

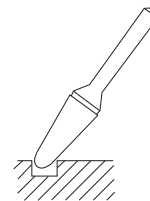
44182 - 44187

Solid carbide/CC milling bits round taper (KEL)

VHM

**ATORN**<sup>®</sup>

44182 - 44187



Head Ø x length mm	Shank Ø mm	Serration 2		Serration 3 (alu)		Serration 5		Serration 6		Serration 6/TiAlN	
		44182	...	44183	...	44185	...	44186	...	44187	...
3 x 12	3	101						101			
6 x 18	6	103						103			
10 x 26	6	105		105				105			
12 x 32	6	106		106		106		106		106	
15 x 33	6	107		107				107			

44192 - 44196

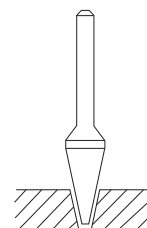
Solid carbide/CC milling bits pointed taper (SKM)

VHM

**ATORN**<sup>®</sup>

44192 - 44196

Head Ø x length mm	Shank Ø mm	Serration 2		Serration 6	
		44192	...	44196	...
3 x 8	3	101		101	
3 x 11	3	102		102	
3 x 15	3	103		103	
6 x 12	3	104		104	
6 x 20	6	105		105	
10 x 20	6	106		106	
12 x 25	6	107		107	
16 x 25	6	108		108	



44202 - 44206

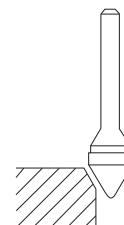
Solid carbide/CC milling bits conical countersink 60° (KSJ)

VHM

**ATORN**<sup>®</sup>

44202 - 44206

Head Ø x length mm	Shank Ø mm	Serration 2		Serration 6	
		44202	...	44206	...
3 x 2.5	3	101		101	
6 x 4	6	102		102	
10 x 8	6	103		103	
12 x 11	6	104		104	
15 x 14	6	105		105	



44212 - 44216

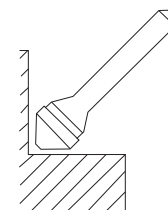
Solid carbide/CC milling bits conical countersink 90° (KSK)

VHM

**ATORN**<sup>®</sup>

44212 - 44216

Head Ø x length mm	Shank Ø mm	Serration 2		Serration 6	
		44212	...	44216	...
3 x 1.5	3	101		101	
6 x 3	6	102		102	
10 x 5	6	103		103	
12 x 6	6	104		104	
15 x 8	6	105		105	



44222 - 44226

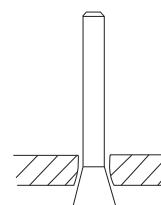
Solid/cemented angled milling bits (WKN)

VHM

**ATORN**<sup>®</sup>

44222 - 44226

Head Ø x length mm	Shank Ø mm	Serration 2		Serration 6	
		44222	...	44226	...
3 x 4	3	101		101	
6 x 6	3	102		102	
10 x 10	6	104		104	
12 x 12	6	105			



Carbide milling bits for universal use

**PFERD**



PFERD carbide milling bits can machine materials of almost any strength. This is possible through the optimal coordination of tooth shape, number of teeth, twist angle, chip angle and concentricity. The precise concentricity of PFERD carbide milling bits

- Protects the health of the person during the work process,
  - Reduces wear on the drive machine,
  - Enables impact-free working,
  - Prevents chatter marks.
- The high profile accuracy of the carbide milling bits enables
- Use on robots and
  - Repeated regrinding.

**Principle of use:**

**The harder the material, the finer the tothing.**

**Note:**

Further dimensions and tothing types, as well as carbide milling bits with special shaft shapes/ lengths and special tothing, are available on request.

**3 PLUS tothing**  
With chip breaker  
(MX in accordance  
with DIN 8033)



**Tothing 4**  
With chip breaker  
(MX in accordance  
with DIN 8033)



**Tothing 5**  
Without chip breaker  
(F in acc. with  
DIN 8033)



Material groups		Machining task	Tothing	Cutting speed
Steel, steel casting	Unhardened, non-tempered steels up to 1200 N/mm <sup>2</sup> (<38 HRC)	Structural steels, carbon steels, tool steels, unalloyed steels, case-hardening steels, steel casting	Roughing	3 PLUS 450 - 600 m/min
	Hardened, tempered steels above 1200 N/mm <sup>2</sup> (>38 HRC)	Tool steels, heat-treated steels, alloyed steels, steel casting	Roughing	3 PLUS 250 - 350 m/min
			Fine machining	5 350 - 450 m/min
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels	Roughing	3 PLUS 250 - 350 m/min
			Fine machining	4 350 - 450 m/min
Non-ferrous metals	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	Roughing	4 250 - 350 m/min
	Highly heat-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)	Roughing	3 PLUS 250 - 450 m/min
			Fine machining	4 350 - 600 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with lamellar graphite, with spheroidal graphite/spheroidal graphite iron, white malleable iron, black malleable iron	Roughing	3 PLUS 450 - 600 m/min

**Example:**

Carbide milling bit, 3 PLUS tothing,  
milling bit dia. 12 mm.  
Roughing of unhardened, non-tempered steels.  
Cutting speed: 450 - 600 m/min  
**Speed range: 12.000 - 16.000 rpm**

Milling bit dia. mm	Cutting speeds m/min				
	250	350	450	600	900
1,5	53.000	74.000	95.000	127.000	191.000
2	40.000	56.000	72.000	95.000	143.000
3	27.000	37.000	48.000	64.000	95.000
4	20.000	28.000	36.000	48.000	72.000
6	13.000	19.000	24.000	32.000	48.000
8	10.000	14.000	18.000	24.000	36.000
10	8.000	11.000	14.000	19.000	29.000
12	7.000	9.000	12.000	16.000	24.000
16	5.000	7.000	9.000	12.000	18.000
20	4.000	6.000	7.000	10.000	14.000
25	3.000	4.000	6.000	8.000	11.000

Continued ►



Carbide milling bits for high-performance applications

STEEL toothing with chip breaker

Material groups		Machining task	Toothing	Cutting speed	
Steel, steel casting	Unhardened, non-tempered steels up to 1200 N/mm <sup>2</sup> (<38 HRC)	Structural steels, carbon steels, tool steels, unalloyed steels, case-hardening steels, steel casting	Roughing	STEEL	450 - 750 m/min
	Hardened, tempered steels above 1200 N/mm <sup>2</sup> (>38 HRC)				

Example:

Carbide milling bit, STEEL toothing,  
Milling bit dia. 12 mm.  
Cutting speed: 450 - 750 m/min  
**Speed range: 12.000 - 20.000 rpm**  
With chip breaker



Milling bit dia. mm	Cutting speeds m/min	
	450	750
6	24.000	40.000
8	18.000	30.000
10	14.000	24.000
12	12.000	20.000
16	9.000	15.000

INOX toothing

Material groups		Machining task	Toothing	Cutting speed	
Stainless steel (INOX)	Rust- and acid-resistant steels	Austenitic and ferritic stainless steels	Roughing	INOX	450 - 600 m/min

Example:

SC milling bit, INOX toothing,  
Milling bit dia. 12 mm.  
Cutting speed: 450 - 600 m/min  
**Speed range: 12.000 - 16.000 rpm**



Milling bit dia. mm	Cutting speeds m/min	
	450	600
3	48.000	64.000
6	24.000	32.000
8	18.000	24.000
10	14.000	19.000
12	12.000	16.000

ALU toothing

Material groups		Machining task	Toothing	Cutting speed
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys	Roughing	600 - 1.100 m/min
			Fine machining	900 - 1.100 m/min
		Brass, copper, zinc	Roughing	600 - 1.100 m/min
			Fine machining	900 - 1.100 m/min
	Hard non-ferrous metals	Hard aluminium alloys (high Si content)	Roughing	600 - 1.100 m/min
			Fine machining	900 - 1.100 m/min
		Titanium and titanium alloys	Roughing	450 - 600 m/min
			Fine machining	600 - 900 m/min
Bronze	Roughing	600 - 1.100 m/min		
	Fine machining	600 - 900 m/min		
Plastics, other materials	Fibre-reinforced plastics (GFRP/CFRP), thermoplastics	Roughing	ALU	600 - 900 m/min
		Fine machining	ALU	600 - 1.100 m/min

Example:

SC milling bit, ALU toothing,  
Milling bit dia. 12 mm. Roughing of hard non-ferrous metals, e.g. bronze.  
Cutting speed: 600 - 1100 m/min  
**Speed range: 16.000 - 30.000 rpm**



Milling bit dia. mm	Cutting speeds m/min			
	450	600	900	1100
3	48.000	64.000	95.000	117.000
6	24.000	32.000	48.000	59.000
8	18.000	24.000	36.000	44.000
10	14.000	19.000	29.000	35.000
12	12.000	16.000	24.000	30.000
16	9.000	12.000	18.000	22.000

Sanding/cutting tools

44233

## CC milling bit set

HM



## Design

Dimensions = Head Ø x head length mm.

## Set contents

4	milling bits cylindrical	2 x 10/3 x 13/6 x 7/6 x 13 mm
1	milling bit flame-shaped	3 x 7 mm
2	milling bits helical	2 x 10/3 x 13 mm
1	milling bit angled	3 x 7 mm
2	milling bits teardrop	3 x 7/6 x 10 mm
1	milling bit spherical	4 x 3 mm
1	milling bit pointed taper	6 x 13 mm
2	milling bits round arc	3 x 7/6 x 13 mm
1	milling bit pointed arc	3 x 7



44233

Contents	Serration	Shank Ø mm	Design	44233	...
15 pieces	5	3	in clear view box		101

44234

## CC milling bit set

HM



## Design

Aggressive serration for high cutting performance, long service life.

Dimensions = Head Ø x head length mm.

## Applications

For structural steel, stainless steel, non-ferrous metals. For fast, aggressive machining on surfaces and in solid material. Especially non-slip when used on edges; for example, when deburring. Ideal for welding seam machining.

## Set contents

2	milling bits cylindrical	6 x 16/12 x 25 mm
2	milling bits spherical	10 x 9/12 x 10 mm
2	milling bits helical	6 x 18/12 x 25 mm
2	milling bits pointed arc	6 x 18/12 x 25 mm
1	milling bit round arc	6 x 18 mm
1	milling bit round taper	12 x 30 mm



44234

Contents	Serration	Shank Ø mm	Cutting speed m/min	Design	44234	...
10 pieces	Combicut	6	450-700	in plastic box		101

44238 - 44242

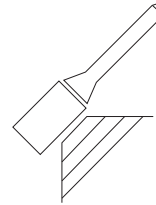
## CC milling bits cylindrical (ZYA)

HM



## Design

- DIN 8032



44238 - 44242

Head Ø x length mm	Shank Ø mm	Total length mm	Serration 3 Plus		Serration 4		Serration 5		INOX	
			44238	...	44239	...	44240	...	44242	...
6 x 16	6	55		106		106		106		106
8 x 20	6	60		107		107				107
10 x 20	6	60		109		109				109
12 x 25	6	65		111		111				111
16 x 25	6	65		113		113				

44243 - 44248

## Cemented carbide milling bits cylindrical (ZYA-S)

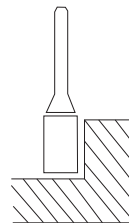
HM



## Design

- DIN 8033

- With spur cut



44243 - 44248

Head Ø x length mm	Shank Ø mm	Total length mm	Serration 3 Plus		Serration 5		STEEL		ALU	
			44243	...	44245	...	44246	...	44248	...
2 x 10	3	40		101		101				
3 x 13	3	43		102		102				
4 x 13	6	55		103		103				
6 x 13	3	43		105		105				
6 x 16	6	55		106		106		206		106
8 x 20	6	60		107				207		107
10 x 20	6	60		109				209		109
12 x 25	6	65		111				211		111

# CC milling bits

44250 - 44255

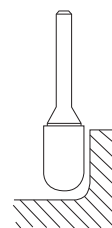
CC milling bits helical (WRC)

HM



Design  
- DIN 8032

44250 - 44255



Head Ø x length mm	Shank Ø mm	Total length mm	Serration 3 Plus		Serration 4		Serration 5		STEEL	INOX	ALU
			44250	...	44251	...	44252	...	44253	...	44254
2 x 10	3	40			101		101				
3 x 13	3	43			102		102	102			
6 x 13	3	43			104		104	104			
6 x 16	6	55			105		105	105	105	105	105
8 x 20	6	60			107		107	107	107	107	107
10 x 20	6	60			109		109	109	109	109	109
12 x 25	6	65			113		113	113	113	113	113

44257 - 44262

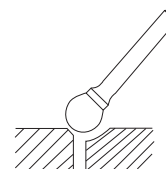
CC milling bits spherical (KUD)

HM



Design  
- DIN 8032

44257 - 44262



Head Ø x length mm	Shank Ø mm	Total length mm	Serration 3 Plus		Serration 4		Serration 5		STEEL	INOX	ALU
			44257	...	44258	...	44259	...	44260	...	44261
3 x 2	3	33			101		101	101			
4 x 3	3	34			102		102	102			
6 x 5	3	35			104		104	104			
6 x 5	6	45			105		105	105	205	105	
8 x 7	6	47			106		106	106	206	106	106
10 x 9	6	49			107		107	107	207	107	107
12 x 10	6	51			108		108	108	208	108	108

44263 - 44267

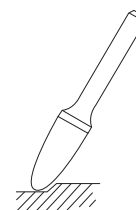
Cemented carbide milling bits round arc (RBF)

HM



Design  
- DIN 8032

44263 - 44267



Head Ø x length mm	Shank Ø mm	Total length mm	Serration 3 Plus		Serration 5		STEEL	INOX	ALU	
			44263	...	44265	...	44266	...	44267	...
6 x 13	3	43			102		102			
6 x 18	6	55					203	103	203	
8 x 20	6	60					207	107	207	
10 x 20	6	60					209	109	209	
12 x 25	6	65					213	113	213	



44268 - 44272

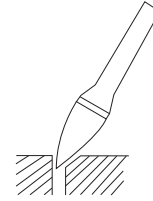
## CC milling bits pointed arc (SPG)

HM



Design  
- DIN 8032

44268 - 44272



Head Ø x length mm	Shank Ø mm	Total length mm	Serration 3 Plus	Serration 4	Serration 5	STEEL	INOX	ALU
			44268	... 44269	... 44270	... 44272	... 44272	... 44272
3 x 13	3	43		102	102			
6 x 13	3	43		103	103			
6 x 18	6	55		104	104	204	304	404
10 x 20	6	60				205	305	405
12 x 25	6	65				207	307	407

44272 - 44273

## CC milling bits flame-shaped (B)

HM



Design  
- ISO 7755/8

44272 - 44273



Head Ø x length mm	Shank Ø mm	Total length mm	Serration 3 Plus	Serration 5
			44272	... 44273
6 x 13	3	43		102
12 x 30	6	70	104	

44283 - 44285

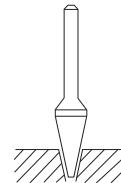
## CC milling bits pointed taper (SKM)

HM



Design  
- DIN 8032

44283 - 44285



Head Ø x length mm	Shank Ø mm	Total length mm	Serration 3 Plus	Serration 5
			44283	... 44285
6 x 13	3	43		103
6 x 18	6	55		104
10 x 20	6	60		105
12 x 25	6	65		106

44293 - 44294

CC milling bits for GFRP and CRP

HM



Applications

- Processing
- GFRP (glass fibre reinforced plastics)
- CRP (carbon fibre reinforced plastics)

FRP serration

Coarse machining = high degree of material removal  
Intended for trimming and contour milling of GFRP and CRP fibre-reinforced plastics, hard rubber and thermoplastics. Suitable for use with machine tools and manual use due to the high degree of concentricity.

FRPS serration

Fine machining = low degree of material removal  
Similar to FRP serration. Designed for use with machines and robots with high feed rates due to special serration, smooth milling behaviour, creates a smooth cutting edge.

44293

Applications

The special **drill cutting edge (BS)** can be inserted into solid material, allowing drilling and milling in a single step.

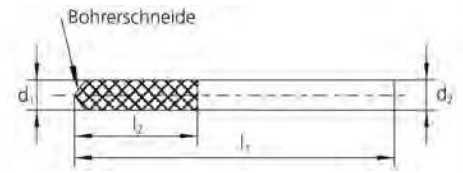
44294

Applications

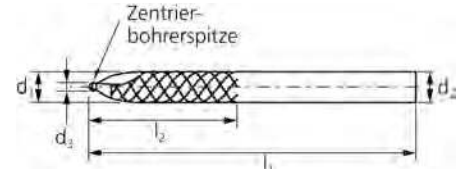
The **centre drill tip (ZBS)** can be inserted into solid material, allowing drilling and milling in a single step. Designed specifically for manual use. The centre drill tip permits reliable spot drilling on almost all surfaces.



44293



44294



With BS                      With ZBS

Serration	d <sub>2</sub> mm	d <sub>3</sub> mm	d <sub>1</sub> x l <sub>2</sub> mm	l <sub>1</sub> mm	Rotation speed rpm at 500 m/min*	Rotation speed rpm at 900 m/min*	44293	...	44294	...
FRP	6	-	6 x 25	65	27,000	48,000			101	
FRP	6	2.5	6 x 30	65	27,000	48,000				101
FRP	8	-	8 x 25	65	20,000	36,000			102	
FRP	8	3.0	8 x 30	65	20,000	36,000				102
FRPS	6	-	6 x 25	65	27,000	48,000			201	
FRPS	6	2.5	6 x 30	65	27,000	48,000				201
FRPS	8	-	8 x 25	65	20,000	36,000			202	

\*Cutting speed



44299

Extensions for milling bits/sanding tips



Applications

- Spindle extensions can be used to extend the shanks of sanding and milling tools
- These permit use in hard-to-reach areas
- The extension for drive spindles is clamped into the machine's collet chuck (pneumatic or electric drive) or in the handpiece of the flexible shaft
- Spindle extensions are an economical alternative to custom milling bits and sanding tips with a long shank

Safety instructions:

**Note: The valid safety and accident prevention regulations must be observed when using spindle extensions.**

When working with a long shanks, the tool must be inserted into the workpiece (e.g. holes, pipes, ducts or grooves) before switching on the drive machine. When not in the workpiece, the tool and extension must never be allowed to run freely.

Failure to observe this instruction results in an increased risk of accident!

Under unfavourable conditions, the extension with the clamped tool may snap off. **The extension is only intended for manual use** in conjunction with suitable pneumatic, electric drives or flexible shaft handpieces for tools with standard **shanks**. It is clamped into the true-running collet chuck of the devices in conjunction with a tool that is duly approved for the rotation speed. It should never be clamped on the transition radius.

**Clamping of a second extension or tools with over-long shanks is prohibited.**



44299 101



44299 102



44299 103



44299 104



44299 105



44299 106



44299 107



Max. permissible rotation speed rpm	Mounting spigots (motor/handpiece) Ø mm	Tool chuck mm	Total length mm	Mounting spigots length mm	Spindle Ø max. mm	Incl. collet chuck Ø mm	44299	...
44,000	8	3	78	30	9.5	3		101
20,000	SPG 6	6	104	Special	12.0	6		102
20,000	8	6	120	30	12.0	6		103
20,000	SPG 6	6	129	Special	12.0	6		104
20,000	8	6	144	30	12.0	6		105
10,000	6	3	150	30	11.5	-		106
10,000	8	6	150	30	13.5	-		107

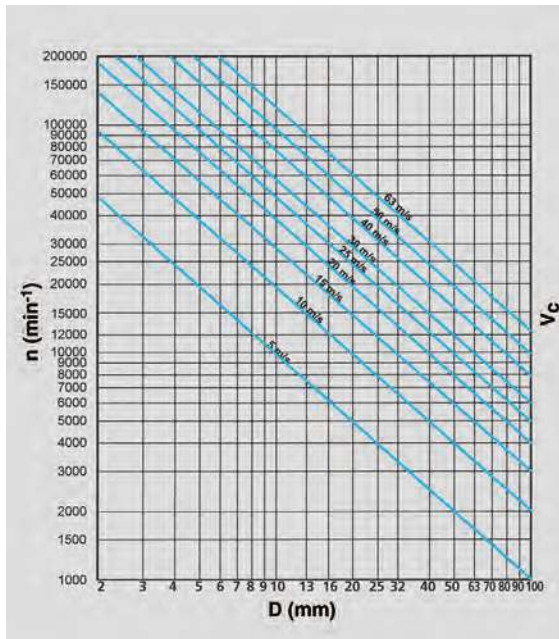


Sanding/cutting tools

The sanding tips are characterised by a consistent, superior removal rate and a long service life while achieving a high surface quality on the workpiece. The precise concentricity prevents chatter marks, enables quiet work, protects the drive machines and takes the health of the user into account. The sanding tips are specifically designed for the listed applications (see table) in terms of grain type, grain size, hardness and binding. The sanding tips can be used universally **for edge and surface grinding**.

Abrasive For material	Special corundum (NDW) Hardened Tool steel	Corundum (EK) steel, cast	Mix-corundum (HK) steel, cast iron, non-ferrous metals, Plastics (hard), GFRP
Grain (from - to)	fine (grain 100)	fine (grain 46-100) to coarse (grain 24-60)*	coarse (grain 24-46)
Degree of hardness	hard/very hard	medium	soft/medium
Binding	ceramic	ceramic	ceramic/synthetic resin
V = m/sec. (edge grinding)	approx. 10-30	approx. 25-40	approx. 30-50
V = m/sec. (surface grinding)	approx. 10-30	approx. 15-25	approx. 25-35
Applications	Grinding	Grinding	Grinding
Art. no.	44300 - 44304	44305 - 44342	44350 - 44355

\*the larger the sanding tip, the coarser the grain  
V = m/sec.: Recommended peripheral speed in m/sec.



**Recommended peripheral speeds**

In the diagram, the peripheral speeds are represented by blue diagonal lines. The vertical line corresponding to the tool diameter meets the specified peripheral speed (diagonal). From there, the rotation speed for the grinding tool and machine is read horizontally from the left-hand edge in rpm.

**Example:**

- Sanding tip dia. 20 mm,
- Recommended peripheral speed 15-40 m/s,
- Rotation speed: 14.000-38.000 rpm.

**For materials that are difficult to machine, lower peripheral speeds are recommended, as this increases the grinding ability of the sanding tip.**

n = rotation speed  
D= tool diameter  
Vc = peripheral speed



**44300**

**Sanding tip set NDW**



**Design**

Dimensions = Ø x height. Excellent dimensional stability, high edge strength, optimum machining results and long service life.

**Applications**

For forming and tool construction, especially for finishing and deburring work, edge machining, hardened steels.

**Quality**

**Composition:**

- N** = synthetic corundum,
- D** = dark red corundum,
- W** = white monocrystalline corundum.

44300



**Set contents**

- 4 sanding tips cylindrical 4 x 8/6 x 10/8 x 10/10 x 13 mm
- 2 sanding tips pointed arc 5 x 10/8 x 10 mm
- 3 sanding tips spherical 4 x 4/6 x 6/8 x 8 mm
- 1 sanding tip helical 10 x 13 mm

Contents	Shank Ø mm	Shank length mm	Cutting speed m/sec	Design	44300	...
10 pieces	3	50	10-30	in case		101



## Grinding points

### 44301 - 44304 Sanding tips NDW (shank Ø 3 mm)



#### Design

Excellent dimensional stability, high edge strength, optimum machining results and long service life, recommended cutting speed 10–30 m/sec, shank length 50 mm.

#### Applications

For forming and tool construction, especially for finishing and deburring work, edge machining, hardened steels.

#### Quality

##### Composition:

N = synthetic corundum  
D = dark red corundum  
W = white monocrystalline corundum

44301

Cylindrical.

44303

Spherical.

44302

Pointed arc.

44304

Helical.



Ø x height mm	Cylindrical		Pointed arc		Spherical		Helical	
	44301	...	44302	...	44303	...	44304	...
4 x 4						101		
4 x 8		102						
5 x 10				101				
6 x 6						102		
6 x 10		103						
8 x 8						103		
8 x 10		105		102				
10 x 13		108						101

### 44305 Sanding tip set EK



#### Design

Dimensions = Ø x height.

#### Quality

Pink fused corundum.

#### Set contents

11	sanding tips cylindrical 4 x 8/5 x 10/ 5 x 10/6 x 13/8 x 2/8 x 10/8 x 10/ 10 x 13/13 x 3/16 x 4/16 x 4 mm
2	sanding tips pointed arc 3 x 6/8 x 16 mm
1	sanding tip helical 5 x 10 mm
1	sanding tip spherical Ø 5 mm



Contents	Grain	Shank Ø mm	Design	44305	...
15 pieces	Fine	3	in box		101

### 44310 - 44315 Sanding tips EK



44310

Cylindrical.

44315

Spherical.

#### Quality

Pink fused corundum.

Ø x height mm	Ø mm	Shank Ø mm	Cylindrical		Spherical	
			44310	...	44315	...
4 x 8	-	3		105		
5 x 10	-	3		106		
6 x 10	-	3		107		
8 x 16	-	3		109		
-	6	3				101
-	8	3				102
-	13	3				104



### 44317 Cylindrical sanding tips EK



#### Quality

Pink fused corundum.

Ø x height mm	Grain	Shank Ø mm		44317	...
4 x 8	coarse 60	3	10 pcs.		104
4 x 8	fine 100	3	10 pcs.		105
5 x 10	coarse 60	3	10 pcs.		106
5 x 10	fine 100	3	10 pcs.		107
6 x 13	coarse 60	3	10 pcs.		109
6 x 13	fine 100	3	10 pcs.		110
8 x 16	coarse 46	3	10 pcs.		115
8 x 16	fine 80	3	10 pcs.		116



44320

## Sanding tip set EK



## Design

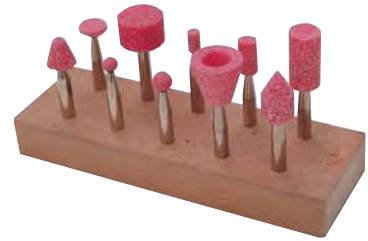
Dimensions = Ø x height.

## Quality

Pink fused corundum.

## Set contents

- 5 sanding tips cylindrical 5 x 10/8 x 16/  
13 x 3/13 x 25/20 x 13 mm
- 1 sanding tip taper 13 x 13 mm
- 2 sanding tips spherical Ø 6/8 mm
- 1 sanding tip cup, conical 20 x 19.5 mm
- 1 sanding tip centre 60° 13 x 20 mm



44320

Contents	Shank Ø mm	Design	44320	...
10 pieces	6	in wooden holder		101

44322

## Sanding tip set EK

## PFERD



## Design

Dimensions = Ø x height.

## Quality

Pink fused corundum.

## Set contents

- 5 sanding tips cylindrical 10 x 13/13 x 20/  
20 x 6/20 x 13/20 x 25 mm
- 1 sanding tip spherical Ø 16 mm
- 1 sanding tip helical 20 x 25 mm
- 1 sanding tip pointed arc 13 x 20 mm
- 2 sanding tips taper 20 x 20/20 x 32 mm



44322

Contents	Grain	Shank Ø mm	Design	44322	...
10 pieces	coarse	6	in box		101

44325

## Cylindrical sanding tips EK



## Quality

Pink fused corundum.



44325

Ø x height mm	Shank Ø mm	44325	...
4 x 8	6	103	
5 x 10	6	104	
6 x 10	6	105	
8 x 16	6	107	
10 x 20	6	111	
10 x 32	6	112	
13 x 3	6	114	
13 x 20	6	116	

Ø x height mm	Shank Ø mm	44325	...
13 x 25	6	117	
16 x 4	6	119	
16 x 20	6	121	
16 x 32	6	122	
16 x 40	6	123	
20 x 6	6	124	
20 x 40	6	129	
25 x 10	6	131	

Ø x height mm	Shank Ø mm	44325	...
25 x 32	6	134	
32 x 8	6	135	
32 x 20	6	136	
32 x 40	6	138	
40 x 10	6	139	
40 x 20	6	140	
50 x 10	6	142	
50 x 20	6	143	

44326

## Cylindrical sanding tips SiC-Alu



## Applications

Specifically for machining non-ferrous metals.

For deburring, dressing, post-machining and surface finishing. Through its special micro-structure design, maximum service life is achieved and pores are prevented from clogging.

The sanding tips have a special impregnation which promotes self-sharpening.

## Quality

Silicon carbide, green.



44326

Ø x height mm	Grain	Shank Ø mm	44326	...
10 x 13	80	6	106	
10 x 20	80	6	107	

Ø x height mm	Grain	Shank Ø mm	44326	...
13 x 32	80	6	109	
16 x 32	80	6	111	

Ø x height mm	Grain	Shank Ø mm	44326	...
20 x 20	80	6	112	
20 x 40	80	6	114	

44327

## Cylindrical sanding tips EK

## PFERD



## Quality

Pink fused corundum.



44327

Ø x height mm	Grain	Shank Ø mm	44327	...
4 x 8	coarse 60	6	103	
4 x 8	fine 100	6	104	
5 x 10	coarse 60	6	105	
5 x 10	fine 100	6	106	
6 x 13	coarse 60	6	107	
6 x 13	fine 100	6	108	
8 x 16	coarse 46	6	114	
8 x 16	fine 80	6	115	

Ø x height mm	Grain	Shank Ø mm	44327	...
10 x 20	coarse 46	6	120	
10 x 20	fine 80	6	121	
10 x 32	coarse 46	6	124	
10 x 32	fine 80	6	125	
13 x 3	coarse 60	6	126	
13 x 20	coarse 46	6	131	
13 x 20	fine 80	6	132	
13 x 25	coarse 46	6	133	

Ø x height mm	Grain	Shank Ø mm	44327	...
13 x 25	fine 80	6	134	
16 x 4	coarse 46	6	138	
16 x 4	fine 80	6	139	
16 x 20	coarse 30	6	143	
16 x 20	fine 60	6	144	
16 x 32	coarse 30	6	145	
16 x 32	fine 60	6	146	

## Grinding points

**44330**

### Tapered sanding tips EK



Quality  
Pink fused corundum.

Ø x height mm	Shank Ø mm	44330	...
16 x 32	6		102
20 x 32	6		105

Ø x height mm	Shank Ø mm	44330	...
20 x 40	6		106
25 x 70	6		107


**44330**
**44331**

### Tapered sanding tips SiC-Alu



Quality  
Silicon carbide, green.

#### Usage

**Specifically for machining non-ferrous metals.**  
For deburring, dressing, post-machining and surface finishing. Through its special micro-structure design, maximum service life is achieved and pores are prevented from clogging. The sanding tips have a special impregnation which promotes self-sharpening.

Ø x height mm	Grain	Shank Ø mm	...
16 x 32	44331 80	6	102

Ø x height mm	Grain	Shank Ø mm	...
20 x 40	44331 80	6	106


**44331**
**44332**

### Tapered sanding tips EK

**PFERD**


Quality  
Pink fused corundum.

Ø x height mm	Grain	Shank Ø mm	44332	...
16 x 45	coarse 46	6		108
16 x 45	fine 80	6		109
20 x 32	coarse 30	6		112
20 x 32	fine 60	6		113

Ø x height mm	Grain	Shank Ø mm	44332	...
20 x 40	coarse 30	6		114
20 x 40	fine 60	6		115
25 x 70	coarse 30	6		120


**44332**
**44335**

### Spherical sanding tips EK



Quality  
Pink fused corundum.

Ø mm	Shank Ø mm	44335	...
6	6		101
8	6		102
13	6		104

Ø mm	Shank Ø mm	44335	...
20	6		106
25	6		107
32	6		108


**44335**
**44337**

### Spherical sanding tips EK

**PFERD**


Quality  
Pink fused corundum.

Ø mm	Grain	Shank Ø mm	44337	...
5	coarse 60	6		102
5	fine 100	6		103
8	coarse 46	6		104
8	fine 80	6		105
13	coarse 46	6		108
13	fine 80	6		109

Ø mm	Grain	Shank Ø mm	44337	...
20	coarse 30	6		112
20	fine 60	6		113
25	coarse 30	6		114
25	fine 60	6		115
32	coarse 24	6		116
32	fine 46	6		117


**44337**

44340

## Conical cup sanding tips EK



Quality  
Pink fused corundum.

Largest Ø x height mm	Shank Ø mm	44340	...
20 x 20	6		101
25 x 24	6		102

Largest Ø x height mm	Shank Ø mm	44340	...
32 x 29	6		103
40 x 36	6		104



44340

44342

## Conical cup sanding tips EK



Quality  
Pink fused corundum.

Ø x height mm	Grain	Shank Ø mm	44342	...
20 x 16	coarse 30	6		101
20 x 16	fine 60	6		102
25 x 20	coarse 30	6		103

Ø x height mm	Grain	Shank Ø mm	44342	...
32 x 25	coarse 24	6		105
32 x 25	fine 46	6		106



44342

44355

## Cylindrical sanding tips INOX (ADW) hardness L



## Design

INOX is specifically designed for use on stainless steel (INOX) and suitable for universal use on non-ferrous base metals and bronze. These tools are used for coarse grinding of stainless steel (INOX) cast parts and for sanding moulded parts made of heat-resistant alloys.

## Advantage

- Ideal for temperature-sensitive materials due to low-temperature sanding
- High grinding comfort due to low-vibration cutting

## Machinable materials:

- Stainless steel/INOX
- Bronze
- Hard non-ferrous metals

## Design

- Synthetic resin bond
- Mix of dark red and white corundum

## Recommended use:

INOX sanding tips achieve their best performance at a cutting speed of 35 to 50 m/s.

## Suitable tool drives:

- Flexible shaft drive
- Straight grinder

## Note:

The maximum permissible rotation speed refers to the open shank length of 10 mm.



44355

ADW/L medium

Head Ø x head height mm	Grain	Shank Ø rotation speed rpm	Max. permitted rotation speed rpm	Recommended	ADW/L medium 44355	...
8 x 16	coarse 46	6	119,300	100,000		150
10 x 32	coarse 46	6	62,800	62,800		168
16 x 32	coarse 30	6	51,200	51,200		199
20 x 40	coarse 30	6	72,400	32,400		222
25 x 32	coarse 30	6	32,900	32,900		237
32 x 16	coarse 24	6	29,800	29,000		244
40 x 20	coarse 24	6	23,800	23,000		253
50 x 25	coarse 24	6	19,000	19,000		258

# Grinding points

44356

## Sanding tip sets TOUGH

**NEW**



**Design**

The TOUGH design is specially intended for use on titanium materials, nickel and cobalt-based alloys and for the machining of hardened steel components and surface-layer welding. Machining tasks include, amongst others, smoothing repair welds and finishing turbine blades during aircraft maintenance and re-grinding repair welds in tool construction and forming.

**Machinable materials**

- Hardened, tempered steels over 1200 N/mm<sup>2</sup> (more than 38 HRC)
- Nickel-based alloys Inconel and Hastelloy
- Highly heat-resistant materials
- Cobalt-based alloys
- Other non-ferrous metals
- Hard non-ferrous metal
- Titanium alloys
- Titanium

**Applications**

Grouting, gouging, grinding, deburring, surface conditioning, edge finishing (chamfering, rounding), edge finishing, finishing, welding seam machining.

**Quality**

White corundum abrasive grain and ceramic abrasive grain.



44356 101



44356 102

**Set contents 44356 101 (shank Ø 3 mm)**

- 8 sanding tips cylindrical 2 x 5/3 x 6/4 x 8/5 x 10/6 x 13/8 x 16/13 x 3/20 x 6 mm
- 3 sanding tips spherical Ø 3/6/8 mm
- 4 sanding tips pointed arc 3 x 6/4 x 8/6 x 13/8 x 16 mm
- 4 sanding tips pointed arc 3 x 6/4 x 8/6 x 13/8 x 16 mm

**Set contents 44356 102 (shank Ø 6 mm)**

- 6 sanding tips cylindrical 10 x 13/13 x 25/16 x 20/20 x 25/20 x 40/40 x 10 mm
- 1 sanding tip spherical Ø 13 mm
- 1 sanding tip pointed arc 13 x 20 mm
- 2 sanding tips tapered 10 x 25/16 x 45 mm
- 2 sanding tips tapered 10 x 25/16 x 45 mm

Contents	Grain	Shank Ø mm	44356	...
15 pieces	fine	3		101
10 pieces	coarse	6		102

44357 - 44358

## Cylindrical sanding tips TOUGH (AWCO) hardness J (shank Ø 3 and 6 mm)



**Quality**

White corundum and ceramic abrasive grain.

**Shank Ø 3 mm**

Head Ø x head height mm	Grain	Shank Ø x shank length mm	Max. permitted rotation speed rpm	Recommended rotation speed rpm	44357	...
3 x 6	80	3 x 30	206,100	150,000		101
3 x 6	100	3 x 30	206,100	150,000		102
4 x 8	80	3 x 30	175,100	150,000		103
4 x 8	100	3 x 30	175,100	150,000		104
5 x 10	80	3 x 30	130,700	130,700		105
5 x 10	100	3 x 30	130,700	130,700		106
6 x 13	60	3 x 30	93,600	33,600		107
6 x 13	80	3 x 30	93,600	33,600		108
6 x 13	100	3 x 30	93,600	33,600		109

**Shank Ø 6 mm**

Head Ø x head height mm	Grain	Shank Ø x shank length mm	Max. permitted rotation speed rpm	Recommended rotation speed rpm	44358	...
8 x 16	46	6 x 40	119,300	100,000		101
8 x 16	80	6 x 40	119,300	100,000		102
10 x 13	46	6 x 40	95,400	85,000		103
10 x 13	80	6 x 40	95,400	85,000		104
13 x 25	46	6 x 40	73,400	65,000		105
13 x 25	80	6 x 40	73,400	65,000		106
16 x 20	46	6 x 40	59,600	55,000		107
16 x 20	60	6 x 40	59,600	55,000		108
16 x 32	46	6 x 40	51,200	51,200		109
16 x 32	60	6 x 40	51,200	51,200		110
20 x 25	46	6 x 40	47,700	45,000		111
20 x 25	60	6 x 40	47,700	45,000		112
32 x 32	46	6 x 40	25,700	25,700		113
40 x 20	46	6 x 40	23,800	22,000		114

44357 - 44358



Sanding/cutting tools

44359 - 44360

## Spherical sanding tips TOUGH (AWCO) hardness J



Quality

White corundum and ceramic abrasive grain.

Shank Ø 3 mm

Head Ø mm	Grain	Shank Ø x shank length mm	Max. permitted rotation speed rpm	Recommended rotation speed rpm	44359	...
6	80	3 x 30	159,100	140,000		101
6	100	3 x 30	159,100	140,000		102
8	80	3 x 30	116,200	100,000		103
8	100	3 x 30	116,200	100,000		104

Shank Ø 6 mm

Head Ø mm	Grain	Shank Ø x shank length mm	Max. permitted rotation speed rpm	Recommended rotation speed rpm	44360	...
13	46	6 x 40	73,400	65,000		101
13	60	6 x 40	73,400	65,000		102
13	80	6 x 40	73,400	65,000		103

44359 - 44360



Sanding/cutting tools

44361 - 44362

## Pointed arc sanding tips TOUGH (AWCO) hardness J



Quality

White corundum and ceramic abrasive grain.

Shank Ø 3 mm

Head Ø x head height mm	Grain	Shank Ø x shank length mm	Max. permitted rotation speed rpm	Recommended rotation speed rpm	44361	...
6 x 13	80	3 x 30	108,100	108,100		101
6 x 13	100	3 x 30	108,100	108,100		102
8 x 16	60	3 x 30	72,800	72,800		103
8 x 16	80	3 x 30	72,800	72,800		104
8 x 16	100	3 x 30	72,800	72,800		105

Shank Ø 6 mm

Head Ø x head height mm	Grain	Shank Ø x shank length mm	Max. permitted rotation speed rpm	Recommended rotation speed rpm	44362	...
13 x 20	46	6 x 40	73,400	65,000		101
13 x 20	60	6 x 40	73,400	65,000		102
13 x 20	80	6 x 40	73,400	65,000		103

44361 - 44362



44363

## Tapered sanding tips TOUGH (AWCO) hardness J



Quality

White corundum and ceramic abrasive grain.

Shank Ø 6 mm

Head Ø x head height mm	Grain	Shank Ø x shank length mm	Max. permitted rotation speed rpm	Recommended rotation speed rpm	44363	...
10 x 25	46	6 x 40	95,400	85,000		101
10 x 25	60	6 x 40	95,400	85,000		102
16 x 45	46	6 x 40	52,000	52,000		103
16 x 45	60	6 x 40	52,000	52,000		104

44363



## Info

## Sanding tips TOUGH (AWCO) hardness J art. no. 44356 - 44363

PFERD



The TOUGH (AWCO) version in **hardness J** is specifically intended for use on titanium materials, nickel- and cobalt-based alloys and for the machining of hardened steel components and surface-layer welding.

Machining tasks include smoothing repair welds and finishing turbine blades during aircraft maintenance and re-grinding repair welds in tool construction and forming.

## Advantage

- Cool grinding due to the tendency of the grain mixture to splinter
- High removal rates and excellent service life
- Consistent removal rates thanks to the self-sharpening effect of the ceramic abrasive grain

## Machinable materials:

- Hardened, tempered steels above 1200 N/mm<sup>2</sup> (> 38 HRC)
- Titanium alloys
- Titanium
- Highly heat-resistant materials
- Nickel- and cobalt-based alloys

## Version

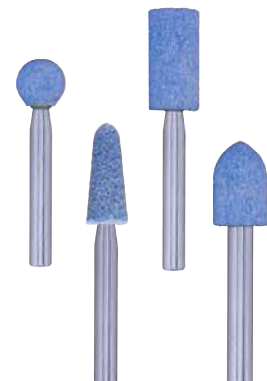
- Ceramic binding
- Corundum mixture of ceramic abrasive grain and white corundum

## Application recommendations:

- TOUGH sanding tips provide optimum performance at a cutting speed of 30 to 50 m/s.

## Suitable tool drives:

Flexible shaft drive, straight grinder



44364 - 44366 Poliflex® cylindrical finishing tips



**Applications**

Example applications include cold and heat-resistant steel, steel precision casting, structural steel, stainless steel, acid-resistant steel, stainless steel sheets, stainless casting steel, rustproof steel, bronze, copper, brass and bronze casting.

**44364**

**Design**

Rubber bonding, soft grinding finish.

**Applications**

Used to prepare for polishing and create a matt finish for non-ferrous base metals. Also for aluminium, aluminium wrought alloys, cast aluminium. Recommended peripheral speeds < 12–20 m/s

**Quality**

Pink fused corundum (EK).

**44365**

**Design**

Leather bonding, better surface quality, long service life.

**Applications**

Used to prepare for polishing and round edges. Recommended peripheral speeds < 15–30 m/s.

**Quality**

White corundum (EK).

**44366**

**Design**

Polyurethane bonding, soft, elastic, low-temperature sanding, adapts to contours.

**Applications**

For gentle machining of surfaces, line matting, cleaning, preliminary work for cleaning, de-oxidising, light duty deburring. Recommended peripheral speeds < 10–15 m/s

**Quality**

Silicon carbide green (SIC)

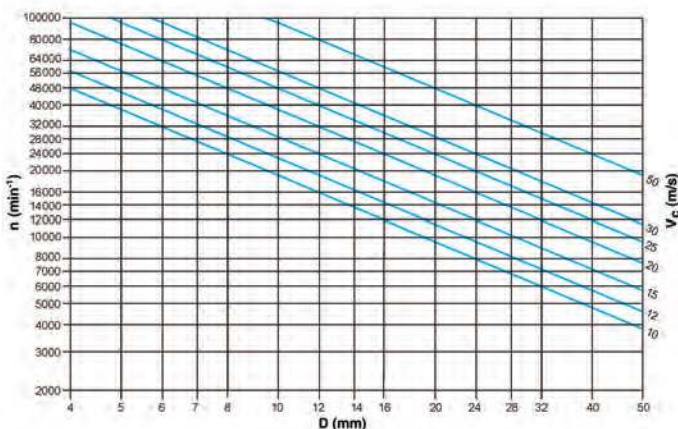
44364

44365

44366



Sanding/cutting tools



**Operating speeds for Poliflex® tools**

In the diagram, the cutting speeds are represented by diagonal lines.

The perpendicular tool diameter line intersects the specified cutting speed (the diagonal line). The recommended speed for the selected diameter of the Poliflex® tool in RPM is read out at the left edge where it intersects with the horizontal.

**Example:**

Poliflex® finishing tip, pink fused corundum, 15 mm Ø, recommended peripheral speed = < 12–20 m/s, recommended rotational speed range = < 15,500–26,000 rpm.

- n = rotation speed
- D = tool diameter
- Vc = peripheral speed

Head Ø x head height mm	Grain	Shank Ø mm	Shank length mm	Pink fused corundum		White corundum		SIC green	
				44364	...	44365	...	44366	...
8 x 12	80	3	30						107
8 x 12	120	3	30			112		109	
10 x 15	120	6	40			118		114	
15 x 25	120	6	40			128		123	
20 x 30	80	6	40						111
20 x 30	120	6	40			132		127	
25 x 25	120	6	40			134		129	
30 x 30	120	6	40			136		131	

**Info**

**Polishing tips art. no. 44375 - 44377**

Owing to their excellent elasticity, the felt polishing tips in combination with the grinding paste (art. no. 43141) and polishing pastes (art. nos. 44380 - 44381) are also suitable for polishing particularly complicated shapes, such as die-casting moulds and injection moulds, drawing tools, pressing tools and cutting tools, cold heading dies, bending dies, bearings, spindles, rollers, calibres, etc.

Abrasive	Felt with abrasive paste
For material made of	steel, cast iron, non-ferrous metals
Grain (from – to)	Microfine (with paste grain 1200) to very coarse (with paste grain 90)
Degree of hardness	Very soft
V = m/sec.	approx. 5-10
Applications	Polishing
Art. no.	44375 - 44377

V = m/sec.: Recommended peripheral speed in m/sec.



## 44375

## Felt polishing tips (shank Ø 6 mm)



### Applications

For surface honing of pre-sanded workpieces. Used in conjunction with special grinding paste art. no. 43141 and polishing paste art. no. 44380–44381.

### Note:

Art. no. 44375 120 with hole 6 mm Ø, without mandrel.

44375 101-105    44375 107-109    44375 111    44375 118    44375 120    44375 126



43141

Shape	Head Ø x length approx. mm	44375	...
Cylindrical	10 x 15	101	
Cylindrical	25 x 30	105	
Spherical	Ø 10	107	
Spherical	Ø 12	108	
Spherical	Ø 20	109	

Shape	Head Ø x length approx. mm	44375	...
Pointed arc	12 x 20	111	
Round taper	25 x 30	118	
Disc	40 x 30	120	
Mandrel	-	126	

## 44376

## Felt polishing tips



### Applications

Used in conjunction with special grinding paste art. no. 43141 and polishing pastes art. no. 44380–44381 primarily for **high-gloss polishing**.

The different diameters and shapes mean that workpieces with complex geometries can also be polished. Easy to profile.

Shape	Head Ø x length mm	Shank Ø mm	Shank length mm	Recommended rotation speed rpm	44376	...
Cylindrical	6 x 10	3	40	16,000–32,000	101	
Cylindrical	8 x 10	3	40	12,000–24,000	102	
Cylindrical	10 x 14	3	40	10,000–20,000	103	
Pointed arc	8 x 12	3	40	12,000–24,000	104	
Pointed arc	10 x 18	3	40	10,000–20,000	105	
Pointed arc	12 x 18	3	40	8,000–16,000	106	
Helical	8 x 12	3	40	12,000–24,000	107	
Helical	10 x 14	3	40	10,000–20,000	108	



44376 101-103



44376 104-106



44376 107-108



## 44377

## Felt polishing tips



### Applications

Used in conjunction with special grinding paste art. no. 43141 and polishing pastes art. no. 44380–44381 primarily for **high-gloss polishing**. The broad diversity of shapes and diameters also permits the polishing of complex workpiece geometries. Easy to profile.

### 44377 102-104

#### Design

With centre hole, making it ideal for face grinding. The centre hole prevents the accumulation of machining residue.

Shape	Head Ø x length mm	Shank Ø mm	Shank length mm	Recommended rotation speed rpm	44377	...
Cylindrical	10 x 14	6	40	10,000–20,000	101	
Cylindrical	15 x 20	6	40	6,000–12,000	102	
Cylindrical	20 x 25	6	40	5,000–10,000	103	
Cylindrical	25 x 30	6	40	4,000–8,000	104	
Pointed arc	10 x 18	6	40	10,000–20,000	105	
Pointed arc	15 x 20	6	40	6,000–12,000	106	
Pointed arc	15 x 30	6	40	6,000–12,000	107	
Pointed arc	20 x 25	6	40	5,000–10,000	108	
Helical	15 x 20	6	40	6,000–12,000	109	
Helical	20 x 25	6	40	5,000–10,000	110	
Helical	25 x 30	6	40	4,000–8,000	111	
Round taper	15 x 20	6	40	6000–12,000	112	
Round taper	20 x 25	6	40	5000–10,000	113	
Round taper	25 x 30	6	40	4,000–8,000	114	
Round taper	30 x 35	6	40	3,000–6,000	115	
Teardrop	10 x 14	6	40	10,000–20,000	116	
Angled	20 x 16	6	40	5,000–10,000	117	



44377 101



44377 102-104



44377 105-108



44377 109-111



44377 112-115



44377 116



44377 117





**44380 Polishing paste bars**



**Applications**  
Use in conjunction with felt polishing tips (art. no. 44375-44377).

44380

Design	Use	Colour	W x D x H mm	44380	...
Pre-polishing paste	Steel + stainless steel	Green	70 x 50 x 140		101
Pre-polishing paste	Aluminium + brass	Grey	70 x 50 x 140		102
Pre-polishing paste	Non-ferrous metals	Brown	70 x 50 x 140		103
High gloss polishing paste	All metals	Pink	70 x 50 x 140		104
High gloss polishing paste	Plastics	Beige	70 x 50 x 140		105



**44381 Diamond polishing pastes**



**Design**

- Concentrated paste in practical dosing syringe with scale
- **High diamond content**
- Can also be applied in concentrated form
- Grain mix, providing better abrasion than pure grain
- Distinctive paste colour avoids mix-ups
- Soluble in oil
- No hazardous substances

**Applications**  
Suitable for polishing  
- Cemented carbides  
- Hard case-hardening and chrome steels  
- Coatings that protect against wear

44381

Grain $\mu$	Contents ml	Colour	44381	...
1-3	5	red		201
1-3	20	red		401
4-6	5	yellow		202
4-6	20	yellow		402
12-17	5	green		203
12-17	20	green		403
30-40	5	blue		204
30-40	20	blue		404
40-50	5	orange		205
40-50	20	orange		405



**44385 - 44390 Diamond and CBN sanding tips**



**Design**

Cylindrical, A = offset shank, N = non-offset shank.  
**Advantages:** Excellent service life and good retention of profile. Short machining times. Reduced auxiliary process times. Avoidance of thermal damage to the workpiece due to lower sanding temperatures. Uniform level of quality across a multitude of workpieces.

plastics, natural and artificial stone, fire-resistant materials on internal cylindrical grinding machines and co-ordinate grinding machines amongst others.  
**Recommended peripheral speeds:**  
wet 20 m/sec, dry 15 m/sec.  
**Quality**  
**Grain D 126.**

44385 - 44390

**44385**

**Diamond sanding tips**

**Applications**

For the machining of cemented carbide (sintered, green compact), glass, ceramics (including engineered ceramics), porcelain, coatings that protect against wear, ferrite, silicon, graphite, electro-carbons, thermosetting plastics, glass fibre-reinforced

**44390**

**CBN sanding tips**

Cubic boron nitride (cubic crystalline boron nitride).

**Applications**

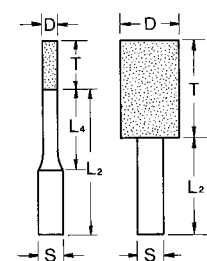
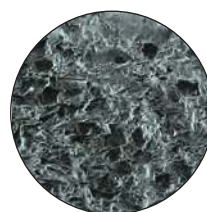
For the machining of high-speed steels, tool steels, case-hardening steels, ball bearing steels, chrome steels on internal cylindrical grinding machines and co-ordinate grinding machines amongst others.

**Recommended peripheral speeds:**

wet 30 m/sec, dry 20 m/sec.

**Quality**

**Grain B 126.**



Type A

Type N

D x T mm	S mm	Shank shape	L2 mm	L4 mm	Diamond		CBN	
					44385	...	44390	...
1.0 x 4	3	A	36	9		103		103
1.6 x 4	3	A	36	10		107		107
2.0 x 4	3	A	36	10		109		109
2.6 x 4	3	A	36	14		113		113
3.0 x 4	3	A	36	19		115		115
3.5 x 5	3	N	45	-		116		116
4.0 x 5	3	N	45	-		117		117
4.5 x 5	3	N	45	-		118		118
5.0 x 5	3	N	45	-		119		119

D x T mm	S mm	Shank shape	L2 mm	L4 mm	Diamond		CBN	
					44385	...	44390	...
5.5 x 6	3	N	44	-		120		120
6.0 x 6	6	A	54	19		121		121
7.0 x 8	6	N	52	-		123		123
8.0 x 8	6	N	52	-		125		125
10.0 x 8	6	N	52	-		127		127
12.0 x 8	6	N	52	-		129		129
15.0 x 10	6	N	50	-		132		132
20.0 x 10	6	N	50	-		136		136





**Design**

- High-quality cup wheels in synthetic resin bond with maximum service life and equally high removal rate
- Premium wheel with vibration-absorbing basic body
- Universal grain for most grinding tasks

**Applications**

Universal use for dry and wet grinding on all common grinding machines; wet grinding is generally recommended (service life, temperature, performance).

**Diamond (D126)**

**Applications**

For grinding cemented carbide and Cermet as well as materials made of stone, glass, porcelain, graphite, GFP etc.

**Recommended peripheral speeds:**

wet 25–30 m/s; dry 15–20 m/s

**CBN (B126)**

**Applications**

For grinding high alloy (HSS) tool and case-hardening steels, hard cast, stellite, Ni and Co-based alloys.

**Recommended peripheral speeds:**

wet 30–40 m/s; dry 20–25 m/s

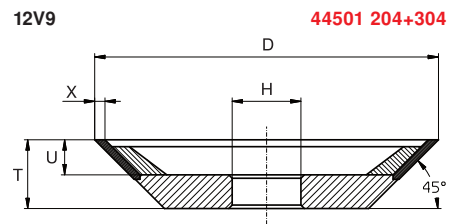
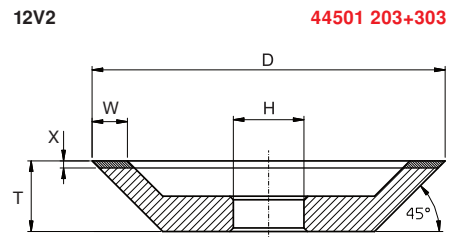
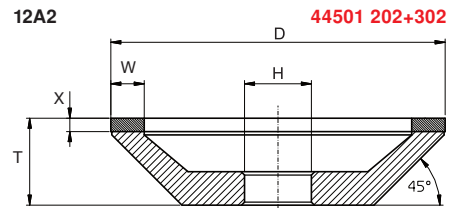
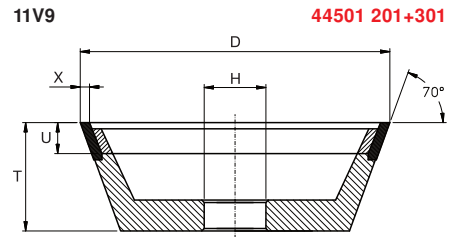
**Note:**

Cup wheels can be made to order.



44501

Type	D mm	H H6 mm	T mm	X mm	U mm	D126		B126	
						44501	...	44501	...
11V9	100	20	35	3	10	201		301	



Type	D mm	H H6 mm	T mm	X mm	W mm	D126		B126	
						44501	...	44501	...
12A2	100	20	26	4	10	202		302	

Type	D mm	H H6 mm	T mm	X mm	W mm	D126		B126	
						44501	...	44501	...
12V2	100	20	20	2	10	203		303	

Type	D mm	H H6 mm	T mm	X mm	U mm	D126		B126	
						44501	...	44501	...
12V9	100	20	20	3	10	204		304	

**PFERD**



**Design**

Synthetic resin bond.

**Applications**

Intended in particular for grinding (sharpening) of cemented carbide tools on all common grinding machines. Universally suitable for dry and wet grinding (wet grinding is recommended).

**Grain D 126: For finishing**

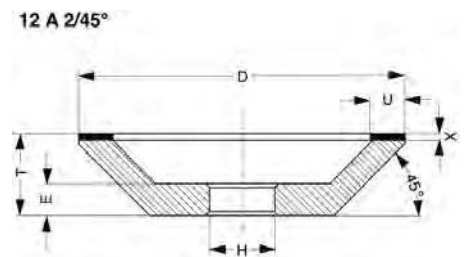
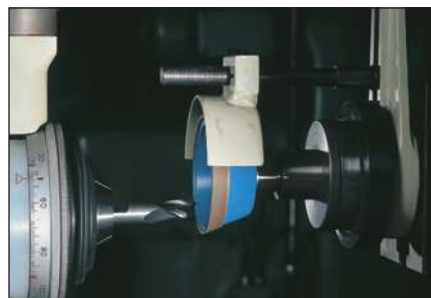
**Grain D 64: For fine-grinding.**

**Bonding PHT:**

Specially designed for **high-performance dry grinding**, i.e. lower-temperature grinding even without coolant.

**Note:**

Grain concentration refers to the amount of grain in carats (ct) per volume unit (cm<sup>3</sup>) of the abrasive coating.



44502

D x X x U x H mm	T mm	E mm	Grain	Bonding	Grain concentration	Wet grinding approx. m/sec	Dry grinding approx. m/sec	44502	...
125 x 2 x 10 x 20	25	10	D 64	PHT	C 50 (2.2 ct/cm <sup>3</sup> )	20 - 35	15 - 20		114
125 x 2 x 10 x 20	25	10	D 126	PHT	C 75 (3.3 ct/cm <sup>3</sup> )	20 - 35	15 - 20		115

44540

**Sanding block deburring wheel Scotch-Brite™ DB-WL**

**3M**

**Design**

This wheel is made of wound fibre fleece. This guarantees a permanent release of the abrasive grain. **Extremely long service life.** High cutting performance.

**Applications**

Ideal for deburring and rounding edges and holes, milling or punching edges and deburring taps. Suitable for all metals, including hard and ductile materials such as stainless steel and titanium.

**Note:**

Reducer flange for compact wheels, see art. no. 44545.



44540

Type	External Ø x width x internal Ø mm	Rotation speed max. rpm	44540	...
DB-WL	203 x 50.8 x 76.2	4,500		101

44541

**Sanding block finishing wheel Scotch-Brite™ FS-WL**

**3M**

**Design**

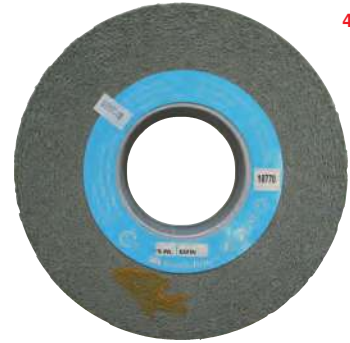
Wound fibre fleece wheel guarantees a permanent release of abrasive grain. The impregnation ensures a longer service life. Uniform grain distribution, no deviations in the surface. Gentle, adaptive application, quick cutting at low temperatures.

**Applications**

For fine machining of stainless steel, copper, brass and aluminium.

**Note:**

Reducer flange for compact wheels, see art. no. 44545.



44541

Type	External Ø x width x internal Ø mm	Rotation speed max. rpm	44541	...
FS-WL	203 x 50.8 x 76.2	4,500		101

44545

**Reducer flange for compact wheels**

**Design**

**In pairs.**

**Applications**

This flange pair is used to mount compact wheels. They are suitable for all standard shank diameters. The hole can be drilled out for other shank diameters.

**Note:**

For compatible compact wheels, see art. no. 44540–44541.



44545

Can be used for internal Ø mm	Flange hole mm	44545	...
76.2	13		101

44550

**Sanding discs for roughing**

**AO**

**Design**

Straight, ceramic bond, bonding type V 42, hardness 36 P.

**Applications**

For general workshop use. For roughing of normal steel, iron etc.

**Quality**

Abrasive grain synthetic corundum (AO).

**Note:**

Other sanding disc dimensions available on request. To reduce the hole Ø with reducing rings, see art. no. 44560.



44550

NK/grain 36		NK/grain 36		NK/grain 36	
Disc Ø x width x hole mm	44550	Disc Ø x width x hole mm	44550	Disc Ø x width x hole mm	44550
150 x 20 x 15	101	200 x 20 x 32	105	200 x 25 x 51	109
150 x 20 x 32	102	200 x 25 x 15	106	200 x 32 x 51	110
175 x 25 x 32	103	200 x 25 x 20	107	300 x 40 x 76	113
175 x 25 x 51	104	200 x 25 x 32	108		

## 44552 - 44556

## Bench grinder wheels

### Design

- Straight
- Ceramic bond
- Bonding type V 42

### Note:

Other sanding disc dimensions available on request.  
To reduce the hole Ø with reducing rings,  
see art. no. 44560.

### 44552

#### Applications

Hardness M. For general workshop use.

#### Materials to be processed:

Unalloyed and low-alloy steel, unhardened, iron etc.

#### Quality

Synthetic corundum (NK).

### 44554

#### Applications

Hardness K. For finish-grinding of alloyed steel, HSS and workshop steel.

#### Materials to be processed:

High-alloy steel (hardened), low-alloy steel (hardened), tool steel, HSS.

#### Quality

Pink fused corundum (EK).

### 44556

#### Applications

Hardness J. For finishing cast iron, cemented carbide and high-alloy steel.

#### Materials to be processed:

Cast iron, cemented carbide, high-alloy steel.

#### Quality

Green silicon carbide (SiC).

44552

44554



44556



Sanding/cutting tools

Disc Ø x width x hole mm	Synthetic corundum medium/K60		Corundum medium/K60		Silicon carbide green/K80	
	44552	...	44554	...	44556	...
150 x 20 x 15		301		101		101
150 x 20 x 32		302		102		102
175 x 25 x 32		303		103		103
175 x 25 x 51		304		104		104
200 x 20 x 32		305		105		105
200 x 25 x 15		306		106		106
200 x 25 x 20		307		107		107
200 x 25 x 32		308		108		108
200 x 25 x 51		309		109		109
200 x 32 x 51		310		110		110
250 x 32 x 51		311		111		111
300 x 40 x 25		312		112		112
300 x 40 x 76		313		113		113

## 44560

## Reducing rings for sanding discs

### Design

In pairs.

### Applications

For reducing the hole diameter of sanding discs (art. no. 44550-44556).

2 reducing rings are required per disc.



44560

External Ø mm	Internal Ø mm	Pair		External Ø mm	Internal Ø mm	Pair		External Ø mm	Internal Ø mm	Pair	
		44560	...			44560	...			44560	...
20	12		101	32	15		103	51	32		106
20	16		102	32	16		104	76	51		107
				32	20		105				

## 44902 - 44903

## Visual grinding wheels

### Design

Horizontally rotating. Elongated holes arranged radially on the break-resistant sanding disc ensure a see-through effect during sanding to allow the workpiece below to be observed. Abrasive covering with synthetic resin bonding – both sides can be used.

### Quality

Corundum abrasive with silicon carbide.

### 44902

#### Type ER

#### Applications

For structural steels, malleable iron, steel casting, grey cast iron and non-metallic materials.

### 44903

#### Type EF

#### Applications

For high-speed steels (alloyed tool steels).

44902 - 44903



Grain	Ø x thickness x hole mm	Type ER		Type EF	
		44902	...	44903	...
60	210 x 5 x 12		202		202
120	210 x 4 x 12		205		205
150	210 x 4 x 12		206		206

# Quick-action clamping nuts | Rough grinding discs

## 91403 FIXTEC quick-action clamping nut

### Design

Designed to permit practical, ergonomic working at all times: The patented FIXTEC quick-action nut for tool-free disc changes with integrated safety slip clutch for all angle grinders up to 150 mm Ø/thread M 14.

Thread	91403	...
M 14		101



91403

## 91431 SDS quick-action clamping nut

### BOSCH

#### Applications

Fast, tool-free clamping and releasing of plug-in tools without auxiliary tool for all angle grinders with thread M14.

Thread	91431	...
M 14		101



91431

## 44601 Rough grinding discs (metal)

### ATORN®

#### Hard disc

#### Design


Offset, glass fibre-reinforced, open structure. Hard disc with high machining performance and edge strength.

#### Applications

For use on high-speed angle grinders. For machining structural and construction steels.

#### Quality

Abrasive grain synthetic corundum (AO).

Ø x width mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44601	...
115 x 7	22.2	13,285	80	25 pcs.		201
125 x 7	22.2	12,200	80	25 pcs.		202
180 x 7	22.2	8,600	80	10 pcs.		203
230 x 7	22.2	6,600	80	10 pcs.		204



AO

44601

## 44606 - 44609 Rough grinding discs (metal)

### RHODIUS

#### Design

Offset, glass fibre-reinforced, open structure.

#### Applications

For machining steel on high-speed angle grinders.

#### Quality

Abrasive grain synthetic corundum (AO).

#### 44606

#### Medium-hard disc type RS 2

#### Design

With high machining performance and edge strength.

#### Applications

For the machining of high-strength and high-alloy steels, structural steels, tool steels, hardened steels and Hardox.

#### 44609

#### Standard universal type KSM

#### Design

Hard design with a long service life.

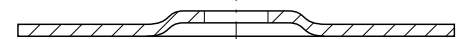
#### Applications

For general metalworking and universal use.



PROLINE ●●●

ALPHA LINE ●●●




Medium-hard

44606

Standard

44609

Ø x width mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44606	...	44609	...
115 x 7	22.2	13,285	80	25 pcs.			101	101
125 x 7	22.2	12,200	80	25 pcs.			102	102
150 x 7	22.2	10,185	80	10 pcs.			103	
180 x 7	22.2	8,600	80	10 pcs.			104	104
180 x 10	22.2	8,600	80	10 pcs.			106	
230 x 7	22.2	6,600	80	10 pcs.				107

## 44615 Rough grinding discs (metal)

### PFERD



#### Universal line PSF STEEL

#### Advantage


- Fast progress and high efficiency due to considerable ease of grinding.
  - Good service life
  - Also suitable for low-performance angle grinders.
- Soft grinding characteristics, highly efficient machining even at low contact pressures.

#### Applications

For surface grinding, welding seam machining, fillet weld machining, gouging, chamfering and deburring. Can be used on steel and cast iron.

#### Quality

Abrasive grain synthetic corundum (AO).

Ø x width mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44615	...
115 x 7	22.23	13,300	80	10 pcs.		101
125 x 7	22.23	12,200	80	10 pcs.		102
178 x 7	22.23	8,600	80	10 pcs.		103
178 x 8	22.23	8,600	80	10 pcs.		104
230 x 7	22.23	6,600	80	10 pcs.		105



AO

44615



44617

## Rough grinding discs (metal)

AO



## Performance line SG STEEL

## Advantage


- Fast progress and maximum efficiency due to considerable ease of grinding
- Long service life, meaning fewer tool changes

## Applications

For surface grinding, welding seam machining, fillet weld machining, gouging, chamfering and deburring. Can be used on steel.

## Quality

**Abrasive grain, special corundum (AO).**

Ø x width mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44617	...
115 x 7.0	22.23	13,300	80	10 pcs.		102
125 x 7.0	22.23	12,200	80	10 pcs.		104
178 x 7.0	22.23	8,600	80	10 pcs.		106
178 x 8.0	22.23	8,600	80	10 pcs.		107
230 x 7.0	22.23	6,600	80	10 pcs.		108



44617

Sanding/cutting tools

44610

## Rough grinding disc (metal)

CER



44610 104-105

## CC-GRIND-SOLID STEEL VICTOGRAIN

## Design

CC-GRIND-SOLID from PFERD is a modern, powerful and ergonomic alternative to conventional rough grinding discs. The abrasive grain cutting edges of the uniformly shaped and sized triangles of the **VICTOGRAIN** abrasive grain hit the workpiece at an optimal angle, meaning that the individual abrasive grains therefore require very little energy to penetrate the workpiece.

## Advantage

- Ultimate, constant maximum performance at low temperatures and an extremely long service life
- Extremely fast work progress
- Requires less heat to be applied to the workpiece
- Less vibration, extremely quiet operation

## Machining tasks

- Deburring
- Surface grinding
- Surface machining
- Chamfering
- Edge machining
- Welding seam machining
- Staged finishing

## Machinable materials

Steel.


## Quality

**Ceramic abrasive grain (CER).**

**FE/S/Cl <= 0.1% free from iron, chlorine and sulphur.**

## Note:

For optimum performance, use with a shallow contact angle and the SFS CC-GRIND clamping flange set. For surface grinding only, not suitable for peripheral grinding.

Ø mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec	Compatible clamping flange set		44610	...
115	22.23	13,300	80	44610 201	10 pcs.		104
125	22.23	12,200	80	44610 201	10 pcs.		105

44610 201-202

## Clamping flange sets

## Applications

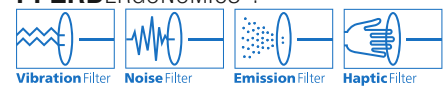
The CC-GRIND clamping flange set is used to optimally position the CC-GRIND-SOLID and CC-GRIND-FILEX in the angle grinder protective cover,

enabling extremely flat, efficient use of the sanding discs. The black support plate is placed on the original mounting flange of the angle grinder.

The silver flange nut replaces the original flange nut.

Thread	Suitable for machine types	44610	...
M14	Angle grinder 115/125, mount M14		201
M14	Angle grinder 150/180, mount M14		202

## PFERDERGONOMICS®:



## PFERDEFICIENCY®:



44610



44610 201-202

## Rough grinding discs

44630

### Rough grinding discs (stainless steel)

AO

#### RHODIUS

Medium-hard disc  
Type RS 38

##### Design

Offset, glass fibre-reinforced, open structure. Grinds easily, with exceptional machining performance and a long service life.

##### Applications


For rust and acid-resistant steels such as Inox, V2A, Coracid, Nirosta, heat-resistant steel casting (GX steels), spring steels, all structural and tool steels. For grinding edges, deburring, dressing weld seams.

##### Quality

**Abrasive grain synthetic corundum (AO).**  
FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.



44630

Ø x width mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44630	...
115 x 6	22.2	13,285	80	25 pcs.		101
125 x 6	22.2	12,200	80	25 pcs.		102
180 x 6	22.2	8,600	80	10 pcs.		103
230 x 6	22.2	6,600	80	10 pcs.		105

44621

### Rough grinding discs (stainless steel)

AO

#### PFERD



Performance line SG INOX

##### Advantage

- Soft grinding characteristics for low-temperature grinding on stainless steel (INOX)
- Fast progress and maximum efficiency due to considerable ease of grinding
- Long service life, meaning fewer tool changes

##### Applications

For surface grinding, welding seam machining, fillet weld machining, gouging, chamfering and deburring. For use on stainless steel (INOX).

##### Quality


**Abrasive grain, special corundum (AO).**  
FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.

##### Note:

Widths of 4.1 and 5.0 mm are ideal for root seams. Does not contain iron, sulphur or chlorine fillers.



44621

Ø x width mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44621	...
115 x 4.1	22.23	13,300	80	10 pcs.		101
115 x 7.0	22.23	13,300	80	10 pcs.		103
125 x 5.0	22.23	12,200	80	10 pcs.		105
125 x 7.0	22.23	12,200	80	10 pcs.		106

44632

### Rough grinding discs (stainless steel)

CER

#### LUKAS

PurpleGrain Single

##### Design

- PurpleGrain Single offers a high abrasion rate with application of force
- The integrated support plate made from eco-friendly recycled fibre ensures high stability and durability
- Its innovative design ensures even wear without overheating, brittleness or chips
- The deep offset zone permits flat work. Thanks to its special tool geometry, PurpleGrain Single is perfect even for hard-to-reach areas and offers greater versatility than a conventional tool

- Self-sharpening ceramic abrasive grain ensures sustained aggressive low-temperature grinding at a low contact force. The tools therefore offer aggressive grinding down to the last grain

##### Applications

For machining stainless steel, steel.

##### Quality

**Ceramic abrasive grain (CER).**  
FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.



Ceramic abrasive grain structure

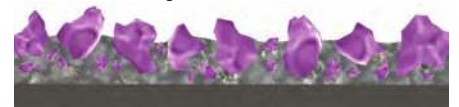



Illustration of self-sharpening effect of ceramic abrasive grain



44632

Ø mm	Grain	Hole Ø mm	Rotation speed max. rpm		44632	...
115	36	22.2	13,300	10 pcs.		101
125	36	22.2	12,200	10 pcs.		201

44603

## Rough grinding discs (stainless steel)

CER

**ATORN®****Design**

Innovative rough grinding discs with latest-generation ceramic abrasive grain with permanently ultra-sharp cutting edges.

**Advantage**

- Increased productivity, removing up to three times more material than commercially available discs
- Maximum aggressiveness combined with comfortable handling
- More cost effective thanks to extremely long service life
- Superior performance at low contact pressure
- Low-temperature grinding with no heat-induced blue discoloration minimises rework

- Free grind function reduces twisting at the beginning of the roughing process

**Applications**

Ideal for users from pipe and pipeline construction, shipyards, metal construction, foundries, commercial vehicle construction, steel construction, plant construction, crane construction, construction vehicle manufacturing. Preparation and removal of welding seams, weld spatter removal, descaling, rough deburring and abrasive grinding on stainless steel or steel.

**Quality**


**Ceramic abrasive grain (CER).**

**FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.**

**NEW**

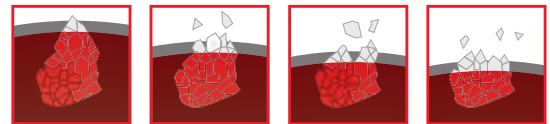
44603



Ø x width mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/s		44603	...
115 x 7	22.23	13,280	80	10 pcs.		201
125 x 7	22.23	12,200	80	10 pcs.		202
180 x 7	22.23	8,600	80	10 pcs.		203
230 x 7	22.23	6,600	80	10 pcs.		204

**Info****Ceramic abrasive grain: Permanently sharp edges for a sustained bite**

The new binding technology and microcrystalline structure of the ceramic abrasive grain guarantees a sustained and targeted release of new, ultra-sharp cutting edges. The ATORN rough grinding disc offers continued peak performance at all times – from start to finish. ATORN quality for maximum cutting speed, removal rate and service life.



44604

## Rough grinding discs (stainless steel)

CER

**3M****Cubitron™ II****Design**

- Up to three times the removal rate of conventional rough grinding discs
- Immediate engagement in solid material
- Up to 70% reduction in force required with the same removal rates
- Fast, low temperature grinding and optimised grinding processes

**Applications**

Ideal for structural steelwork applications (side grinding with frequent edge stress), chamfering, grinding of fillet welds, dressing, gouging, coarse grinding tasks and welding seam removal.


**Quality**

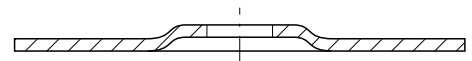
**Ceramic abrasive grain (CER).**

**FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.**



44604

Ø x width mm	Hole Ø mm	Working speed max. m/s		44604	...
115 x 7	22.2	80	10 pcs.		101
125 x 7	22.2	80	10 pcs.		102
178 x 7	22.2	80	10 pcs.		103
230 x 7	22.2	80	10 pcs.		104





# Rough grinding discs

44631

## Rough grinding discs (stainless steel)



44631 104-105

### CC-GRIND-SOLID INOX VICTOGRAIN

#### Design

CC-GRIND-SOLID from PFERD is a modern, powerful and ergonomic alternative to conventional rough grinding discs. The abrasive grain cutting edges of the uniformly shaped and sized triangles of the **VICTOGRAIN** abrasive grain hit the workpiece at an optimal angle, meaning that the individual abrasive grains therefore require very little energy to penetrate the workpiece.

#### Advantage

- Ultimate, constant maximum performance at low temperatures and an extremely long service life
- Extremely fast work progress
- Requires less heat to be applied to the workpiece
- Less vibration, extremely quiet operation

#### Machining tasks

- Deburring
- Surface grinding
- Surface machining
- Chamfering
- Edge machining
- Welding seam machining

#### Machinable materials

Stainless steel.

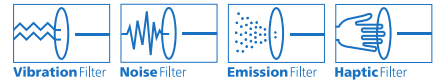
#### Quality

**Ceramic abrasive grain (CER).**

**FE/S/Cl <= 0.1% free from iron, chlorine and sulphur.**



#### PFERDERGONOMICS®:



#### PFERDEFICIENCY®:



44631

Ø mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec	Compatible clamping flange set		44631	...
115	22.23	13,300	80	44610 201	10 pcs.		104
125	22.23	12,200	80	44610 201	10 pcs.		105

### 44610 201-202

#### Clamping flange sets

#### Applications

The CC-GRIND clamping flange set is used to optimally position the CC-GRIND-SOLID and CC-GRIND-FILEX in the angle grinder protective cover, enabling extremely flat, efficient use of the sanding discs.

The black support plate is placed on the original mounting flange of the angle grinder. The silver flange nut replaces the original flange nut.



44610 201-202

Thread	Suitable for machine types	44610	...
M14	Angle grinder 115/125, mount M14		201
M14	Angle grinder 150/180, mount M14		202

44611

## Rough grinding discs (alu)

AO

**RHODIUS**Medium-hard disc  
Type RS 24**Design**

Offset, glass fibre-reinforced, open structure. Grinds easily, with an exceptional removal rate and long service life. Special filler materials to prevent clogging of the disc.

**Applications**


For all lubricating non-ferrous metals such as aluminium, copper, zinc, lead and tin and alloys such as bronze, brass and gunmetal. For grinding sprues, casting skin, weld seams, burrs and edges.

**Quality**

**Abrasive grain synthetic corundum (AO).**



44611

Ø x width mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44611	...
115 x 7	22.2	13,285	80	25 pcs.		101
125 x 7	22.2	12,200	80	25 pcs.		102
180 x 7	22.2	8,600	80	10 pcs.		104



44612

## Rough grinding discs High Speed ALUMASTER set

**PFERD**

44612 100

High Speed ALUMASTER rough grinding disc

**Design**

- Extremely high cutting performance
- Protects health as no hazardous or explosive dusts are generated
- Maximum safety thanks to innovative cutting edge geometry and integrated depth limiter
- Extremely lightweight and robust tool due to innovative GFRP disc
- Can be used on all standard angle grinders (Ø 115/125 mm)
- Can be used anywhere as does not require suction
- Extremely durable due to innovative disc geometry and specially developed rotating and replaceable carbide indexable inserts
- No clogging of the tool even on lubricating materials
- Economic and environmentally friendly alternative to roughing and serrated lock washers

**Applications**

Ideal for aluminium machining.

**The set includes:**

- High Speed ALUMASTER rough grinding disc
- Indexable insert set
- Screw set for indexable inserts
- TX wrenches

**44612 201****Indexable insert set****44612 200****Screw set for indexable inserts**

44612 100

Designation	Ø mm	Rotation speed max. rpm	44612	...
HSD-F 115/125 ALUMASTER	115/125	13,300/12,300		100

Designation	Ø mm	Set contents	Compatible with	44612	...
WSP-A-12R ALUMASTER	12	10	HSD-F 115/125 ALUMASTER		201

Designation	Set contents	Compatible with Indexable inserts	44612	...
WSP-S-M4S	5	HSD-F 115/125 ALUMASTER		200



44660 - 44661 Cup wheels (metal/stone)

AO SIC

**RHODIUS**

**Design**

Conical, medium hard.

**Applications**

For pre-sanding to final sanding.  
On commercially available angle grinders.

**Note:**

Use special protective cover!

44660

**Applications**

For sanding surfaces, constructions and welding seams. For levelling of joined parts by face

mounting. For structural steels, unalloyed and alloyed steels, spring steels and heat-treated steels.

**Quality**

Abrasive grain synthetic corundum (AO).

44661

**Applications**

For sanding natural and artificial stone, edge chamfering, fettling of grey cast iron parts, sanding formwork panels. For concrete, flame-proof stone, tiles, glazed tiles, clinker, moulding sand.

**Quality**

Abrasive grain silicon carbide (SIC).



Grain	Maximum Ø x height mm	Hardness	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec	Metal		Stone	
						44660	...	44661	...
24 (coarse)	110/90 x 55	Q	22.2	8680	50			201	201
36 (medium)	110/90 x 55	Q	22.2	8680	50			202	
60 (fine)	110/90 x 55	Q	22.2	8680	50			203	

Sanding/cutting tools

44705 Combination grinding discs

AO

**RHODIUS**

Type XT 35 Cross

**Design**

Extra-thin combination disc (1.9 mm), offset. Enables pleasantly straightforward and rapid cutting and rough grinding with a good service life. Three full fabric layers guarantee very high stability and maximum occupational safety. Free from iron and sulphur. HydroProtect formula offers effective

protection against age-related loss of performance. For longer-lasting retention and cutting performance.

**Applications**

Extra-fine cutting, deburring, chamfering and sanding with a disc. For stainless and acid-resistant steels, Hardox, hardened, high alloy and high strength steels, zinc-plated parts, steels, tool steels.

**Quality**

Abrasive grain synthetic corundum (AO).

Ø x Thickness mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec	Units	44705	...
115 x 1.9	22.23	13,285	80	25 pcs.		101
125 x 1.9	22.23	12,200	80	25 pcs.		102



BRAINTOOLS<sup>®</sup> by Rhodius

44705

44710 Combination grinding discs

AO

**PFERD**



Universal line PSF DUO STEELOX

**Design**

- To EN 12413

- With high cutting performance and a long service life
- Robust, dimensionally and laterally stable disc design
- Reduces labour costs by reducing setup times
- Aggressive abrasive and high-grade abrasive grain bond

**Applications**

For cutting, deburring, surface grinding, fillet weld machining, gouging and welding seam machining. Suitable for use on steel and stainless steel (INOX). Suitable for angle grinders in all performance classes.

**Quality**

Abrasive grain corundum (AO).

**Note:**

Does not contain iron, sulphur or chlorine fillers.

Ø x Thickness mm	Type	Hole Ø mm	Rotation speed max. rpm	Units	44710	...
115 x 1.9	offset	22.23	13,300	10 pcs.		100
115 x 2.8	offset	22.23	13,300	10 pcs.		101
125 x 1.9	offset	22.23	12,200	10 pcs.		103
125 x 2.8	offset	22.23	12,200	10 pcs.		102



44710

**Info**

Combination grinding discs DUODISC<sup>®</sup>



Combination grinding discs are the solution for safe cutting and grinding with a single tool. They meet all the requirements of EN 12413 for cutting and rough grinding discs.

**Advantage**

- Safe, standard-compliant solution for cutting and lateral grinding with a single tool
- Save time thanks to fewer disc changes
- For universal use on steel and stainless steel (INOX)
- Widths 1.4 and 1.9 mm, also ideal for cordless angle grinders
- Solves issues relating to scale grinding



44800 - 44801

Small free-hand cutting discs

AO

PFERD



44800

Medium-hard disc  
Design

To EN 12413. Straight, fibre-reinforced synthetic resin bond. Does not contain iron, sulphur or chlorine fillers.

Applications

Universal implementation for cutting steel, stainless steel, cast iron and non-ferrous metals. Ideal for highly heat-resistant materials, e.g. for engine repair in turbine construction. Also in bodywork construction for cutting sheet metal in hard-to-reach areas.

Quality

Abrasive grain synthetic corundum (AO).  
FE/S/Cl <= 0.1% free from iron, chlorine and sulphur.

Note:

With the clamping bolt mounted on straight grinders, can be used up to the maximum permissible rotation speed of the clamping bolt.

For (pneumatic) straight grinders, see art. no. 91500–91503, 92425, 92430.

44801

Clamping bolts  
Design

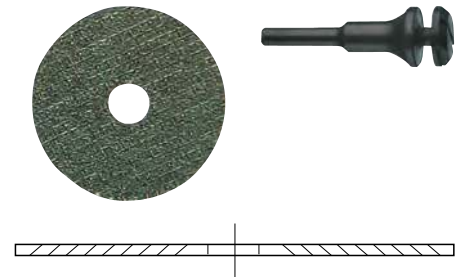
Shank Ø 6 or 10 mm.

Note:

When using the clamping bolt, comply with the maximum permissible rotation speed specified on the package insert.

44800

44801



Sanding/cutting tools

Ø x width mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec	Cutting disc		Clamping bolt	
				44800	...	44801	...
30 x 1.1	6	51,000	80			101	101
40 x 1.1	6	38,200	80			103	101
50 x 2.1	6	30,600	80			107	101
65 x 2.1	10	23,500	80			112	103
70 x 2.1	10	21,800	80			116	103
76 x 2.1	10	20,100	80			121	103

44804

Free-hand cutting discs (metal)

AO

ATORN®

Hard disc

Design

Straight, thin design. Very hard cutting disc for extremely short cutting times. Smooth sides for chatter-free and virtually burr-free cutting.

Applications

For cutting thin-walled pipes, thin sheet steel and profiles.

Quality

Abrasive grain synthetic corundum (AO).

44804

Ø x Thickness mm	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44804	...
115 x 1.0	22.2	13,285	80	50 pcs.		101
115 x 1.5	22.2	13,285	80	50 pcs.		102
125 x 1.0	22.2	12,200	80	50 pcs.		103
125 x 1.5	22.2	12,200	80	50 pcs.		104
180 x 1.5	22.2	8,600	80	25 pcs.		106
230 x 1.9	22.2	8,600	80	25 pcs.		107



44805

Cutting discs (metal/cast iron)

AO

ATORN®

Medium-hard disc

Applications

For cutting high-strength structural and construction steels. For machining all types of construction steels, alloyed and high-alloy steels, stainless steels and cast iron as well as for cutting larger cross-sections of solid material.

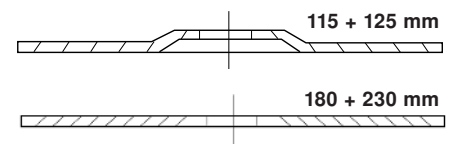
Quality

Abrasive grain synthetic corundum (AO).

NEW

44805

Ø x Thickness mm	Type	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44805	...
115 x 3	offset	22.2	13,285	80	25 pcs.		201
125 x 3	offset	22.2	12,200	80	25 pcs.		202
180 x 3	straight	22.2	8,600	80	25 pcs.		203
230 x 3	straight	22.2	6,600	80	25 pcs.		204



**RHODIUS**

**Design**

Glass-fibre reinforced, open structure, hole Ø 22.2 mm, max. working speed 80 m/sec.

**Quality**

Abrasive grain synthetic corundum (AO).

**44809**

**Extra-thin high-performance cutting disc**

**Type XT20**

**Design**

Very hard, ultra-fast cutting, extremely thin, millimetre precision, chatter free, burr free, quiet, cool, with an extremely long service life.

**Applications**

For cutting solid steel materials, pipes, profiles, plates, spring steels and tool steels.

**44810**

**High-performance cutting disc**

**Type XT/FT/FTK 67**

**Design**

With an extremely long service life, cuts at particularly low temperatures. HydroProtect formula offers effective protection against age-related loss of performance. For longer-lasting retention and cutting performance.

**Applications**

For cutting sheet metal, pipes, profiles and solid steel material. Easily cuts all ferrous materials.

**44814**

**Medium-hard disc**

**Type KSM/KSMK**

**Design**

Good performance and cutting properties.

**Applications**

For universal use in metalworking.

**44815**

**Special medium-hard**

**Type FT/FTK 33**

**Design**

Cool and fast cutting with a long service life.

**Applications**

For cutting high-strength structural and construction steels.

**44816**

**Medium-hard cutting disc**

**Type XT/FT/FTK 24**

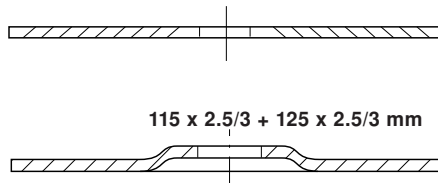
**Design**

Even cuts heavy-duty materials easily, long service life. HydroProtect formula offers effective protection against age-related loss of performance.

For longer-lasting retention and cutting performance.

**Applications**

Ideally suited for cutting aluminium, aluminium alloys, copper, brass, bronze and other lubricating non-ferrous metals.



TOPLINE ●●●



TOPLINE ●●●



ALPHA LINE ●●○



PRO LINE ●●○



TOPLINE ●●●

Ø x thickness mm	Type	Rotation speed max. rpm.	Image	XT20		XT/FT/FTK 67		KSM/KSMK		FT/FTK 33		XT/FT/FTK 24	
				44809	...	44810	...	44814	...	44815	...	44816	...
115 x 1.0	straight	13,285	-			101		201					
115 x 1.5	straight	13,285	-			102		203					103
115 x 2.5	offset	13,285	-										108
115 x 3.0	offset	13,285	25 pcs.						108			208	
115 x 3.0	offset	13,285	-					208					
125 x 1.0	straight	12,200	-			103		209					
125 x 1.5	straight	12,200	-			104		211					111
125 x 2.5	offset	12,200	25 pcs.										116
125 x 3.0	offset	12,200	25 pcs.					216	116			216	
150 x 1.5	straight	10,185	25 pcs.			108							
150 x 3.0	straight	10,185	-						223				
180 x 1.5	straight	8,600	25 pcs.			105		229					
180 x 1.5	straight	8,600	-										128
180 x 3.0	straight	8,600	25 pcs.					231	131			231	
180 x 3.0	straight	8,600	-										131
230 x 1.9	straight	6,600	25 pcs.			106		237					137
230 x 3.0	straight	6,600	25 pcs.					239	139				139
230 x 3.0	straight	6,600	-									239	

44806

## Free-hand cutting discs (metal)

AO



## Universal line PSF STEEL

## Design

- **Thickness: 1.9/1.6/1.0 mm:** for fast, comfortable and burr-free cutting.
- **Thickness: 2.4 mm:** for universal cutting tasks.
- **Thickness: 3.2 mm:** for an extremely long service life and high degree of lateral stability. Suitable for angle grinders in all performance classes.

## Advantage

- Fast progress owing to high cutting efficiency
- Very cost effective thanks to long service life

## Applications

For cutting sheet metal, profiles and solid material, creating openings.

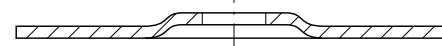
## Quality

Abrasive grain synthetic corundum (AO).

44806



115 x 2.4 + 125 x 2.4 mm



Ø x thickness mm	Type	Grain size	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44806	...
115 x 1.0	straight	60	22.23	13,300	80	25 pcs.		105
115 x 1.6	straight	46	22.23	13,300	80	25 pcs.		106
115 x 2.4	offset	46/30	22.23	13,300	80	25 pcs.		107
125 x 1.0	straight	60	22.23	12,200	80	25 pcs.		109
125 x 1.6	straight	46	22.23	12,200	80	25 pcs.		110
125 x 2.4	offset	46/30	22.23	12,200	80	25 pcs.		111
178 x 1.6	straight	46	22.23	8,600	80	25 pcs.		112
178 x 3.2	straight	24	22.23	8,600	80	25 pcs.		113
230 x 1.9	straight	46	22.23	6,600	80	25 pcs.		114
230 x 3.0	straight	24	22.23	6,600	80	25 pcs.		115

44807

## Free-hand cutting discs (metal)

AO



## Performance line SG STEEL

## Design

- **Thickness: 1.9/1.6/1.0 mm:** for fast, comfortable and burr-free cutting.
- **Thickness: 2.4 mm:** for universal cutting tasks.
- **Thickness: 3.2 mm:** for an extremely long service life and high degree of lateral stability. Suitable for angle grinders in all performance classes.

## Advantage

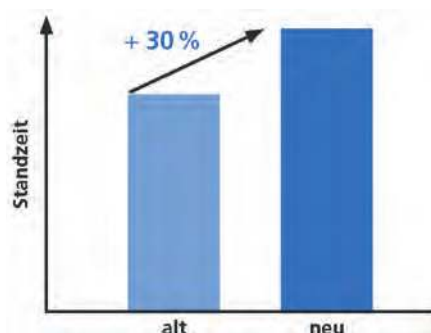
- Fast progress owing to high cutting efficiency
- Highly cost-effective thanks to extremely long service life

## Applications

For cutting sheet metal, profiles and solid material, creating openings.

## Quality

Abrasive grain high-performance corundum (AO).



\* Thickness 1.0 has been optimised for a longer service life and improved handling (art. no. 44807 104 and 109). The SSG cutting discs offer an up to 30% longer service life than cutting discs for steel and stainless steel (INOX)! SSG therefore represents the best solution for users who only machine steel.

44807



115 x 2.4 + 125 x 2.4 mm



Ø x thickness mm	Type	Grain size	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44807	...
* 115 x 1.0	straight	60	22.23	13,300	80	25 pcs.		104
115 x 1.6	straight	46	22.23	13,300	80	25 pcs.		105
115 x 2.4	straight	30	22.23	13,300	80	25 pcs.		106
115 x 2.4	offset	46/30	22.23	13,300	80	25 pcs.		107
* 125 x 1.0	straight	60	22.23	12,200	80	25 pcs.		109
125 x 1.6	straight	46	22.23	12,200	80	25 pcs.		110
125 x 2.4	straight	30	22.23	12,200	80	25 pcs.		111
125 x 2.4	offset	46/30	22.23	12,200	80	25 pcs.		112
178 x 1.6	straight	46	22.23	8,600	80	25 pcs.		115
178 x 3.2	straight	24	22.23	8,600	80	25 pcs.		116
230 x 1.9	straight	46	22.23	6,600	80	25 pcs.		119
230 x 2.9	straight	24	22.23	6,600	80	25 pcs.		120

## Cutting discs

44824

### Free-hand extra thin cutting discs (stainless steel)

AO

**ATORN®**

#### Design

- The latest generation of extra thin high-performance cutting discs
- Longer service life and improved cutting performance
- Clean, almost burr-free cuts requiring minimum application of force
- Minimises post-machining work, such as cleaning and deburring
- Reduces heat-induced blue discolouration
- No tendency to kick back or risk of jamming
- 30% less dust production
- Noise reducing and vibration damping
- Improved performance and significantly lower tool wear
- Short cutting times thanks to exceptional cutting performance and rough lateral surfaces

#### Applications

Super thin cutting discs are particularly suitable for thin-walled sheet steel, profiles and pipes, but can also cut through small cross-sections, bars and iron reinforcements quickly and easily.

#### Quality

**Abrasive grain synthetic corundum (AO).**  
**FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.**

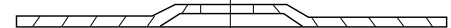
44824



44824 101+102



44824 201+202



Ø x Thickness mm	Type	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44824	...
115 x 0.75	straight	22.23	13,300	80	25 pcs.		101
115 x 0.75	offset	22.23	13,300	80	25 pcs.		201
125 x 0.75	straight	22.23	12,250	80	25 pcs.		102
125 x 0.75	offset	22.23	12,250	80	25 pcs.		202

44802

### Free-hand cutting discs (metal and stainless steel)

AO

**HHW**

#### Design

High-performance cutting disc for steel and stainless steel with high cutting performance and minimal expenditure of force. The disc offers an exceptionally clean cut and high cutting speed. This disc is ideal for use with cordless angle grinders.

#### Advantage

- Longer service life
- High cutting speed
- Fast, low-temperature cutting
- Minimal expenditure of force
- Burr-free edges

#### Applications

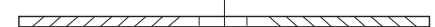
Cutting disc for cutting thin-walled profiles, tubes and plates made of non-ferrous metals, steel, stainless steel and composite materials (GFRP).

#### Quality

**Abrasive grain high-performance corundum (AO).**  
**FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.**

**NEW**

44802



Ø x Thickness mm	Type	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44802	...
115 x 1.0	straight	22.23	13,300	80	50 pcs.		201
125 x 1.0	straight	22.23	12,250	80	50 pcs.		202
180 x 1.6	straight	22.23	8,500	80	25 pcs.		203
230 x 1.9	straight	22.23	6,650	80	25 pcs.		204

44802 200

#### Design

Practical storage box with 10 cutting discs (125 x 1 mm) and carrier core for safe transport.

**NEW**

44802 200



Ø x thickness mm	Type	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		Pack= pcs.	44802	...
125 x 1.0	straight	22.23	12,250	80	1 pcs.	10		200

44825

## Free-hand cutting discs (stainless steel)

AO

**ATORN®**

## Very hard disc

## Design

- Highly durable cutting disc with good cutting properties
- Minimal burr formation, sparking and odour
- High cutting speed and a long service life

## Applications

Iron and sulphur-free cutting disc for cutting alloyed, high-alloy and non-rusting stainless steels, sheet metal, pipes, flat bars, profiles and solid material.

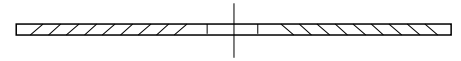
## Quality

**Abrasive grain synthetic corundum (AO).**

**FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.**



44825



Ø x Thickness mm	Type	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44825	...
115 x 1.0	straight	22.2	13,300	80	50 pcs.		101
115 x 1.5	straight	22.2	13,300	80	50 pcs.		102
125 x 1.0	straight	22.2	12,250	80	50 pcs.		103
125 x 1.5	straight	22.2	12,250	80	50 pcs.		104
180 x 1.5	straight	22.2	8,500	80	25 pcs.		106
230 x 1.9	straight	22.2	6,650	80	25 pcs.		107

## 44825 303

## Design

10x cutting discs in sheet steel box with viewing window for safe storage of the cutting discs.



44825 303

Ø x thickness mm	Type	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		Pack= pcs.	44825	...
125 x 1.0	straight	22.2	12,250	80	1 pcs.	10		303

44826

## Free-hand cutting discs X-Lock (metal and stainless steel)

AO

**ATORN®**

## Design

High-performance cutting disc with the innovative Bosch X-LOCK clamping system. For extremely rapid cutting of steel and stainless steel with millimetre precision and minimal force. The disc offers an exceptionally clean cut and high cutting speed. This disc is ideal for use with cordless angle grinders.

## Advantage

- Innovative quick-action clamping system X-Lock
- Extremely long service life
- High cutting speed
- Fast, low-temperature cutting
- Burr-free edges

## Applications

Cutting disc for cutting thin-walled profiles, tubes and plates made of non-ferrous metals, steel, stainless steel and composite materials (GFRP).

## Quality

**Abrasive grain high-performance corundum (AO).**

**FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.**

NEW



44826



Ø x Thickness mm	Type	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44826	...
125 x 1.0	straight	22.23	12,250	80	50 pcs.		101

## 44826 100

## Design

Practical storage box with 10 cutting discs (125 x 1 mm) and carrier core for safe transport.

NEW



44826 100

Ø x thickness mm	Type	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		Pack= pcs.	44826	...
125 x 1.0	straight	22.23	12,250	80	1 pcs.	10		100



## Cutting discs

44820

### Free-hand cutting discs (stainless steel)

AO

## RHODIUS

Type XT/FT/FTK 38

### Design


Highly durable cutting disc with good cutting properties. **Free from iron and sulphur.** HydroProtect formula offers effective protection against age-related loss of performance. For longer-lasting retention and cutting performance.

### Applications

For cutting alloyed, high-alloy and non-rusting stainless steels, sheet metal, pipes, profiles and solid material.

### Quality

**Abrasive grain synthetic corundum (AO).**  
**FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.**

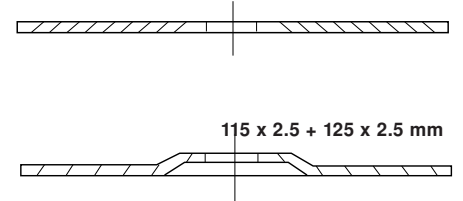
Ø x Thickness mm	Type	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44820	...
115 x 1.0	straight	22.2	13,300	80	50 pcs.		301
115 x 1.5	straight	22.2	13,300	80	50 pcs.		302
115 x 2.5	offset	22.2	13,300	80	25 pcs.		303
125 x 1.0	straight	22.2	12,250	80	50 pcs.		304
125 x 1.5	straight	22.2	12,250	80	50 pcs.		305
125 x 2.5	offset	22.2	12,250	80	25 pcs.		306
* 180 x 1.5	straight	22.2	8,500	80	25 pcs.		307
180 x 3.0	straight	22.2	8,500	80	25 pcs.		308
* 230 x 1.9	straight	22.2	6,650	80	25 pcs.		309
230 x 3.0	straight	22.2	6,650	80	25 pcs.		310

\* Up to 30% more cuts.



PROLINE ●●○

TOPLINE ●●●



44823

### Free-hand cutting discs (stainless steel)

AO

## RHODIUS

### Quality

**Abrasive grain synthetic corundum (AO).**  
**FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.**

44823 100 + 107

Type XTK8

### Design

Very hard, iron and sulphur-free, extremely fast cutting, millimetre thin, millimetre precision, chatter free, burr free, quiet, low temperature. HydroProtect formula offers effective protection against age-related loss of performance. For longer-lasting retention and cutting performance.

### Applications

0.8 mm precision cutting disc for thin sheet metal.

44823 101-106 + 109


Type XT10

### Design

Very hard, iron and sulphur-free. Extremely long service life meaning fewer disc changes and maximum cost effectiveness. Low-temperature, burr-free cutting. HydroProtect formula offers effective protection against age-related loss of performance. For longer-lasting retention and cutting performance.

### Applications

For cutting solid material, pipes, profiles and stainless steel sheet metal. Ideal for all stainless and acid-resistant steels, spring steels, tool steels.

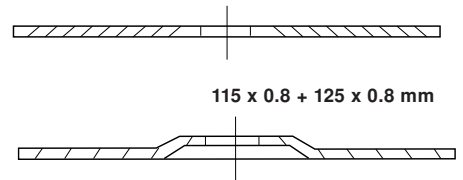
Ø x thickness mm	Type	Hole Ø mm	Rotation speed max. rpm		44823	...
115 x 0.8	offset	22.23	13,285	50 pcs.		100
115 x 1.0	straight	22.23	13,285	50 pcs.		101
115 x 1.5	straight	22.23	13,285	50 pcs.		102
125 x 0.8	offset	22.23	12,200	50 pcs.		107
125 x 1.0	straight	22.23	12,200	50 pcs.		103
125 x 1.5	straight	22.23	12,200	50 pcs.		104
* 150 x 1.5	straight	22.23	10,185	25 pcs.		109
* 180 x 1.5	straight	22.23	8,600	25 pcs.		105
* 230 x 1.9	straight	22.23	6,600	25 pcs.		106

\* Up to 30% more cuts.



TOPLINE ●●●

TOPLINE ●●●



44830

## Free-hand cutting discs (stainless steel)

AO



## Universal line PSF STEELOX

## Advantage

- Fast progress owing to high cutting efficiency
- Very cost effective thanks to long service life
- Thin cutting discs are ideal for cordless angle grinders

## Applications

For cutting sheet metal, profiles and solid material, creating openings. For universal use on steel and stainless steel (INOX).

## Quality

**Abrasive grain synthetic corundum (AO).**


**FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.**

## Note:

Does not contain iron, sulphur or chlorine fillers.

44830



Ø x thickness mm	Type	Grain size	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44830	...
115 x 1.0	straight	60	22.23	13,300	80	25 pcs.		105
115 x 1.6	straight	46	22.23	13,300	80	25 pcs.		106
115 x 2.4	straight	46	22.23	13,300	80	25 pcs.		107
125 x 1.0	straight	60	22.23	12,200	80	25 pcs.		109
125 x 1.6	straight	46	22.23	12,200	80	25 pcs.		110
125 x 2.4	straight	46	22.23	12,200	80	25 pcs.		111
178 x 1.6	straight	46	22.23	8,600	80	25 pcs.		112
178 x 2.5	straight	24	22.23	8,600	80	25 pcs.		113
230 x 1.9	straight	46	22.23	6,600	80	25 pcs.		114
230 x 2.5	straight	24	22.23	6,600	80	25 pcs.		115

44832

## Free-hand cutting discs (stainless steel)

AO



## Power line SG STEELOX

## Advantage

- Fast progress owing to high cutting efficiency
- Highly cost-effective thanks to extremely long service life

## Applications

For cutting sheet metal, profiles and solid material, creating openings. For universal use on steel and stainless steel (INOX).

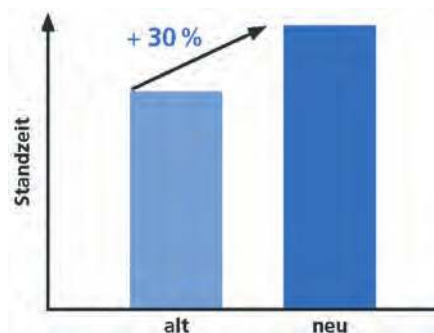
## Quality

**Abrasive grain high-performance corundum (AO).**

**FE/S/Cl ≤ 0.1% free from iron, chlorine and sulphur.**

## Note:


Does not contain iron, sulphur or chlorine fillers.



\* Following systematic further development, the 1.0 mm disc R SG-INOX (art. no. 44832 102 and 106) sets new standards in performance. This intensive development has improved performance by up to 30%.

44832



Ø x thickness mm	Type	Grain size	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44832	...
* 115 x 1.0	straight	60	22.23	13,300	80	25 pcs.		102
115 x 1.6	straight	46	22.23	13,300	80	25 pcs.		103
115 x 2.4	straight	46	22.23	13,300	80	25 pcs.		104
* 125 x 1.0	straight	60	22.23	12,200	80	25 pcs.		106
125 x 1.6	straight	46	22.23	12,200	80	25 pcs.		107
125 x 2.4	straight	46	22.23	12,200	80	25 pcs.		108
178 x 1.6	straight	46	22.23	8,600	80	25 pcs.		109
178 x 2.5	straight	24	22.23	8,600	80	25 pcs.		110
230 x 1.9	straight	46	22.23	6,600	80	25 pcs.		111
230 x 2.5	straight	24	22.23	6,600	80	25 pcs.		112

## Cutting discs

44833

### Free-hand cutting discs (stainless steel)

AO



#### Special line SGP STEELOX

##### Advantage

- Exceptional service life on thin sheet metal and profiles due to wear-resistant binding system
- Fast progress owing to high cutting efficiency

##### Applications

For cutting sheet metal, profiles and solid material, creating openings.  
For universal use on steel and stainless steel (INOX).

##### Quality

Abrasive grain high-performance corundum (AO).


FE/S/Cl <= 0.1% free from iron, chlorine and sulphur.

##### Note:

Does not contain iron, sulphur or chlorine fillers.

44833



Ø x thickness mm	Type	Grain size	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		44833	...
115 x 1.0	straight	60	22.23	13,300	80	25 pcs.		102
115 x 1.6	straight	46	22.23	13,300	80	25 pcs.		103
125 x 0.8	straight	60	22.23	12,200	80	25 pcs.		155
125 x 1.0	straight	60	22.23	12,200	80	25 pcs.		106
125 x 1.6	straight	46	22.23	12,200	80	25 pcs.		107
178 x 1.6	straight	46	22.23	8,600	80	25 pcs.		110
230 x 1.9	straight	46	22.23	6,600	80	25 pcs.		115

44811

### Free-hand cutting discs (stainless steel)

CER



#### Cubitron™ II

##### Design

- Faster cutting and a longer service life
- Minimal discolouration
- Ultra thin cut with minimal burr formation
- Fast, low temperature grinding and optimised grinding processes

##### Applications

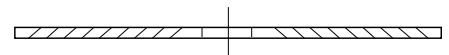
Fast, convenient cutting of profiles, bars and pipes as well as stainless steel, structural steel and non-ferrous base metal sheet metal.


##### Quality

Ceramic abrasive grain (CER).

FE/S/Cl <= 0.1% free from iron, chlorine and sulphur.

44811



Ø x thickness mm	Type	Hole Ø mm	Working speed max. m/s		44811	...
76 x 1.0	straight	6.35	80	25 pcs.		101
76 x 1.0	straight	9.53	80	25 pcs.		102
115 x 1.0	straight	22.20	80	25 pcs.		103
115 x 1.6	straight	22.20	80	25 pcs.		104
115 x 2.5	straight	22.20	80	25 pcs.		105
125 x 1.0	straight	22.20	80	25 pcs.		106
125 x 1.6	straight	22.20	80	25 pcs.		107
125 x 2.0	straight	22.20	80	25 pcs.		108
125 x 2.5	straight	22.20	80	25 pcs.		109
180 x 1.6	straight	22.20	80	25 pcs.		110
180 x 2.0	straight	22.20	80	25 pcs.		111
180 x 2.5	straight	22.20	80	25 pcs.		112
230 x 2.5	straight	22.20	80	25 pcs.		113

44834

### Free-hand cutting discs (aluminium)

AO



##### Design

Cutting disc for aluminium and other non-ferrous metals with high cutting performance and maximum service life.

##### Advantage

- Special abrasive mixture and binding technology prevent the cutting disc clogging, even on soft, tough aluminium
- Fast progress owing to high cutting efficiency
- Highly cost-effective thanks to extremely long service life
- Contains no fillers to leave unwanted residue on the workpiece.
- **The surface can therefore be welded directly**

##### Applications

Creating openings. Cutting solid material, sheet metal and profiles.

##### Machinable materials:

- Aluminium
- Other non-ferrous metals

##### Quality


Abrasive grain synthetic corundum (AO).

**NEW**

44834 101

44834 201



Ø x Thickness mm	Type	Hole Ø mm	Rotation speed max. rpm		44834	...
115 x 1.0	straight	22.23	13,300	25 pcs.		101
125 x 1.0	straight	22.23	12,200	25 pcs.		201

**RHODIUS****Design**

Glass-fibre reinforced, open structure.

**Quality****Abrasive grain synthetic corundum (AO).****44818****Special hard type FT/FTK 44****Design**

Long service life and a broad range of applications.

**Applications**

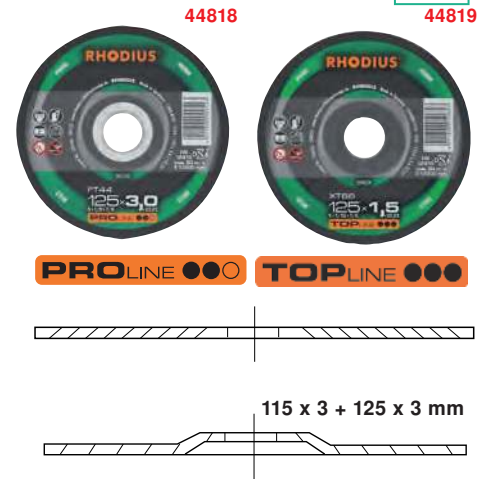
For cutting concrete, natural and artificial stone as well as roof tiles, granite, ceramics and clinker etc.


**44819****Special hard type XT 66****Design**

Very hard cutting disc. Good cutting performance with a long service life. Smooth, precise cutting edges. Up to 50% less dust.

**Applications**

For glazed tiles, tiles, marble, window sills, stairs, slate roof etc.

**Special application: titanium.**

Ø x thickness mm	Type	Hole Ø mm	Rotation speed max. rpm	Working speed max. m/sec		FT/FTK 44		XT 66	
						44818	...	44819	...
115 x 1.5	straight	22.2	13,285	80	50 pcs.				201
115 x 3.0	offset	22.2	13,285	80	25 pcs.		101		
125 x 1.5	straight	22.2	12,200	80	50 pcs.				202
125 x 3.0	offset	22.2	12,200	80	25 pcs.		102		
180 x 1.9	straight	22.2	8,600	80	25 pcs.				204
180 x 3.0	straight	22.2	8,600	80	25 pcs.		104		
230 x 1.9	straight	22.2	6,600	80	25 pcs.				205

## 44821 - 44822

## Diamond cutting discs

**HHW****Applications**

For dry cutting with angle grinders. Especially for concrete, hard artificial stone, roof tiles, clinker High-fired, stoneware pipes, exposed aggregate concrete etc.

**44821****Design**

Slotted edge with diamond segments. High performance series.

**44822****Design**

Smooth closed edge.

**Applications**

For glazed tiles, glazed clinker, natural stone, tiles.

Ø mm	Segment height mm	Segment width mm	Hole mm	44821	...	44822	...
125	5	1.9	22.23				102
115	10	2.2	22.23		101		
125	10	2.2	22.23		102		
180	10	2.4	22.23		103		
230	10	2.4	22.23		104		



44822



## 44828

## Diamond cutting discs (Allcut)

**RHODIUS****Type DG210 Allcut****Design**

The diamonds are applied directly onto the carrier blade and constantly provide a good cutting capacity until they are completely worn. Its long service life means that it is very cost effective when used for cutting stone. Its performance on steel makes it the ideal all-rounder. Fast, reliable, low-temperature cutting of a wide range of materials. High cutting speed, high cutting performance, short cutting times, comfortable cutting behaviour.

**Applications**

For wet and dry cutting. Suitable for concrete products, reinforced concrete, natural stone, construction materials, steel, tiles, glazed tiles, wood, plastics, GFRP.

Ø mm	Segment height mm	Segment width mm	Hole mm	44828	...
115	3	2.5	22.23		101
125	3	2.5	22.23		102
150	3	2.5	22.23		103
180	3	2.8	22.23		104
230	3	2.8	22.23		105



