

Diamond and CBN tools



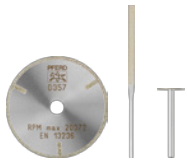
Diamond and CBN tools

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Diamond cut-off wheels for the construction industry

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Flexible diamond files and diamond sheets

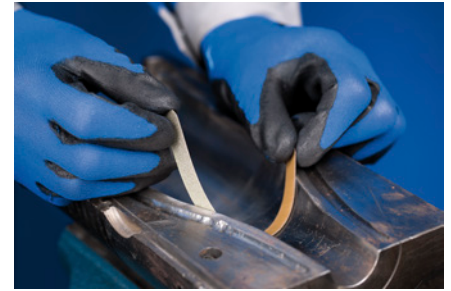
The flexible diamond files perfectly adapt to the workpiece surface. Due to their flexibility, they can be used in convex and concave contours with small radii.

The diamond sheets are exceptionally well-suited to work on larger surfaces. Convex and concave contours can be worked on with relatively little effort.

Scan the QR code to find out more about flexible diamond files and diamond sheets.

Advantages:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain. Compared against tools with conventional abrasives such as aluminium oxide and silicon carbide.



Customer-specific products made to order

PFERD specializes in consulting for and the production of customer-specific electroplated diamond and CBN tools.

Almost all tool blank geometries can be coated with various grit sizes. The electroplated bond also enables economic production of small batch sizes. Because of the diverse possibilities, our production can respond to individual customer requirements with a high degree of flexibility.

Our technical advisers will be happy to visit you on-site to develop individual and economical tool solutions for your applications.

Get the best possible advice for super-hard solutions! Scan the QR code to find out more about customer-specific products made to order.



Customer-specific tool solutions for grey and nodular cast iron



Tools for auxiliary spindles

PFERD offers tools for auxiliary spindles in different shapes/geometries and dimensions as well as with M12 and M16 threads.



Cut-off wheels and grinding discs

Diamond cut-off wheels and diamond grinding discs from PFERD can be purchased in diameters of up to 600 mm. Shapes and dimensions (hole, radius, reference circle, etc.) can be produced according to customer requirements.



Grinding points and grinding drums

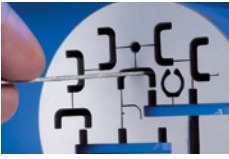


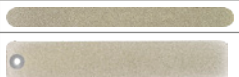














The range of PFERD tools that can be produced according to customer requirements includes diamond grinding drums and diamond grinding points. These can be customized with different shapes, dimensions and shanks.



Diamond and CBN tools

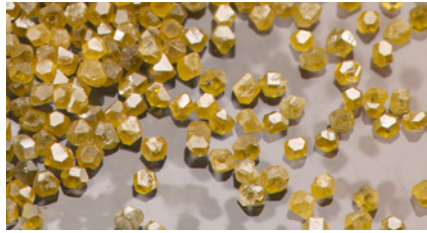
The quick way to find the perfect tool



| Use | Material | Application | Tools | | |
|---|--|---|---|--|---|
| Filing  | Hardened steels, tungsten carbide, ceramics, glass, ferrite, nickel-based and titanium-based alloys | Precision filing | Diamond files  | | |
| | | Precision filing with air-powered filing machines | Diamond files for air-powered filing machines  | | |
| | | Machining concave and convex surfaces | Flexible diamond files Diamond sheets  | | |
| | | Fibre-reinforced plastics (GRP/CRP) | Deburring, chamfering and breaking of edges | Diamond machinist's files, grit size D 251  | |
| Grinding    | Tungsten carbide, ceramics, glass, ferrite (magnetic material), nickel-based and titanium-based alloys | Grinding of bores, radii, contours, profiles and shoulders, as well as deburring and chamfering | Electroplated diamond grinding points  | | |
| | | | Diamond grinding disc CC-GRIND SOLID DIAMOND  | | |
| | | Internal grinding of bores | Electroplated diamond grinding points, cylindrical shape ZY Electroplated diamond grinding discs  | | |
| | | Tungsten carbide | Sharpening of tungsten carbide tools | Resinoid-bonded diamond grinding discs  | |
| | | Hardened steels from approx. 54 HRC | Grinding of bores, radii, contours, profiles and shoulders, as well as deburring and chamfering | Electroplated CBN grinding points  | |
| | | | | Electroplated CBN grinding points, cylindrical shape ZY Electroplated CBN grinding discs  | |
| | | | | HSS (High Speed Steel) | Sharpening of HSS tools |
| | | Fibre-reinforced plastics (GRP/CRP) | Deburring, chamfering and general grinding work | Electroplated diamond grinding points, cylindrical shape with radius end WR, grit size D357 Diamond grinding disc CC-GRIND SOLID DIAMOND  | |
| | | | | | Grey and nodular cast iron |
| | | Cutting  | Tungsten carbide, ceramics, glass, ferrite, nickel-based and titanium-based alloys | Cutting | Diamond cut-off wheels, grit size D 64/D 151  |
| | Fibre-reinforced plastics (GRP/CRP) | | | | Cut-off grinding, trimming, making cut-outs, and cutting straight contours to size |
| | | | | Sawing, trimming, making cut-outs, and cutting curved contours to size | |
| | Grey and nodular cast iron | | Separation of open risers, burrs, feeders, sprues, parting lines etc. | Diamond cut-off wheels, grit size D 852  | |

Materials

Diamond and CBN abrasives are used when materials cannot be machined with conventional abrasives such as aluminium oxide or silicon carbide. They also provide a more economical solution for many applications. Due to high chemical wear, rotating diamond tools are not suitable for work on steel. CBN tools are used for these applications. The two abrasives complement each other ideally. In the adjacent overview, you will find various materials associated with the abrasives.



Diamond

- Duroplastics, in particular with glass or carbon fibre reinforcement (GRP and CRP)
- Ferrite (magnetic material)
- Glass
- Graphite and synthetic carbon
- Grey and nodular cast iron
- Tungsten carbide
- Nickel or titanium-based superalloys
- Technical ceramics
- Wear-resistant coatings (powder metal alloys and hardfacing alloys)



CBN

- Case-hardened steels
- Roller-bearing and ball-bearing steels
- Tool steels
- Other hardened steel materials with a hardness from approx. 54 HRC

Customer-specific tool solutions

1. Process analysis and tool development

Contact us at www.pferd.com and arrange an appointment with our experienced sales representatives and technical advisers.

If you already have precise ideas about the desired tool, you can provide us with a technical drawing or a dimensioned sketch and information on the desired abrasives and grit sizes.

Our employees **will analyze your application with you on-site** and develop the most economic individual tool solution for you. You will then immediately receive a quote. Three production variants are possible:

2. Production

■ Complete production

From design and construction, through manufacture of the tool blank (steel, stainless steel or brass) and its coating with diamond or CBN grit, to the balancing of the finished tool, PFERD offers you all the production steps from a single source. This guarantees you the highest level of quality, flexibility and on-time delivery.

■ Coating

Steel, stainless steel or brass blanks provided by the customer can also be coated with diamond or CBN grit. Close cooperation at an early stage is recommended.

■ Recoating

PFERD offers recoating of blunt tools with steel or stainless steel blanks as an economical alternative to replacement production. Tools with brass blanks cannot be recoated.

3. Use

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

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

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



Diamond and CBN tools

Safety notes and recommended cutting speeds

Safety notes

The operator is responsible for the grinding application, including correct tool drive use, correct handling and use of the grinding tools.



Wear eye protection!



Wear hearing protection!



Wear gloves!



Wear a dust mask!



Follow the safety instructions!

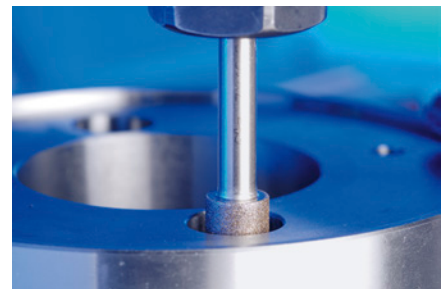


Recommended cutting speeds

The recommended cutting speed ranges depend on the application and must not exceed the maximum permissible peripheral speed. Because of the wide range of tasks and application fields of electroplated diamond and CBN tools, as well as the large influence of the employed tool drive, it is not possible to specify a generally valid cutting speed. The recommended cutting speed ranges serve as reference values.

Generally, the following applies:

- In dry grinding, do not use diamond tools at too high a cutting speed in order to avoid thermal damage to the abrasive.
- If possible, do not use CBN tools under the cutting speeds specified below. The optimum cutting speed has a direct effect on the economic efficiency of the tools in use.
- All parameters must always be coordinated with each other within the grinding process. If the cutting speed is changed, the feed, infeed and coolant supply, among others, must be adjusted accordingly.
- Electroplated diamond and CBN tools can be used in dedicated stationary applications up to a peripheral speed of 125 m/s.



5

| | | Cutting speed [m/s] ▶ | | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | ... | 80 |
|---------------------------|---------|-----------------------|--|-----------|-----------|-----------|-----------|----|----|--|----|----|-----|----|
| Electroplated bond | Diamond | Dry grinding | | | 8–18 m/s | | | | | 30–80 m/s for CRP/GRP as well as grey and nodular cast iron | | | | |
| | | Wet grinding | | | 15–25 m/s | | | | | | | | | |
| | CBN | Dry grinding | | | 15–25 m/s | | | | | | | | | |
| | | Wet grinding | | | | 20–40 m/s | | | | | | | | |
| Resinoid bond | Diamond | Dry grinding | | | 15–20 m/s | | | | | | | | | |
| | | Wet grinding | | | | 20–30 m/s | | | | | | | | |
| | CBN | Dry grinding | | | | 18–30 m/s | | | | | | | | |
| | | Wet grinding | | | | | 25–40 m/s | | | | | | | |
| Metal bond | Diamond | Dry grinding | | 10–15 m/s | | | | | | | | | | |
| | | Wet grinding | | | 15–30 m/s | | | | | | | | | |
| | CBN | Wet grinding | | | | 25–30 m/s | | | | | | | | |

| Tool dia. [mm] | Cutting speed [m/s] | | | | | | | | | | | |
|-------------------|------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 8 | 12 | 15 | 18 | 20 | 25 | 30 | 40 | 50 | 80 | 100 | 125 |
| | Rotational speed rounded off [RPM] | | | | | | | | | | | |
| 1 | 153,000 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 76,400 | 115,000 | 143,000 | 172,000 | 191,000 | - | - | - | - | - | - | - |
| 3 | 50,900 | 76,400 | 95,500 | 115,000 | 127,000 | 159,000 | 191,000 | - | - | - | - | - |
| 4 | 38,200 | 57,300 | 71,600 | 85,900 | 95,500 | 119,000 | 143,000 | - | - | - | - | - |
| 5 | 30,600 | 45,800 | 57,300 | 68,800 | 76,400 | 95,500 | 115,000 | 153,000 | - | - | - | - |
| 6 | 25,500 | 38,200 | 47,700 | 57,300 | 63,700 | 79,600 | 95,500 | 127,000 | 159,000 | - | - | - |
| 7 | 21,800 | 32,700 | 40,900 | 49,100 | 54,600 | 68,200 | 81,900 | 109,000 | 136,000 | - | - | - |
| 8 | 19,100 | 28,600 | 35,800 | 43,000 | 47,700 | 59,700 | 71,600 | 95,500 | 119,000 | 191,000 | - | - |
| 9 | 17,000 | 25,500 | 31,800 | 38,200 | 42,400 | 53,100 | 63,700 | 84,900 | 106,000 | 170,000 | - | - |
| 10 | 15,300 | 22,900 | 28,600 | 34,400 | 38,200 | 47,700 | 57,300 | 76,400 | 95,500 | 153,000 | 191,000 | - |
| 12 | 12,700 | 19,100 | 23,900 | 28,600 | 31,800 | 39,800 | 47,700 | 63,700 | 79,600 | 127,000 | 159,000 | 199,000 |
| 14 | 10,900 | 16,400 | 20,500 | 24,600 | 27,300 | 34,100 | 40,900 | 54,600 | 68,200 | 109,000 | 136,000 | 171,000 |
| 15 | 10,200 | 15,300 | 19,100 | 22,900 | 25,500 | 31,800 | 38,200 | 50,900 | 63,700 | 102,000 | 127,000 | 159,000 |
| 16 | 9,500 | 14,300 | 17,900 | 21,500 | 23,900 | 29,800 | 35,800 | 47,700 | 59,700 | 95,500 | 119,000 | 149,000 |
| 18 | 8,500 | 12,700 | 15,900 | 19,100 | 21,200 | 26,500 | 31,800 | 42,400 | 53,100 | 84,900 | 106,000 | 133,000 |
| 20 | 7,600 | 11,500 | 14,300 | 17,200 | 19,100 | 23,900 | 28,600 | 38,200 | 47,700 | 76,400 | 95,500 | 119,000 |
| 22 | 6,900 | 10,400 | 13,000 | 15,600 | 17,400 | 21,700 | 26,000 | 34,700 | 43,400 | 69,400 | 86,800 | 109,000 |
| 25 | 6,100 | 9,200 | 11,500 | 13,800 | 15,300 | 19,100 | 22,900 | 30,600 | 38,200 | 61,100 | 76,400 | 95,500 |
| 30 | 5,100 | 7,600 | 9,500 | 11,500 | 12,700 | 15,900 | 19,100 | 25,500 | 31,800 | 50,900 | 63,700 | 79,600 |
| 40 | 3,800 | 5,700 | 7,200 | 8,600 | 9,500 | 11,900 | 14,300 | 19,100 | 23,900 | 38,200 | 47,700 | 59,700 |
| 50 | 3,100 | 4,600 | 5,700 | 6,900 | 7,600 | 9,500 | 11,500 | 15,300 | 19,100 | 30,600 | 38,200 | 47,700 |
| 75 | 2,000 | 3,100 | 3,800 | 4,600 | 5,100 | 6,400 | 7,600 | 10,200 | 12,700 | 20,400 | 25,500 | 31,800 |
| 100 | 1,530 | 2,300 | 2,900 | 3,400 | 3,800 | 4,800 | 5,700 | 7,600 | 9,500 | 15,300 | 19,100 | 23,900 |
| 125 | 1,220 | 1,830 | 2,300 | 2,800 | 3,100 | 3,800 | 4,600 | 6,100 | 7,600 | 12,200 | 15,300 | 19,100 |
| 150 | 1,020 | 1,530 | 1,910 | 2,300 | 2,500 | 3,200 | 3,800 | 5,100 | 6,400 | 10,200 | 12,700 | 15,900 |
| 175 | 870 | 1,310 | 1,640 | 1,960 | 2,200 | 2,700 | 3,300 | 4,400 | 5,500 | 8,700 | 10,900 | 13,600 |
| 200 | 760 | 1,150 | 1,430 | 1,720 | 1,910 | 2,400 | 2,900 | 3,800 | 4,800 | 7,600 | 9,500 | 11,900 |
| 230 | 660 | 1,000 | 1,250 | 1,490 | 1,660 | 2,100 | 2,500 | 3,300 | 4,200 | 6,600 | 8,300 | 10,400 |
| 250 | 610 | 920 | 1,150 | 1,380 | 1,530 | 1,910 | 2,300 | 3,100 | 3,800 | 6,100 | 7,600 | 9,500 |
| 300 | 510 | 760 | 950 | 1,150 | 1,270 | 1,590 | 1,910 | 2,500 | 3,200 | 5,100 | 6,400 | 8,000 |
| 350 | 440 | 650 | 820 | 980 | 1,090 | 1,360 | 1,640 | 2,200 | 2,700 | 4,400 | 5,500 | 6,800 |
| 400 | 380 | 570 | 720 | 860 | 950 | 1,190 | 1,430 | 1,910 | 2,400 | 3,800 | 4,800 | 6,000 |
| 450 | 340 | 510 | 640 | 760 | 850 | 1,060 | 1,270 | 1,700 | 2,100 | 3,400 | 4,200 | 5,300 |
| 500 | 310 | 460 | 570 | 690 | 760 | 950 | 1,150 | 1,530 | 1,910 | 3,100 | 3,800 | 4,800 |
| 600 | 250 | 380 | 480 | 570 | 640 | 800 | 950 | 1,270 | 1,590 | 2,500 | 3,200 | 4,000 |

Refer to the table for the recommended rotational speed based on the diameter and cutting speed of your tool.

Example:

Diamond grinding point, diameter: 20 mm

Cutting speed: 25 m/s

Rotational speed rounded: 23,900 RPM



Diamond and CBN tools – electroplated bond

Diamond escapement files




Diamond escapement files, half-round

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|------------|-------------------------|--------------------------|-------------------|---------------------|-----------|---|----------|---------------|----------------|
| Half-round | 4.2 | 1.5 | 140 | 40 | D 25 | 1 | 15308143 | DF 3608 D 25 | - |
| | | | | | D 46 | 1 | 15308140 | DF 3608 D 46 | - |
| | | | | | D 91 | 1 | 15308141 | DF 3608 D 91 | - |
| | | | | | D 126 | 1 | 15308142 | DF 3608 D 126 | - |




Diamond escapement files, crossing oval

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------------------|-------------------------|--------------------------|-------------------|---------------------|-----------|---|----------|---------------|----------------|
| Crossing oval shape | 3.8 | 1.8 | 140 | 40 | D 25 | 1 | 15309143 | DF 3609 D 25 | - |
| | | | | | D 91 | 1 | 15309141 | DF 3609 D 91 | - |
| | | | | | D 126 | 1 | 15309142 | DF 3609 D 126 | - |




Diamond escapement files, barrette

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------|-------------------------|--------------------------|-------------------|---------------------|-----------|---|----------|---------------|----------------|
| Barrette shape | 4 | 1.2 | 140 | 40 | D 25 | 1 | 15310143 | DF 3610 D 25 | - |
| | | | | | D 46 | 1 | 15310140 | DF 3610 D 46 | - |
| | | | | | D 91 | 1 | 15310141 | DF 3610 D 91 | - |
| | | | | | D 126 | 1 | 15310142 | DF 3610 D 126 | - |






Diamond escapement files, three square

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|--------------|-------------------------|-------------------|---------------------|-----------|---|----------|---------------|----------------|
| Three square | 3 | 140 | 40 | D 25 | 1 | 15314143 | DF 3614 D 25 | - |
| | | | | D 46 | 1 | 15314140 | DF 3614 D 46 | - |
| | | | | D 91 | 1 | 15314141 | DF 3614 D 91 | - |
| | | | | D 126 | 1 | 15314142 | DF 3614 D 126 | - |




Diamond escapement files, hand

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|---------------|----------------|
| Hand | 4 | 1.2 | 140 | 40 | D 25 | 1 | 15317143 | DF 3617 D 25 | - |
| | | | | | D 46 | 1 | 15317140 | DF 3617 D 46 | - |
| | | | | | D 91 | 1 | 15317141 | DF 3617 D 91 | - |
| | | | | | D 126 | 1 | 15317142 | DF 3617 D 126 | - |




Diamond escapement files, square

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|---------------|----------------|
| Square | 2 | 2 | 140 | 40 | D 25 | 1 | 15319143 | DF 3619 D 25 | - |
| | | | | | D 46 | 1 | 15319140 | DF 3619 D 46 | - |
| | | | | | D 91 | 1 | 15319141 | DF 3619 D 91 | - |
| | | | | | D 126 | 1 | 15319142 | DF 3619 D 126 | - |

Diamond and CBN tools – electroplated bond

Diamond escapement files




Diamond escapement files, round

Diamond escapement files are used on very small shapes in tool making and in precision mechanics. They have a forged shank which allows use without an additional handle. Grit sizes D 25 and D 46 provide ultra-fine surface finishes.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------|-------------------------|-------------------|---------------------|-----------|---|----------|---------------|----------------|
| Round | 1.8 | 140 | 40 | D 25 | 1 | 15321143 | DF 3621 D 25 | - |
| | | | | D 46 | 1 | 15321140 | DF 3621 D 46 | - |
| | | | | D 91 | 1 | 15321141 | DF 3621 D 91 | - |
| | | | | D 126 | 1 | 15321142 | DF 3621 D 126 | - |



Diamond escapement file sets

Diamond escapement file sets are supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.


Contents:

Contains one each of the following escapement files: DF 3608 (half-round), DF 3614 (three square), DF 3617 (hand), DF 3619 (square) and DF 3621 (round).

- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

Special features:

- Ideal for work on hardened steel.

| Grit size |  | Item no. | Designation | Price/unit EUR |
|-----------|---|----------|---------------|----------------|
| D 25 | 1 | 15830903 | DF 3090 D 25 | - |
| D 46 | 1 | 15830900 | DF 3090 D 46 | - |
| D 91 | 1 | 15830901 | DF 3090 D 91 | - |
| D 126 | 1 | 15830902 | DF 3090 D 126 | - |

Diamond needle files




Diamond needle files, hand

Diamond needle files can be used generally in tool making. Diamond needle files in extra-slim design (S) are particularly suitable for work on deep-set, narrow contours.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------------------------------------|-------------------------|--------------------------|-------------------|---------------------|-----------|---|----------|----------------|----------------|
| Needle files, extra slim (S) | | | | | | | | | |
| Hand, ultra-slim | 5.3 | 1.3 | 140 | 70 | D 126 | 1 | 15102082 | DF 4112S D 126 | - |
| Needle files | | | | | | | | | |
| Hand | 5.5 | 1.6 | 140 | 70 | D 91 | 1 | 15101061 | DF 4112 D 91 | - |
| | | | | | D 126 | 1 | 15101062 | DF 4112 D 126 | - |
| | | | | | D 181 | 1 | 15101063 | DF 4112 D 181 | - |




Diamond needle files, hand with rounded edges

Diamond needle files can be used generally in tool making.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|-----------------------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|----------------|----------------|
| Hand with round edges | 5.5 | 1.6 | 140 | 70 | D 91 | 1 | 15102061 | DF 4112R D 91 | - |
| | | | | | D 126 | 1 | 15102062 | DF 4112R D 126 | - |
| | | | | | D 181 | 1 | 15102063 | DF 4112R D 181 | - |




Diamond needle files, flat

Diamond needle files can be used generally in tool making.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|---------------|----------------|
| Flat | 5.5 | 1.6 | 140 | 70 | D 91 | 1 | 15103061 | DF 4122 D 91 | - |
| | | | | | D 126 | 1 | 15103062 | DF 4122 D 126 | - |
| | | | | | D 181 | 1 | 15103063 | DF 4122 D 181 | - |




Diamond needle files, three square

Diamond needle files can be used generally in tool making. Diamond needle files in extra-slim design (S) are particularly suitable for work on deep-set, narrow contours.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|--------------------------|-------------------------|-------------------|---------------------|-----------|---|----------|----------------|----------------|
| Three square, ultra-slim | 2.8 | 140 | 70 | D 126 | 1 | 15104082 | DF 4132S D 126 | - |
| Three square | 3.5 | 140 | 70 | D 91 | 1 | 15104061 | DF 4132 D 91 | - |
| | | | | D 126 | 1 | 15104062 | DF 4132 D 126 | - |
| | | | | D 181 | 1 | 15104063 | DF 4132 D 181 | - |



Diamond and CBN tools – electroplated bond

Diamond needle files




Diamond needle files, square

Diamond needle files can be used generally in tool making. Diamond needle files in extra-slim design (S) are particularly suitable for work on deep-set, narrow contours.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|--------------------|-------------------------|-------------------|---------------------|-----------|---|----------|----------------|----------------|
| Square, ultra-slim | 2.3 | 140 | 70 | D 126 | 1 | 15105082 | DF 4142S D 126 | - |
| Square | 2.6 | 140 | 70 | D 91 | 1 | 15105061 | DF 4142 D 91 | - |
| | | | | D 126 | 1 | 15105062 | DF 4142 D 126 | - |
| | | | | D 181 | 1 | 15105063 | DF 4142 D 181 | - |




Diamond needle files, half-round

Diamond needle files can be used generally in tool making.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|------------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|---------------|----------------|
| Half-round | 5.5 | 1.6 | 140 | 70 | D 91 | 1 | 15106061 | DF 4152 D 91 | - |
| | | | | | D 126 | 1 | 15106062 | DF 4152 D 126 | - |
| | | | | | D 181 | 1 | 15106063 | DF 4152 D 181 | - |




Diamond needle files, round

Diamond needle files can be used generally in tool making. Diamond needle files in extra-slim design (S) are particularly suitable for work on deep-set, narrow contours.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------------------|-------------------------|-------------------|---------------------|-----------|---|----------|----------------|----------------|
| Round, ultra-slim | 2.8 | 140 | 70 | D 126 | 1 | 15107082 | DF 4162S D 126 | - |
| Round | 3.2 | 140 | 70 | D 91 | 1 | 15107061 | DF 4162 D 91 | - |
| | | | | D 126 | 1 | 15107062 | DF 4162 D 126 | - |
| | | | | D 181 | 1 | 15107063 | DF 4162 D 181 | - |






Diamond needle files, knife

Diamond needle files can be used generally in tool making.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|---------------|----------------|
| Knife shape | 5 | 1.8 | 140 | 70 | D 91 | 1 | 15108061 | DF 4172 D 91 | - |
| | | | | | D 126 | 1 | 15108062 | DF 4172 D 126 | - |
| | | | | | D 181 | 1 | 15108063 | DF 4172 D 181 | - |




Diamond needle files, feather edge

Diamond needle files can be used generally in tool making.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|--------------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|---------------|----------------|
| Feather edge | 5 | 2.4 | 140 | 70 | D 91 | 1 | 15109061 | DF 4182 D 91 | - |
| | | | | | D 126 | 1 | 15109062 | DF 4182 D 126 | - |




Diamond needle files, crossing oval

Diamond needle files can be used generally in tool making.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------------------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|---------------|----------------|
| Crossing oval shape | 5 | 2.2 | 140 | 70 | D 91 | 1 | 15110061 | DF 4192 D 91 | - |
| | | | | | D 126 | 1 | 15110062 | DF 4192 D 126 | - |




Diamond needle files, barrette

Diamond needle files can be used generally in tool making.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|---------------|----------------|
| Barrette shape | 5 | 2 | 140 | 70 | D 91 | 1 | 15100061 | DF 4102 D 91 | - |
| | | | | | D 126 | 1 | 15100062 | DF 4102 D 126 | - |



Diamond and CBN tools – electroplated bond

Diamond needle files



Diamond needle file sets

Diamond needle file sets are supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.

Contents:


The **DF 4205 needle file set** contains one each of the following needle files: DF 4112 (hand), DF 4132 (three square), DF 4142 (square), DF 4152 (half-round) and DF 4162 (round).

The **DF 4211 needle file set** contains one each of the following needle files: DF 4112 (hand), DF 412R (hand with round edges), DF 4122 (flat), DF 4132 (three square),

DF 4142 (square), DF 4152 (half-round), DF 4162 (round), DF 4172 (knife), DF 4182 (feather edge), DF 4192 (crossing oval) and DF 4102 (barrette).

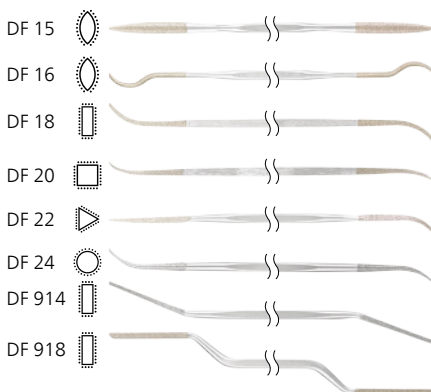
Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Grit size |  | Item no. | Designation | Price/unit EUR |
|-----------|---|----------|---------------|----------------|
| D 91 | 1 | 15842051 | DF 4205 D 91 | - |
| D 126 | 1 | 15842052 | DF 4205 D 126 | - |
| D 181 | 1 | 15842053 | DF 4205 D 181 | - |
| D 91 | 1 | 15842111 | DF 4211 D 91 | - |
| D 126 | 1 | 15842112 | DF 4211 D 126 | - |
| D 181 | 1 | 15842113 | DF 4211 D 181 | - |

Diamond riffler files

5




Diamond riffler files

Diamond riffler files are used for work in hard-to-reach areas and on complex geometries. The coating length is 25 mm on both sides of the files.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Double-sided coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------------------|-------------------------|--------------------------|-------------------|----------------------------------|-----------|---|----------|--------------|----------------|
| Crossing oval shape | 3.2 | 2 | 150 | 25 | D 91 | 1 | 15215070 | DF 15 D 91 | - |
| | | | | | D 126 | 1 | 15215100 | DF 15 D 126 | - |
| Hand | 3.1 | 3 | 150 | 25 | D 91 | 1 | 15216070 | DF 16 D 91 | - |
| | | | | | D 126 | 1 | 15216100 | DF 16 D 126 | - |
| Square | 2.5 | 2.5 | 150 | 25 | D 91 | 1 | 15218070 | DF 18 D 91 | - |
| | | | | | D 126 | 1 | 15218100 | DF 18 D 126 | - |
| Three square | 3 | - | 150 | 25 | D 91 | 1 | 15220070 | DF 20 D 91 | - |
| | | | | | D 126 | 1 | 15220100 | DF 20 D 126 | - |
| Round | 3 | - | 150 | 25 | D 91 | 1 | 15222070 | DF 22 D 91 | - |
| | | | | | D 126 | 1 | 15222100 | DF 22 D 126 | - |
| Hand | 3.8 | 1.6 | 150 | 25 | D 91 | 1 | 15224070 | DF 24 D 91 | - |
| | | | | | D 126 | 1 | 15224100 | DF 24 D 126 | - |
| Hand | 4 | 2 | 150 | 25 | D 91 | 1 | 15209141 | DF 914 D 91 | - |
| | | | | | D 126 | 1 | 15209142 | DF 914 D 126 | - |
| | | | | | D 91 | 1 | 15209181 | DF 918 D 91 | - |
| | | | | | D 126 | 1 | 15209182 | DF 918 D 126 | - |



Diamond riffler file set

The diamond riffler file set is supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.




Contents:

Contains one each of the following riffler files: DF 16 (crossing oval), DF 18 (hand), DF 20 (square), DF 22 (three square), DF 24 (round).

Special features:

- Sturdy plastic box to prevent damage.

| Grit size |  | Item no. | Designation | Price/unit EUR |
|-----------|---|----------|---------------|----------------|
| D 126 | 1 | 15816242 | DF 1624 D 126 | - |

Diamond handy files




Diamond handy files, hand

Diamond handy files have a forged shank which allows for use without an additional handle.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|---------------|----------------|
| Hand | 10.3 | 2.8 | 215 | 100 | D 126 | 1 | 15430202 | DF 2601 D 126 | - |
| | | | | | D 181 | 1 | 15430203 | DF 2601 D 181 | - |




Diamond handy files, half-round

Diamond handy files have a forged shank which allows for use without an additional handle.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|------------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|---------------|----------------|
| Half-round | 12.5 | 3.8 | 215 | 100 | D 126 | 1 | 15431202 | DF 2602 D 126 | - |
| | | | | | D 181 | 1 | 15431203 | DF 2602 D 181 | - |




Diamond handy files, three square

Diamond handy files have a forged shank which allows for use without an additional handle.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|--------------|-------------------------|-------------------|---------------------|-----------|---|----------|---------------|----------------|
| Three square | 10 | 215 | 100 | D 126 | 1 | 15432202 | DF 2607 D 126 | - |
| | | | | D 181 | 1 | 15432203 | DF 2607 D 181 | - |



Diamond and CBN tools – electroplated bond

Diamond handy files




Diamond handy files, square

Diamond handy files have a forged shank which allows for use without an additional handle.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------|-------------------------|--------------------------|-------------------|---------------------|-----------|---|----------|---------------|----------------|
| Square | 5.5 | 5.5 | 215 | 100 | D 126 | 1 | 15433202 | DF 2608 D 126 | - |
| | | | | | D 181 | 1 | 15433203 | DF 2608 D 181 | - |




Diamond handy files, round

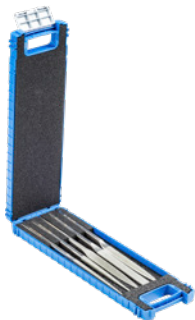
Diamond handy files have a forged shank which allows for use without an additional handle.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------|-------------------------|-------------------|---------------------|-----------|---|----------|---------------|----------------|
| Round | 6.7 | 215 | 100 | D 126 | 1 | 15434202 | DF 2610 D 126 | - |
| | | | | D 181 | 1 | 15434203 | DF 2610 D 181 | - |

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Diamond handy file sets


Diamond handy file sets are supplied in a sturdy, practical plastic box which protects the tools from damage. This is ideal for keeping in the tool trolley or workbench.

Contents:

Contains one each of the following handy files: DF 2601 (hand), DF 2602 (half-round), DF 2607 (three square), DF 2608 (square) and DF 2610 (round).

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Grit size |  | Item no. | Designation | Price/unit EUR |
|-----------|---|----------|---------------|----------------|
| D 126 | 1 | 15826272 | DF 2627 D 126 | - |
| D 181 | 1 | 15826273 | DF 2627 D 181 | - |




Conical diamond files

The conical diamond files are used in tool-making for particularly narrow, deep-set contours. The forged shank allows for use without an additional handle.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Width A [mm] | Thickness B [mm] | Thickness B ₁ [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|--------------|------------------|-------------------------------|-------------------|---------------------|-----------|---|----------|---------------------------|----------------|
| 4 | 2 | 0.5 | 170 | 50 | D 46 | 1 | 15917040 | DF-K 170-4-2-0,5 D 46 | - |
| | | | | | D 91 | 1 | 15917041 | DF-K 170-4-2-0,5 D 91 | - |
| | | | | | D 126 | 1 | 15917042 | DF-K 170-4-2-0,5 D 126 | - |
| 6 | 2.4 | 0.5 | 170 | 50 | D 46 | 1 | 15917060 | DF-K 170-6-2,4-0,5 D 46 | - |
| | | | | | D 91 | 1 | 15917061 | DF-K 170-6-2,4-0,5 D 91 | - |
| | | | | | D 126 | 1 | 15917062 | DF-K 170-6-2,4-0,5 D 126 | - |
| 8 | 2.4 | 0.5 | 170 | 50 | D 46 | 1 | 15917080 | DF-K 170-8-2,4-0,5 D 46 | - |
| | | | | | D 91 | 1 | 15917081 | DF-K 170-8-2,4-0,5 D 91 | - |
| | | | | | D 126 | 1 | 15917082 | DF-K 170-8-2,4-0,5 D 126 | - |
| 10 | 2.5 | 0.5 | 170 | 50 | D 46 | 1 | 15917100 | DF-K 170-10-2,5-0,5 D 46 | - |
| | | | | | D 91 | 1 | 15917101 | DF-K 170-10-2,5-0,5 D 91 | - |
| | | | | | D 126 | 1 | 15917102 | DF-K 170-10-2,5-0,5 D 126 | - |

Diamond machinist's files

5




Diamond machinist's files, hand

Diamond machinist's files are used in many industries, such as the manufacturing of large tools. Grit size D 251 is also suitable for work on fibre-reinforced plastics (GRP/CRP). Diamond machinist's files are supplied with ergonomic file handles.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------|-------------------------|--------------------------|-------------------|---------------------|-----------|--|----------|-------------------|----------------|
| Hand | 10 | 3.2 | 100 | 85 | D 126 | 1 | 15400126 | DF 1112/100 D 126 | - |
| | | | | | D 151 | 1 | 15400151 | DF 1112/100 D 151 | - |
| | | | | | D 251 | 1 | 15400251 | DF 1112/100 D 251 | - |
| | 11.2 | 4.2 | 125 | 110 | D 126 | 1 | 15401126 | DF 1112/125 D 126 | - |
| | | | | | D 151 | 1 | 15401151 | DF 1112/125 D 151 | - |
| | | | | | D 251 | 1 | 15401199 | DF 1112/150 D 251 | - |
| | 13 | 5 | 150 | 135 | D 126 | 1 | 15401192 | DF 1112/150 D 126 | - |
| | | | | | D 151 | 1 | 15401195 | DF 1112/150 D 151 | - |
| | | | | | D 251 | 1 | 15401205 | DF 1112/200 D 251 | - |
| | 22.5 | 5.5 | 200 | 180 | D 151 | 1 | 15401204 | DF 1112/200 D 151 | - |
| | | | | | D 251 | 1 | 15401205 | DF 1112/200 D 251 | - |

Diamond and CBN tools – electroplated bond

Diamond machinist's files




Diamond machinist's files, three square

Diamond machinist's files are used in many industries, such as the manufacturing of large tools. Grit size D 251 is also suitable for work on fibre-reinforced plastics (GRP/CRP). Diamond machinist's files are supplied with ergonomic file handles.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|--------------|-------------------------|-------------------|---------------------|-----------|---|----------|-------------------|----------------|
| Three square | 7 | 100 | 85 | D 126 | 1 | 15403126 | DF 1132/100 D 126 | - |
| | | | | D 151 | 1 | 15403151 | DF 1132/100 D 151 | - |
| | 14 | 200 | 180 | D 151 | 1 | 15403204 | DF 1132/200 D 151 | - |
| | | | | D 251 | 1 | 15403205 | DF 1132/200 D 251 | - |




Diamond machinist's files, square

Diamond machinist's files are used in many industries, such as the manufacturing of large tools. Grit size D 251 is also suitable for work on fibre-reinforced plastics (GRP/CRP). Diamond machinist's files are supplied with ergonomic file handles.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------|-------------------------|--------------------------|-------------------|---------------------|-----------|---|----------|-------------------|----------------|
| Square | 7.5 | 7.5 | 200 | 180 | D 151 | 1 | 15404204 | DF 1142/200 D 151 | - |




Diamond machinist's files, half-round pointed

Diamond machinist's files are used in many industries, such as the manufacturing of large tools. Grit size D 251 is also suitable for work on fibre-reinforced plastics (GRP/CRP). Diamond machinist's files are supplied with ergonomic file handles.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|--------------------|-------------------------|--------------------------|-------------------|---------------------|-----------|---|----------|-------------------|----------------|
| Half-round pointed | 12 | 4 | 100 | 85 | D 126 | 1 | 15405126 | DF 1152/100 D 126 | - |
| | | | | | D 151 | 1 | 15405151 | DF 1152/100 D 151 | - |
| | 22 | 6.5 | 200 | 180 | D 151 | 1 | 15405204 | DF 1152/200 D 151 | - |
| | | | | | D 251 | 1 | 15405205 | DF 1152/200 D 251 | - |




Diamond machinist's files, round

Diamond machinist's files are used in many industries, such as the manufacturing of large tools. Grit size D 251 is also suitable for work on fibre-reinforced plastics (GRP/CRP). Diamond machinist's files are supplied with ergonomic file handles.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Total length [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------|-------------------------|-------------------|---------------------|-----------|---|----------|-------------------|----------------|
| Round | 8 | 200 | 180 | D 151 | 1 | 15406204 | DF 1162/200 D 151 | - |




Flexible diamond files

The flexible diamond files perfectly adapt to the workpiece surface. Due to its flexibility, they can be used in convex and concave contours with small radii.



Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------------------------|--------------------------|-------------------|----------|-----------|---|----------|----------------------|----------------|
| 0.5 | 14 | 165 | one side | D 76 | 5 | 15600076 | DF-FLEX 14-165 D 76 | - |
| | | | | D 126 | 5 | 15600126 | DF-FLEX 14-165 D 126 | - |
| | | | | D 181 | 5 | 15600181 | DF-FLEX 14-165 D 181 | - |

Diamond sheets




Diamond sheets

The diamond sheets are exceptionally well-suited to work on larger surfaces. Convex and concave contours can be worked on with relatively little effort.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Width with coating [mm] | Height with coating [mm] | Total length [mm] | Coating | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------------------------|--------------------------|-------------------|----------|-----------|---|----------|----------------------|----------------|
| 0.7 | 30 | 170 | complete | D 64 | 1 | 15600030 | DBL 30-0,7-170 D 64 | - |
| | | | | D 126 | 1 | 15630126 | DBL 30-0,7-170 D 126 | - |
| 1.3 | 35 | 350 | complete | D 64 | 1 | 15635064 | DBL 35-1,3-350 D 64 | - |
| | | | | D 126 | 1 | 15600035 | DBL 35-1,3-350 D 126 | - |



Diamond and CBN tools – electroplated bond

Diamond files for manual filing tools



Diamond files for manual filing tools

Diamond files for manual filing tools are suitable for use in machines, as well as for hand filing. The shank diameter of the diamond files is 3 mm.

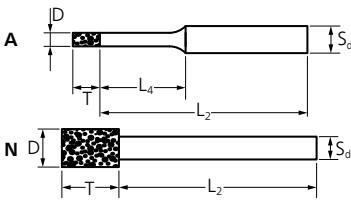
| | | | |
|--------------|--|------------------|--|
| DF 5301–5309 | | DF 5365–5375 | |
| DF 5310–5314 | | DF 5352–5362 | |
| DF 5316 | | DF 5380–5382 | |
| DF 5390–5392 | | DF 0103, DF 0106 | |
| DF 5331–5347 | | | |

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| Profile | Width with coating [mm] | Height with coating [mm] | Total length [mm] | Double-sided coating length [mm] | Coating | Grit size | | Item no. | Designation | Price/unit EUR |
|--------------|-------------------------|--------------------------|-------------------|----------------------------------|------------|-----------|----------|---------------|------------------|----------------|
| Hand | 3 | 1 | 50 | 15 | one side | D 126 | 1 | 15653032 | DF 5303 D 126 | - |
| | 4 | 1 | 50 | 15 | one side | D 126 | 1 | 15653052 | DF 5305 D 126 | - |
| | 5 | 2 | 50 | 15 | one side | D 126 | 1 | 15653072 | DF 5307 D 126 | - |
| | | | 60 | 25 | one side | D 126 | 1 | 15653092 | DF 5309 D 126 | - |
| | 2 | 1 | 50 | 15 | both sides | D 126 | 1 | 15653102 | DF 5310 D 126 | - |
| | 3 | 1 | 50 | 15 | both sides | D 126 | 1 | 15653112 | DF 5311 D 126 | - |
| | 4 | 1 | 50 | 15 | both sides | D 126 | 1 | 15653122 | DF 5312 D 126 | - |
| | 5 | 2 | 50 | 15 | both sides | D 126 | 1 | 15653132 | DF 5313 D 126 | - |
| 60 | | | 25 | both sides | D 126 | 1 | 15653142 | DF 5314 D 126 | - | |
| | 0.5 | 4 | 50 | 15 | face-down | D 126 | 1 | 15653162 | DF 5316 D 126 | - |
| Round | 1 | - | 50 | 15 | complete | D 126 | 1 | 15653312 | DF 5331 D 126 | - |
| | 2 | - | 50 | 15 | complete | D 126 | 1 | 15653352 | DF 5335 D 126 | - |
| | | | 60 | 25 | complete | D 126 | 1 | 15653372 | DF 5337 D 126 | - |
| | 3 | - | 50 | 15 | complete | D 126 | 1 | 15653392 | DF 5339 D 126 | - |
| | | | 60 | 25 | complete | D 126 | 1 | 15653432 | DF 5343 D 126 | - |
| | 4 | - | 50 | 15 | complete | D 126 | 1 | 15653452 | DF 5345 D 126 | - |
| | | | 60 | 25 | complete | D 126 | 1 | 15653472 | DF 5347 D 126 | - |
| | Crossing oval shape | 2 | 1 | 50 | 15 | complete | D 126 | 1 | 15653522 | DF 5352 D 126 |
| 3.5 | | 2 | 50 | 15 | complete | D 126 | 1 | 15653562 | DF 5356 D 126 | - |
| 6 | | 3 | 60 | 25 | complete | D 126 | 1 | 15653622 | DF 5362 D 126 | - |
| Three square | 2 | - | 50 | 15 | complete | D 126 | 1 | 15653652 | DF 5365 D 126 | - |
| | 3.5 | - | 50 | 15 | complete | D 126 | 1 | 15653672 | DF 5367 D 126 | - |
| | | | 60 | 25 | complete | D 126 | 1 | 15653712 | DF 5371 D 126 | - |
| | 4.5 | - | 60 | 25 | complete | D 126 | 1 | 15653752 | DF 5375 D 126 | - |
| Knife shape | 2 | 6 | 50 | 15 | complete | D 126 | 1 | 15653822 | DF 5382 D 126 | - |
| Square | 1.5 | 1.5 | 50 | 15 | complete | D 126 | 1 | 15653902 | DF 5390 D 126 | - |
| | 3 | 3 | 50 | 15 | complete | D 126 | 1 | 15653912 | DF 5391 D 126 | - |
| | 4 | 4 | 50 | 15 | complete | D 126 | 1 | 15653922 | DF 5392 D 126 | - |
| Flat conical | 3.3 | 1 | 55 | 16 | complete | D 126 | 1 | 15601032 | DF 0103 D 126 | - |
| | 6.3 | 1 | 55 | 16 | complete | D 126 | 1 | 15601062 | DF 0106/55 D 126 | - |
| | | | 73 | 16 | complete | D 126 | 1 | 15601064 | DF 0106/73 D 126 | - |






Cylindrical shape ZY

The cylindrical shape ZY is suitable for grinding bores, radii and contours in stationary or manual applications. Grinding points with a diameter of 8 mm or more have a recess on the front surface.



Special features:

- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | L ₄ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------------------|--------|---------------------|---------------------|---------------------|-----------|---|----------|---------------------|----------------|
| Shank diameter 3 mm | | | | | | | | | |
| 0.5 | 2 | 3 | 38 | 5 | D 64 | 5 | 36000506 | DZY-A 0,5-2/3 D 64 | - |
| 0.8 | 2 | 3 | 38 | 5 | D 64 | 5 | 36000806 | DZY-A 0,8-2/3 D 64 | - |
| 1 | 4 | 3 | 36 | 9 | D 64 | 5 | 36001006 | DZY-A 1,0-4/3 D 64 | - |
| | | | | | D 91 | 5 | 36001009 | DZY-A 1,0-4/3 D 91 | - |
| | | | | | D 126 | 5 | 36001010 | DZY-A 1,0-4/3 D 126 | - |
| 1.2 | 4 | 3 | 36 | 9 | D 64 | 5 | 36001206 | DZY-A 1,2-4/3 D 64 | - |
| | | | | | D 91 | 5 | 36001209 | DZY-A 1,2-4/3 D 91 | - |
| | | | | | D 126 | 5 | 36001210 | DZY-A 1,2-4/3 D 126 | - |
| 1.4 | 4 | 3 | 36 | 9 | D 64 | 5 | 36001406 | DZY-A 1,4-4/3 D 64 | - |
| | | | | | D 91 | 5 | 36001409 | DZY-A 1,4-4/3 D 91 | - |
| | | | | | D 126 | 5 | 36001410 | DZY-A 1,4-4/3 D 126 | - |
| 1.6 | 4 | 3 | 36 | 10 | D 91 | 5 | 36001609 | DZY-A 1,6-4/3 D 91 | - |
| | | | | | D 126 | 5 | 36001610 | DZY-A 1,6-4/3 D 126 | - |
| 1.8 | 4 | 3 | 36 | 10 | D 91 | 5 | 36001809 | DZY-A 1,8-4/3 D 91 | - |
| | | | | | D 126 | 5 | 36001810 | DZY-A 1,8-4/3 D 126 | - |
| 2 | 4 | 3 | 36 | 10 | D 64 | 5 | 36002006 | DZY-A 2,0-4/3 D 64 | - |
| | | | | | D 91 | 5 | 36002009 | DZY-A 2,0-4/3 D 91 | - |
| | | | | | D 126 | 5 | 36002010 | DZY-A 2,0-4/3 D 126 | - |
| 2.2 | 4 | 3 | 36 | 14 | D 91 | 5 | 36002209 | DZY-A 2,2-4/3 D 91 | - |
| 2.4 | 4 | 3 | 36 | 14 | D 91 | 5 | 36002409 | DZY-A 2,4-4/3 D 91 | - |
| | | | | | D 126 | 5 | 36002410 | DZY-A 2,4-4/3 D 126 | - |
| 2.6 | 4 | 3 | 36 | 14 | D 91 | 5 | 36002609 | DZY-A 2,6-4/3 D 91 | - |
| | | | | | D 126 | 5 | 36002610 | DZY-A 2,6-4/3 D 126 | - |
| 2.8 | 4 | 3 | 36 | 14 | D 126 | 5 | 36002810 | DZY-A 2,8-4/3 D 126 | - |
| 3 | 4 | 3 | 36 | 19 | D 64 | 5 | 36003006 | DZY-A 3,0-4/3 D 64 | - |
| | | | | | D 91 | 5 | 36003009 | DZY-A 3,0-4/3 D 91 | - |
| | | | | | D 126 | 5 | 36003010 | DZY-A 3,0-4/3 D 126 | - |
| 3.5 | 5 | 3 | 45 | - | D 91 | 5 | 36003509 | DZY-N 3,5-5/3 D 91 | - |
| | | | | | D 126 | 5 | 36003510 | DZY-N 3,5-5/3 D 126 | - |
| 4 | 5 | 3 | 45 | - | D 91 | 5 | 36004009 | DZY-N 4,0-5/3 D 91 | - |
| | | | | | D 126 | 5 | 36004010 | DZY-N 4,0-5/3 D 126 | - |
| | | | | | D 181 | 5 | 36004018 | DZY-N 4,0-5/3 D 181 | - |
| 4.5 | 5 | 3 | 45 | - | D 91 | 5 | 36004509 | DZY-N 4,5-5/3 D 91 | - |
| | | | | | D 126 | 5 | 36004510 | DZY-N 4,5-5/3 D 126 | - |
| 5 | 5 | 3 | 45 | - | D 91 | 5 | 36005009 | DZY-N 5,0-5/3 D 91 | - |
| | | | | | D 126 | 5 | 36005010 | DZY-N 5,0-5/3 D 126 | - |
| 5.5 | 6 | 3 | 44 | - | D 91 | 5 | 36005509 | DZY-N 5,5-6/3 D 91 | - |
| | | | | | D 126 | 5 | 36005510 | DZY-N 5,5-6/3 D 126 | - |
| | | | | | D 181 | 5 | 36005518 | DZY-N 5,5-6/3 D 181 | - |


Continued on next page



Diamond and CBN tools – electroplated bond

Diamond grinding points



| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | L ₄ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|-----------------------------|--------|---------------------|---------------------|---------------------|-----------|---|----------|------------------------|----------------|
| Shank diameter 6 mm | | | | | | | | | |
| 6 | 6 | 6 | 54 | 19 | D 91 | 1 | 36006009 | DZY-A 6,0-6/6 D 91 | - |
| | | | | | D 126 | 1 | 36006010 | DZY-A 6,0-6/6 D 126 | - |
| | | | | | D 181 | 1 | 36006018 | DZY-A 6,0-6/6 D 181 | - |
| 7 | 8 | 6 | 52 | - | D 126 | 1 | 36007010 | DZY-N 7,0-8/6 D 126 | - |
| 8 | 8 | 6 | 52 | - | D 91 | 1 | 36008009 | DZY-N 8,0-8/6 D 91 | - |
| | | | | | D 126 | 1 | 36008010 | DZY-N 8,0-8/6 D 126 | - |
| | | | | | D 181 | 1 | 36008018 | DZY-N 8,0-8/6 D 181 | - |
| 9 | 8 | 6 | 52 | - | D 126 | 1 | 36009010 | DZY-N 9,0-8/6 D 126 | - |
| 10 | 8 | 6 | 52 | - | D 91 | 1 | 36010009 | DZY-N 10,0-8/6 D 91 | - |
| | | | | | D 126 | 1 | 36010010 | DZY-N 10,0-8/6 D 126 | - |
| | | | | | D 181 | 1 | 36010018 | DZY-N 10,0-8/6 D 181 | - |
| 12 | 8 | 6 | 52 | - | D 91 | 1 | 36012009 | DZY-N 12,0-8/6 D 91 | - |
| | | | | | D 126 | 1 | 36012010 | DZY-N 12,0-8/6 D 126 | - |
| | | | | | D 181 | 1 | 36012018 | DZY-N 12,0-8/6 D 181 | - |
| 15 | 10 | 6 | 50 | - | D 126 | 1 | 36015010 | DZY-N 15,0-10/6 D 126 | - |
| 18 | 10 | 6 | 50 | - | D 126 | 1 | 36018010 | DZY-N 18,0-10/6 D 126 | - |
| 20 | 10 | 6 | 50 | - | D 126 | 1 | 36020010 | DZY-N 20,0-10/6 D 126 | - |
| Shank diameter 10 mm | | | | | | | | | |
| 15 | 10 | 10 | 110 | - | D 126 | 1 | 36015110 | DZY-N 15,0-10/10 D 126 | - |
| Shank diameter 12 mm | | | | | | | | | |
| 25 | 10 | 12 | 110 | - | D 126 | 1 | 36025110 | DZY-N 25,0-10/12 D 126 | - |

5

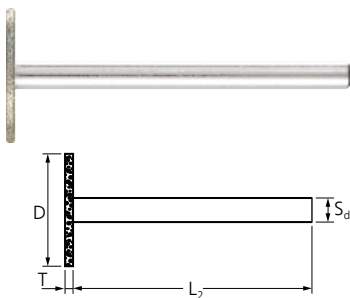
Special shape ZY


The special shape ZY is suitable for grinding slits and grooves in hard-to-reach areas.

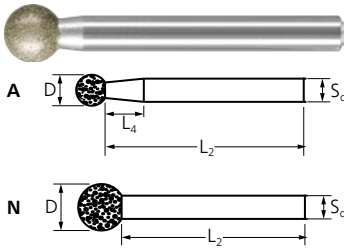


Special features:

- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.



| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------------------|--------|---------------------|---------------------|-----------|---|----------|-----------------------|----------------|
| Shank diameter 3 mm | | | | | | | | |
| 8 | 0.5 | 3 | 35 | D 64 | 1 | 36050806 | DZY-N 8,0-0,5/3 D 64 | - |
| 14 | 0.5 | 3 | 35 | D 64 | 1 | 36051406 | DZY-N 14,0-0,5/3 D 64 | - |
| | | | | D 64 | 1 | 36051416 | DZY-N 14,0-1,0/3 D 64 | - |
| | 1 | 3 | 35 | D 91 | 1 | 36051419 | DZY-N 14,0-1,0/3 D 91 | - |




Ball shape KU

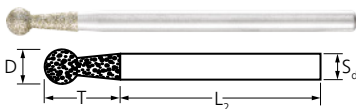
The ball shape KU is often used in manual applications. This shape is well-suited for engraving, contour grinding and deburring tasks.



Special features:

- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| D [mm] | S _d [mm] | L ₂ [mm] | L ₄ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------------------|---------------------|---------------------|---------------------|-----------|---|----------|--------------------|----------------|
| Shank diameter 3 mm | | | | | | | | |
| 1 | 3 | 44 | 10 | D 64 | 5 | 36201006 | DKU-A 1,0/3 D 64 | - |
| | | | | D 91 | 5 | 36201009 | DKU-A 1,0/3 D 91 | - |
| | | | | D 126 | 5 | 36201010 | DKU-A 1,0/3 D 126 | - |
| | | | | D 181 | 5 | 36201018 | DKU-A 1,0/3 D 181 | - |
| 2 | 3 | 43 | 8 | D 64 | 5 | 36202006 | DKU-A 2,0/3 D 64 | - |
| | | | | D 91 | 5 | 36202009 | DKU-A 2,0/3 D 91 | - |
| | | | | D 126 | 5 | 36202010 | DKU-A 2,0/3 D 126 | - |
| | | | | D 181 | 5 | 36202018 | DKU-A 2,0/3 D 181 | - |
| 3 | 3 | 42 | 6 | D 64 | 5 | 36203006 | DKU-A 3,0/3 D 64 | - |
| | | | | D 91 | 5 | 36203009 | DKU-A 3,0/3 D 91 | - |
| | | | | D 126 | 5 | 36203010 | DKU-A 3,0/3 D 126 | - |
| | | | | D 181 | 5 | 36203018 | DKU-A 3,0/3 D 181 | - |
| 4 | 3 | 41 | 5 | D 91 | 5 | 36204009 | DKU-A 4,0/3 D 91 | - |
| | | | | D 126 | 5 | 36204010 | DKU-A 4,0/3 D 126 | - |
| | | | | D 181 | 5 | 36204018 | DKU-A 4,0/3 D 181 | - |
| 5 | 3 | 40 | 2 | D 91 | 5 | 36205009 | DKU-A 5,0/3 D 91 | - |
| | | | | D 126 | 5 | 36205010 | DKU-A 5,0/3 D 126 | - |
| | | | | D 181 | 5 | 36205018 | DKU-A 5,0/3 D 181 | - |
| 6 | 3 | 39 | - | D 91 | 1 | 36206009 | DKU-N 6,0/3 D 91 | - |
| | | | | D 126 | 1 | 36206010 | DKU-N 6,0/3 D 126 | - |
| | | | | D 181 | 1 | 36206018 | DKU-N 6,0/3 D 181 | - |
| Shank diameter 6 mm | | | | | | | | |
| 8 | 6 | 52 | 10 | D 126 | 1 | 36208010 | DKU-A 8,0/6 D 126 | - |
| 10 | 6 | 50 | 5 | D 126 | 1 | 36210010 | DKU-A 10,0/6 D 126 | - |
| 12 | 6 | 48 | - | D 126 | 1 | 36212010 | DKU-N 12,0/6 D 126 | - |




Special shape KU

Often used for deburring plastic profiles in manual applications. This shape is also coated with abrasive grain under the ball-shaped part of the grinding point on the stepped shank. The special shape provides optimum results when machining profiles.

Special features:

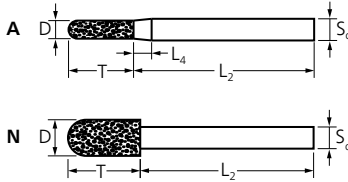
- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------------------|--------|---------------------|---------------------|-----------|---|----------|--------------------|----------------|
| Shank diameter 3 mm | | | | | | | | |
| 3 | 10 | 3 | 40 | D 181 | 1 | 36223018 | DKU 3,0-10/3 D 181 | - |
| 4 | 10 | 3 | 40 | D 181 | 1 | 36224018 | DKU 4,0-10/3 D 181 | - |



Diamond and CBN tools – electroplated bond

Diamond grinding points



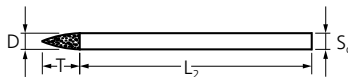
Cylindrical shape with radius end WR

The cylindrical shape with radius end WR is best suited to manual applications and can be used for a wide variety of deburring and grinding tasks. Coarse grit size D 357 is exceptionally well-suited for use on fibre-reinforced plastics (GRP/CRP).

Special features:

- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | L ₄ [mm] | Grit size | | Item no. | Designation | Price/unit EUR |
|----------------------------|--------|---------------------|---------------------|---------------------|-----------|---|----------|-----------------------|----------------|
| Shank diameter 6 mm | | | | | | | | | |
| 5 | 18 | 6 | 50 | 5 | D 126 | 1 | 36425026 | DWR-A 5,0-18/6 D 126 | - |
| | | | | | D 357 | 1 | 36425035 | DWR-A 5,0-18/6 D 357 | - |
| 6 | 18 | 6 | 50 | 5 | D 126 | 1 | 36426026 | DWR-A 6,0-18/6 D 126 | - |
| | | | | | D 357 | 1 | 36426035 | DWR-A 6,0-18/6 D 357 | - |
| 10 | 20 | 6 | 50 | - | D 126 | 1 | 36431026 | DWR-N 10,0-20/6 D 126 | - |
| | | | | | D 357 | 1 | 36431057 | DWR-N 10,0-20/6 D 357 | - |



Pointed tree shape SPG

The pointed tree shape SPG is exceptionally well-suited to machining small holes or bores as well as for engraving work.

Special features:

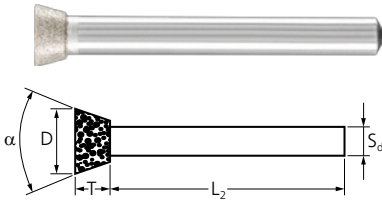
- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.



| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | Grit size | | Item no. | Designation | Price/unit EUR |
|----------------------------|--------|---------------------|---------------------|-----------|---|----------|---------------------|----------------|
| Shank diameter 3 mm | | | | | | | | |
| 3 | 7 | 3 | 43 | D 126 | 1 | 36443010 | DSPG 3,0-7/3 D 126 | - |
| | 13 | 3 | 37 | D 126 | 1 | 36443020 | DSPG 3,0-13/3 D 126 | - |
| Shank diameter 6 mm | | | | | | | | |
| 6 | 18 | 6 | 50 | D 126 | 1 | 36443030 | DSPG 6,0-18/6 D 126 | - |

5





Cup shape KT

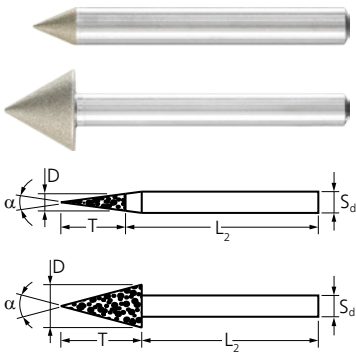
The cup shape KT is ideal for work on profiles, planar surfaces and ledges, without the cylindrical surface being damaged.

Special features:

- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.

- Longer tool life due to harder diamond grain.

| D [mm] | T [mm] | α [°] | S_d [mm] | L_2 [mm] | Grit size | | Item no. | Designation | Price/unit EUR |
|----------------------------|--------|--------------|------------|------------|-----------|---|----------|----------------------|----------------|
| Shank diameter 3 mm | | | | | | | | | |
| 3 | 7 | 8 | 3 | 43 | D 126 | 1 | 36453010 | DKT 3,0-8°/3 D 126 | - |
| Shank diameter 6 mm | | | | | | | | | |
| 10 | 5 | 30 | 6 | 50 | D 126 | 1 | 36461010 | DKT 10,0-30°/6 D 126 | - |



Conical pointed shape SK

The conical pointed shape SK is exceptionally well-suited to deburring bores, regrinding centring holes and chamfering.



Special features:

- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| D [mm] | T [mm] | α [°] | S_d [mm] | L_2 [mm] | Grit size | | Item no. | Designation | Price/unit EUR | |
|----------------------------|--------|--------------|------------|------------|-----------|-------|----------|----------------------|----------------------|---|
| Shank diameter 6 mm | | | | | | | | | | |
| 6 | 45 | 7 | 6 | 50 | D 64 | 1 | 36476007 | DSK 6,0-7°/6 D 64 | - | |
| | | | | | D 126 | 1 | 36476026 | DSK 6,0-7°/6 D 126 | - | |
| | 26 | 12 | 12 | 6 | 50 | D 64 | 1 | 36476012 | DSK 6,0-12°/6 D 64 | - |
| | | | | | | D 126 | 1 | 36476120 | DSK 6,0-12°/6 D 126 | - |
| | | | | | | D 64 | 1 | 36476015 | DSK 6,0-15°/6 D 64 | - |
| | | | | | | D 126 | 1 | 36476150 | DSK 6,0-15°/6 D 126 | - |
| | 11 | 30 | 30 | 6 | 50 | D 64 | 1 | 36476006 | DSK 6,0-30°/6 D 64 | - |
| | | | | | | D 126 | 1 | 36476030 | DSK 6,0-30°/6 D 126 | - |
| | 5 | 60 | 60 | 6 | 50 | D 64 | 1 | 36476060 | DSK 6,0-60°/6 D 64 | - |
| | | | | | | D 126 | 1 | 36470126 | DSK 6,0-60°/6 D 126 | - |
| | 10 | 9 | 60 | 6 | 50 | D 64 | 1 | 36476104 | DSK 10,0-60°/6 D 64 | - |
| | | | | | | D 126 | 1 | 36476106 | DSK 10,0-60°/6 D 126 | - |
| 5 | | 90 | 90 | 6 | 50 | D 64 | 1 | 36476124 | DSK 10,0-90°/6 D 64 | - |
| | | | | | | D 126 | 1 | 36476126 | DSK 10,0-90°/6 D 126 | - |
| 15 | 13 | 60 | 6 | 50 | D 64 | 1 | 36476144 | DSK 15,0-60°/6 D 64 | - | |
| | | | | | D 126 | 1 | 36476146 | DSK 15,0-60°/6 D 126 | - | |
| | 7.5 | 90 | 90 | 6 | 50 | D 64 | 1 | 36476164 | DSK 15,0-90°/6 D 64 | - |
| | | | | | D 126 | 1 | 36476166 | DSK 15,0-90°/6 D 126 | - | |



Diamond and CBN tools – electroplated bond

Diamond grinding points



Diamond grinding point set


The set contains 10 diamond grinding points with grit size D 126 in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.

Contents:

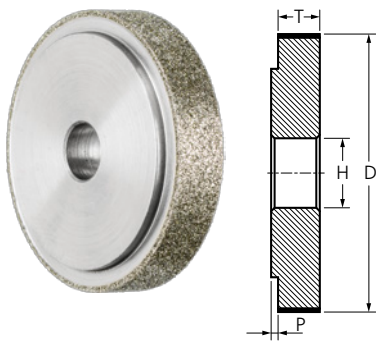
Contains one each of the following diamond grinding points:
 DZY-A 1.0-4/3 D 126,
 DZY-A 2.0-4/3 D 126, DZY-N 4.0-5/3 D 126,
 DZY-N 5.0-5/3 D 126, DZY-N 14.0-1.1/3 D 126,
 DKU-A 2.0/3 D 126, DKU-A 4.0/3 D 126,
 DKU-N 6.0/3 D 126, DSPG 3.0-7/3 D 126 and
 DKT 3.0-8°/3 D 126.

Special features:

- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| S_d [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---------------|-----------|---|----------|--------------|-------------------|
| 3 | D 126 | 1 | 36476067 | D-Set/3 D126 | - |

Diamond grinding discs




Grinding discs 1A1

Diamond grinding discs are intended for use on stationary machines. As from an outer diameter of 18 mm: with additional centring shoulder which allows them to be mounted and aligned on the machine spindle. Combined with a stable mandrel, these tools are ideal for work in deep-set or long bores.

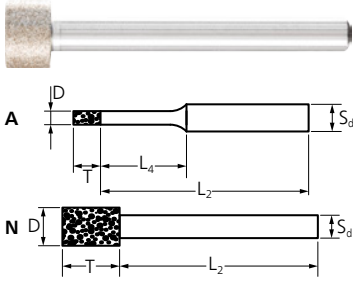


Special features:

- Ideal for work on tungsten carbide.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

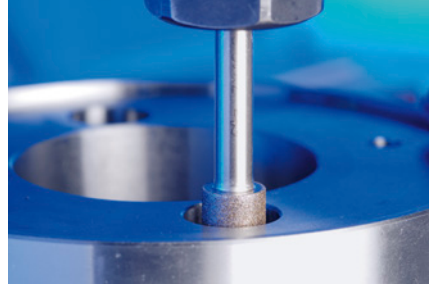
| D [mm] | T [mm] | H [mm] | P [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|-----------|-----------|-----------|-----------|-----------|---|----------|---------------------|-------------------|
| 18 | 10 | 8 | 2 | D 151 | 1 | 36618015 | D1A1 18-10-8 D 151 | - |
| 20 | 10 | 8 | 2 | D 151 | 1 | 36622015 | D1A1 20-10-8 D 151 | - |
| 30 | 10 | 10 | 2 | D 151 | 1 | 36623015 | D1A1 30-10-10 D 151 | - |
| 40 | 10 | 10 | 2 | D 151 | 1 | 36624015 | D1A1 40-10-10 D 151 | - |
| 50 | 10 | 10 | 2 | D 151 | 1 | 36625015 | D1A1 50-10-10 D 151 | - |

5 




Cylindrical shape ZY

The cylindrical shape ZY is suitable for grinding bores, radii and contours in stationary or manual applications. Grinding points with a diameter of 8 mm or more have a recess on the front surface.



Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | L ₄ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------------------|--------|---------------------|---------------------|---------------------|-----------|---|----------|-----------------------|----------------|
| Shank diameter 3 mm | | | | | | | | | |
| 0.5 | 2 | 3 | 38 | 5 | B 64 | 5 | 36100506 | BZY-A 0,5-2/3 B 64 | - |
| 0.8 | 2 | 3 | 38 | 5 | B 64 | 5 | 36100806 | BZY-A 0,8-2/3 B 64 | - |
| 1 | 4 | 3 | 36 | 9 | B 64 | 5 | 36101006 | BZY-A 1,0-4/3 B 64 | - |
| | | | | | B 126 | 5 | 36101010 | BZY-A 1,0-4/3 B 126 | - |
| 1.2 | 4 | 3 | 36 | 9 | B 64 | 5 | 36101206 | BZY-A 1,2-4/3 B 64 | - |
| | | | | | B 126 | 5 | 36101210 | BZY-A 1,2-4/3 B 126 | - |
| 1.4 | 4 | 3 | 36 | 9 | B 126 | 5 | 36101410 | BZY-A 1,4-4/3 B 126 | - |
| 1.6 | 4 | 3 | 36 | 10 | B 64 | 5 | 36101606 | BZY-A 1,6-4/3 B 64 | - |
| | | | | | B 126 | 5 | 36101610 | BZY-A 1,6-4/3 B 126 | - |
| 1.8 | 4 | 3 | 36 | 10 | B 126 | 5 | 36101810 | BZY-A 1,8-4/3 B 126 | - |
| 2 | 4 | 3 | 36 | 10 | B 64 | 5 | 36102006 | BZY-A 2,0-4/3 B 64 | - |
| | | | | | B 126 | 5 | 36102010 | BZY-A 2,0-4/3 B 126 | - |
| 2.2 | 4 | 3 | 36 | 14 | B 126 | 5 | 36102210 | BZY-A 2,2-4/3 B 126 | - |
| 2.4 | 4 | 3 | 36 | 14 | B 64 | 5 | 36102406 | BZY-A 2,4-4/3 B 64 | - |
| | | | | | B 126 | 5 | 36102410 | BZY-A 2,4-4/3 B 126 | - |
| 2.6 | 4 | 3 | 36 | 14 | B 64 | 5 | 36102606 | BZY-A 2,6-4/3 B 64 | - |
| | | | | | B 126 | 5 | 36102610 | BZY-A 2,6-4/3 B 126 | - |
| 2.8 | 4 | 3 | 36 | 14 | B 126 | 5 | 36102810 | BZY-A 2,8-4/3 B 126 | - |
| 3 | 4 | 3 | 36 | 19 | B 64 | 5 | 36103006 | BZY-A 3,0-4/3 B 64 | - |
| | | | | | B 126 | 5 | 36103010 | BZY-A 3,0-4/3 B 126 | - |
| 3.5 | 5 | 3 | 45 | - | B 64 | 5 | 36103506 | BZY-N 3,5-5/3 B 64 | - |
| | | | | | B 126 | 5 | 36103510 | BZY-N 3,5-5/3 B 126 | - |
| 4 | 5 | 3 | 45 | - | B 64 | 5 | 36104006 | BZY-N 4,0-5/3 B 64 | - |
| | | | | | B 126 | 5 | 36104010 | BZY-N 4,0-5/3 B 126 | - |
| 4.5 | 5 | 3 | 45 | - | B 126 | 5 | 36104510 | BZY-N 4,5-5/3 B 126 | - |
| 5 | 5 | 3 | 45 | - | B 64 | 5 | 36105006 | BZY-N 5,0-5/3 B 64 | - |
| | | | | | B 126 | 5 | 36105010 | BZY-N 5,0-5/3 B 126 | - |
| 5.5 | 6 | 3 | 44 | - | B 126 | 5 | 36105510 | BZY-N 5,5-6/3 B 126 | - |
| Shank diameter 6 mm | | | | | | | | | |
| 6 | 6 | 6 | 54 | 19 | B 126 | 1 | 36106010 | BZY-A 6,0-6/6 B 126 | - |
| 7 | 8 | 6 | 52 | - | B 126 | 1 | 36107010 | BZY-N 7,0-8/6 B 126 | - |
| 8 | 8 | 6 | 52 | - | B 126 | 1 | 36108010 | BZY-N 8,0-8/6 B 126 | - |
| 9 | 8 | 6 | 52 | - | B 126 | 1 | 36109010 | BZY-N 9,0-8/6 B 126 | - |
| 10 | 8 | 6 | 52 | - | B 126 | 1 | 36110010 | BZY-N 10,0-8/6 B 126 | - |
| 12 | 8 | 6 | 52 | - | B 126 | 1 | 36112010 | BZY-N 12,0-8/6 B 126 | - |
| 13 | 10 | 6 | 50 | - | B 126 | 1 | 36113010 | BZY-N 13,0-10/6 B 126 | - |
| 14 | 10 | 6 | 50 | - | B 126 | 1 | 36114010 | BZY-N 14,0-10/6 B 126 | - |
| 15 | 10 | 6 | 50 | - | B 126 | 1 | 36115010 | BZY-N 15,0-10/6 B 126 | - |
| 18 | 10 | 6 | 50 | - | B 126 | 1 | 36118010 | BZY-N 18,0-10/6 B 126 | - |


Continued on next page

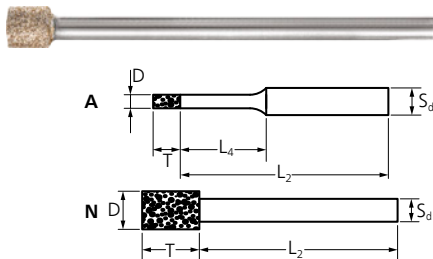


Diamond and CBN tools – electroplated bond

CBN grinding points



| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | L ₄ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|-----------------------------|--------|---------------------|---------------------|---------------------|-----------|---|----------|------------------------|----------------|
| 20 | 10 | 6 | 50 | - | B 126 | 1 | 36120010 | BZY-N 20,0-10/6 B 126 | - |
| Shank diameter 10 mm | | | | | | | | | |
| 15 | 10 | 10 | 110 | - | B 126 | 1 | 36115110 | BZY-N 15,0-10/10 B 126 | - |




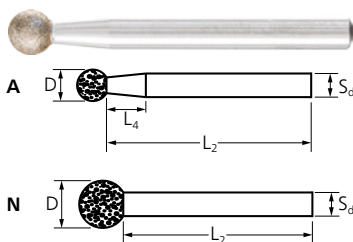
Cylindrical points with tungsten carbide shank

Cylindrical mounted points with tungsten carbide shanks are used for internal grinding on stationary machines. In internal grinding applications, tools with a tungsten carbide shank offer higher stock removal rates, superior surfaces and more precise shape and position tolerances.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | L ₄ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------------------|--------|---------------------|---------------------|---------------------|-----------|---|----------|-------------------------|----------------|
| Shank diameter 3 mm | | | | | | | | | |
| 4 | 5 | 3 | 43 | - | B 151 | 1 | 36154515 | BZY-N 4,0-5/3 HM B 151 | - |
| Shank diameter 6 mm | | | | | | | | | |
| 6 | 6 | 6 | 98 | 19 | B 151 | 1 | 36136615 | BZY-A 6,0-6/6 HM B 151 | - |
| 8 | 8 | 6 | 98 | - | B 151 | 1 | 36158815 | BZY-N 8,0-8/6 HM B 151 | - |
| 12 | 8 | 6 | 98 | - | B 151 | 1 | 36161151 | BZY-N 12,0-8/6 HM B 151 | - |




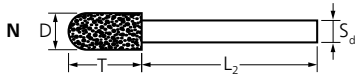
Ball shape KU

Spherical shape CBN grinding points are often used for engraving, contours and deburring work.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

| D [mm] | S _d [mm] | L ₂ [mm] | L ₄ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------------------|---------------------|---------------------|---------------------|-----------|---|----------|--------------------|----------------|
| Shank diameter 3 mm | | | | | | | | |
| 1 | 3 | 44 | 10 | B 64 | 5 | 36301006 | BKU-A 1,0/3 B 64 | - |
| | | | | B 126 | 5 | 36301010 | BKU-A 1,0/3 B 126 | - |
| 2 | 3 | 43 | 8 | B 126 | 5 | 36302010 | BKU-A 2,0/3 B 126 | - |
| 3 | 3 | 42 | 6 | B 64 | 5 | 36303006 | BKU-A 3,0/3 B 64 | - |
| | | | | B 126 | 5 | 36303010 | BKU-A 3,0/3 B 126 | - |
| 4 | 3 | 41 | 5 | B 126 | 5 | 36304010 | BKU-A 4,0/3 B 126 | - |
| 5 | 3 | 40 | 2 | B 126 | 5 | 36305010 | BKU-A 5,0/3 B 126 | - |
| 6 | 3 | 39 | - | B 126 | 1 | 36306010 | BKU-N 6,0/3 B 126 | - |
| Shank diameter 6 mm | | | | | | | | |
| 8 | 6 | 52 | 10 | B 126 | 1 | 36308010 | BKU-A 8,0/6 B 126 | - |
| 10 | 6 | 50 | 5 | B 126 | 1 | 36310010 | BKU-A 10,0/6 B 126 | - |
| 12 | 6 | 48 | - | B 126 | 1 | 36312010 | BKU-N 12,0/6 B 126 | - |




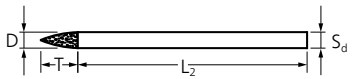
Cylindrical shape with radius end WR

The cylindrical shape with radius end WR is best suited to manual applications and can be used for a wide variety of deburring and grinding tasks.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------------------|--------|---------------------|---------------------|-----------|---|----------|----------------------|----------------|
| Shank diameter 3 mm | | | | | | | | |
| 5 | 10 | 3 | 40 | B 126 | 1 | 36525010 | BWR-N 5,0-10/3 B 126 | - |
| 6 | 10 | 3 | 40 | B 126 | 1 | 36526010 | BWR-N 6,0-10/3 B 126 | - |




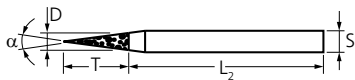
Pointed tree shape SPG

The pointed tree shape SPG is exceptionally well-suited to machining small holes or bores as well as for engraving work.

Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------------------|--------|---------------------|---------------------|-----------|---|----------|---------------------|----------------|
| Shank diameter 3 mm | | | | | | | | |
| 3 | 7 | 3 | 43 | B 126 | 1 | 36543010 | BSPG 3,0-7/3 B 126 | - |
| Shank diameter 6 mm | | | | | | | | |
| 6 | 18 | 6 | 50 | B 126 | 1 | 36546010 | BSPG 6,0-18/6 B 126 | - |




Conical pointed shape SK

The conical pointed shape SK is exceptionally well-suited to deburring bores, regrinding centring holes and chamfering.

Special features:

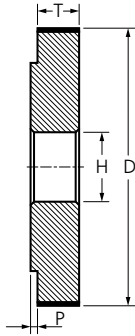
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

| D [mm] | T [mm] | α [°] | S _d [mm] | L ₂ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------------------------|--------|-------|---------------------|---------------------|-----------|---|----------|--------------------|----------------|
| Shank diameter 6 mm | | | | | | | | | |
| 6 | 7 | 45 | 6 | 50 | B 64 | 1 | 36576045 | BSK 6,0-45°/6 B 64 | - |
| | 5 | 60 | 6 | 50 | B 64 | 1 | 36576060 | BSK 6,0-60°/6 B 64 | - |



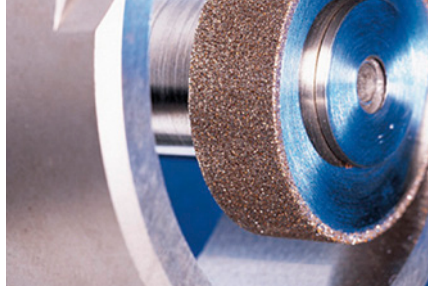
Diamond and CBN tools – electroplated bond

CBN grinding discs




Grinding discs 1A1

CBN grinding discs are intended for use on stationary machines. They have an additional centring shoulder which allows them to be accurately mounted and aligned on the machine spindle. Combined with a stable mandrel, these tools are ideal for work in deep-set or long bores.



Special features:

- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.

| D [mm] | T [mm] | H [mm] | P [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|--------|--------|--------|--------|-----------|---|----------|---------------------|----------------|
| 20 | 10 | 8 | 2 | B 151 | 1 | 36722015 | B1A1 20-10-8 B 151 | - |
| 30 | 10 | 10 | 2 | B 151 | 1 | 36723015 | B1A1 30-10-10 B 151 | - |
| 40 | 10 | 10 | 2 | B 151 | 1 | 36724015 | B1A1 40-10-10 B 151 | - |
| 50 | 10 | 10 | 2 | B 151 | 1 | 36725015 | B1A1 50-10-10 B 151 | - |





Shape D (continuous coating)

The continuous coating is particularly suitable for very fine separating cuts.



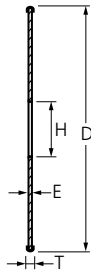
Shape G (with protective segments)

The continuous coating with protective segments facilitates optimum free-cutting.



Shape S 2 (segmented)

The segmentation allows particularly good chip removal.




Diamond cut-off wheels

Electroplated diamond cut-off wheels are used with grit sizes from D 64 to D 427 for cutting hard materials such as tungsten carbide or ceramics and fibre-reinforced plastics (GRP/CRP).



Special features:

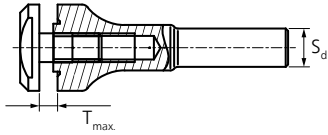
- Ideal for work on hardened steel.
- No chemical wear thanks to the low working temperatures.
- Longer tool life due to harder diamond grain.

| D [mm] | T [mm] | E [mm] | H [mm] | Shape | Protective seg. per side | Grit size |  | Item no. | Designation | Price/unit EUR |
|--|--------|--------|--------|-------|--------------------------|-----------|---|----------|----------------------------------|----------------|
| Hard materials, e.g. glass, ceramic or tungsten carbide | | | | | | | | | | |
| 22 | 0.5 | 0.3 | 1.7 | D | no | D 64 | 1 | 68402206 | D1A1R 22-0,5-1,7 D 64 GAD | - |
| 30 | 1 | 0.6 | 10 | D | no | D 151 | 1 | 68403015 | D1A1R 30-1-10 D 151 GAD | - |
| 40 | 1 | 0.6 | 10 | D | no | D 151 | 1 | 68404015 | D1A1R 40-1-10 D 151 GAD | - |
| 50 | 1.4 | 1 | 10 | D | no | D 151 | 1 | 68405025 | D1A1R 50-1,4-10 D 151 GAD | - |
| | | | 6 | D | no | D 151 | 1 | 68405015 | D1A1R 50-1,4-6 D 151 GAD | - |
| 125 | 1.4 | 1 | 20 | D | no | D 151 | 1 | 68412115 | D1A1R 125-1,4-20 D 151 GAD | - |
| Fibre-reinforced plastics (GRP and CRP) as well as pre-sintered and green ceramic | | | | | | | | | | |
| 50 | 2 | 1 | 10 | D | no | D 357 | 1 | 68405164 | D1A1R 50-2-10 D 357 GAD | - |
| | | | | G | 3 | D 357 | 1 | 68405163 | D1A1R 50-2-10 D 357 GAG | - |
| | | | 6 | D | no | D 357 | 1 | 68405064 | D1A1R 50-2-6 D 357 GAD | - |
| | | | | G | 3 | D 357 | 1 | 68405063 | D1A1R 50-2-6 D 357 GAG | - |
| 75 | 2 | 1 | 10 | D | no | D 357 | 1 | 68407503 | D1A1R 75-2-10 D 357 GAD | - |
| | | | | G | 3 | D 357 | 1 | 68407103 | D1A1R 75-2-10 D 357 GAG | - |
| 100 | 2 | 1 | 22.23 | D | no | D 427 | 1 | 68410237 | D1A1R 100-2-22,23 D 427 GAD | - |
| | | | | G | 3 | D 427 | 1 | 68410238 | D1A1R 100-2-22,23 D 427 GAG | - |
| 115 | 2 | 1 | 22.23 | D | no | D 427 | 1 | 68411237 | D1A1R 115-2-22,23 D 427 GAD | - |
| | | | | G | 3 | D 427 | 1 | 68411238 | D1A1R 115-2-22,23 D 427 GAG | - |
| 125 | 2 | 1 | 22.23 | D | no | D 427 | 1 | 68412237 | D1A1R 125-2-22,23 D 427 GAD | - |
| | | | | G | 3 | D 427 | 1 | 68412238 | D1A1R 125-2-22,23 D 427 GAG | - |
| 178 | 2 | 1 | 22.23 | D | no | D 427 | 1 | 68417838 | D1A1R 178-2-22,23 D 427 GAD | - |
| 230 | 2.5 | 1.5 | 22.23 | S2 | no | D 427 | 1 | 68423227 | D1A1RSS 230-2,5-22,23 D 427 GAS2 | - |
| 250 | 2.5 | 1.5 | 22.23 | S2 | no | D 427 | 1 | 68425037 | D1A1RSS 250-2,5-22,23 D 427 GAS2 | - |
| 300 | 2.5 | 1.5 | 30 | S2 | no | D 427 | 1 | 68430037 | D1A1RSS 300-2,5-30,0 D 427 GAS2 | - |
| 350 | 2.8 | 1.8 | 30 | S2 | no | D 427 | 1 | 68435037 | D1A1RSS 350-2,8-30,0 D 427 GAS2 | - |
| 400 | 3.8 | 2.8 | 30 | S2 | no | D 427 | 1 | 68440137 | D1A1RSS 400-3,8-30,0 D 427 GAS2 | - |



Diamond and CBN tools – electroplated bond

Diamond cut-off wheels

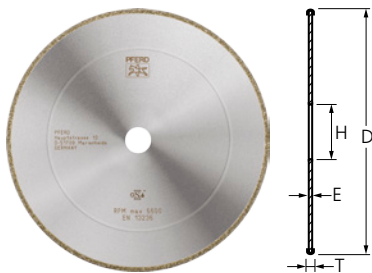


Arbor for diamond cut-off wheels

Accessory for mounting diamond cut-off wheels up to and including a diameter of 75 mm.

| S_d [mm] | Suitable for hole diameter [mm] | T_{max} [mm] | Max. RPM [mm] | | Item no. | Designation | Price/unit EUR |
|---------------|---------------------------------------|-------------------|------------------|---|----------|-------------|-------------------|
| 3 | 1.7 | 1 | 28,000 | 1 | 68400317 | BO 3/1,7 1 | - |
| 6 | 10 | 3 | 30,000 | 1 | 33512040 | BO 6/10 3 | - |
| 8 | 10 | 3 | 30,000 | 1 | 33513900 | BO 8/10 3 | - |

Diamond cut-off wheels and grinding points for foundries



Diamond cut-off wheels for grey and nodular cast iron

Electroplated diamond cut-off wheels with grit size D 852 are exceptionally well-suited to machining grey cast iron and nodular cast iron (GG and GGG or GJL and GJS) as well as for use in robots. They have a very long tool life.

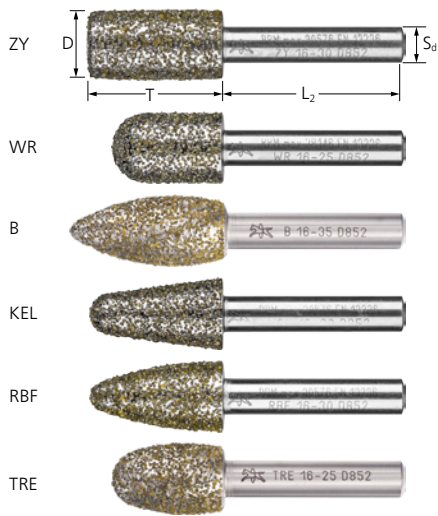


Special features:

- Ideal for work on deep areas because of the constant tool diameter.
- Easy and quick elimination of metal contamination.
- Minimized dust formation due to the monolayer coating and coarse chips.

| D [mm] | T [mm] | E [mm] | H [mm] | Shape | Protective seg. per side | Grit size | | Item no. | Designation | Price/ unit EUR |
|---|-----------|-----------|-----------|-------|--------------------------------|-----------|---|----------|-------------------------------|-----------------------|
| Grey and nodular cast iron (GG and GGG or GJL and GJS) | | | | | | | | | | |
| 230 | 3.8 | 1.8 | 22.23 | D | no | D 852 | 1 | 68423228 | D1A1R 230-3,8-22,23 D 852 GAD | - |
| 400 | 4.5 | 2.5 | 40 | D | no | D 852 | 1 | 68440037 | D1A1R 400-4,5-40,0 D 852 GAD | - |






Diamond grinding points for grey and nodular cast iron

Diamond grinding points with grit size D 852 are exceptionally well-suited to machining grey cast iron and nodular cast iron (GG and GGG or GJL and GJS). They have an outstanding tool life.



Special features:

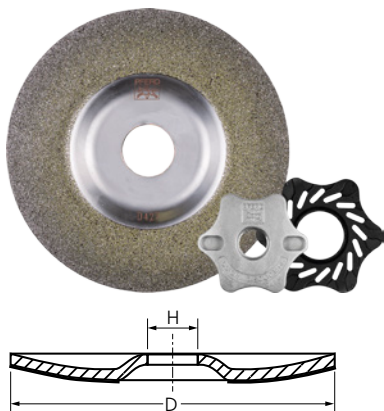
- Fast, aggressive grinding with maximum stock removal rate.
- Easy and quick elimination of metal contamination thanks to diamond as a super-hard abrasive.
- Lower dust load due to the dimensional stability of the grinding tool (no tool wear).

| D [mm] | T [mm] | S _d [mm] | L ₂ [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|---|--------|---------------------|---------------------|-----------|---|----------|----------------------|----------------|
| Cylindrical shape ZY | | | | | | | | |
| 16 | 30 | 8 | 40 | D 852 | 1 | 36015019 | DZY-N 16-30/8 D 852 | - |
| 20 | 30 | 8 | 40 | D 852 | 1 | 36015020 | DZY-N 20-30/8 D 852 | - |
| 24 | 30 | 8 | 40 | D 852 | 1 | 36015022 | DZY-N 24-30/8 D 852 | - |
| 45 | 6.5 | 8 | 40 | D 852 | 1 | 36803965 | DZY-N 45-6,5/8 D 852 | - |
| Cylindrical shape with radius end WR | | | | | | | | |
| 10 | 20 | 6 | 40 | D 852 | 1 | 36476061 | DWR-N 10-20/6 D 852 | - |
| 12 | 25 | 6 | 40 | D 852 | 1 | 36476062 | DWR-N 12-25/6 D 852 | - |
| 16 | 25 | 8 | 40 | D 852 | 1 | 36476063 | DWR-N 16-25/8 D 852 | - |
| 20 | 30 | 8 | 40 | D 852 | 1 | 36476068 | DWR-N 20-30/8 D 852 | - |
| 24 | 30 | 8 | 40 | D 852 | 1 | 36476069 | DWR-N 24-30/8 D 852 | - |
| Flame-shaped B | | | | | | | | |
| 16 | 35 | 8 | 40 | D 852 | 1 | 36803966 | DB-N 16-35/8 D 852 | - |
| Conical shape KEL | | | | | | | | |
| 12 | 25 | 6 | 40 | D 852 | 1 | 36476071 | DKEL-N 12-25/6 D 852 | - |
| 16 | 30 | 8 | 40 | D 852 | 1 | 36476064 | DKEL-N 16-30/8 D 852 | - |
| 20 | 30 | 8 | 40 | D 852 | 1 | 36476070 | DKEL-N 20-30/8 D 852 | - |
| 24 | 30 | 8 | 40 | D 852 | 1 | 36476072 | DKEL-N 24-30/8 D 852 | - |
| Tree shape with radius end RBF | | | | | | | | |
| 12 | 25 | 6 | 40 | D 852 | 1 | 36476065 | DRBF-N 12-25/6 D 852 | - |
| 16 | 30 | 8 | 40 | D 852 | 1 | 36476066 | DRBF-N 16-30/8 D 852 | - |
| 20 | 30 | 8 | 40 | D 852 | 1 | 36476073 | DRBF-N 20-30/8 D 852 | - |
| Oval shape TRE | | | | | | | | |
| 16 | 25 | 8 | 40 | D 852 | 1 | 36803967 | DTRE-N 16-25/8 D852 | - |



Diamond and CBN tools – electroplated bond

Diamond grinding discs CC-GRIND SOLID DIAMOND




CC-GRIND SOLID DIAMOND

The CC-GRIND SOLID DIAMOND has been specially developed for applications on hard materials which cannot be machined with conventional tools made of aluminium oxide or silicon carbide.



Special features:

- Fast, aggressive grinding with maximum stock removal rate.
- Easy and quick elimination of metal contamination thanks to diamond as a super-hard abrasive.
- Lower dust load due to the dimensional stability of the grinding tool (no tool wear).

| D [mm] | H [mm] | Grit size | Max. RPM |  | Item no. | Designation | Price/unit EUR |
|---|--------|-----------|----------|---|----------|--|----------------|
| Integrated clamping flange set SFS CC-GRIND SOLID 100 M10 | | | | | | | |
| 100 | 16 | D 427 | 15,300 | 1 | 36610042 | CC-GRIND SOLID DIAMOND 100-16.0 D 427 | - |
| | | D 852 | 15,300 | 1 | 36610085 | CC-GRIND SOLID DIAMOND 100-16.0 D 852 | - |
| Integrated clamping flange set SFS CC-GRIND SOLID/FLEX 115/125 M14 | | | | | | | |
| 115 | 22.23 | D 427 | 13,300 | 1 | 36611542 | CC-GRIND SOLID DIAMOND 115-22.23 D 427 | - |
| | | D 852 | 13,300 | 1 | 36611585 | CC-GRIND SOLID DIAMOND 115-22.23 D 852 | - |
| 125 | 22.23 | D 427 | 12,200 | 1 | 36612542 | CC-GRIND SOLID DIAMOND 125-22.23 D 427 | - |
| | | D 852 | 12,200 | 1 | 36612585 | CC-GRIND SOLID DIAMOND 125-22.23 D 852 | - |


5

Diamond sabre saw blades



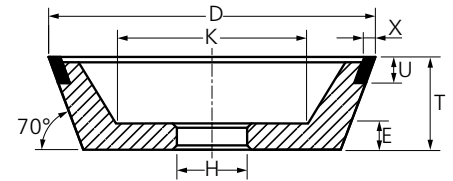
Diamond sabre saw blades

Diamond sabre saw blades are suitable for work on fibre-reinforced plastics (GRP/CRP). Flexible cutting line for producing a wide range of geometries, plus a long tool life. Suitable for cutting out holes and for cutting.

| Total length [mm] | Total width [mm] | Coating length [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------------------|------------------|---------------------|-----------|---|----------|----------------------|----------------|
| 75 | 2 | 50 | D 357 | 1 | 15600571 | DIA-SSB 50/75 D 357 | - |
| 100 | 2 | 75 | D 357 | 1 | 15600791 | DIA-SSB 75/100 D 357 | - |

In addition to the standard resinoid-bonded diamond and CBN grinding tools available from stock, customer-specific tool solutions are also possible. In your request, please specify the material to be worked, the application and the tool drive.

In the following tables, all the available shapes and dimensions are shown. For dimensions separated by slashes, please select the desired dimension.



Explanation of the abbreviations

| | |
|---------------------|-------------------------------------|
| α | = Mount angle |
| D [mm] | = Outer diameter |
| E [mm] | = Bottom thickness |
| H [mm] | = Bore diameter |
| J [mm] | = Smaller diameter |
| K [mm] | = Internal diameter |
| L ₂ [mm] | = Shank length |
| L ₄ [mm] | = Reduced diameter length |
| R [mm] | = Radius |
| S ₁ [mm] | = Reduced diameter |
| S _d [mm] | = Shank diameter |
| T [mm] | = Total width |
| U [mm] | = Coating width |
| W [mm] | = Mounted point width |
| X [mm] | = Usable abrasive coating thickness |

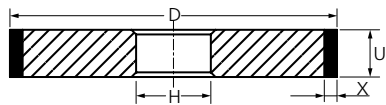


Diamond and CBN tools – resinoid bond

Customer-specific tool solutions



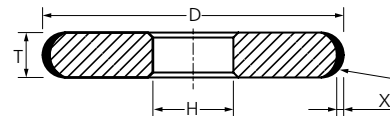
Shape 1A1



| D [mm] | U [mm] | X [mm] | H [mm] |
|--------|-----------------------------|---------------|----------------|
| 50 | 4 / 6 / 8 / 10 / 12 | 3 / 4 / 5 / 6 | Please specify |
| 75 | 6 / 8 / 10 / 12 | 3 / 4 / 5 / 6 | |
| 100 | 6 / 8 / 10 / 12 | 3 / 4 / 5 / 6 | |
| 125 | 8 / 10 / 12 / 15 | 3 / 4 / 5 / 6 | |
| 150 | 8 / 10 / 12 / 15 / 20 | 3 / 4 / 5 / 6 | |
| 175 | 10 / 12 / 15 / 20 | 3 / 4 / 5 | |
| 200 | 12 / 15 / 20 / 25 / 30 | 3 / 4 / 5 / 6 | |
| 225 | 12 / 15 / 20 | 3 / 4 / 5 | |
| 250 | 15 / 20 / 25 / 30 / 40 / 50 | 3 / 4 / 5 | |
| 300 | 15 / 20 / 25 / 30 / 40 / 50 | 3 / 4 / 5 / 6 | |
| 350 | 20 / 25 / 30 / 40 / 50 | 3 / 4 / 5 / 6 | |
| 400 | 25 / 30 / 40 / 50 | 3 / 4 / 5 / 6 | |
| 450 | 25 / 30 / 40 / 50 | 3 / 4 / 5 / 6 | |
| 500 | 30 / 40 / 50 | 3 / 4 / 5 / 6 | |
| 600 | 35 / 40 | 3 / 5 | |

Ordering example: 1A1 200-20-4-127 D 126 PHN C 75

Shape 1FF1

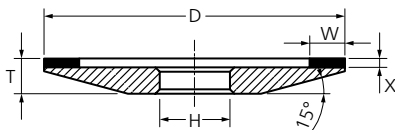


| D [mm] | T [mm] | X [mm] | R [mm] | H [mm] |
|--------|--------|--------|--------|----------------|
| 50 | 6 | 2 | 3 | Please specify |
| | 8 | | 4 | |
| | 10 | | 5 | |
| 75 | 6 | | 3 | |
| | 8 | | 4 | |
| | 10 | | 5 | |
| 100 | 6 | | 3 | |
| | 8 | | 4 | |
| | 10 | | 5 | |
| | 12 | | 6 | |
| 125 | 6 | | 3 | |
| | 8 | | 4 | |
| | 10 | 5 | | |
| | 12 | 6 | | |
| 150 | 6 | 3 | | |
| | 8 | 4 | | |
| | 10 | 5 | | |
| | 12 | 6 | | |

Ordering example: 1FF1 150-8/4R-2-32 D 126 PHN C 75

5

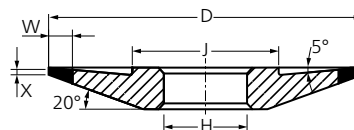
Shape 4A2



| D [mm] | W [mm] | X [mm] | H [mm] | T - X [mm] |
|--------|-------------------------------|-----------|----------------|------------|
| 50 | 3 / 5 | 2 / 3 / 4 | Please specify | 5 |
| 75 | | | | 5 |
| 100 | 3 / 4 / 5 / 6 / 8 / 10 | | | 6 |
| 125 | 3 / 4 / 5 / 6 / 8 / 10 | | | 7 |
| 150 | 3 / 4 / 5 / 6 / 8 / 10 / 12.5 | | | 9 |

Ordering example: 4A2 100-4-2-20 D 64 PHT C 50

Shape 4BT9

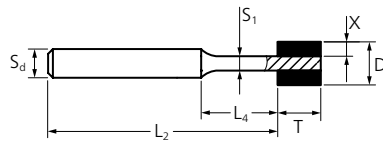


| D [mm] | W [mm] | X [mm] | H [mm] | T [mm] | J [mm] |
|--------|--------|--------|----------------|--------|--------|
| 75 | 6 | 1 | Please specify | 8 | 36 |
| 100 | | | | 10 | 50 |
| 125 | | | | 12 | 65 |
| 150 | | | | 15 | 80 |

Ordering example: 4BT9 100-6-1-20 D 126 PHN C 75

Other dimensions on request!

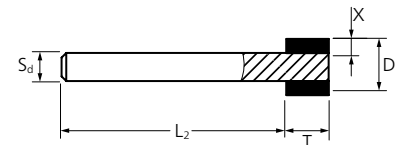
Shape 1A1W



| D [mm] | T [mm] | X [mm] | S _d [mm] | L ₂ [mm] | S ₁ [mm] | L ₄ [mm] |
|--------|--------|--------|---------------------|---------------------|---------------------|---------------------|
| 3 | 6 | 0.75 | 3 | 60 | 1.5 | 8 |
| 4 | 6 | 1 | 3 | 60 | 2 | 8 |
| 5 | 6 | 1.5 | 3 | 60 | 2 | 8 |
| 6 | 6 | 1.5 | 6 | 60 | 3 | 8 |
| 6 | 8 | 1.5 | 6 | 60 | 3 | 10 |
| 7 | 6 | 2 | 6 | 60 | 3 | 8 |
| 8 | 6 | 2 | 6 | 60 | 4 | 8 |
| 8 | 10 | 2 | 6 | 60 | 4 | 12 |
| 9 | 6 | 2 | 6 | 60 | 5 | 8 |

Ordering example: 1A1W 8-6-2-6-60-4-8 D 91 PHNT C 100

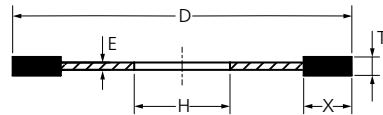
Shape 1A1W



| D [mm] | T [mm] | X [mm] | S _d [mm] | L ₂ [mm] |
|--------|--------|--------|---------------------|---------------------|
| 10 | 6 | 2 | 6 | 60 |
| | 10 | 2 | 6 | 60 |
| 12 | 6 | 2 | 6 | 60 |
| | 10 | 2 | 6 | 60 |
| 15 | 6 | 2 | 6 | 60 |
| | 10 | 2 | 6 | 60 |
| 18 | 6 | 2 | 6 | 60 |
| | 10 | 2 | 6 | 60 |
| 20 | 6 | 2 | 6 | 60 |
| | 10 | 2 | 6 | 60 |

Ordering example: 1A1W 15-10-2-6-60 D 91 PHNT C 100

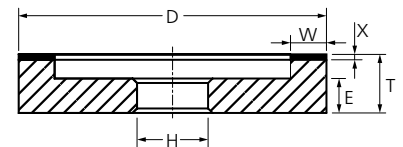
Shape 1A1R



| D [mm] | T [mm] | X [mm] | H [mm] | E [mm] |
|--------|--------|--------|----------------|--------|
| 75 | 1 | 5 | H ≥ 20 mm | 0.8 |
| 100 | 1 | 5 | Please specify | 0.8 |
| 125 | 1 | 5 | | 0.8 |
| 150 | 1 | 7 | | 0.8 |
| 175 | 1.2 | 7 | | 0.9 |
| 200 | 1.2 | 7 | | 0.9 |

Ordering example: 1A1R 150-1-7-20 D 151 PHT C 75

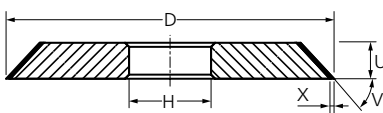
Shape 6A2



| D [mm] | W [mm] | X [mm] | H [mm] | T - X [mm] | E [mm] |
|--------|--------------------------------------|-----------|----------------|------------|--------|
| 50 | 3 / 5 | 2 / 3 / 4 | Please specify | 20 | 10 |
| 75 | 3 / 5 / 10 | | | 20 | 10 |
| 100 | 5 / 8 / 10 / 12.5 / 15 | 20 | | 10 | |
| 125 | 4 / 6 / 8 / 10 / 12.5 / 15 / 20 / 25 | 23 | | 10 | |
| 150 | 6 / 8 / 10 / 12.5 / 15 / 20 / 25 | 23 | | 23 | 10 |

Ordering example: 6A2 125-10-2-20 D 126 PHT C 50

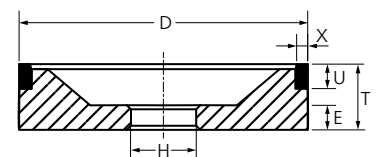
Shape 1V1



| D [mm] | U [mm] | X [mm] | V | H [mm] |
|--------|------------|----------------|------------|----------------|
| 50 | 6 / 8 | 3 / 4 | 20° to 89° | Please specify |
| 75 | 6 / 8 / 10 | | | |
| 100 | 8 / 10 | Please specify | | |
| 125 | 8 / 10 | | | |
| 150 | 8 / 10 | | | |
| 175 | 10 | | | |
| 200 | 12 / 15 | | | |
| 250 | 15 / 20 | | | |
| 300 | 15 / 20 | | | |

Ordering example: 1V1 150-8-3/60°-32 B 126 PHN C 75

Shape 6A9



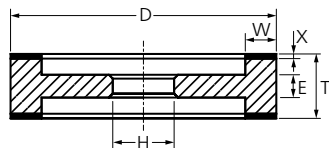
| D [mm] | X [mm] | U [mm] | H [mm] | T [mm] | E [mm] |
|--------|--------|--------|----------------|--------|--------|
| 75 | 1.5 | 6 / 10 | Please specify | 25 | 10 |
| | 2 | 6 / 10 | | 25 | 10 |
| | 3 | 6 / 10 | | 25 | 10 |
| 100 | 1.5 | 6 / 10 | | 30 | 10 |
| | 2 | 6 / 10 | | 30 | 10 |
| | 3 | 6 / 10 | | 30 | 10 |
| 125 | 1.5 | 6 / 10 | | 30 | 10 |
| | 2 | 6 / 10 | | 30 | 10 |
| | 3 | 6 / 10 | | 30 | 10 |
| 150 | 1.5 | 6 / 10 | | 35 | 10 |
| | 2 | 6 / 10 | | 35 | 10 |
| | 3 | 6 / 10 | | 35 | 10 |

Ordering example: 6A9 100-2-10-20 D 126 PHN C 100

Other dimensions on request!



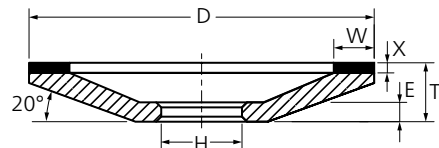
Shape 9A3



| D [mm] | W [mm] | X [mm] | T [mm] | H [mm] | E [mm] |
|--------|---------------------|--------|---------|----------------|--------|
| 100 | 6 / 8 / 10 | 2 / 3 | 22 | Please specify | 10 |
| 125 | 6 / 8 / 10 | | 22 | | 10 |
| 150 | 4 / 6 / 8 / 10 / 15 | | 25 / 35 | | 14 |
| | | | 25 / 35 | | 14 |
| 200 | 8 / 10 / 15 | | 30 | | 18 |

Ordering example: 9A3 150-8-2-25-20 D 64 PHN C 75

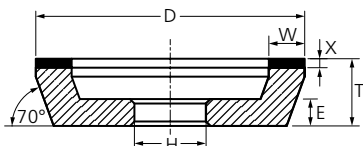
Shape 12A2/20°



| D [mm] | W [mm] | X [mm] | H [mm] | T - X [mm] | E [mm] |
|--------|--------------------|-----------|----------------|------------|--------|
| 75 | 3 / 5 / 6 / 8 / 10 | 2 / 3 / 4 | Please specify | 8 | 5 |
| 100 | 3 / 5 / 6 / 8 / 10 | | | 10 | 6 |
| 125 | 5 / 6 / 8 / 10 | | | 14 | 8 |
| 150 | 5 / 6 / 8 / 10 | | | 16 | 9 |
| 175 | 6 / 10 | | | 18 | 10 |
| 200 | 6 / 10 | | | 20 | 11 |
| 250 | 6 / 10 | | | 23 | 13 |

Ordering example: 12A2/20° 125-10-2-20 D 126 PHT C 50

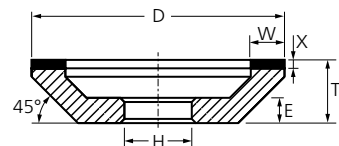
Shape 11A2



| D [mm] | W [mm] | X [mm] | H [mm] | T - X [mm] | E [mm] |
|--------|----------------------------|-----------|----------------|------------|--------|
| 50 | 3 / 6 | 2 / 3 / 4 | Please specify | 20 | 8 |
| 75 | 3 / 6 / 10 | | | 20 | 10 |
| 100 | 4 / 6 / 8 / 10 | | | 20 | 10 |
| 125 | 5 / 6 / 8 / 10 / 12.5 / 15 | | | 23 | 10 |
| 150 | 6 / 8 / 10 / 12.5 / 15 | | | 23 | 10 |
| 175 | 6 / 10 / 12.5 / 15 | | | 25 | 12 |

Ordering example: 11A2 125-10-2-20 D 126 PHT C 50

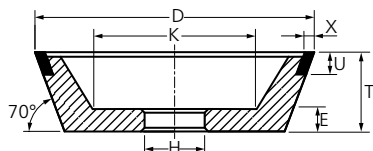
Shape 12A2/45°



| D [mm] | W [mm] | X [mm] | H [mm] | T - X [mm] | E [mm] |
|--------|----------------------------|-----------|----------------|------------|--------|
| 50 | 3 / 6 | 2 / 3 / 4 | Please specify | 15 | 8 |
| 75 | 3 / 6 / 10 | | | 20 | 9 |
| 100 | 4 / 6 / 8 / 10 | | | 23 | 10 |
| 125 | 5 / 6 / 8 / 10 / 12.5 / 15 | | | 23 | 10 |
| 150 | 6 / 8 / 10 / 12.5 / 15 | | | 23 | 10 |
| 175 | 6 / 10 / 12.5 / 15 | | | 25 | 12 |

Ordering example: 12A2/45° 125-10-2-20 D 126 PHT C 50

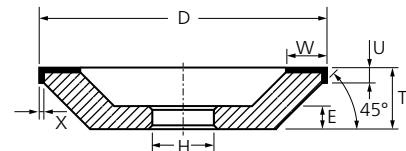
Shape 11V9



| D [mm] | X [mm] | U [mm] | H [mm] | T [mm] | E [mm] | K [mm] |
|--------|-------------|--------|----------------|--------|--------|--------|
| 50 | 2 | 10 | Please specify | 30 | 10 | 22 |
| 75 | 1.5 / 2 / 3 | 10 | | 30 | 10 | 41 |
| 100 | 1.5 / 2 / 3 | 10 | | 35 | 10 | 60 |
| 125 | 1.5 / 2 / 3 | 10 | | 40 | 10 | 75 |
| 150 | 1.5 / 2 / 3 | 10 | | 50 | 10 | 89 |

Ordering example: 11V9 100-2-10-20 D 126 PHT C 75

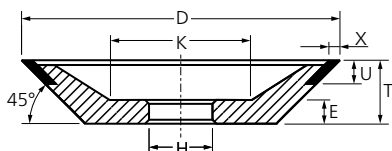
Shape 12C9



| D [mm] | W [mm] | U [mm] | X [mm] | H [mm] | T [mm] | E [mm] |
|--------|-----------|--------|--------|----------------|--------|--------|
| 100 | 6 / 10 | 4 | 2 | Please specify | 26 | 10 |
| | 10 | 4 | 3 | | 27 | 10 |
| 125 | 6 / 10 | 4 | 2 | | 26 | 10 |
| | 10 | 4 | 3 | | 27 | 10 |
| | 12.5 | 5 | 2 | | 26 | 10 |
| 150 | 10 | 4 | 2 | | 26 | 10 |
| | 10 | 4 | 3 | | 27 | 10 |
| | 12.5 / 15 | 5 | 2 | | 26 | 10 |

Ordering example: 12C9 100-10-4-2-20 D 64 PHN C 75

Shape 12V9

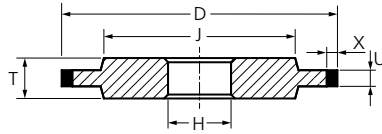


| D [mm] | X [mm] | U [mm] | H [mm] | T [mm] | E [mm] | K [mm] |
|--------|-------------|--------|----------------|--------|--------|--------|
| 50 | 2 | 6 | Please specify | 20 | 10 | 24 |
| 75 | 2 / 3 | 10 | | 20 | 10 | 41 |
| 100 | 1.5 / 2 / 3 | 10 | | 20 | 10 | 62 |
| 125 | 1.5 / 2 / 3 | 10 | | 25 | 10 | 76 |
| 150 | 2 / 3 | 10 | | 25 | 10 | 97 |

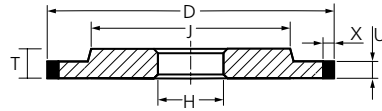
Ordering example: 12V9 100-2-10-20 D 126 PHT C 75

Other dimensions on request!

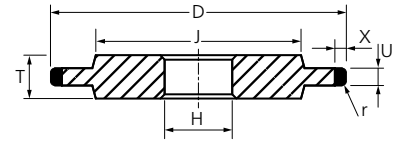
Shape 14A1



Shape 3A1



Shape 14F1



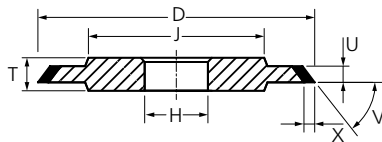
| D [mm] | U [mm] | X [mm] | H [mm] | T [mm] | J [mm] |
|--------|------------------------|---------------|----------------|--------|--------|
| 75 | 1 / 2 | 3 / 6 | Please specify | 6 | 50 |
| | 3 / 4 / 5 | 3 / 4 / 6 | | 6 | 50 |
| 100 | 1 / 2 | 3 / 6 | Please specify | 6 | 80 |
| | 3 / 4 / 5 | 3 / 4 / 6 | | 6 | 70 |
| 125 | 1 / 2 | 3 / 6 | Please specify | 7 | 105 |
| | 3 / 4 / 5 / 6 | 3 / 4 / 6 | | 7 | 100 |
| 150 | 1 / 2 | 3 / 6 | Please specify | 8 | 130 |
| | 3 / 4 / 5 / 6 | 3 / 4 / 6 | | 8 | 120 |
| 175 | 1 / 2 | 3 / 6 | Please specify | 10 | 150 |
| | 3 / 4 / 5 / 6 / 8 | 3 / 4 / 6 | | 10 | 140 |
| 200 | 1 / 2 | 6 | Please specify | 12 | 175 |
| | 3 / 4 / 5 / 6 / 8 / 10 | 3 / 4 / 5 / 6 | | 12 | 160 |
| 225 | 6 / 8 / 10 | 3 / 4 / 5 | 12 | 180 | 180 |
| 250 | 6 / 8 / 10 / 12 | 3 / 4 / 5 | 15 | 200 | 200 |
| 300 | 8 / 10 / 12 | 3 / 4 / 5 / 6 | 15 | 250 | 250 |
| 350 | 10 / 12 / 15 | 3 / 4 / 5 / 6 | 20 | 300 | 300 |
| 400 | 10 / 12 / 15 / 20 | 3 / 4 / 5 / 6 | 25 | 350 | 350 |
| 450 | 10 / 12 / 15 / 20 | 3 / 4 / 5 / 6 | 25 | 400 | 400 |
| 500 | 15 / 20 / 25 | 3 / 4 / 5 / 6 | 30 | 450 | 450 |
| 600 | 15 / 20 / 25 / 30 | 3 / 5 | 35 | 550 | 550 |

Ordering example: 14A1 150-6-3-32 D 107 PHN C 100

| D [mm] | U [mm] | X [mm] | R [mm] | H [mm] | T [mm] | J [mm] |
|--------|--------|---------------|--------|----------------|--------|--------|
| 40 | 2 | 3 / 4 / 5 / 6 | 1 | Please specify | 6 | 25 |
| | 3 | | 1.5 | | 6 | 25 |
| | 4 | | 2 | | 6 | 25 |
| 50 | 2 | 3 / 4 / 5 / 6 | 1 | Please specify | 6 | 30 |
| | 3 | | 1.5 | | 6 | 30 |
| | 4 | | 2 | | 6 | 30 |
| 75 | 2 | 3 / 4 / 5 / 6 | 1 | Please specify | 6 | 50 |
| | 3 | | 1.5 | | 6 | 50 |
| | 4 | | 2 | | 6 | 50 |
| 100 | 2 | 3 / 4 / 5 / 6 | 1 | Please specify | 6 | 70 |
| | 3 | | 1.5 | | 6 | 70 |
| | 4 | | 2 | | 6 | 70 |
| 125 | 2 | 3 / 4 / 5 / 6 | 1 | Please specify | 8 | 100 |
| | 3 | | 1.5 | | 8 | 100 |
| | 4 | | 2 | | 8 | 100 |
| 150 | 2 | 3 / 4 / 5 / 6 | 1 | Please specify | 8 | 120 |
| | 3 | | 1.5 | | 8 | 120 |
| | 4 | | 2 | | 8 | 120 |

Ordering example: 14F1 150-2/1R-6-32 D 107 PHN C 125

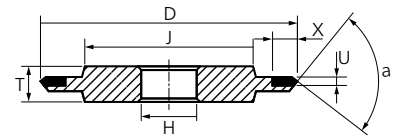
Shape 14V1



| D [mm] | U [mm] | X [mm] | V | C [mm] | T [mm] | J [mm] |
|--------|---------------------|----------------|----------------|----------------|--------|--------|
| 50 | 3 / 4 / 5 | 2 / 3 / 4 | 20° to 89° | Please specify | 6 | 30 |
| 75 | 3 / 4 / 5 | | | | 6 | 45 |
| 100 | 4 / 6 | Please specify | Please specify | Please specify | 8 | 70 |
| 125 | 4 / 6 | | | | 8 | 100 |
| 150 | 4 / 6 | Please specify | Please specify | Please specify | 8 | 120 |
| 175 | 4 / 6 / 8 | | | | 10 | 140 |
| 200 | 4 / 6 / 8 / 10 | Please specify | Please specify | Please specify | 12 | 160 |
| 250 | 4 / 6 / 8 / 10 / 12 | | | | 15 | 200 |
| 300 | 4 / 6 / 8 / 10 / 12 | Please specify | Please specify | Please specify | 15 | 250 |

Ordering example: 14V1 150-6-3/60°-32 B 126 PHN C 75

Shape 14E9



| D [mm] | U [mm] | X [mm] | α | H [mm] | T [mm] | J [mm] |
|--------|--------|--------|-----------------------|----------------|--------|--------|
| 50 | 1 / 2 | 6 | 35° / 45° / 60° / 90° | Please specify | 6 | 32 |
| 75 | 1 / 2 | | | | 6 | 50 |
| 100 | 1 / 2 | 6 | 35° / 45° / 60° / 90° | Please specify | 6 | 70 |
| 125 | 1 / 2 | | | | 6 | 100 |
| 150 | 1 / 2 | 6 | 35° / 45° / 60° / 90° | Please specify | 8 | 100 |
| 150 | 1 / 2 | | | | 6 | 120 |

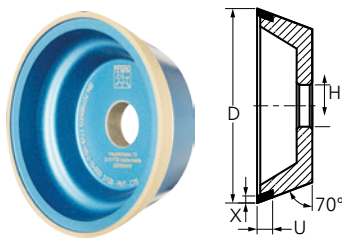
Ordering example: 14E9 150-2-6-60°-32 D 107 PHN C 125

Other dimensions on request!



Diamond and CBN tools – resinoid bond

Diamond grinding tools




Shape 11V9

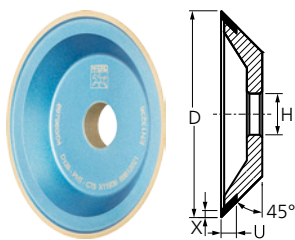
Phenolic resin bond for dry grinding. The PHT bond allows cool grinding, even without coolant. The PHST bond can withstand higher loads, i.e. it allows a higher infeed per stroke, but has a slightly shorter grinding time and tool life.

Special features:

- The characteristics of the resinoid bond can be optimally adjusted to the application.

- Easy to dress.

| Shape | D [mm] | X [mm] | U [mm] | H [mm] | Bond | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------|--------|--------|--------|--------|------|-----------|---|----------|---------------------------------|----------------|
| 11V9 | 100 | 2 | 10 | 20 | PHT | D 126 | 1 | 68611021 | 11V9 100-2-10-20 D 126 PHT C75 | - |
| | | 3 | 10 | 20 | PHST | D 126 | 1 | 68611032 | 11V9 100-3-10-20 D 126 PHST C75 | - |

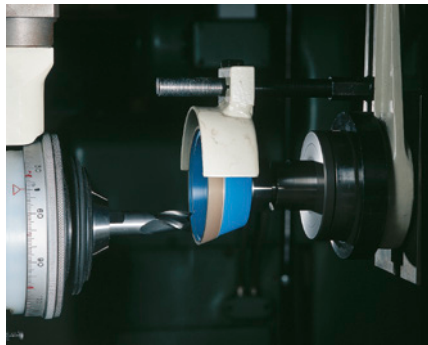



Shape 12V9

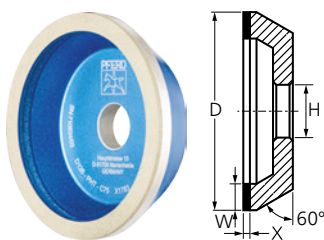
Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:

- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.



| Shape | D [mm] | X [mm] | U [mm] | H [mm] | Bond | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------|--------|--------|--------|--------|------|-----------|---|----------|--------------------------------|----------------|
| 12V9 | 100 | 2 | 10 | 20 | PHT | D 126 | 1 | 68612021 | 12V9 100-2-10-20 D 126 PHT C75 | - |




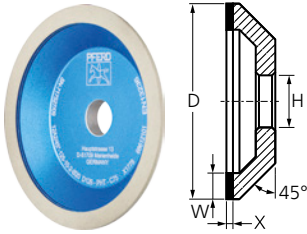
Shape 11A2/60°

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:

- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

| Shape | D [mm] | W [mm] | X [mm] | H [mm] | Bond | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------|--------|--------|--------|--------|------|-----------|---|----------|-----------------------------------|----------------|
| 11A2/60° | 100 | 8 | 2 | 20 | PHT | D 126 | 1 | 68613081 | 11A2/60° 100-8-2-20 D 126 PHT C75 | - |
| | | | | | | D 64 | 1 | 68613086 | 11A2/60° 100-8-2-20 D 64 PHT C75 | - |




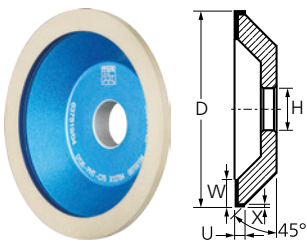
Shape 12A2/45°

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:

- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

| Shape | D [mm] | W [mm] | X [mm] | H [mm] | Bond | Grit size |  | Item no. | Designation | Price/unit EUR |
|----------|--------|--------|--------|--------|------|-----------|---|----------|------------------------------------|----------------|
| 12A2/45° | 125 | 10 | 2 | 20 | PHT | D 126 | 1 | 68612101 | 12A2/45° 125-10-2-20 D 126 PHT C75 | - |
| | | | | | | D 64 | 1 | 68612106 | 12A2/45° 125-10-2-20 D 64 PHT C50 | - |




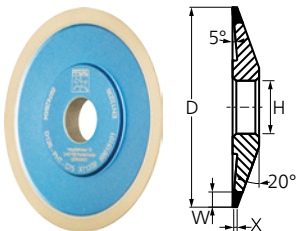
Shape 12C9

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:

- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

| Shape | D [mm] | W [mm] | X [mm] | U [mm] | H [mm] | Bond | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------|--------|--------|--------|--------|--------|------|-----------|--|----------|----------------------------------|----------------|
| 12C9 | 100 | 10 | 3 | 4 | 20 | PHT | D 126 | 1 | 68612023 | 12C9 100-10-4-3-20 D 126 PHT C75 | - |




Shape 4BT9

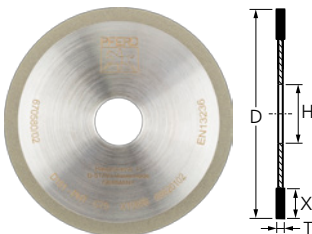
Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:

- The characteristics of the resinoid bond can be optimally adjusted to the application.

- Easy to dress.

| Shape | D [mm] | W [mm] | X [mm] | H [mm] | Bond | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------|--------|--------|--------|--------|------|-----------|---|----------|-------------------------------|----------------|
| 4BT9 | 100 | 6 | 1 | 20 | PHT | D 126 | 1 | 68615101 | 4BT9 100-6-1-20 D 126 PHT C75 | - |




Shape 1A1R

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

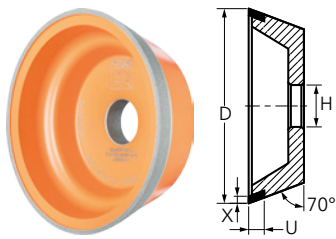
Special features:

- The characteristics of the resinoid bond can be optimally adjusted to the application.

- Easy to dress.

| Shape | D [mm] | T [mm] | X [mm] | H [mm] | Bond | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------|--------|--------|--------|--------|------|-----------|---|----------|-------------------------------|----------------|
| 1A1R | 100 | 1 | 5 | 20 | PHT | D 151 | 1 | 68620102 | 1A1R 100-1-5-20 D 151 PHT C75 | - |
| | 150 | 1 | 7 | 20 | PHT | D 151 | 1 | 68620152 | 1A1R 150-1-7-20 D 151 PHT C75 | - |






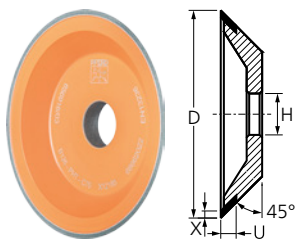
Shape 11V9

PH 4.1 is a phenolic resin bond for maximum stock removal rates. Very long tool life and suitable for dry and wet grinding. PH 4.2 is a high-performance bond for cool dry grinding at low infeed rates. Only for 11V9 and 12V9 up to dia. 150 mm.

Special features:

- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

| Shape | D [mm] | X [mm] | U [mm] | H [mm] | Bond | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------|--------|--------|--------|--------|--------|-----------|---|----------|-----------------------------------|----------------|
| 11V9 | 100 | 2 | 10 | 20 | PH 4.1 | B 126 | 1 | 68664101 | 11V9 100-2-10-20 B 126 PH 4.1 C75 | - |
| | | | | | PH 4.2 | B 151 | 1 | 68661032 | 11V9 100-2-10-20 B 151 PH 4.2 | - |




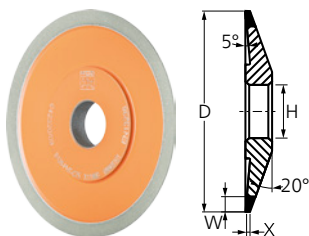
Shape 12V9

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:

- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.

| Shape | D [mm] | X [mm] | U [mm] | H [mm] | Bond | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------|--------|--------|--------|--------|------|-----------|--|----------|--------------------------------|----------------|
| 12V9 | 100 | 2 | 10 | 20 | PHT | B 126 | 1 | 68662022 | 12V9 100-2-10-20 B 126 PHT C75 | - |

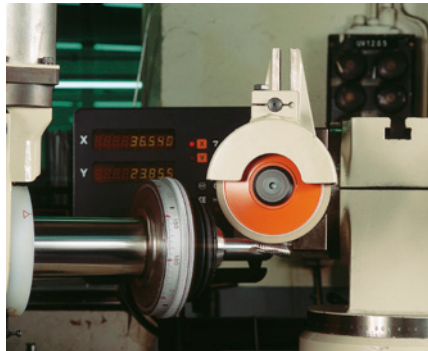



Shape 4BT9

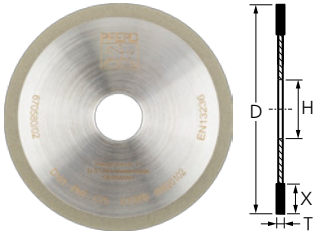
Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:

- The characteristics of the resinoid bond can be optimally adjusted to the application.
- Easy to dress.



| Shape | D [mm] | W [mm] | X [mm] | H [mm] | Bond | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------|--------|--------|--------|--------|------|-----------|---|----------|-------------------------------|----------------|
| 4BT9 | 100 | 6 | 1 | 20 | PHT | B 126 | 1 | 68665101 | 4BT9 100-6-1-20 B 126 PHT C75 | - |




Shape 1A1R

Phenolic resin bond for high-performance dry grinding. The PHT bond is designed for dry grinding and allows cool grinding, even without coolant.

Special features:

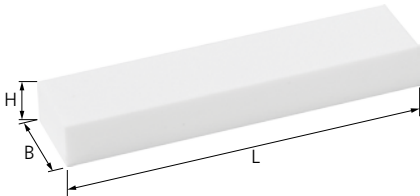
- The characteristics of the resinoid bond can be optimally adjusted to the application.

- Easy to dress.


| Shape | D [mm] | T [mm] | X [mm] | H [mm] | Bond | Grit size |  | Item no. | Designation | Price/unit EUR |
|-------|--------|--------|--------|--------|------|-----------|---|----------|--------------------------------|----------------|
| 1A1R | 100 | 1 | 5 | 20 | PHT | B 151 | 1 | 68670102 | 1A1R 100-1-5-20 B 151 PHT C100 | - |

Sharpening block for diamond and CBN tools

Sharpening block for diamond and CBN tools



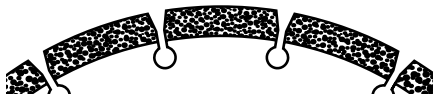
Used to restore the sharpness of resinoid-bonded diamond and CBN grinding discs. The sharpening block is first soaked in coolant and then fed in. The grinding process restores the sharpness very quickly.

| L [mm] | B [mm] | H [mm] |  | Item no. | Designation | Price/unit EUR |
|--------|--------|--------|---|----------|-------------|----------------|
| 100 | 24 | 13 | 5 | 68402413 | SBL 1002413 | - |



Diamond cut-off wheels for the construction industry

General information



Shape DS

Segmented type for fast cutting



Shape DG

Type with continuous rim for easy cutting (TURBO)



Shape DG FL

Type with continuous rim for very fine cutting, e.g. tiles and glazed tiles

The quick way to find the perfect tool

| Application | Material | Tools | |
|---|--|--|--|
| Aggressive, fast cutting | <ul style="list-style-type: none"> ■ Concrete (medium-hard, reinforced, hard) ■ Aerated concrete ■ Pumice ■ Brick ■ Soft clinker brick ■ Sand-lime brick | Cut-off wheels of the type DS <ul style="list-style-type: none"> ■ Universal Line PSF ■ Performance Line SG | |
| Easy cutting with high cutting quality | <ul style="list-style-type: none"> ■ Fresh concrete ■ Screed ■ Firebrick | Cut-off wheels of the type DG <ul style="list-style-type: none"> ■ Performance Line SG | |
| | <ul style="list-style-type: none"> ■ Sandstone ■ Clay brick ■ Slate ■ Granite ■ Marble | Cut-off wheels of the type DG <ul style="list-style-type: none"> ■ Universal Line PSF ■ Performance Line SG | |
| | <ul style="list-style-type: none"> ■ Glazed tiles ■ Ceramic tiles ■ Porcelain stoneware ■ Slate ■ Marble | Cut-off wheels of the type DG FL <ul style="list-style-type: none"> ■ Universal Line PSF ■ Performance Line SG | |

5

Segmented type for fast cutting



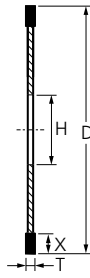
DS PSF type

General-purpose segmented-rim tool for aggressive, fast cutting with high cutting performance and a good tool life.

Special features:

- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

| D [mm] | T [mm] | H [mm] | X [mm] | Max. RPM | | Item no. | Designation | Price/unit EUR |
|--------|--------|--------|--------|----------|---|----------|--------------------------|----------------|
| 115 | 2.2 | 22.23 | 7 | 13,300 | 1 | 68011221 | DS 115 x 2,2 x 22,23 PSF | - |
| 125 | 2.2 | 22.23 | 7 | 12,200 | 1 | 68012221 | DS 125 x 2,2 x 22,23 PSF | - |
| 178 | 2.4 | 22.23 | 7 | 8,600 | 1 | 68017221 | DS 178 x 2,4 x 22,23 PSF | - |
| 230 | 2.4 | 22.23 | 7 | 6,600 | 1 | 68023223 | DS 230 x 2,4 x 22,23 PSF | - |



DS SG type

High-performance segmented-edge tool for aggressive, fast cutting of hard materials with high cutting performance and very good tool life.



Contents:

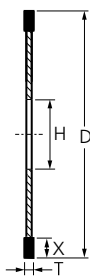
All diamond cut-off wheels with a centre hole diameter of 25.4 mm are supplied with a reducing ring to 22.23 mm for use on angle grinders.

Special features:

- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

| D [mm] | T [mm] | H [mm] | X [mm] | Max. RPM | | Item no. | Designation | Price/unit EUR |
|--------|--------|--------|--------|----------|---|----------|-------------------------|----------------|
| 115 | 2.4 | 22.23 | 10 | 13,300 | 1 | 68000041 | DS 115 x 2,4 x 22,23 SG | - |
| 125 | 2.4 | 22.23 | 10 | 12,200 | 1 | 68000042 | DS 125 x 2,4 x 22,23 SG | - |
| 178 | 2.6 | 22.23 | 10 | 8,600 | 1 | 68000043 | DS 178 x 2,6 x 22,23 SG | - |
| 230 | 2.8 | 22.23 | 10 | 6,600 | 1 | 68000044 | DS 230 x 2,8 x 22,23 SG | - |
| 300 | 2.8 | 20 | 10 | 6,400 | 1 | 68000045 | DS 300 x 2,8 x 20,0 SG | - |
| | | 25.4 | 10 | 6,400 | 1 | 68000046 | DS 300 x 2,8 x 25,4 SG | - |
| 350 | 2.8 | 20 | 10 | 5,400 | 1 | 68000047 | DS 350 x 2,8 x 20,0 SG | - |
| | | 25.4 | 10 | 5,400 | 1 | 68000048 | DS 350 x 2,8 x 25,4 SG | - |
| 400 | 3.2 | 25.4 | 10 | 4,800 | 1 | 68000049 | DS 400 x 3,2 x 25,4 SG | - |

Type with continuous rim for easy cutting (TURBO)



DG PSF type

General-purpose continuous-rim tool for easy cutting (TURBO) with high cutting performance and a good tool life.



Special features:

- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

| D [mm] | T [mm] | H [mm] | X [mm] | Max. RPM | | Item no. | Designation | Price/unit EUR |
|--------|--------|--------|--------|----------|---|----------|--------------------------|----------------|
| 115 | 2.1 | 22.23 | 7 | 13,300 | 1 | 68011222 | DG 115 x 2,1 x 22,23 PSF | - |
| 125 | 2.1 | 22.23 | 7 | 12,200 | 1 | 68012222 | DG 125 x 2,1 x 22,23 PSF | - |
| 178 | 2.4 | 22.23 | 7 | 8,600 | 1 | 68017222 | DG 178 x 2,4 x 22,23 PSF | - |
| 230 | 2.6 | 22.23 | 7 | 6,600 | 1 | 68023222 | DG 230 x 2,6 x 22,23 PSF | - |



Diamond cut-off wheels for the construction industry

Type with continuous rim for easy cutting (TURBO)




DG SG type

High-performance continuous-edge tool for easy cutting (TURBO) with high cutting performance and very good tool life.

Special features:

- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

| D [mm] | T [mm] | H [mm] | X [mm] | Max. RPM |  | Item no. | Designation | Price/unit EUR |
|--------|--------|--------|--------|----------|---|----------|-------------------------|----------------|
| 115 | 2.2 | 22.23 | 8 | 13,300 | 1 | 68000021 | DG 115 x 2,2 x 22,23 SG | - |
| 125 | 2.2 | 22.23 | 8 | 12,200 | 1 | 68000022 | DG 125 x 2,2 x 22,23 SG | - |
| 178 | 2.5 | 22.23 | 8 | 8,600 | 1 | 68000023 | DG 178 x 2,5 x 22,23 SG | - |
| 230 | 2.8 | 22.23 | 8 | 6,600 | 1 | 68000024 | DG 230 x 2,8 x 22,23 SG | - |

Type with continuous rim for very fine cutting




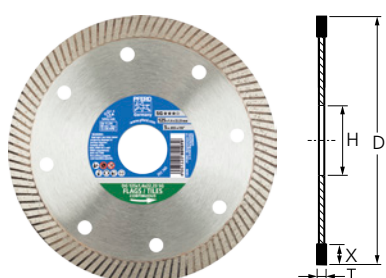
DG FL PSF type

General-purpose continuous-rim tool for cutting without edge breakages on workpieces with high-quality surfaces. High cutting performance and good tool life.

Special features:

- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

| D [mm] | T [mm] | H [mm] | X [mm] | Max. RPM |  | Item no. | Designation | Price/unit EUR |
|--------|--------|--------|--------|----------|---|----------|-----------------------------|----------------|
| 115 | 1.6 | 22.23 | 7 | 13,300 | 1 | 68000011 | DG 115 x 1,6 x 22,23 FL PSF | - |
| 125 | 1.6 | 22.23 | 7 | 12,200 | 1 | 68000012 | DG 125 x 1,6 x 22,23 FL PSF | - |




DG FL SG type

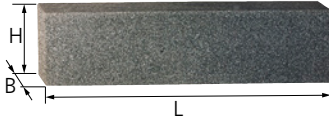
High-performance continuous-rim tool for cutting without edge breakages on workpieces with high-quality surfaces. High cutting performance and very good tool life.



Special features:


- High diamond qualities.
- Excellent cutting characteristics and short cutting times.
- High ease of cutting and economic efficiency.

| D [mm] | T [mm] | H [mm] | X [mm] | Max. RPM |  | Item no. | Designation | Price/unit EUR |
|--------|--------|--------|--------|----------|---|----------|----------------------------|----------------|
| 115 | 1.4 | 22.23 | 8 | 13,300 | 1 | 68000031 | DG 115 x 1,4 x 22,23 FL SG | - |
| 125 | 1.4 | 22.23 | 8 | 12,200 | 1 | 68000032 | DG 125 x 1,4 x 22,23 FL SG | - |



Sharpening block DSB

The sharpening block is used to resharpen metal-bonded diamond cut-off wheels (e.g. after cutting lubricating materials).

| L [mm] | B [mm] | H [mm] | Grit size |  | Item no. | Designation | Price/unit EUR |
|-----------|-----------|-----------|-----------|---|----------|-------------|-------------------|
| 200 | 50 | 25 | 80 | 1 | 68075025 | DSB 2005025 | - |





Files



Milling, drilling and countersinking tools



Mounted points



Fine grinding and polishing tools



Diamond and CBN tools



Cut-off wheels, flap discs and grinding wheels



Cut-off wheels for stationary applications



Industrial power brushes



Tool drives



Cutting tools for stationary applications

5

New additions to the PFERD product range



Stay up to date and discover our new products digitally and online. Our new products have **blue** item numbers in the Tool Manual.