 207 | 32,400 | 32,400 | 50 | ZY 2040 6 ADR 30 O5V CAST STEEL |
| 25 x 32 | 802960 | - | 25,000 | 32,900 | 50 | ZY 2532 6 ADR 30 O5V CAST STEEL |



CAST STEEL, pointed tree type

The pointed tree shape SP is excellent for machining small holes and bores.

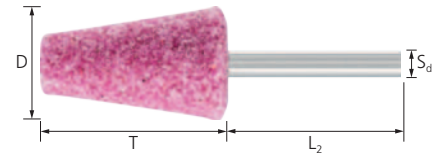
| D x T [mm] | Grit size | Opt. RPM | Max. RPM | IP | Description |
|------------|-------------|----------|----------|----|-------------|
| | 30 | | | | |
| | EAN 4007220 | | | | |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | |
|---------|--------|--------|--------|----|---------------------------------|
| 20 x 50 | 802977 | 14,100 | 14,100 | 50 | SP 2050 6 ADR 30 O5V CAST STEEL |
|---------|--------|--------|--------|----|---------------------------------|

CAST STEEL, conical with radius end type

The conical shape with radius end KE is designed for a comfortable working position during surface grinding and grinding of chamfers.



| D x T [mm] | Grit size | | | Opt. RPM | Max. RPM | IP | Description |
|-------------|-----------|----|----|----------|----------|----|-------------|
| | 24 | 30 | 46 | | | | |
| EAN 4007220 | | | | | | | |

Shank dia. 6 x 40 mm [S_d x L_2]

| | | | | | | | |
|---------|---|--------|--------|--------|--------|----|---------------------------------|
| 16 x 45 | - | - | 802991 | 24,000 | 24,000 | 50 | KE 1645 6 ADR 46 O5V CAST STEEL |
| 20 x 40 | - | 803011 | - | 20,900 | 20,900 | 50 | KE 2040 6 ADR 30 O5V CAST STEEL |

Shank dia. 8 x 40 mm [S_d x L_2]

| | | | | | | | |
|---------|--------|---|---|--------|--------|----|---------------------------------|
| 35 x 50 | 642672 | - | - | 15,600 | 15,600 | 50 | KE 3550 8 ADR 24 O5V CAST STEEL |
|---------|--------|---|---|--------|--------|----|---------------------------------|



Mounted points

For universal use on plastic



RUBBER mounted points

The RUBBER type is specifically designed for universal use on soft materials such as rubber, plastic and wood. The fields of application include removal of burrs on plastic injection-moulded parts, trimming of rubber moulded parts and moulded parts made of polyurethane (PUR), grinding of wooden cores and wooden shapes in model construction workshops and roughening of various adhesive joints (e.g. for repairs on conveyor belts and tyres).

Advantages:

- Open structure and large chip spaces due to bubble grain aluminium oxide.
- Machining of temperature-sensitive materials without addition of cooling lubricant due to large chip spaces.
- Excellent grinding performance.

Recommendations for use:

- RUBBER mounted points perform best at a cutting speed of 5 to 20 m/s.

Matching tool drives:

- Flexible shaft drive
- Straight grinder

Materials that can be worked:

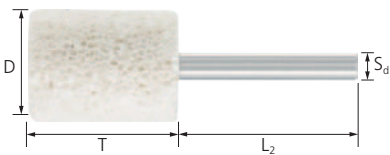
- Elastomers
- Thermoplastics
- Rubber
- Wood

Safety notes:

- The maximum permitted rotational speed relates to the unsupported shank length of 10 mm.

Type:

- Vitrified bond
- Bubble grain aluminium oxide



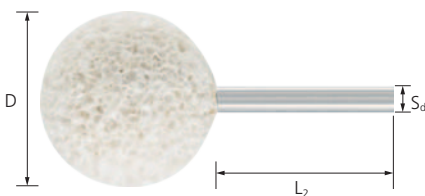
RUBBER, cylindrical type

The cylindrical shape ZY is ideal for grinding radii and contours, and for deburring work.

| D x T [mm] | Grit size | | Opt. RPM | Max. RPM |  | Description |
|---------------|-----------|---|-------------|-------------|---|-------------|
| | 1 | 2 | | | | |
| EAN 4007220 | | | | | | |


Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | | |
|---------|--------|--------|--------|--------|----|----------------------------|
| 16 x 32 | 096703 | - | 12,000 | 51,200 | 10 | ZY 1632 6 AH 1 D12V RUBBER |
| 25 x 32 | 097540 | - | 8,000 | 32,900 | 10 | ZY 2532 6 AH 1 D12V RUBBER |
| 40 x 20 | - | 100134 | 5,000 | 23,800 | 5 | ZY 4020 6 AH 2 D12V RUBBER |



RUBBER, ball type

The ball shape KU is often used for roughening rubber surfaces in tyre repair.

| D [mm] | Grit size | Opt. RPM | Max. RPM |  | Description |
|-----------|-------------|-------------|-------------|--|--------------------------|
| | 2 | | | | |
| | EAN 4007220 | | | | |
| 40 | 948095 | 5,000 | 19,700 | 5 | KU 40 6 AH 2 D12V RUBBER |

Shank dia. 6 x 40 mm [S_d x L₂]

| | | | | | |
|----|--------|-------|--------|---|--------------------------|
| 40 | 948095 | 5,000 | 19,700 | 5 | KU 40 6 AH 2 D12V RUBBER |
|----|--------|-------|--------|---|--------------------------|

PFERD offers a very wide range of high-quality bench grinding wheels for working with a large variety of materials and for many different applications.

Bench grinding wheels are available with different dimensions, grains and abrasives. The PFERD range has been adapted to the standard bench grinders on the market.

Advantages:

- Long tool life.
- High dimensional stability.
- High abrasive performance.
- Integrated adapter sleeves for mounting on almost any bench grinder spindle.

Applications:

- Deburring
- Work on edges (chamfering, rounding)
- Sharpening

Recommendations for use:

- Dressing the wheel on a regular basis exposes sharp grain and maintains an even grinding area.
- Constantly adjust the workpiece support to the grinding wheel diameter (gap width max. 3 mm).

Matching tool drives:

- Bench grinders

Ordering notes:

- Please complete the description with the desired grit size.

Safety notes:

- The maximum permitted peripheral speed is 35 m/s.
- For safety reasons, the maximum permitted rotational speed indicated must never be exceeded.
- Before clamping, the grinding tool must be ring tested to make sure that it does not have any cracks (undamaged grinding tools give a clear tone).



= Wear eye protection!



= Wear a dust mask!



= Wear hearing protection!



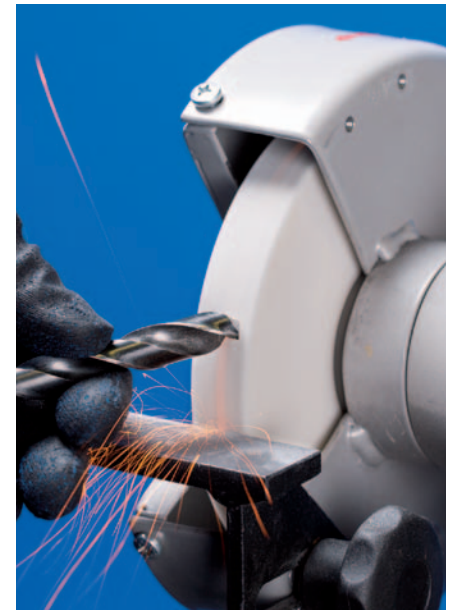
= Wear gloves!



= Follow the safety instructions!

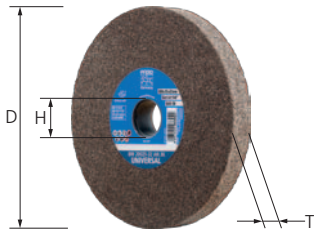


= Do not use if damaged!



Bench grinding wheels

UNIVERSAL, HSS, CARBIDE



UNIVERSAL type

UNIVERSAL type bench grinding wheels are ideal for universal use in the workshop.



Materials that can be worked:

steel, cast steel, stainless steel (INOX), cast iron

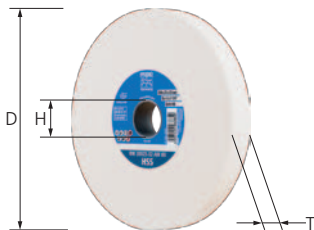
Type:

Vitrified bond, regular aluminium oxide, hardness grade: Q (grit size 24), P (grit size 36), M (grit size 60), structural density: 5 (grit size 24 and 36), 6 (grit size 60)

| D x T [mm] | H [mm] | Grit size | | | Reductions | Max. RPM | | Description |
|---------------|-----------|-------------|----|----|------------|-------------|--|-------------|
| | | 24 | 36 | 60 | | | | |
| | | EAN 4007220 | | | | | | |

Aluminium oxide, regular (AN)

| | | | | | | | | |
|----------|----|--------|--------|--------|----------|-------|---|------------------------------|
| 125 x 20 | 32 | - | 037904 | 037997 | 25/20/16 | 5,350 | 1 | BW 12520-32 AN ... UNIVERSAL |
| 150 x 16 | 32 | 610138 | - | 610145 | 25/20/16 | 4,500 | 1 | BW 15016-32 AN ... UNIVERSAL |
| 150 x 20 | 32 | 610176 | 037911 | 610183 | 25/20/16 | 4,500 | 1 | BW 15020-32 AN ... UNIVERSAL |
| 150 x 25 | 32 | 610213 | - | 610220 | 25/20/16 | 4,500 | 1 | BW 15025-32 AN ... UNIVERSAL |
| 175 x 25 | 32 | - | 037928 | 038000 | 25/20/16 | 3,750 | 1 | BW 17525-32 AN ... UNIVERSAL |
| | 51 | - | 037935 | 038017 | 32 | 3,750 | 1 | BW 17525-51 AN ... UNIVERSAL |
| 200 x 20 | 32 | 610305 | - | 610312 | 25/20/16 | 3,350 | 1 | BW 20020-32 AN ... UNIVERSAL |
| 200 x 25 | 32 | 610350 | 037942 | 610367 | 25/20/16 | 3,350 | 1 | BW 20025-32 AN ... UNIVERSAL |
| | 51 | - | 037959 | 038024 | 32 | 3,350 | 1 | BW 20025-51 AN ... UNIVERSAL |
| 200 x 30 | 32 | 612378 | - | 610398 | 25/20/16 | 3,350 | 1 | BW 20030-32 AN ... UNIVERSAL |
| 200 x 32 | 51 | - | 037966 | 038031 | 32 | 3,350 | 1 | BW 20032-51 AN ... UNIVERSAL |
| 250 x 32 | 51 | - | 037973 | 038048 | 32 | 2,700 | 1 | BW 25032-51 AN ... UNIVERSAL |
| 300 x 40 | 76 | - | 037980 | 038062 | - | 2,250 | 1 | BW 30040-76 AN ... UNIVERSAL |



HSS type

HSS type bench grinding wheels are particularly useful for sharpening HSS pilot drills or machining other high-alloy steels.

Materials that can be worked:

tool steels, case-hardened steels, hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC)

Type:

Vitrified bond, white aluminium oxide, hardness grade: K, structural density: 7

| D x T [mm] | H [mm] | Grit size | | Reductions | Max. RPM | | Description |
|---------------|-----------|-------------|----|------------|-------------|--|-------------|
| | | 60 | 80 | | | | |
| | | EAN 4007220 | | | | | |

Aluminium oxide (AW)

| | | | | | | | | |
|----------|----|--------|--------|--|----------|-------|---|------------------------|
| 125 x 20 | 32 | - | 037812 | | 25/20/16 | 5,350 | 1 | BW 12520-32 AW ... HSS |
| 150 x 16 | 32 | 610152 | - | | 25/20/16 | 4,500 | 1 | BW 15016-32 AW ... HSS |
| 150 x 20 | 32 | 610190 | 037829 | | 25/20/16 | 4,500 | 1 | BW 15020-32 AW ... HSS |
| 150 x 25 | 32 | 610237 | - | | 25/20/16 | 4,500 | 1 | BW 15025-32 AW ... HSS |
| 175 x 25 | 32 | - | 037836 | | 25/20/16 | 3,750 | 1 | BW 17525-32 AW ... HSS |
| | 51 | - | 037843 | | 32 | 3,750 | 1 | BW 17525-51 AW ... HSS |
| 200 x 20 | 32 | 610329 | - | | 25/20/16 | 3,350 | 1 | BW 20020-32 AW ... HSS |
| 200 x 25 | 32 | 610374 | 037850 | | 25/20/16 | 3,350 | 1 | BW 20025-32 AW ... HSS |
| | 51 | - | 037867 | | 32 | 3,350 | 1 | BW 20025-51 AW ... HSS |
| 200 x 30 | 32 | 612385 | - | | 25/20/16 | 3,350 | 1 | BW 20030-32 AW ... HSS |
| 200 x 32 | 51 | - | 037874 | | 32 | 3,350 | 1 | BW 20032-51 AW ... HSS |
| 250 x 32 | 51 | - | 037881 | | 32 | 2,700 | 1 | BW 25032-51 AW ... HSS |
| 300 x 40 | 76 | - | 037898 | | - | 2,250 | 1 | BW 30040-76 AW ... HSS |

CARBIDE type

CARBIDE type bench grinding wheels are used on hard materials, such as for sharpening tungsten carbide tools.

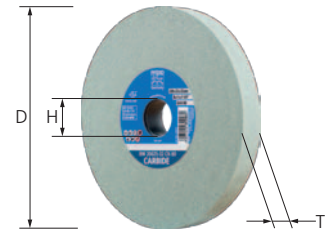


Materials that can be worked:

tungsten carbide, hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC), steel materials with a hardness > 54 HRC, glass

Type:

Vitrified bond, green silicon carbide, hardness grade: J, structural density: 7



| D x T [mm] | H [mm] | Grit size | | | Reductions | Max. RPM | | Description |
|-----------------------------|--------|-----------|--------|--------|------------|----------|---|----------------------------|
| | | 60 | 80 | 120 | | | | |
| EAN 4007220 | | | | | | | | |
| Silicon carbide (CN) | | | | | | | | |
| 125 x 20 | 32 | - | 038079 | - | 25/20/16 | 5,350 | 1 | BW 12520-32 CN ... CARBIDE |
| 150 x 16 | 32 | - | - | 610169 | 25/20/16 | 4,500 | 1 | BW 15016-32 CN ... CARBIDE |
| 150 x 20 | 32 | 718902 | 038086 | 610206 | 25/20/16 | 4,500 | 1 | BW 15020-32 CN ... CARBIDE |
| 150 x 25 | 32 | - | - | 610244 | 25/20/16 | 4,500 | 1 | BW 15025-32 CN ... CARBIDE |
| 175 x 25 | 32 | - | 038093 | - | 25/20/16 | 3,750 | 1 | BW 17525-32 CN ... CARBIDE |
| | 51 | - | 038109 | - | 32 | 3,750 | 1 | BW 17525-51 CN ... CARBIDE |
| 200 x 20 | 32 | - | 610336 | 610343 | 25/20/16 | 3,350 | 1 | BW 20020-32 CN ... CARBIDE |
| 200 x 25 | 32 | - | 629031 | 610381 | 25/20/16 | 3,350 | 1 | BW 20025-32 CN ... CARBIDE |
| | 51 | - | 038116 | - | 32 | 3,350 | 1 | BW 20025-51 CN ... CARBIDE |
| 200 x 30 | 32 | - | - | 612392 | 25/20/16 | 3,350 | 1 | BW 20030-32 CN ... CARBIDE |
| 200 x 32 | 51 | - | 038123 | - | 32 | 3,350 | 1 | BW 20032-51 CN ... CARBIDE |
| 250 x 32 | 51 | - | 038130 | - | 32 | 2,700 | 1 | BW 25032-51 CN ... CARBIDE |
| 300 x 40 | 76 | - | 038147 | - | - | 2,250 | 1 | BW 30040-76 CN ... CARBIDE |



Grinding and polishing stones

General information



PFERD grinding and polishing stones are versatile tools for finish machining on forms in tool and mould-making. They are used for step-by-step fine grinding after machining or after electrical discharge machining (EDM) to grind in a brushed finish/polish in the demoulding direction or to prepare for high-gloss polishing with diamond pastes.

Advantages:

- Long tool life.
- High dimensional stability.
- High abrasive performance.
- Even stock removal.
- Fine surface finish.

Applications:

- Surface work
- Polishing
- Rounding
- Finishing
- Step-by-step fine grinding

Recommendations for use:

- A quick-mounting handle is recommended in manual applications to make work more ergonomic.
- The use of grinding oils is recommended to achieve a better surface finish.
- Sort the polishing stones by type to avoid grain being carried over.

Matching tool drives:

- Manual filing machine

Ordering notes:

- Please complete the description with the desired grit size.



Detailed information on grinding oils can be found in catalogue section 4.

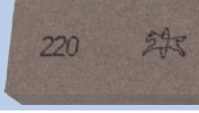
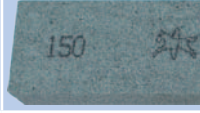


Detailed information on ceramic fibre files can be found in catalogue section 4.



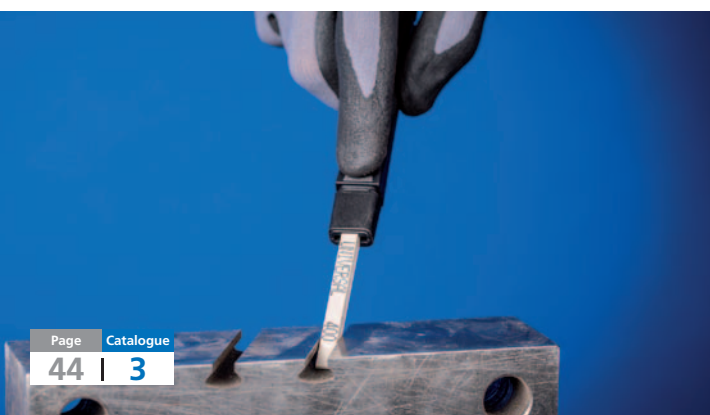
A manual filing machine is recommended to make work easier. Detailed information can be found in catalogue section 9.

The fast way to the best tool

| Material group ▼ | | Type ▶ | UNIVERSAL | CARBIDE |
|------------------------|---|---|---|---|
| | | |  |  |
| Steel | Steels up to 1,200 N/mm ² (< 38 HRC) | Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, tempering steels | ● | ○ |
| | Hardened, heat-treated steels over 1,200 N/mm ² (> 38 HRC) | Tool steels, tempering steels, alloyed steels | ○ | ● |
| Stainless steel (INOX) | Rust and acid-resistant steels | Austenitic and ferritic stainless steels | ● | |
| Tungsten carbide | – | – | | ● |
| Non-ferrous metals | Soft non-ferrous metals, non-ferrous metals | Aluminium alloys, brass, copper, zinc | ● | |
| | Hard non-ferrous metals | Bronze, titanium, titanium alloys, hard aluminium alloys | ● | |

● = highly suitable

○ = suitable



UNIVERSAL type

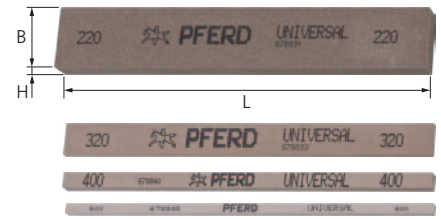
The UNIVERSAL type grinding and polishing stones are the all-rounders for step-by-step fine grinding in tool and mould construction.

Materials that can be worked:

hardened, heat-treated steels over 1,200 N/mm² (> 38 HRC), stainless steel (INOX), aluminium, other non-ferrous metals

Type:

Vitrified bond, regular aluminium oxide



| Width [mm] | Height [mm] | Length [mm] | Grit size | | | | Description |
|-------------|-------------|-------------|-----------|-----|-----|-----|-------------|
| | | | 220 | 320 | 400 | 600 | |
| EAN 4007220 | | | | | | | |

Square

| | | | | | | | | |
|----|----|-----|--------|--------|--------|--------|----|--------------------------------|
| 4 | 4 | 150 | 106679 | 106969 | 107034 | 107096 | 12 | SPS 4x4x150 AN ... UNIVERSAL |
| 6 | 3 | 150 | 106914 | 106976 | 107041 | 107102 | 12 | SPS 6x3x150 AN ... UNIVERSAL |
| | 6 | 150 | 106921 | 106983 | 107058 | 107119 | 12 | SPS 6x6x150 AN ... UNIVERSAL |
| 13 | 3 | 150 | 106938 | 107003 | 107065 | 107126 | 12 | SPS 13x3x150 AN ... UNIVERSAL |
| | 6 | 150 | 106945 | 107010 | 107072 | 107133 | 12 | SPS 13x6x150 AN ... UNIVERSAL |
| 25 | 13 | 150 | 106952 | 107027 | 107089 | 107140 | 6 | SPS 25x13x150 AN ... UNIVERSAL |

CARBIDE type

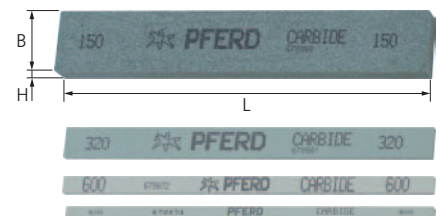
The CARBIDE type soft grinding and polishing stones enable high removal rates without clogging on hard materials in tool and mould construction.

Materials that can be worked:

high-temperature-resistant materials, tungsten carbide, steel materials with a hardness > 54 HRC

Type:

Vitrified bond, green silicon carbide



| Width [mm] | Height [mm] | Length [mm] | Grit size | | | | Description |
|-------------|-------------|-------------|-----------|-----|-----|-----|-------------|
| | | | 150 | 220 | 320 | 400 | |
| EAN 4007220 | | | | | | | |

Square

| | | | | | | | | | |
|----|----|-----|--------|--------|--------|--------|--------|----|------------------------------|
| 4 | 4 | 150 | 107157 | 107218 | 107270 | 107331 | 107393 | 12 | SPS 4x4x150 CN ... CARBIDE |
| 6 | 3 | 150 | 107164 | 107225 | 107287 | 107348 | 107409 | 12 | SPS 6x3x150 CN ... CARBIDE |
| | 6 | 150 | 107171 | 107232 | 107294 | 107355 | 107416 | 12 | SPS 6x6x150 CN ... CARBIDE |
| 13 | 3 | 150 | 107188 | 107249 | 107300 | 107362 | 107423 | 12 | SPS 13x3x150 CN ... CARBIDE |
| | 6 | 150 | 107195 | 107256 | 107317 | 107379 | 107430 | 12 | SPS 13x6x150 CN ... CARBIDE |
| 25 | 13 | 150 | 107201 | 107263 | 107324 | 107386 | 107447 | 6 | SPS 25x13x150 CN ... CARBIDE |

Arbors for grinding and polishing stones

SPSH 6x6/6x13:

Offers space to clamp two different cross sections.

SPSH 6x3/6x6/13x1,5/13x3:

Is used to clamp four different cross sections.

SPSH 3-13mm 3,1:

The arbor for the manual filing machine is variably adjustable.



SPSH 6x6/6x13
SPSH 6x3/6x6/13x1,5/13x3



SPSH 3-13mm 3,1

| Matching cross sections | EAN 4007220 | Description | |
|---|-------------|-------------|--------------------------|
| 6 x 6 mm, 13 x 6 mm | 107553 | 1 | SPSH 6x6/6x13 |
| 6 x 3 mm, 13 x 1.5 mm / 6 x 6 mm, 13 x 3 mm | 107560 | 1 | SPSH 6x3/6x6/13x1,5/13x3 |
| all grinding and polishing stones | 107577 | 1 | SPSH 3-13mm 3,1 |

Manual application

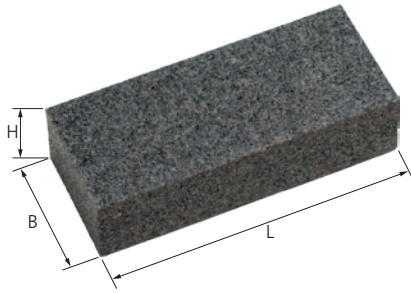
| | | | |
|---|--------|---|--------------------------|
| 6 x 6 mm, 13 x 6 mm | 107553 | 1 | SPSH 6x6/6x13 |
| 6 x 3 mm, 13 x 1.5 mm / 6 x 6 mm, 13 x 3 mm | 107560 | 1 | SPSH 6x3/6x6/13x1,5/13x3 |

Manual filing machine shank diameter of 3.17 x 20 mm [S_d x L₂]

| | | | |
|-----------------------------------|--------|---|-----------------|
| all grinding and polishing stones | 107577 | 1 | SPSH 3-13mm 3,1 |
|-----------------------------------|--------|---|-----------------|

Hand dressers

Dressing stones, abrasive segments, diamond dresser



Dressing stones

Dressing stone SE 1203050 CU 30 R 5 V:

Dressing stone with coarse grain (grit size 30) for coarse dressing work. The rubber backing provides a slip-free grip and protects the support surfaces from damage.


Dressing stone SE 1203050 CU 30/60 R 5 V:

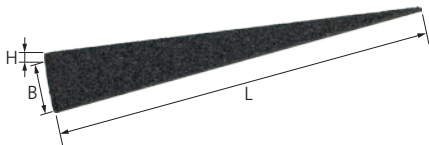
Dressing stone with two different grit sizes:

- Upper side (coarse): Profiling and dressing of large mounted points with coarse bonds and grain
- Underside (fine): Profiling and dressing of mounted points with fine bonds and grain

Dressing stone SE 702212 CU 46 M 5 V:

Small dressing stone with finer grain for profiling and dressing of smaller mounted points.

| L x H x B [mm] | EAN 4007220 |  | Description |
|----------------|-------------|---|---------------------------|
| 120 x 30 x 50 | 103500 | 5 | SE 1203050 CU 30 R 5 V |
| | 505687 | 5 | SE 1203050 CU 30/60 R 5 V |
| 70 x 22 x 12 | 114445 | 5 | SE 702212 CU 46 M 5 V |




Abrasive segments

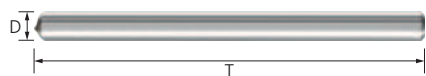
Wedge-shaped abrasive segments for work on sand moulds and cores in foundries.

Using the abrasive segments, the intersections and separators on sand moulds and cores can be re-finished and removed.

The wedge-shaped design allows effortless work in both very narrow areas and on large surfaces.



| L x H x B [mm] | EAN 4007220 |  | Description |
|----------------|-------------|---|-------------------------|
| 235 x 42 x 4 | 800034 | 10 | SE 235-42-4 AN 46 N 5 B |
| 246 x 32 x 5 | 800041 | 10 | SE 246-32-5 AN 46 N 5 B |




Diamond dresser

Long-life diamond dresser with large single grit diamond for profiling and dressing mounted points, grinding discs and Poliflex grinding points (see catalogue section 4).

Using this diamond dresser, blunt grit and metal particles can be removed from the grinding tool, and the required grinding wheel shapes can be produced.

Recommendations for use:

- Protect the diamond dresser from impacts and impact-type loads.
- Clamp deeply and ensure it is well tightened.
- Insert at an angle of 5 to 15 degrees, just below the mounted point or disc centre.

| L x D [mm] | EAN 4007220 | Carats [ct] |  | Description |
|------------|-------------|-------------|---|-------------|
| 81 x 6 | 103494 | 0.20 | 1 | 400 B |

If you cannot find the solution for your particular application in our extensive catalogue range, we can produce mounted points in premium PFERD quality specifically for your application on request. We can take into account your specifications and needs, drawings, information on bonds and hardness grades, grit sizes, grain types, shapes, dimensions, shanks and packaging. Please speak to our sales representatives. We will be happy to advise you.



3



1. Process analysis and tool development

Contact us to arrange an appointment with our experienced sales representatives and technical customer support team. **You can find our worldwide sales addresses at www.pferd.com.**

Our employees will **analyse your application with you on-site** and develop the most economic individual tool solution for you! You will then receive a quote.

2. Production

Our production teams subsequently create a technical drawing with which your made-to-order product will be produced.

Each mounted point is supplied **in premium PFERD quality**. We always work to the highest standards, from the inspection of raw materials, through inspections during the course of production by our staff, up to the final visual inspection of each individual mounted point.

The quality of PFERD tools is certified according to ISO 9001.

3. Use

Our flexible production and global logistics network ensure that you receive your new tool on time.

If desired, your personal sales representative and a technical adviser will set up all the process parameters together with you.

See the quality, performance and economic value of PFERD tools for yourself!

Examples of custom PFERD tools





Catalogue section 1

Files



Catalogue section 2

Milling tools



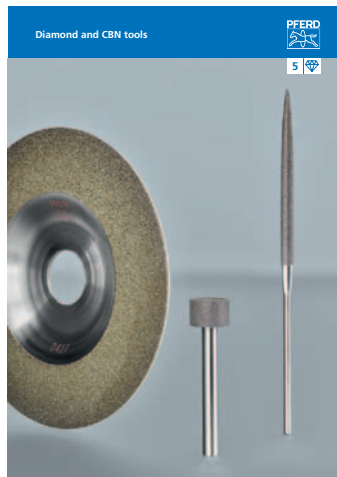
Catalogue section 3

Mounted points



Catalogue section 4

Fine grinding and polishing tools



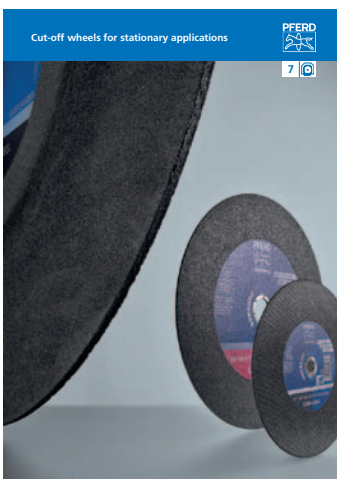
Catalogue section 5

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