

Tungsten carbide burrs with MICRO cut

The stock removal experts for finishing work



TRUST BLUE

- High surface quality
 - Unlike with mounted grinding points, there is no change in geometry due to wear and tear
 - Work on almost all materials
-

Tungsten carbide burrs with MICRO cut for finishing work

Tungsten carbide burrs with the MICRO cut are specifically designed for finishing and are used in areas in which mounted grinding points are usually used. They offer a higher stock removal rate and produce a high surface quality, particularly compared with conventionally milled surfaces. They also operate with low vibration and little noise. They maintain their geometry over their entire tool life, and are well suited to manual and machine applications. Almost all materials up to a hardness of 68 HRC can be machined.



Advantages:

- High surface quality.
- Unlike with mounted grinding points, there is no change in geometry due to wear and tear.
- Work on almost all materials up to 68 HRC.

Applications:

- Finishing
- Very fine cleaning work
- Corrections in tool and mould construction
- Sharpening cutting tools

Materials that can be worked:

- Steel and cast steel
- Stainless steel (INOX)
- Non-ferrous metals
- Cast iron

Recommendations for use:

- If possible, use the tools on powerful drives with elastically mounted spindles to avoid vibration.
- For the cost-effective use of burrs, work with higher rotational/cutting speeds.
Power recommendation for tool drives:
 - Shank diameter of 3 mm: 75 to 300 watts
 - Shank diameter of 6 mm: from 300 watts
- Please observe the rotational speed recommendations.

Matching tool drives:

- Flexible shaft drive
- Straight grinder
- Robot applications
- Machine tools

Safety notes:



= Wear eye protection!



= Wear hearing protection!



Wearing protective gloves is recommended. Handle the tool drive with both hands.



Observe the recommended rotational speed, especially when using burrs with long shanks!

PFERDVALUE:

PFERDERGONOMICS recommends burrs with MICRO cut as an innovative tool solution for comfortable working with significantly reduced vibration and less noise.



PFERDEFFICIENCY recommends burrs with MICRO cut for long fatigue-free and resource-saving work with perfect results in a very short period of time.



PFERDVIDEO:

Learn more about the advantages of using tungsten carbide burrs with MICRO cut.



Tungsten carbide burrs with MICRO cut for finishing work

Recommended rotational speed range [RPM]

To determine the recommended cutting speed range [m/min], please proceed as follows:

- ❶ Select the material group to be machined.
- ❷ Establish the cutting speed range.

To determine the recommended rotational speed range [RPM], please proceed as follows:

- ❸ Select the required burr diameter.
- ❹ The cutting speed range and the burr diameter determine the recommended rotational speed range.

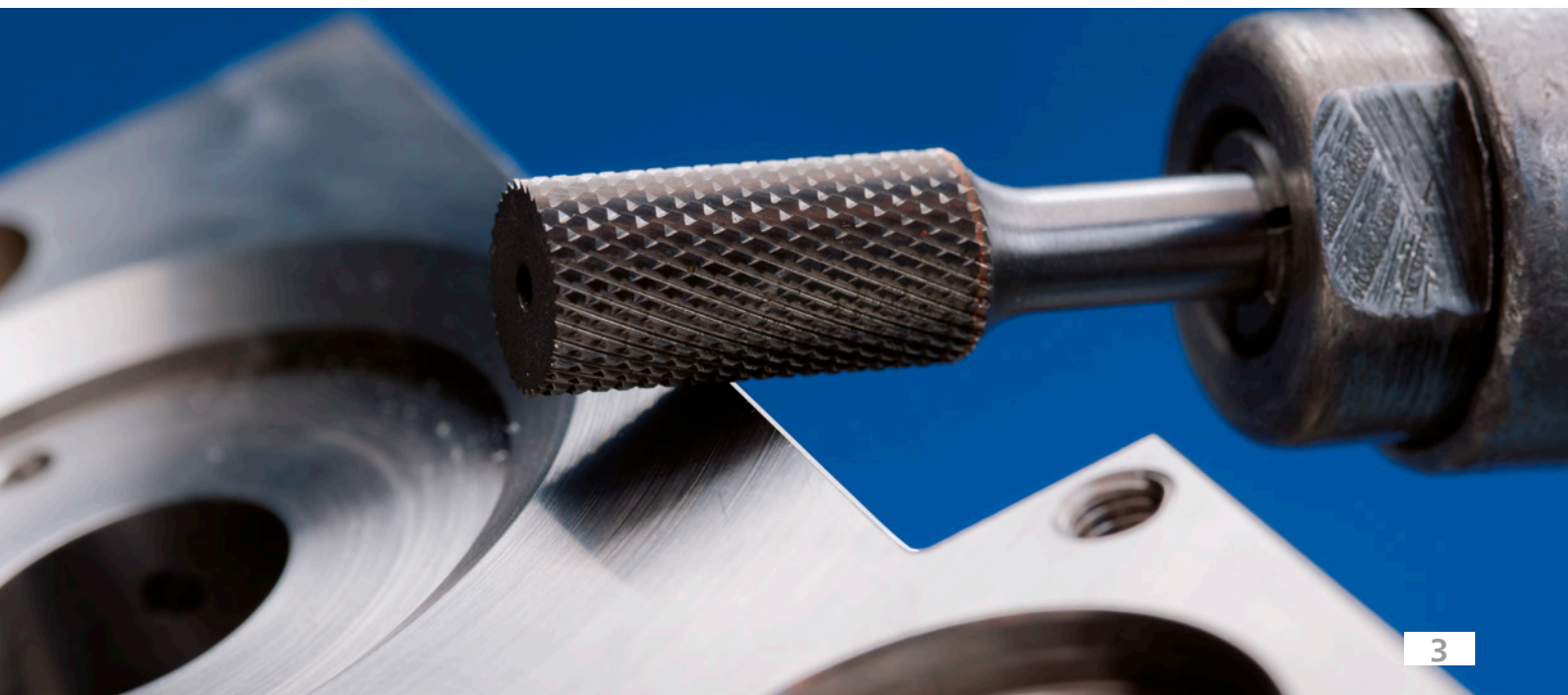
❶ Material group		Application	Cut	❷ Cutting speed	
Steel, cast steel	Steels up to 1,200 N/mm ² (< 38 HRC)	Construction steels, carbon steels, tool steels, non-alloyed steels, case-hardened steels, cast steel, alloyed steels	Fine stock removal	MICRO	600–750 m/min
	Hardened, heat-treated steels over 1,200 N/mm ² (> 38 HRC)	Tool steels, tempering steels, alloyed steels, cast steel			450–600 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Fine stock removal	MICRO	450–600 m/min
Non-ferrous metals	Hard non-ferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high Si content)	Fine stock removal	MICRO	450–600 m/min
	High-temperature-resistant materials	Nickel-based and cobalt-based alloys (engine and turbine construction)			
Cast iron	Grey cast iron, white cast iron	Cast iron with flake graphite EN-GJL (GG), with nodular graphite/nodular cast iron EN-GJS (GGG), white annealed cast iron EN-GJMW (GTW), black cast iron EN-GJMB (GTS)	Fine stock removal	MICRO	600–750 m/min

Example:

TC burr,
MICRO cut,
burr dia. of 10 mm.
Fine stock removal on steels
up to 1,200 N/mm².
Cutting speed: 600–750 m/min

**Rotational speed range:
19,000–24,000 RPM**

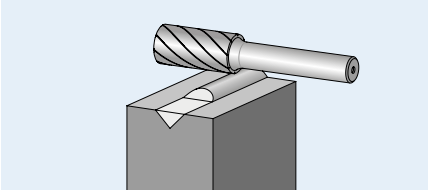
❸ Burr dia. [mm]	❹ Cutting speeds [m/min]		
	450	600	750
	Rotational speeds [RPM]		
2	72,000	95,000	120,000
3	48,000	64,000	80,000
4	36,000	48,000	60,000
6	24,000	32,000	40,000
8	18,000	24,000	30,000
10	14,000	19,000	24,000
12	12,000	16,000	20,000



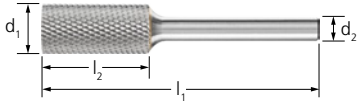
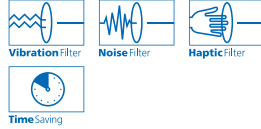
Tungsten carbide burrs with MICRO cut for finishing work



Cylindrical shape ZYA without end cut

Cylindrical burr according to DIN 8032.



PFERDVALUE:



d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	Cut		Description
				MICRO 		
				EAN 4007220		

Shank dia. 3 mm

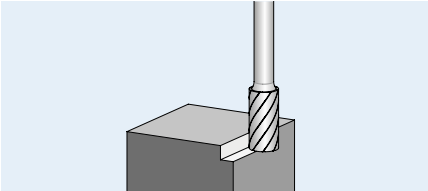
2	10	3	40	895511	1	ZYA 0210/3 MICRO
3	13	3	43	895535	1	ZYA 0313/3 MICRO
4	13	3	43	895542	1	ZYA 0413/3 MICRO
6	13	3	43	953068	1	ZYA 0613/3 MICRO

Shank dia. 6 mm

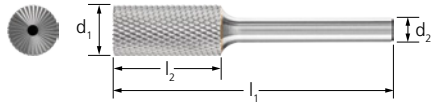
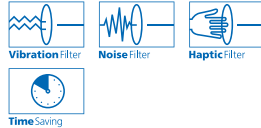
6	16	6	55	895559	1	ZYA 0616/6 MICRO
8	20	6	60	895573	1	ZYA 0820/6 MICRO
10	20	6	60	895603	1	ZYA 1020/6 MICRO
12	25	6	65	953051	1	ZYA 1225/6 MICRO



Cylindrical shape ZYAS with end cut

Cylindrical burr according to DIN 8032 with circumferential and end cut.



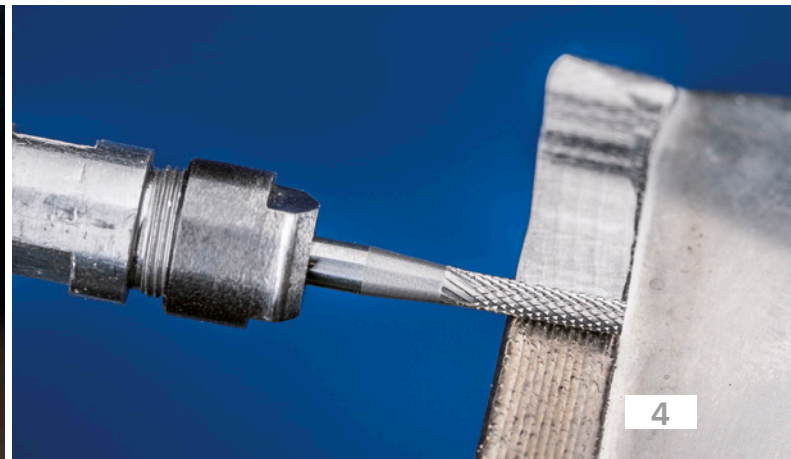
PFERDVALUE:



d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	Cut		Description
				MICRO 		
				EAN 4007220		

Shank dia. 6 mm

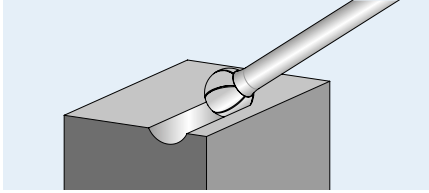
6	16	6	55	895566	1	ZYAS 0616/6 MICRO
8	20	6	60	895580	1	ZYAS 0820/6 MICRO
10	20	6	60	895610	1	ZYAS 1020/6 MICRO
12	25	6	65	953105	1	ZYAS 1225/6 MICRO



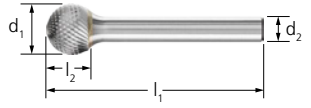
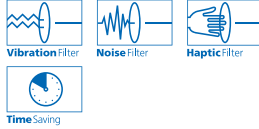
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Ball shape KUD

Ball-shaped burr according to DIN 8032.



PFERDVALUE:



d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	Cut		Description
				MICRO 		
				EAN 4007220		

Shank dia. 3 mm

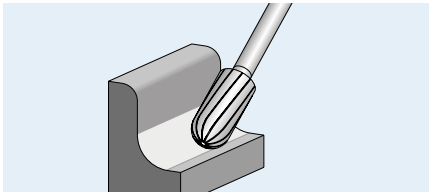
2	1.5	3	33	895399	1	KUD 021,5/3 MICRO
3	2	3	33	895405	1	KUD 0302/3 MICRO
4	3	3	34	895412	1	KUD 0403/3 MICRO
6	5	3	35	953129	1	KUD 0605/3 MICRO

Shank dia. 6 mm

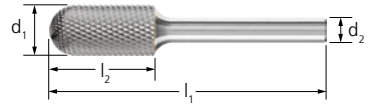
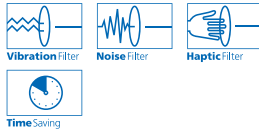
6	5	6	45	895436	1	KUD 0605/6 MICRO
8	7	6	47	895474	1	KUD 0807/6 MICRO
10	9	6	49	895481	1	KUD 1009/6 MICRO
12	10	6	51	953112	1	KUD 1210/6 MICRO



Cylindrical shape with radius end WRC

Cylindrical burr with radius end according to DIN 8032. Combination of cylindrical and ball-shaped geometries.



PFERDVALUE:



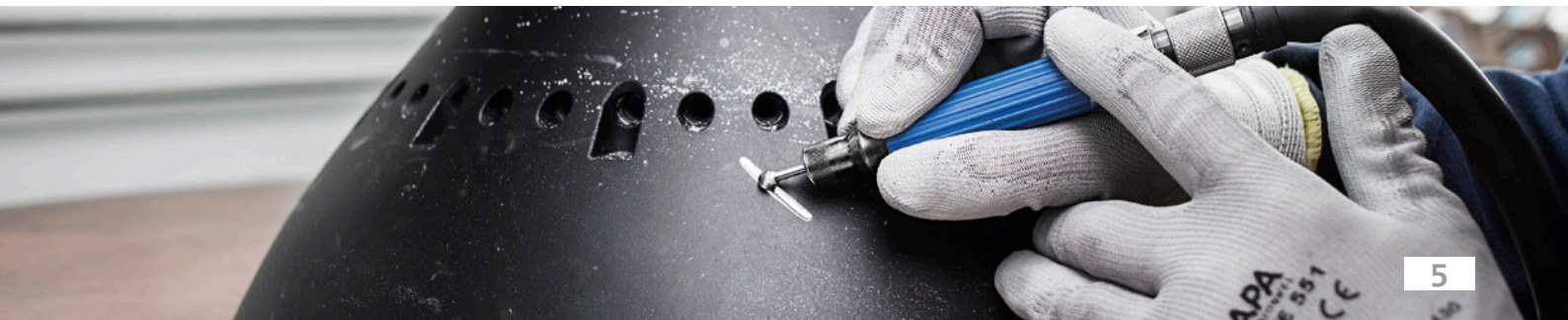
d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	Cut		Description
				MICRO 		
				EAN 4007220		

Shank dia. 3 mm

2	10	3	40	953167	1	WRC 0210/3 MICRO
3	13	3	43	869000	1	WRC 0313/3 MICRO
6	13	3	43	953150	1	WRC 0613/3 MICRO

Shank dia. 6 mm

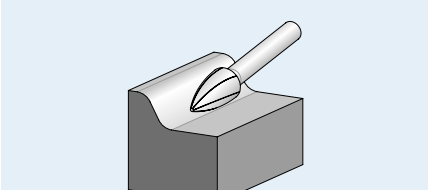
6	16	6	55	869017	1	WRC 0616/6 MICRO
8	20	6	60	869024	1	WRC 0820/6 MICRO
10	20	6	60	869031	1	WRC 1020/6 MICRO
12	25	6	65	953136	1	WRC 1225/6 MICRO



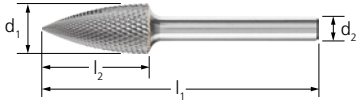
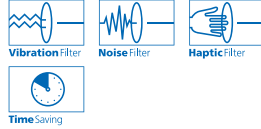
Tungsten carbide burrs with MICRO cut for finishing work



Pointed tree shape SPG

Pointed tree-shaped burr according to DIN 8032, flattened tip.



PFERDVALUE:



d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	Cut MICRO 		Description
				EAN 4007220		

Shank dia. 3 mm

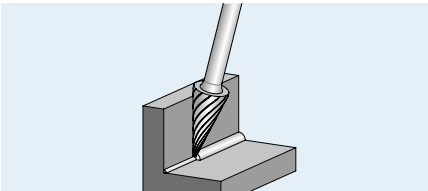
3	7	3	37	003886	1	SPG 0307/3 MICRO
	13	3	43	003893	1	SPG 0313/3 MICRO
6	13	3	43	003909	1	SPG 0613/3 MICRO

Shank dia. 6 mm

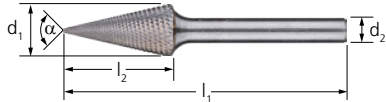
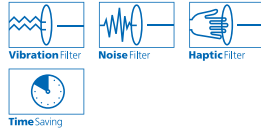
6	18	6	55	003916	1	SPG 0618/6 MICRO
8	20	6	60	003923	1	SPG 0820/6 MICRO
10	20	8	60	003930	1	SPG 1020/6 MICRO
12	25	6	65	003954	1	SPG 1225/6 MICRO



Conical pointed shape SKM

Conical pointed burr according to DIN 8032, flattened tip.



PFERDVALUE:



d_1 [mm]	l_2 [mm]	d_2 [mm]	l_1 [mm]	α	Cut MICRO 		Description
					EAN 4007220		

Shank dia. 3 mm

3	7	3	37	21°	067833	1	SKM 0307/3 MICRO
	11	3	41	14°	067864	1	SKM 0311/3 MICRO
6	13	3	43	25°	067871	1	SKM 0613/3 MICRO

Shank dia. 6 mm

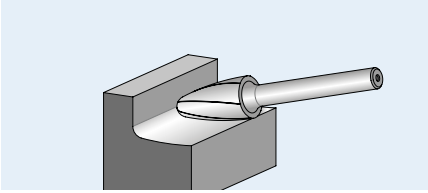
6	18	6	55	18°	067888	1	SKM 0618/6 MICRO
8	20	6	60	22°	067895	1	SKM 0820/6 MICRO
10	20	6	60	28°	067901	1	SKM 1020/6 MICRO
12	25	6	65	26°	067918	1	SKM 1225/6 MICRO



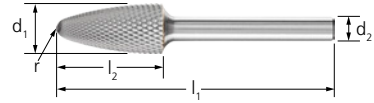
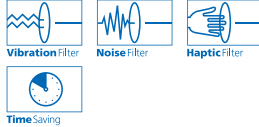
Tungsten carbide burrs with MICRO cut for finishing work



Tree shape with radius end RBF

Tree-shaped burr with radius end according to DIN 8032.



PFERDVALUE:



d ₁ [mm]	l ₂ [mm]	d ₂ [mm]	l ₁ [mm]	r [mm]	Cut		Description
					MICRO 		
					EAN 4007220		

Shank dia. 3 mm

3	7	3	37	0.75	835524	1	RBF 0307/3 MICRO
	13	3	43	0.75	955352	1	RBF 0313/3 MICRO
6	13	3	43	1.5	955338	1	RBF 0613/3 MICRO

Shank dia. 6 mm

6	18	6	55	1.5	835494	1	RBF 0618/6 MICRO
8	20	6	60	1.2	835500	1	RBF 0820/6 MICRO
10	20	6	60	2.5	835517	1	RBF 1020/6 MICRO
12	25	6	65	2.5	953143	1	RBF 1225/6 MICRO

Set 1502 MICRO

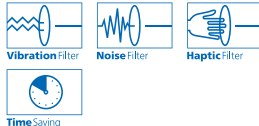
Set 1502 MICRO contains ten tungsten carbide burrs for finishing in the most common shapes and dimensions. The sturdy plastic box protects the tools from dirt and damage.


Contents:

10 tungsten carbide burrs,
shank diameter of 3 mm, MICRO cut
1 piece each:

- ZYA 0210/3 MICRO
- ZYA 0313/3 MICRO
- ZYA 0613/3 MICRO
- WRC 0210/3 MICRO
- WRC 0313/3 MICRO
- WRC 0613/3 MICRO
- KUD 0302/3 MICRO
- KUD 0605/3 MICRO
- RBF 0307/3 MICRO
- RBF 0613/3 MICRO

PFERDVALUE:



Cut		Description
MICRO 		
EAN 4007220		

Shank dia. 3 mm

896181	1	1502 MICRO
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Tungsten carbide burrs with MICRO cut for finishing work

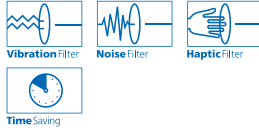
Set 1303 MICRO



Set 1303 MICRO contains three tungsten carbide burrs for finishing in the most common shapes and dimensions. The set is supplied in promotional plastic packaging. The sturdy plastic box protects the tools from dirt and damage.

Contents:

- 3 tungsten carbide burrs,
shank diameter of 3 mm, MICRO cut
1 piece each:
- ZYA 0313/3 MICRO
- WRC 0313/3 MICRO
- RBF 0313/3 MICRO

PFERDVALUE:



Cut		Description
MICRO		
		
EAN 4007220		
Shank dia. 3 mm		
226667	1	1303 MICRO

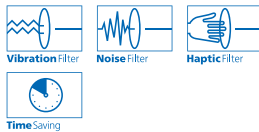
Set 1306 MICRO



Set 1306 MICRO contains three tungsten carbide burrs for finishing in the most common shapes and dimensions. The set is supplied in promotional plastic packaging. The sturdy plastic box protects the tools from dirt and damage.

Contents:

- 3 tungsten carbide burrs,
shank diameter of 6 mm, MICRO cut
1 piece each:
- ZYAS 0616/6 MICRO
- WRC 0616/6 MICRO
- RBF 0618/6 MICRO

PFERDVALUE:



Cut		Description
MICRO		
		
EAN 4007220		
Shank dia. 6 mm		
226674	1	1306 MICRO

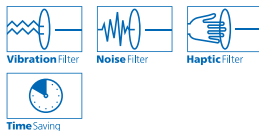
Set 1312 MICRO



Set 1312 MICRO contains three tungsten carbide burrs for finishing in the most common shapes and dimensions. The set is supplied in promotional plastic packaging. The sturdy plastic box protects the tools from dirt and damage.

Contents:

- 3 tungsten carbide burrs,
shank diameter of 6 mm, MICRO cut
1 piece each:
- ZYAS 1225/6 MICRO
- WRC 1225/6 MICRO
- RBF 1225/6 MICRO

PFERDVALUE:



Cut		Description
MICRO		
		
EAN 4007220		
Shank dia. 6 mm		
226681	1	1312 MICRO