

- 1.1 Tungsten carbide burrs
- 1.2 Burrs made from HSS
- 1.3 Solid carbide engraving cutters

MILLING

12–44
45–55
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TECHNICAL INFORMATION AND PRODUCT INFORMATION

LUKAS tungsten carbide burrs**QUALITY**

LUKAS carbide burrs are manufactured using high-quality solid carbides on modern CNC automatic grinding machines in order to guarantee precision and repeatability of angle, profile and twist. We manufacture solid carbide burrs to your drawings and specifications to help you solve difficult stock removal problems.

APPLICATION

Selecting the right cut and speed is key for achieving the best results when working with a variety of materials. Please refer to the tables for cut and cutting speed on **page 15**.

POWER TOOLS

Electrical or pneumatic tools, with bearings and collets that are in good condition and run true, are key to getting perfect results. Vibration and chatter will cause premature wear and tooth breakage. Excessive working pressure will increase wear but not increase performance.

SHANKS

For safety reasons, always choose the largest shank diameter available from the table. All burr shanks from LUKAS have a shank diameter tolerance of h9 to ensure safe and smooth assembly. Other shank lengths and diameters are available upon request. See **pages 38–40** for a selection of burrs with extra-long shank.

ROBOT APPLICATION

LUKAS solid carbide burrs are precision tools that have proven themselves in deburring work with industrial robots. We can also develop the perfect tool to suit your application.

SPECIAL TOOLS

We manufacture solid carbide burrs to your drawings and specifications to help you solve difficult stock removal problems.

PACKAGING

We use plastic packaging. Please refer to the product tables for the respective packaging units.

RECOMMENDATIONS FOR USE

Select the cut according to the material to be machined. The rule of thumb is: **the harder the material, the finer the cut.**


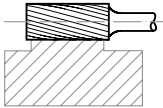

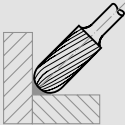
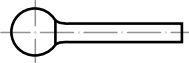
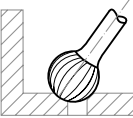

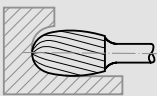
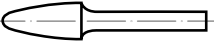
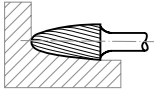

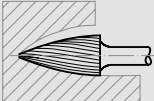

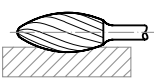
Selecting the right speed is key when it comes to achieving perfect working results and long tool life. The following pages contain information that can help you determine the right speed for your process.


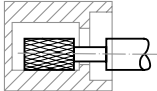
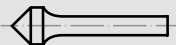
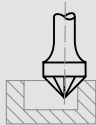

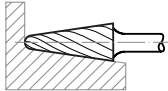

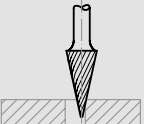
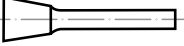
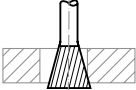

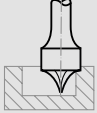
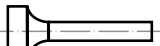
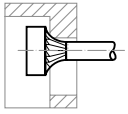
Use the highest speeds possible within the ranges listed. **Speeds that are too low cause vibration, chipping and premature wear!** Reduce the speed of the burrs only when working with large contact angles or materials with low heat conductivity. **Never allow blue discolouration to appear on the shank and head.** For safety reasons, the use of longer shanks requires lower speeds.

Always ensure the settings of your power tool are properly adjusted for the job and material at hand. Avoid a reduction in speed caused by insufficient drive power, especially when using pneumatic machines. Only use collets that run true. Run-out and vibration will result in chipping and premature wear. For the same reasons, make sure that the machine bearings are in perfect condition. To avoid vibrations and shank breakage, select the shortest shank overhang possible.

SHAPE

A summary of available shapes

Shape		Application
	HFA Cylindrical	
	HFC Cylindrical round nose	
	HFD Spherical	
	HFE Oval	
	HFF Arch round nose	
	HFG Arch pointed nose	
	HFH Flame	

Shape		Application
	HFI Internal	
	HFJ Counter sink	
	HFL Conical round nose	
	HFM Conical pointed nose	
	HFN Inverted cone	
	Burrs for radius trimming (external)	
	Burrs for radius trimming (internal)	

LUKAS BURR SETS

Have the right tool for any application. Choose from our assortment of burrs to try out, test, for your toolbox and much more on **page 43**.

POWER TOOLS

You can find the right power tools for our LUKAS tools on **pages 304–312**. Our power tools are designed for use with LUKAS tools and ensure highly efficient use.

RECOMMENDATIONS FOR USE AND CUTS

Three steps to your perfect tungsten carbide burr

STEP 1

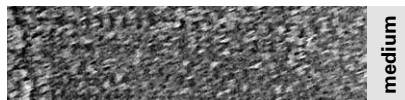
STEP 2

Begin by selecting the right **material** and **machining mode** (coarse to fine) from the table.

Read off the recommended **cut** and **cutting speed**.

Material	Strength (N/mm ²)	Machining	Cut	Recommended cutting speed v _c (m/min)
● Steel, cast steel	up to 800	coarse	Z3, Z7 Steel, ZX	500–700
		medium	Z5, Z42 Inox/Steel	300–500
		fine	ZF3	500–700
	800 to 1,200	coarse	Z7 Steel, ZX	400–600
		medium	Z5	300–400
		fine	ZF3	400–600
	from 1,200	coarse	Z7 Steel, Z4	300–500
		medium	Z5	300–400
		fine	ZF3	400–600
● Stainless steel	up to 800	coarse	Z2, Z6	400–500
		medium	Z3, Z7 Steel, Z4, Z5, Z42 Inox/Steel	300–500
		fine	ZF3	400–600
● Cast material	150 to 300	coarse	Cast, Z6	400–600
		medium	Z7 Steel	300–500
	300 to 450	coarse	Cast, Z7 Steel	300–500
		medium	Z5	300–500
		fine	ZF3	400–700
● Aluminium	up to 450	coarse	Z9 Alu	600–1,000
		medium	Z1	500–900
● Brass and bronze	up to 450	coarse	Z9 Alu, Z1	400–800
	from 450	medium	Z2	400–600
		fine	ZF3	500–600
● Titanium	up to 900	coarse	Z6	300–500
		medium	Z7 Steel	300–400
		fine	ZF3	500–700
	900 to 1,500	coarse	Z4	300–400
		medium	Z5	400–500
		fine	ZF3	400–600
● Plastic and wood	20 to 400	coarse	Composite coarse/fine, Z1, Z9 Alu	600–1,000
		fine	Composite coarse/fine, Wood	500–900
	400 to 1,000	coarse	Composite coarse/fine, Z1	500–800
		fine	Composite coarse/fine, Z2, Wood	400–800

MACHINING



STEP 3




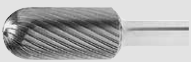
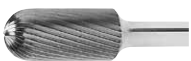
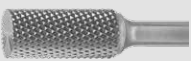

Determine the appropriate **speed** for your power tool in the second table, based on the tool diameter and cutting speed.


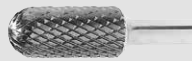
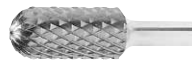
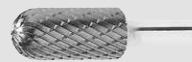

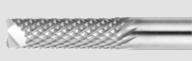

		Recommended cutting speed v_c (m/min)							
		300	400	500	600	700	800	900	1,000
Tool diameter (mm)	2	48,000	64,000	80,000	95,000	111,000	127,000	143,000	159,000
	3	32,000	42,000	53,000	64,000	74,000	85,000	95,000	106,000
	4	24,000	32,000	40,000	48,000	56,000	64,000	72,000	80,000
	6	16,000	21,000	27,000	32,000	37,000	42,000	48,000	53,000
	8	12,000	16,000	20,000	24,000	28,000	32,000	36,000	40,000
	10	10,000	13,000	16,000	19,000	22,000	25,000	29,000	32,000
	12	8,000	11,000	13,000	16,000	19,000	21,000	24,000	27,000
	16	6,000	8,000	10,000	12,000	14,000	16,000	18,000	20,000
	20	5,000	6,000	8,000	10,000	11,000	13,000	14,000	16,000
		Speed (rpm)							

TIP: You can find the full overview of shapes for your perfect burr on **page 13**.



CUTS

Cut	Properties	Page
 Z9 Alu	very coarse single cut with faceting for soft materials	31/32
 Z1	coarse cut for soft materials	30
 Z2 Brass	robust single cut for high stock removal	30
 Z3	medium single cut	26/27, 37, 39
 Z5 Hard	very fine single cut for high-quality surfaces	25, 34/35
 ZF1 to ZF3	fine cross cuts from coarse to very fine for perfect surfaces	33/34
 Wood	rasp cut for pattern construction	29

Cut	Properties	Page
 Z42 Inox/Steel	robust faceted toothing for Inox and steel	20
 Z4	fine cross cut for hard materials	22/23
 Z6	robust cross cut	23
 Z7 Steel	medium cross cut	17–19, 38
 Cast	robust cross cut specially designed for cast materials	21
 Composite Coarse and Fine	cross cut for machining plastic	28
 ZX	universal cross cut for almost all applications	40–42

COATINGS


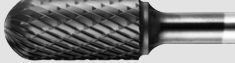



Custom optimisation with LUKAS coatings

The use of hard coatings like TiN, TiCN, TiAlN and LTE on cutting tools from LUKAS can help:

- increase tool life
- make the tool more efficient and reduce machine load
- improve chip removal

The increase in tool life is mainly the result of the considerably higher surface hardness of the coating in comparison to the base material of the tool itself. The high chemical stability of the coatings also minimises reactions between the cutting edge of the tool and the chip.

The reduction of machine load and the improvement in chip removal are achieved through a reduction in the friction between the free cutting zone of the tool and workpiece on the one hand, and the cutting edge of the tool and the chip removed on the other. The reduction in friction is due to the coating improving the surface finish and largely preventing chemical reactions. Our technicians would be pleased to help you in the selection of the correct coating.

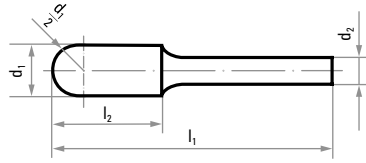
	Special feature	Properties	Coating	Friction on steel μm
 <p>AllCoat*</p>	general purpose	<ul style="list-style-type: none"> ■ general-purpose wear protection when machining ferrous metals (like steel and cast iron) and plastic ■ high toughness ■ food safe ■ biocompatible 	TiN (titanium nitride)	0.65–0.70
 <p>HeavyDuty</p>	suitable for extreme thermal and mechanical shock loads	<ul style="list-style-type: none"> ■ high-performance coating with high hardness and low heat conductivity for use when machining highly abrasive and hard materials (such as steel, non-rusting steels and stainless steel) ■ for milling under extreme conditions ■ for high-performance cutting 	TiAlN (titanium aluminium nitride) see page 17	0.30–0.35
 <p>ThermoShock*</p>	high and sudden thermal shock loads	<ul style="list-style-type: none"> ■ wear-resistant coating, particularly well suited to machining difficult-to-process steel alloys (high and low-alloy steels) ■ for fine deburring 	TiCN (titanium carbon nitride)	0.10–0.20
 <p>LowFriction*</p>	lotus effect	<ul style="list-style-type: none"> ■ special coating with lotus effect for long chip and smearing non-ferrous metals, especially aluminium alloys ■ significantly reduces friction and adhesive wear ■ reduces loading 	LTE (hard, carbon-based coating)	0.10–0.20
 <p>LightFlow</p>	easy chip removal	<ul style="list-style-type: none"> ■ combines high wear resistance with outstanding friction and non-stick properties when used on graphite, aluminium, copper, carbon, wood and titanium alloys ■ perfect surface treatment for significantly reduced wear 	TT®-ta-C (carbon layer made from solid carbon) see page 31	0.05–0.10 (dry)

* upon request



Z7 Steel burr with HeavyDuty coating

- high-performance coating for processing very hard and abrasive materials
- for extreme applications
- for high thermal and mechanical shock loads

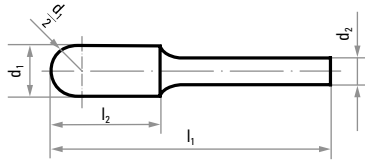


★★★

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10010616608TIALN	HFA 0616.06		Z7 Steel	ZYA 0616	6	16	6	50	1
A10010820608TIALN	HFA 0820.06		Z7 Steel	ZYA 0820	8	20	6	60	1
A10011020608TIALN	HFA 1020.06		Z7 Steel	ZYA 1020	10	20	6	60	1
A10010820608TIAL1	HFAS 0820.06		Z7 Steel	ZYA-S 0820	8	20	6	60	1
A10011020608TIAL1	HFAS 1020.06		Z7 Steel	ZYA-S 1020	10	20	6	60	1
A10011225608TIAL1	HFAS 1225.06		Z7 Steel	ZYA-S 1225	12	25	6	65	1
A10020616608TIALN	HFC 0616.06		Z7 Steel	WRC 0616	6	16	6	50	1
A10020820608TIALN	HFC 0820.06		Z7 Steel	WRC 0820	8	20	6	60	1
A10021020608TIALN	HFC 1020.06		Z7 Steel	WRC 1020	10	20	6	60	1
A10021225608TIALN	HFC 1225.06		Z7 Steel	WRC 1225	12	25	6	65	1
A10030606608TIALN	HFD 0605.06		Z7 Steel	KUD 0605	6	5	6	50	1
A10030808608TIALN	HFD 0807.06		Z7 Steel	KUD 0807	8	7	6	47	1
A10031010608TIALN	HFD 1009.06		Z7 Steel	KUD 1009	10	9	6	49	1
A10101225608TIALN	HFF 1225.06		Z7 Steel	RBF 1225	12	25	6	65	1
A10040618608TIALN	HFG 0618.06		Z7 Steel	SPG 0618	6	18	6	50	1
A10041020608TIALN	HFG 1020.06		Z7 Steel	SPG 1020	10	20	6	60	1
A10041225608TIALN	HFG 1225.06		Z7 Steel	SPG 1225	12	25	6	65	1
A10041630608TIALN	HFG 1630.06		Z7 Steel	SPG 1630	16	30	6	70	1
A10090820608TIALN	HFH 0820.06		Z7 Steel	-	8	20	6	60	1
A10091230608TIALN	HFH 1230.06		Z7 Steel	-	12	30	6	70	1
A10071020608TIALN	HFL 1020.06		Z7 Steel	KEL 1020	10	20	6	60	1
A10051020608TIALN	HFM 1020.06		Z7 Steel	SKM 1020	10	20	6	60	1

Recommended for: ● Inox/Steel ● Steel ● Cast material ● Titanium

Z7 Steel burr



★★☆

- Thanks to the central cross cut, this burr is perfect for use on steel.
- Our choice of shapes lets you find the right tool for every application.

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains	
A10010313308	HFA 0313.03		Z7 Steel	ZYA 0313	3	13	3	40	1	
A10010413608	HFA 0413.06		Z7 Steel	ZYA 0413	4	13	6	50	1	
A10010613308	HFA 0613.03		Z7 Steel	ZYA 0613	6	13	3	43	1	
A10010616608	HFA 0616.06		Z7 Steel	ZYA 0616	6	16	6	50	1	
A10010820608	HFA 0820.06		Z7 Steel	ZYA 0820	8	20	6	60	1	
A10011020608	HFA 1020.06		Z7 Steel	ZYA 1020	10	20	6	60	1	
A10011025608	HFA 1025.06		Z7 Steel	ZYA 1025	10	25	6	65	1	
A10011225608	HFA 1225.06		Z7 Steel	ZYA 1225	12	25	6	65	1	
A10011625608	HFA 1625.06		Z7 Steel	ZYA 1625	16	25	6	65	1	
A100103133080001	HFAS 0313.03			Z7 Steel	ZYA-S 0313	3	13	3	40	1
A100104136080001	HFAS 0413.06			Z7 Steel	ZYA-S 0413	4	13	6	50	1
A100106133080001	HFAS 0613.03			Z7 Steel	ZYA-S 0613	6	13	3	43	1
A100106166080001	HFAS 0616.06			Z7 Steel	ZYA-S 0616	6	16	6	50	1
A100108206080001	HFAS 0820.06			Z7 Steel	ZYA-S 0820	8	20	6	60	1
A100110136080001	HFAS 1013.06			Z7 Steel	ZYA-S 1013	10	13	6	53	1
A100110206080001	HFAS 1020.06			Z7 Steel	ZYA-S 1020	10	20	6	60	1
A100110256080001	HFAS 1025.06	Z7 Steel		ZYA-S 1025	10	25	6	65	1	
A100112256080001	HFAS 1225.06	Z7 Steel		ZYA-S 1225	12	25	6	65	1	
A100112258080001	HFAS 1225.08	Z7 Steel		ZYA-S 1225	12	25	8	65	1	
A100116256080001	HFAS 1625.06	Z7 Steel		ZYA-S 1625	16	25	6	65	1	
A10020210308	HFC 0210.03			Z7 Steel	WRC 0210	2	10	3	40	1
A10020313308	HFC 0313.03			Z7 Steel	WRC 0313	3	13	3	40	1
A10020413608	HFC 0413.06			Z7 Steel	WRC 0413	4	13	6	50	1
A10020613308	HFC 0613.03			Z7 Steel	WRC 0613	6	13	3	43	1
A10020616608	HFC 0616.06			Z7 Steel	WRC 0616	6	16	6	50	1
A10020820608	HFC 0820.06		Z7 Steel	WRC 0820	8	20	6	60	1	
A10021020608	HFC 1020.06		Z7 Steel	WRC 1020	10	20	6	60	1	
A10021025608	HFC 1025.06		Z7 Steel	WRC 1025	10	25	6	65	1	
A10021225608	HFC 1225.06		Z7 Steel	WRC 1225	12	25	6	65	1	
A10021225808	HFC 1225.08		Z7 Steel	WRC 1225	12	25	8	65	1	
A10021625608	HFC 1625.06		Z7 Steel	WRC 1625	16	25	6	65	1	
A10030303308	HFD 0302.03			Z7 Steel	KUD 0302	3	2	3	40	1
A100304043080001	HFD 0403.03			Z7 Steel	KUD 0403	4	3	3	34	1
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A10030606308	HFD 0605.03			Z7 Steel	KUD 0605	6	5	3	35	1
A10030606608	HFD 0605.06			Z7 Steel	KUD 0605	6	5	6	50	1
A10030808608	HFD 0807.06	Z7 Steel		KUD 0807	8	7	6	47	1	
A10031010608	HFD 1009.06	Z7 Steel		KUD 1009	10	9	6	49	1	
A10031212608	HFD 1210.06	Z7 Steel		KUD 1210	12	10	6	51	1	
A10031210808	HFD 1210.08	Z7 Steel		KUD 1210	12	10	8	51	1	
A10031616608	HFD 1614.06	Z7 Steel		KUD 1614	16	14	6	54	1	
A10032020608	HFD 2018.06	Z7 Steel		KUD 2018	20	18	6	58	1	

Recommended for: ● Steel ● Cast material ● Titanium

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains	
A10060307308	HFE 0307.03		Z7 Steel	TRE 0307	3	7	3	40	1	
A10060610308	HFE 0610.03		Z7 Steel	TRE 0610	6	10	3	40	1	
A10060610608	HFE 0610.06		Z7 Steel	TRE 0610	6	10	6	50	1	
A10060813608	HFE 0813.06		Z7 Steel	TRE 0813	8	13	6	53	1	
A10061220608	HFE 1220.06		Z7 Steel	TRE 1220	12	20	6	60	1	
A10061625608	HFE 1625.06		Z7 Steel	TRE 1625	16	25	6	65	1	
A10100313308	HFF 0313.03		Z7 Steel	RBF 0313	3	13	3	40	1	
A10100613308	HFF 0613.03		Z7 Steel	RBF 0613	6	13	3	43	1	
A10100618608	HFF 0618.06		Z7 Steel	RBF 0618	6	18	6	50	1	
A10100820608	HFF 0820.06		Z7 Steel	-	8	20	6	60	1	
A10101020608	HFF 1020.06		Z7 Steel	RBF 1020	10	20	6	60	1	
A10101225608	HFF 1225.06		Z7 Steel	RBF 1225	12	25	6	65	1	
A10101225808	HFF 1225.08		Z7 Steel	RBF 1225	12	25	8	65	1	
A10101230608	HFF 1230.06		Z7 Steel	RBF 1230	12	30	6	70	1	
A10101630608	HFF 1630.06		Z7 Steel	RBF 1630	16	30	6	70	1	
A10040307308	HFG 0307.03			Z7 Steel	SPG 0307	3	7	3	40	1
A10040313308	HFG 0313.03	Z7 Steel		SPG 0313	3	13	3	40	1	
A10040613308	HFG 0613.03	Z7 Steel		SPG 0613	6	13	3	43	1	
A10040618608	HFG 0618.06	Z7 Steel		SPG 0618	6	18	6	50	1	
A10040820608	HFG 0820.06	Z7 Steel		-	8	20	6	60	1	
A10041020608	HFG 1020.06	Z7 Steel		SPG 1020	10	20	6	60	1	
A10041220608	HFG 1220.06	Z7 Steel		SPG 1220	12	20	6	60	1	
A10041225608	HFG 1225.06	Z7 Steel		SPG 1225	12	25	6	65	1	
A10041230608	HFG 1230.06	Z7 Steel		SPG 1230	12	30	6	70	1	
A10041630608	HFG 1630.06	Z7 Steel		SPG 1630	16	30	6	70	1	
A10090613308	HFH 0613.03		Z7 Steel	-	6	13	3	43	1	
A10090820608	HFH 0820.06		Z7 Steel	-	8	20	6	60	1	
A10091230608	HFH 1230.06		Z7 Steel	-	12	30	6	70	1	
A10091635608	HFH 1635.06		Z7 Steel	-	16	35	6	75	1	
A10070820608	HFL 0820.06		Z7 Steel	-	8	20	6	60	1	
A10071020608	HFL 1020.06		Z7 Steel	KEL 1020	10	20	6	60	1	
A10071225608	HFL 1225.06		Z7 Steel	KEL 1225	12	25	6	65	1	
A10071230608	HFL 1230.06		Z7 Steel	KEL 1230	12	30	6	70	1	
A10071630608	HFL 1630.06		Z7 Steel	KEL 1630	16	30	6	70	1	
A10050307308	HFM 0307.03		Z7 Steel	SKM 0307	3	7	3	40	1	
A10050311308	HFM 0311.03		Z7 Steel	SKM 0311	3	11	3	40	1	
A10050613308	HFM 0613.03		Z7 Steel	SKM 0613	6	13	3	43	1	
A10050618608	HFM 0618.06		Z7 Steel	SKM 0618	6	18	6	50	1	
A10050820608	HFM 0820.06		Z7 Steel	-	8	20	6	60	1	
A10051020608	HFM 1020.06		Z7 Steel	SKM 1020	10	20	6	60	1	
A10051225608	HFM 1225.06		Z7 Steel	SKM 1225	12	25	6	65	1	
A10120307308	HFN 0307.03			Z7 Steel	WKN 0307	3	7	3	40	10°
A101203073080001	HFNS 0307.03	Z7 Steel		WKN-S 0307	3	7	3	40	10°	1

Recommended for: ● Steel ● Cast material ● Titanium

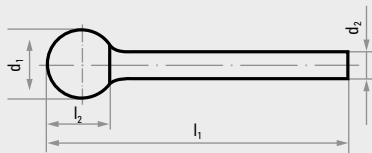
TWO MATERIALS - ONE BURR

PERFECTLY PROCESS STEEL AND STAINLESS STEEL WITH JUST A SINGLE BURR

The new cut profile of the Z42 Inox/Steel burr cuts the two most important materials steel and inox quickly and reliably. The robust tooth geometry with faceting prevents chipping and guarantees high removal rates. This helps you save time and equipment costs. The improved chip breaker allows you to work even more ergonomically while achieving the best surface yet.



Z42 Inox/Steel burr



- high chip volume thanks to coarse cut for quick working
- faceted toothing for perfect surface results
- smoothly running, low-vibration tool without chatter thanks to improved cutting angle



Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10010616620	HFA 0616.06		Z42 Inox/Steel	ZYA 0616	6	16	6	50	1
A10010820620	HFA 0820.06		Z42 Inox/Steel	ZYA 0820	8	20	6	60	1
A10011020620	HFA 1020.06		Z42 Inox/Steel	ZYA 1020	10	20	6	60	1
A10011225620	HFA 1225.06		Z42 Inox/Steel	ZYA 1225	12	25	6	65	1
A10020616620	HFC 0616.06		Z42 Inox/Steel	WRC 0616	6	16	6	50	1
A10020820620	HFC 0820.06		Z42 Inox/Steel	WRC 0820	8	20	6	60	1
A10021020620	HFC 1020.06		Z42 Inox/Steel	WRC 1020	10	20	6	60	1
A10021225620	HFC 1225.06		Z42 Inox/Steel	WRC 1225	12	25	6	65	1
A10030605620	HFD 0605.06		Z42 Inox/Steel	KUD 0605	6	5	6	50	1
A10030807620	HFD 0807.06		Z42 Inox/Steel	KUD 0807	8	7	6	47	1
A10031009620	HFD 1009.06		Z42 Inox/Steel	KUD 1009	10	9	6	49	1
A10031210620	HFD 1210.06		Z42 Inox/Steel	KUD 1210	12	10	6	51	1
A10100618620	HFF 0618.06		Z42 Inox/Steel	RBF 0618	6	18	6	50	1
A10100820620	HFF 0820.06		Z42 Inox/Steel	-	8	20	6	60	1
A10101020620	HFF 1020.06		Z42 Inox/Steel	RBF 1020	10	20	6	60	1
A10101225620	HFF 1225.06		Z42 Inox/Steel	RBF 1225	12	25	6	65	1
A10040618620	HFG 0618.06		Z42 Inox/Steel	SPG 0618	6	18	6	50	1
A10040820620	HFG 0820.06		Z42 Inox/Steel	-	8	20	6	60	1
A10041020620	HFG 1020.06		Z42 Inox/Steel	SPG 1020	10	20	6	60	1
A10041225620	HFG 1225.06		Z42 Inox/Steel	SPG 1225	12	25	6	65	1
A10050618620	HFM 0618.06		Z42 Inox/Steel	SKM 0618	6	18	6	50	1
A10050820620	HFM 0820.06		Z42 Inox/Steel	-	8	20	6	60	1
A10051020620	HFM 1020.06		Z42 Inox/Steel	SKM 1020	10	20	6	60	1
A10051225620	HFM 1225.06		Z42 Inox/Steel	SKM 1225	12	25	6	65	1

Recommended for: ● Inox/Steel ● Steel ● Cast material

CAST – THE BURR FOR CAST MATERIAL

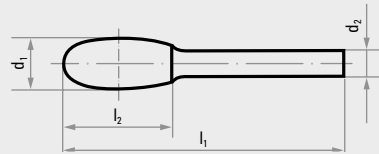
FOR HIGH REMOVAL RATES ON CAST MATERIALS

With its faceted tothing, the Cast burr for cast material achieves a high degree of stock removal with manual machining – in other words, a large chip volume in a short time. The tool can be guided smoothly and easily in the process. No chipping occurs, even with excessive force. The proven tungsten carbide quality and a reliable soldered joint round off the tool. You can therefore work safely and productively!



Cast burr

- perfect for cleaning, deburring and chamfering
- high stock removal capability
- long tool life
- ergonomic and smooth running

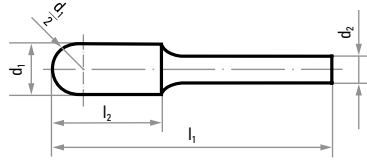
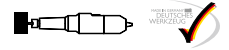


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Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10010616621	HFA 0616.06		Cast	ZYA 0616	6	16	6	50	1
A10010820621	HFA 0820.06		Cast	ZYA 0820	8	20	6	60	1
A10011020621	HFA 1020.06		Cast	ZYA 1020	10	20	6	60	1
A10011225621	HFA 1225.06		Cast	ZYA 1225	12	25	6	65	1
A10020616621	HFC 0616.06		Cast	WRC 0616	6	16	6	50	1
A10020820621	HFC 0820.06		Cast	WRC 0820	8	20	6	60	1
A10021020621	HFC 1020.06		Cast	WRC 1020	10	20	6	60	1
A10021225621	HFC 1225.06		Cast	WRC 1225	12	25	6	65	1
A10030605621	HFD 0605.06		Cast	KUD 0605	6	5	6	50	1
A10030807621	HFD 0807.06		Cast	KUD 0807	8	7	6	47	1
A10031009621	HFD 1009.06		Cast	KUD 1009	10	9	6	49	1
A10031210621	HFD 1210.06		Cast	KUD 1210	12	10	6	51	1
A10060610621	HFE 0610.06		Cast	TRE 0610	6	10	6	50	1
A10060813621	HFE 0813.06		Cast	TRE 0813	8	13	6	53	1
A10061016621	HFE 1016.06		Cast	TRE 1016	10	16	6	56	1
A10061220621	HFE 1220.06		Cast	TRE 1220	12	20	6	60	1
A10100618621	HFF 0618.06		Cast	RBF 0618	6	18	6	50	1
A10100820621	HFF 0820.06		Cast	–	8	20	6	60	1
A10101020621	HFF 1020.06		Cast	RBF 1020	10	20	6	60	1
A10101225621	HFF 1225.06		Cast	RBF 1225	12	25	6	65	1
A10040618621	HFG 0618.06		Cast	SPG 0618	6	18	6	50	1
A10040820621	HFG 0820.06		Cast	–	8	20	6	60	1
A10041020621	HFG 1020.06		Cast	SPG 1020	10	20	6	60	1
A10041225621	HFG 1225.06		Cast	SPG 1225	12	25	6	65	1

Recommended for: ● Cast material

Z4 burr



★★☆

■ fine cross cut for hard materials

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains	
A10010313304	HFA 0313.03		Z4	ZYA 0313	3	13	3	40	1	
A10010616604	HFA 0616.06		Z4	ZYA 0616	6	16	6	50	1	
A10010820604	HFA 0820.06		Z4	ZYA 0820	8	20	6	60	1	
A10011020604	HFA 1020.06		Z4	ZYA 1020	10	20	6	60	1	
A10011025604	HFA 1025.06		Z4	ZYA 1025	10	25	6	65	1	
A10011225604	HFA 1225.06		Z4	ZYA 1225	12	25	6	65	1	
A10011225804	HFA 1225.08		Z4	ZYA 1225	12	25	8	65	1	
A100103133040001	HFAS 0313.03			Z4	ZYA-S 0313	3	13	3	40	1
A100106166040001	HFAS 0616.06			Z4	ZYA-S 0616	6	16	6	50	1
A100108206040001	HFAS 0820.06			Z4	ZYA-S 0820	8	20	6	60	1
A100110206040001	HFAS 1020.06			Z4	ZYA-S 1020	10	20	6	60	1
A100110256040001	HFAS 1025.06			Z4	ZYA-S 1025	10	25	6	65	1
A100112256040001	HFAS 1225.06			Z4	ZYA-S 1225	12	25	6	65	1
A100112258040001	HFAS 1225.08			Z4	ZYA-S 1225	12	25	8	65	1
A10020313304	HFC 0313.03				Z4	WRC 0313	3	13	3	40
A10020413604	HFC 0413.06	Z4			WRC 0413	4	13	6	50	1
A10020616604	HFC 0616.06	Z4			WRC 0616	6	16	6	50	1
A10020820604	HFC 0820.06	Z4			WRC 0820	8	20	6	60	1
A10021020604	HFC 1020.06	Z4			WRC 1020	10	20	6	60	1
A10021020804	HFC 1020.08	Z4			WRC 1020	10	20	8	60	1
A10021225604	HFC 1225.06	Z4			WRC 1225	12	25	6	65	1
A10030303304	HFD 0302.03			Z4	KUD 0302	3	2	3	40	1
A10030404604	HFD 0403.06		Z4	KUD 0403	4	3	6	50	1	
A10030606604	HFD 0605.06		Z4	KUD 0605	6	5	6	50	1	
A10030808604	HFD 0807.06		Z4	KUD 0807	8	7	6	47	1	
A10031010604	HFD 1009.06		Z4	KUD 1009	10	9	6	49	1	
A10031212604	HFD 1210.06		Z4	KUD 1210	12	10	6	51	1	
A10031212804	HFD 1210.08		Z4	KUD 1210	12	10	8	51	1	
A10031616604	HFD 1614.06	Z4	KUD 1614	16	14	6	54	1		
A10060610604	HFE 0610.06		Z4	TRE 0610	6	10	6	50	1	
A10060813604	HFE 0813.06		Z4	TRE 0813	8	13	6	53	1	
A10061220604	HFE 1220.06		Z4	TRE 1220	12	20	6	60	1	
A10100307304	HFF 0307.03		Z4	RBF 0307	3	7	3	40	1	
A10100618604	HFF 0618.06		Z4	RBF 0618	6	18	6	50	1	
A10101020604	HFF 1020.06		Z4	RBF 1020	10	20	6	60	1	
A10101225604	HFF 1225.06		Z4	RBF 1225	12	25	6	65	1	
A10040313304	HFG 0313.03		Z4	SPG 0313	3	13	3	40	1	
A10040618604	HFG 0618.06		Z4	SPG 0618	6	18	6	50	1	
A10041020604	HFG 1020.06		Z4	SPG 1020	10	20	6	60	1	
A10041225604	HFG 1225.06		Z4	SPG 1225	12	25	6	65	1	
A10041230604	HFG 1230.06		Z4	SPG 1230	12	30	6	70	1	
A10041630604	HFG 1630.06		Z4	SPG 1630	16	30	6	70	1	

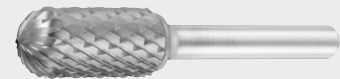
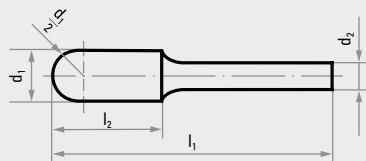
Recommended for: ● Inox/Steel ● Steel ● Titanium ● Plastic/Wood

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains		
A10090613304	HFH 0613.03		Z4	-	6	13	3	43	1		
A10090820604	HFH 0820.06		Z4	-	8	20	6	60	1		
A10091230604	HFH 1230.06		Z4	-	12	30	6	70	1		
Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	r mm	α	Pack contains
A10071225604	HFL 1225.06		Z4	KEL 1225	12	25	6	65	3.3	14°	1
A10071230604	HFL 1230.06		Z4	KEL 1230	12	30	6	70	2.6	14°	1
A10071230804	HFL 1230.08		Z4	KEL 1230	12	30	8	70	2.6	14°	1
Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains		
A10050618604	HFM 0618.06		Z4	SKM 0618	6	18	6	50	1		
A10051020604	HFM 1020.06		Z4	SKM 1020	10	20	6	60	1		
A10051225604	HFM 1225.06		Z4	SKM 1225	12	25	6	65	1		
Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	α	Pack contains	
A10120607604	HFN 0607.06		Z4	WKN 0607	6	7	6	50	10°	1	
A10121013604	HFN 1013.06		Z4	WKN 1013	10	13	6	53	10°	1	
A10121213604	HFN 1213.06		Z4	WKN 1213	12	13	6	53	20°	1	
A10122013604	HFN 2013.06		Z4	-	20	13	6	53	30°	1	
A101216136040001	HFNS 1613.06		Z4	WKN-S 1613	16	13	6	53	20°	1	

Recommended for: ● Inox/Steel ● Steel ● Titanium ● Plastic /Wood



Z6 burr



■ burr with robust cross cut



Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10020820606	HFC 0820.06		Z6	WRC 0820	8	20	6	60	1
A10021020606	HFC 1020.06		Z6	WRC 1020	10	20	6	60	1
A10021225606	HFC 1225.06		Z6	WRC 1225	12	25	6	65	1
A10101020606	HFF 1020.06		Z6	RBF 1020	10	20	6	60	1

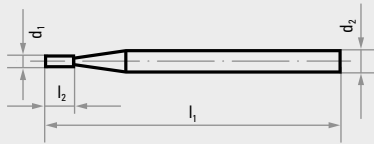
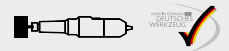
Recommended for: ● Inox/Steel ● Steel ● Titanium ● Plastic/Wood

PRECISION BURR WITH UNIVERSAL CUT

PERFECTLY PERFORM THE MOST DELICATE OF CUTS



Universal miniature burr



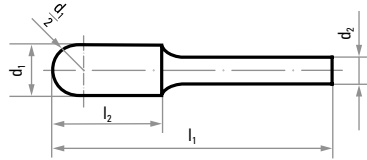
- with 3 mm shank diameter
- high dimensional accuracy
- high concentricity for smooth running
- universal cut
- made from micro-grain carbide
- finely ground cutting edges



Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10010104312	HFA 01004.03		Universal	1	4	3	40	1
A100101043120001	HFA 01504.03		Universal	1,5	4	3	40	1
A10010204312	HFA 02004.03		Universal	2	4	3	40	1
A10020104312	HFC 01004.03		Universal	1	4	3	40	1
A100201043120001	HFC 01504.03		Universal	1,5	4	3	40	1
A10020204312	HFC 02004.03		Universal	2	4	3	40	1
A10030101312	HFD 01001.03		Universal	1	0,9	3	40	1
A100301013120001	HFD 01501.03		Universal	1,5	1,35	3	40	1
A10030202312	HFD 02002.03		Universal	2	1,8	3	40	1
A10060104312	HFE 01504.03		Universal	1,5	4	3	40	1
A10100104312	HFF 01504.03		Universal	1,5	4	3	40	1
A10040104312	HFG 01504.03		Universal	1,5	4	3	40	1
A10050104312	HFM 01504.03		Universal	1,5	4	3	40	1

Recommended for: ● Inox/Steel ● Steel ● Titanium

Z5 small burr



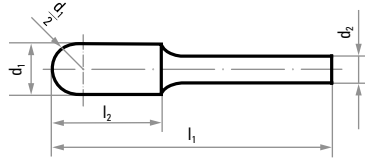
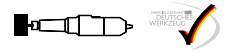
■ with 3 mm shank diameter

★★☆

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains	
A10010210305	HFA 0210.03		Z5 Hard	ZYA 0210	2	10	3	40	1	
A10010313305	HFA 0313.03		Z5 Hard	ZYA 0313	3	13	3	40	1	
A10010607305	HFA 0607.03		Z5 Hard	ZYA 0607	6	7	3	37	1	
A10010613305	HFA 0613.03		Z5 Hard	ZYA 0613	6	13	3	43	1	
A100102103050001	HFAS 0210.03		Z5 Hard	ZYA-S 0210	2	10	3	40	1	
A100103133050001	HFAS 0313.03		Z5 Hard	ZYA-S 0313	3	13	3	40	1	
A100106073050001	HFAS 0607.03		Z5 Hard	ZYA-S 0607	6	7	3	37	1	
A100106133050001	HFAS 0613.03		Z5 Hard	ZYA-S 0613	6	13	3	43	1	
A10020210305	HFC 0210.03			Z5 Hard	WRC 0210	2	10	3	40	1
A10020313305	HFC 0313.03			Z5 Hard	WRC 0313	3	13	3	40	1
A10020613305	HFC 0613.03	Z5 Hard		WRC 0613	6	13	3	43	1	
A10030303305	HFD 0302.03		Z5 Hard	KUD 0302	3	2	3	40	1	
A100304043050001	HFD 0403.03		Z5 Hard	KUD 0403	4	3	3	34	1	
A10030606305	HFD 0605.03		Z5 Hard	KUD 0605	6	5	3	35	1	
A10060307305	HFE 0307.03		Z5 Hard	TRE 0307	3	7	3	40	1	
A10060610305	HFE 0610.03		Z5 Hard	TRE 0610	6	10	3	40	1	
A10100307305	HFF 0307.03		Z5 Hard	RBF 0307	3	7	3	40	1	
A10100313305	HFF 0313.03		Z5 Hard	RBF 0313	3	13	3	40	1	
A10100613305	HFF 0613.03		Z5 Hard	RBF 0613	6	13	3	43	1	
A10040307305	HFG 0307.03		Z5 Hard	SPG 0307	3	7	3	40	1	
A10040313305	HFG 0313.03		Z5 Hard	SPG 0313	3	13	3	40	1	
A10040613305	HFG 0613.03		Z5 Hard	SPG 0613	6	13	3	43	1	
A10090307305	HFH 0307.03		Z5 Hard	-	3	7	3	40	1	
A10090613305	HFH 0613.03		Z5 Hard	-	6	13	3	43	1	
A10050307305	HFM 0307.03			Z5 Hard	SKM 0307	3	7	3	40	1
A10050311305	HFM 0311.03			Z5 Hard	SKM 0311	3	11	3	40	1
A10050613305	HFM 0613.03	Z5 Hard		SKM 0613	6	13	3	43	1	
A10120307305	HFN 0307.03		Z5 Hard	WKN 0307	3	7	3	40	1	
A10120607305	HFN 0607.03		Z5 Hard	WKN 0607	6	7	3	37	1	
A101203073050001	HFNS 0307.03		Z5 Hard	WKN-S 0307	3	7	3	40	1	
A101206073050001	HFNS 0607.03		Z5 Hard	WKN-S 0607	6	7	3	37	1	

Recommended for: ● Steel ● Inox/Steel ● Titanium

Z3 Universal burr



★★☆

■ with single cut for universal applications

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains	
A10010313303	HFA 0313.03		Z3 Universal	ZYA 0313	3	13	3	40	1	
A10010413603	HFA 0413.06		Z3 Universal	ZYA 0413	4	13	6	50	1	
A10010616603	HFA 0616.06		Z3 Universal	ZYA 0616	6	16	6	50	1	
A10010820603	HFA 0820.06		Z3 Universal	ZYA 0820	8	20	6	60	1	
A10011013603	HFA 1013.06		Z3 Universal	ZYA 1013	10	13	6	53	1	
A10011020603	HFA 1020.06		Z3 Universal	ZYA 1020	10	20	6	60	1	
A10011225603	HFA 1225.06		Z3 Universal	ZYA 1225	12	25	6	65	1	
A10011625603	HFA 1625.06		Z3 Universal	ZYA 1625	16	25	6	65	1	
A100103133030001	HFAS 0313.03			Z3 Universal	ZYA-S 0313	3	13	3	40	1
A100104136030001	HFAS 0413.06			Z3 Universal	ZYA-S 0413	4	13	6	50	1
A100106166030001	HFAS 0616.06			Z3 Universal	ZYA-S 0616	6	16	6	50	1
A100108206030001	HFAS 0820.06			Z3 Universal	ZYA-S 0820	8	20	6	60	1
A100110136030001	HFAS 1013.06			Z3 Universal	ZYA-S 1013	10	13	6	53	1
A100110206030001	HFAS 1020.06			Z3 Universal	ZYA-S 1020	10	20	6	60	1
A100112256030001	HFAS 1225.06			Z3 Universal	ZYA-S 1225	12	25	6	65	1
A100116256030001	HFAS 1625.06			Z3 Universal	ZYA-S 1625	16	25	6	65	1
A10020313303	HFC 0313.03			Z3 Universal	WRC 0313	3	13	3	40	1
A10020413603	HFC 0413.06			Z3 Universal	WRC 0413	4	13	6	50	1
A10020616603	HFC 0616.06			Z3 Universal	WRC 0616	6	16	6	50	1
A10020820603	HFC 0820.06			Z3 Universal	WRC 0820	8	20	6	60	1
A10021020603	HFC 1020.06			Z3 Universal	WRC 1020	10	20	6	60	1
A10021225603	HFC 1225.06			Z3 Universal	WRC 1225	12	25	6	65	1
A10021625603	HFC 1625.06			Z3 Universal	WRC 1625	16	25	6	65	1
A10021625803	HFC 1625.08			Z3 Universal	WRC 1625	16	25	8	65	1
A10030303303	HFD 0302.03			Z3 Universal	KUD 0302	3	2	3	40	1
A10030404603	HFD 0403.06			Z3 Universal	KUD 0403	4	3	6	50	1
A10030606603	HFD 0605.06			Z3 Universal	KUD 0605	6	5	6	50	1
A10030808603	HFD 0807.06			Z3 Universal	KUD 0807	8	7	6	47	1
A10031010603	HFD 1009.06			Z3 Universal	KUD 1009	10	9	6	49	1
A10031212603	HFD 1210.06			Z3 Universal	KUD 1210	12	10	6	51	1
A10031616603	HFD 1614.06			Z3 Universal	KUD 1614	16	14	6	54	1
A10031616803	HFD 1614.08			Z3 Universal	KUD 1614	16	14	8	54	1
A10032020603	HFD 2018.06	Z3 Universal		KUD 2018	20	18	6	58	1	
A10032020803	HFD 2018.08	Z3 Universal		KUD 2018	20	18	8	58	1	
A10060307303	HFE 0307.03			Z3 Universal	TRE 0307	3	7	3	40	1
A10060610603	HFE 0610.06			Z3 Universal	TRE 0610	6	10	6	50	1
A10060813603	HFE 0813.06			Z3 Universal	TRE 0813	8	13	6	53	1
A10061220603	HFE 1220.06			Z3 Universal	TRE 1220	12	20	6	60	1
A10061625803	HFE 1625.08			Z3 Universal	TRE 1625	16	25	8	65	1

Recommended for: ● Steel ● Inox/Steel ● Titanium

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains		
A10100307303	HFF 0307.03		Z3 Universal	RBF 0307	3	7	3	40	1		
A10100618603	HFF 0618.06		Z3 Universal	RBF 0618	6	18	6	50	1		
A10100820603	HFF 0820.06		Z3 Universal	–	8	20	6	60	1		
A10101020603	HFF 1020.06		Z3 Universal	RBF 1020	10	20	6	60	1		
A10101225603	HFF 1225.06		Z3 Universal	RBF 1225	12	25	6	65	1		
A10101225803	HFF 1225.08		Z3 Universal	RBF 1225	12	25	8	65	1		
A10101230603	HFF 1230.06		Z3 Universal	RBF 1230	12	30	6	70	1		
A10101630803	HFF 1630.08		Z3 Universal	RBF 1630	16	30	8	70	1		
A10040313303	HFG 0313.03			Z3 Universal	SPG 0313	3	13	3	40	1	
A10040618603	HFG 0618.06	Z3 Universal		SPG 0618	6	18	6	50	1		
A10040820603	HFG 0820.06	Z3 Universal		–	8	20	6	60	1		
A10041020603	HFG 1020.06	Z3 Universal		SPG 1020	10	20	6	60	1		
A10041220603	HFG 1220.06	Z3 Universal		SPG 1220	12	20	6	60	1		
A10041225603	HFG 1225.06	Z3 Universal		SPG 1225	12	25	6	65	1		
A10041225803	HFG 1225.08	Z3 Universal		SPG 1225	12	25	8	65	1		
A10041230603	HFG 1230.06	Z3 Universal		SPG 1230	12	30	6	70	1		
A10041630803	HFG 1630.08	Z3 Universal		SPG 1630	16	30	8	70	1		
A10090613303	HFH 0613.03		Z3 Universal	–	6	13	3	43	1		
A10090820603	HFH 0820.06		Z3 Universal	–	8	20	6	60	1		
A10091230603	HFH 1230.06		Z3 Universal	–	12	30	6	70	1		
A10091230803	HFH 1230.08		Z3 Universal	–	12	30	8	70	1		
A10070820603	HFL 0820.06			Z3 Universal	–	8	20	6	60	1.5	14°
A10071020603	HFL 1020.06	Z3 Universal		KEL 1020	10	20	6	60	2.9	14°	1
A10071225603	HFL 1225.06	Z3 Universal		KEL 1225	12	25	6	65	3.3	14°	1
A10071230603	HFL 1230.06	Z3 Universal		KEL 1230	12	30	6	70	2.6	14°	1
A10071630603	HFL 1630.06	Z3 Universal		KEL 1630	16	30	6	70	4.8	14°	1
A10050307303	HFM 0307.03		Z3 Universal	SKM 0307	3	7	3	40	1		
A10050618603	HFM 0618.06		Z3 Universal	SKM 0618	6	18	6	50	1		
A10050820603	HFM 0820.06		Z3 Universal	–	8	20	6	60	1		
A10051020603	HFM 1020.06		Z3 Universal	SKM 1020	10	20	6	60	1		
A10051225603	HFM 1225.06		Z3 Universal	SKM 1225	12	25	6	65	1		
A10051225803	HFM 1225.08		Z3 Universal	SKM 1225	12	25	8	65	1		
A10121013603	HFN 1013.06		Z3 Universal	WKN 1013	10	13	6	53	10°	1	
A10121213603	HFN 1213.06		Z3 Universal	WKN 1213	12	13	6	53	20°	1	
A10121613803	HFN 1613.08		Z3 Universal	WKN 1613	16	13	8	53	20°	1	
A101210136030001	HFNS 1013.06		Z3 Universal	WKN-S 1013	10	13	6	53	10°	1	
A101212136030001	HFNS 1213.06		Z3 Universal	WKN-S 1213	12	13	6	53	20°	1	
A101216138030001	HFNS 1613.08		Z3 Universal	WKN-S 1613	16	13	8	53	20°	1	
A101216138030001	HFNS 1613.08		Z3 Universal	WKN-S 1613	16	13	8	53	20°	1	

Recommended for: ● Steel ● Inox/Steel ● Titanium

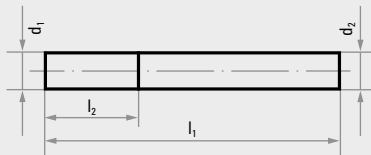
MANUAL OR MECHANICAL PROCESSING OF FIBRE-REINFORCED MATERIALS

MILL, DRILL AND SAW WITH JUST ONE TOOL

The Composite burr is designed for processing fibre-reinforced material, but is incredibly versatile in this area. It can be used in similar variants for both machine and for manual applications. In addition to milling, the extra-long cutting edge is also suitable for sawing. The fishtail tip is suitable for drilling and end milling of workpieces. This makes the Composite burr an all-rounder that makes multiple tool changes unnecessary and is perfectly suited as a robot tool due to its long tool life.



Composite Coarse burr



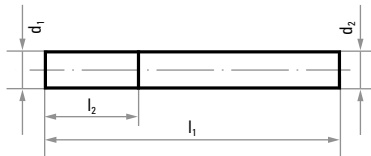
- perfect for drilling, milling and sawing
- extra-long cutting section
- long tool life
- highly economic
- The coarse cut (Coarse) is excellent for stationary use.

★★☆

Product number	Description	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10180315323	HFAS 0315.03	Composite Coarse	3	15	3	42	1
A10180625623	HFAS 0625.06	Composite Coarse	6	25	6	64	1
A10180828823	HFAS 0828.08	Composite Coarse	8	28	8	73	1

Recommended for: ● Plastic/Wood

Composite Fine burr



- perfect for drilling, milling and sawing
- extra-long cutting section
- longer tool life
- highly economic
- The fine cut (Fine) is highly precise and ergonomic, even in manual use.

★★☆

Product number	Description	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10180625624	HFAS 0625.06	Composite Fine	6	25	6	64	1
A10180828824	HFAS 0828.08	Composite Fine	8	28	8	73	1
A101810301024	HFAS 1030.10	Composite Fine	10	30	10	77	1

Recommended for: ● Plastic/Wood

THE BURR FOR WOOD AND LIGHTWEIGHT CONSTRUCTION MATERIALS

THE PERFECT TOOL FOR PATTERN CONSTRUCTION.

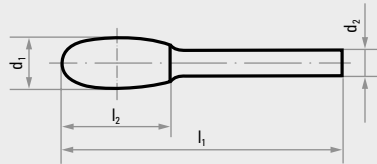
SUITABLE FOR USE ON WOOD, WPC PLASTIC AND NON-FERROUS METALS

Where HSS and stippled burrs quickly fail the Wood rasp burr thrives with its extraordinarily long tool life. This is made possible by manufacturing it from fine-grain tungsten carbide. This means that wood and other lightweight materials can be machined for long periods. Especially when deburring, modelling and smoothing, the Wood rasp burr shows its superiority with fast material removal.

Even with little application of force, it's easy to work quickly with the rasp burr. This is because the coarse cutting edge geometry is always extremely effective and has good cutting properties. The Wood rasp burr does not produce any annoying vibrations. In addition to wood, this tool can machine all types of Plastic and rubber.



- ideal for chamfering, modelling and smoothing
- large cutting angle means high speed
- long tool life thanks to tungsten carbide
- smooth running without vibrations
- Applications: pattern construction and wood, mould making, cores and soft materials



Wood burr

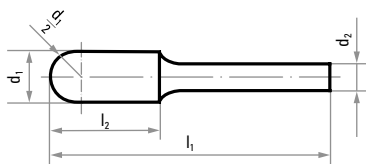
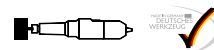


★★★

Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10021225618	HFC 1225.06		Wood	12	25	6	65	1
A10031210618	HFD 1210.06		Wood	12	10	6	50	1
A10061220618	HFE 1220.06		Wood	12	20	6	60	1
A10100618618	HFF 0618.06		Wood	6	18	6	58	1
A10100820618	HFF 0820.06		Wood	8	20	6	60	1

Recommended for: ● Plastic/Wood ● Steel

Z2 Brass burr



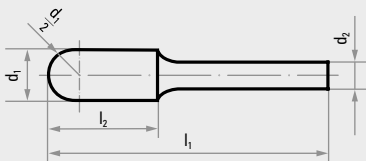
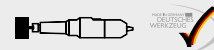
★★☆

■ robust single cut for high stock removal

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10020313302	HFC 0313.03		Z2 Brass	WRC 0313	3	13	3	40	1
A10020616602	HFC 0616.06		Z2 Brass	WRC 0616	6	16	6	50	1
A10021225602	HFC 1225.06		Z2 Brass	WRC 1225	12	25	6	65	1
A10030303302	HFD 0302.03		Z2 Brass	KUD 0302	3	2	3	40	1
A10040618602	HFG 0618.06		Z2 Brass	SPG 0618	6	18	6	50	1
A10041225602	HFG 1225.06		Z2 Brass	SPG 1225	12	25	6	65	1
A10041230602	HFG 1230.06		Z2 Brass	SPG 1230	12	30	6	70	1
A10090613302	HFH 0613.03		Z2 Brass	-	6	13	3	43	1

Recommended for: ● Aluminium ● Cast material ● Plastic/Wood ● Steel

Z1 burr



★★☆

■ coarse single cut for soft materials (e.g. aluminium and copper)

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	r mm	α	Pack contains
A10020616601	HFC 0616.06		Z1	WRC 0616	6	16	6	50	-	-	1
A10021225601	HFC 1225.06		Z1	WRC 1225	12	25	6	65	-	-	1
A10101225601	HFF 1225.06		Z1	RBF 1225	12	25	6	65	-	-	1
A10040618601	HFG 0618.06		Z1	SPG 0618	6	18	6	50	-	-	1
A10071230601	HFL 1230.06		Z1	KEL 1230	12	30	6	70	2.6	14°	1
A10051225601	HFM 1225.06		Z1	SKM 1225	12	25	6	65	-	-	1

Recommended for: ● Aluminium ● Plastic/Wood

REDUCING WEAR WITH LIGHTFLOW

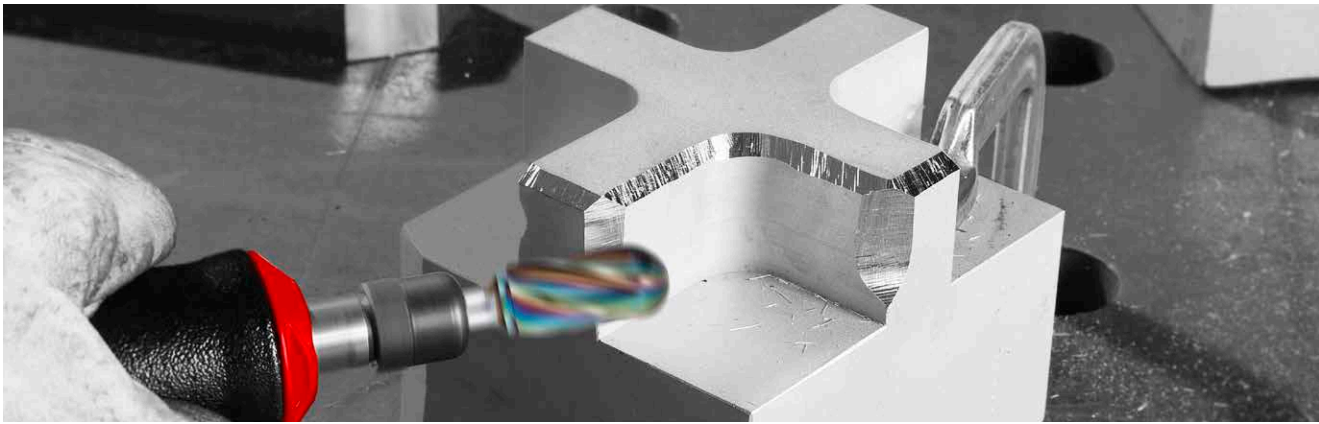
IDEAL SURFACE TREATMENT WITH OUTSTANDING NON-STICK PROPERTIES

The new LightFlow coating from LUKAS is perfect for reducing friction between the tool and the material surface. It lets you create excellent surfaces while also extending the tool life of the burr. This coating prevents the burr from becoming clogged with aluminium chips, therefore reducing machine load and maintaining a consistent speed. There is no sticking or smear-

ing. This lets you work for longer without having to clean or replace the tool.

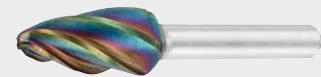
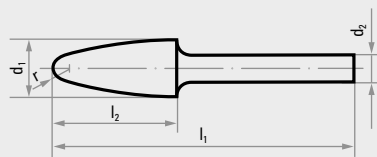
Application areas of the coating:

cutting graphite, aluminium, copper, carbon composites and wood



Z9 Alu burr with Lightflow coating NEW

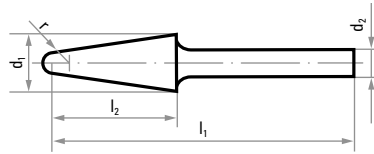
- process aluminium with razor-sharp cutting edges
- the perfect synergies between burr and LightFlow coating
- high chip volume thanks to coarse cut for quick work
- faceted toothing for perfect surface results
- maximum cutting cross section for effortless processing



Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10020616609LF	HFC 0616.06		Z9 Alu	WRC 0616	6	16	6	50	1
A10021225609LF	HFC 1225.06		Z9 Alu	WRC 1225	12	25	6	65	1
A10100618609LF	HFF 0618.06		Z9 Alu	RBF 0618	6	18	6	50	1
A10101225609LF	HFF 1225.06		Z9 Alu	RBF 1225	12	25	6	65	1
A10071230609LF	HFL 1230.06		Z9 Alu	KEL 1230	12	30	6	70	1

Recommended for: ● Aluminium ● Plastic/Wood

Z9 Alu burr



- the burr for aluminium and non-ferrous metals
- ideal for cutting, chamfering and deburring
- high removal speed
- no clogging
- long tool life

★★☆

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10010313309	HFA 0313.03		Z9 Alu	ZYA 0313	3	13	3	40	1
A10010616609	HFA 0616.06		Z9 Alu	ZYA 0616	6	16	6	50	1
A10011225609	HFA 1225.06		Z9 Alu	ZYA 1225	12	25	6	65	1
A10011225809	HFA 1225.08		Z9 Alu	ZYA 1225	12	25	8	65	1
A10011625609	HFA 1625.06		Z9 Alu	ZYA 1625	16	25	6	65	1
A10020313309	HFC 0313.03		Z9 Alu	WRC 0313	3	13	3	40	1
A10020616609	HFC 0616.06		Z9 Alu	WRC 0616	6	16	6	50	1
A10020820609	HFC 0820.06		Z9 Alu	WRC 0820	8	20	6	60	1
A10021225609	HFC 1225.06		Z9 Alu	WRC 1225	12	25	6	65	1
A10021225809	HFC 1225.08		Z9 Alu	WRC 1225	12	25	8	65	1
A10021625609	HFC 1625.06		Z9 Alu	WRC 1625	16	25	6	65	1
A10030403309	HFD 0403.03		Z9 Alu	KUD 0403	4	3	3	34	1
A10030605609	HFD 0605.06		Z9 Alu	KUD 0605	6	5	6	50	1
A10031212609	HFD 1210.06		Z9 Alu	KUD 1210	12	10	6	50	1
A10031616609	HFD 1614.06		Z9 Alu	KUD 1614	16	14	6	54	1
A10031616809	HFD 1614.08		Z9 Alu	KUD 1614	16	14	8	54	1
A10061225809	HFE 1225.08		Z9 Alu	TRE 1225	12	25	8	65	1
A10061625809	HFE 1625.08		Z9 Alu	TRE 1625	16	25	8	65	1
A10100313309	HFF 0313.03		Z9 Alu	RBF 0313	3	13	3	40	1
A10100618609	HFF 0618.06		Z9 Alu	RBF 0618	6	18	6	50	1
A10101225609	HFF 1225.06		Z9 Alu	RBF 1225	12	25	6	65	1
A10101225809	HFF 1225.08		Z9 Alu	RBF 1225	12	25	8	65	1
A10101630609	HFF 1630.06		Z9 Alu	RBF 1630	16	30	6	70	1
A10101630809	HFF 1630.08		Z9 Alu	RBF 1630	16	30	8	70	1
A10040313309	HFG 0313.03		Z9 Alu	SPG 0313	3	13	3	40	1
A10070820609	HFL 0820.06		Z9 Alu	-	8	20	6	60	1
A10071020609	HFL 1020.06		Z9 Alu	KEL 1020	10	20	6	60	1
A10071225609	HFL 1225.06		Z9 Alu	KEL 1225	12	25	6	65	1
A10071230609	HFL 1230.06		Z9 Alu	KEL 1230	12	30	6	70	1
A10071230809	HFL 1230.08		Z9 Alu	KEL 1230	12	30	8	70	1
A10050618609	HFM 0618.06		Z9 Alu	SKM 0618	6	18	6	50	1

Recommended for: ● Aluminium ● Plastic/Wood

BENEFITS OF BURR AND FILE IN A SINGLE TOOL

EVEN CUTS SOFT MATERIALS WITHOUT CLOGGING

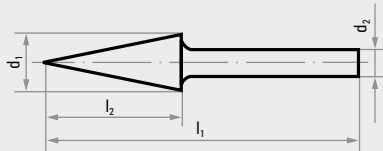


The micro-cut of the solid carbide rotary files is based on the cutting geometry of a file. This prevents the tool from becoming clogged, even when processing soft materials. The precision toothing is produced using modern CNC grinding machines to guarantee perfect concentric running and chatter-free work. This keeps the burrs sharp for longer, leaving a clean surface without any chatter marks. We offer rotary files in a range of shapes and sizes, and with three different cuts from ZF1 (coarse) to ZF3 (fine). This allows you to optimise the conditions for every application and achieve the best surface result.



ZF1 - ZF3 rotary file



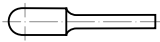


- outstanding surfaces thanks to fine toothing
- long tool life thanks to tungsten carbide
- no clogging
- for outstanding surfaces



★★☆

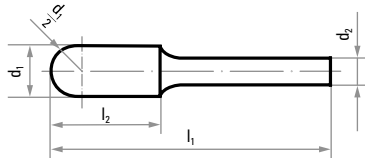
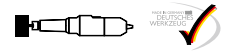
Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A100112256160001	HFAS 1225.06		ZF1	12	25	6	65	1
A10021225616	HFC 1225.06		ZF1	12	25	6	65	1
A10041230616	HFG 1230.06		ZF1	12	30	6	70	1
A100106166150001	HFAS 0616.06		ZF2	6	16	6	50	1
A100112256150001	HFAS 1225.06		ZF2	12	25	6	65	1
A10021225615	HFC 1225.06		ZF2	12	25	6	65	1
A10031009615	HFD 1009.06		ZF2	10	9	6	49	1
A10040618615	HFG 0618.06		ZF2	6	18	6	50	1
A10041230615	HFG 1230.06		ZF2	12	30	6	70	1

Recommended for: ● Inox/Steel ● Steel ● Cast material ● Plastic/Wood ● Titanium

Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10051225615	HFM 1225.06		ZF2	12	25	6	65	1
A100106166140001	HFAS 0616.06		ZF3	6	16	6	50	1
A10020616614	HFC 0616.06		ZF3	6	16	6	50	1
A10040618614	HFG 0618.06		ZF3	6	18	6	50	1
A10041230614	HFG 1230.06		ZF3	12	30	6	70	1
A10010204300	HFI 0204.03		ZI/ZF	2,5	4	3	40	1
A10010408300	HFI 0408.03		ZI/ZF	4	8	3	50	1
A10010810600	HFI 0810.06		ZI/ZF	8	10	6	65	1

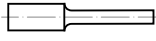
Recommended for: ● Inox/Steel ● Steel ● Cast material ● Plastic/Wood ● Titanium

Z5 Hard burr



★★☆

■ with very fine single cut for high-quality surfaces with hard materials

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10010210305	HFA 0210.03		Z5 Hard	ZYA 0210	2	10	3	40	1
A10010313305	HFA 0313.03		Z5 Hard	ZYA 0313	3	13	3	40	1
A10010607305	HFA 0607.03		Z5 Hard	ZYA 0607	6	7	3	37	1
A10010613305	HFA 0613.03		Z5 Hard	ZYA 0613	6	13	3	43	1
A10010616605	HFA 0616.06		Z5 Hard	ZYA 0616	6	16	6	50	1
A10010820605	HFA 0820.06		Z5 Hard	ZYA 0820	8	20	6	60	1
A10011225605	HFA 1225.06		Z5 Hard	ZYA 1225	12	25	6	65	1
A100102103050001	HFAS 0210.03		Z5 Hard	ZYA-S 0210	2	10	3	40	1
A100103133050001	HFAS 0313.03		Z5 Hard	ZYA-S 0313	3	13	3	40	1
A100106073050001	HFAS 0607.03		Z5 Hard	ZYA-S 0607	6	7	3	37	1
A100106133050001	HFAS 0613.03		Z5 Hard	ZYA-S 0613	6	13	3	43	1
A100106166050001	HFAS 0616.06		Z5 Hard	ZYA-S 0616	6	16	6	50	1
A100108206050001	HFAS 0820.06		Z5 Hard	ZYA-S 0820	8	20	6	60	1
A100112256050001	HFAS 1225.06		Z5 Hard	ZYA-S 1225	12	25	6	65	1

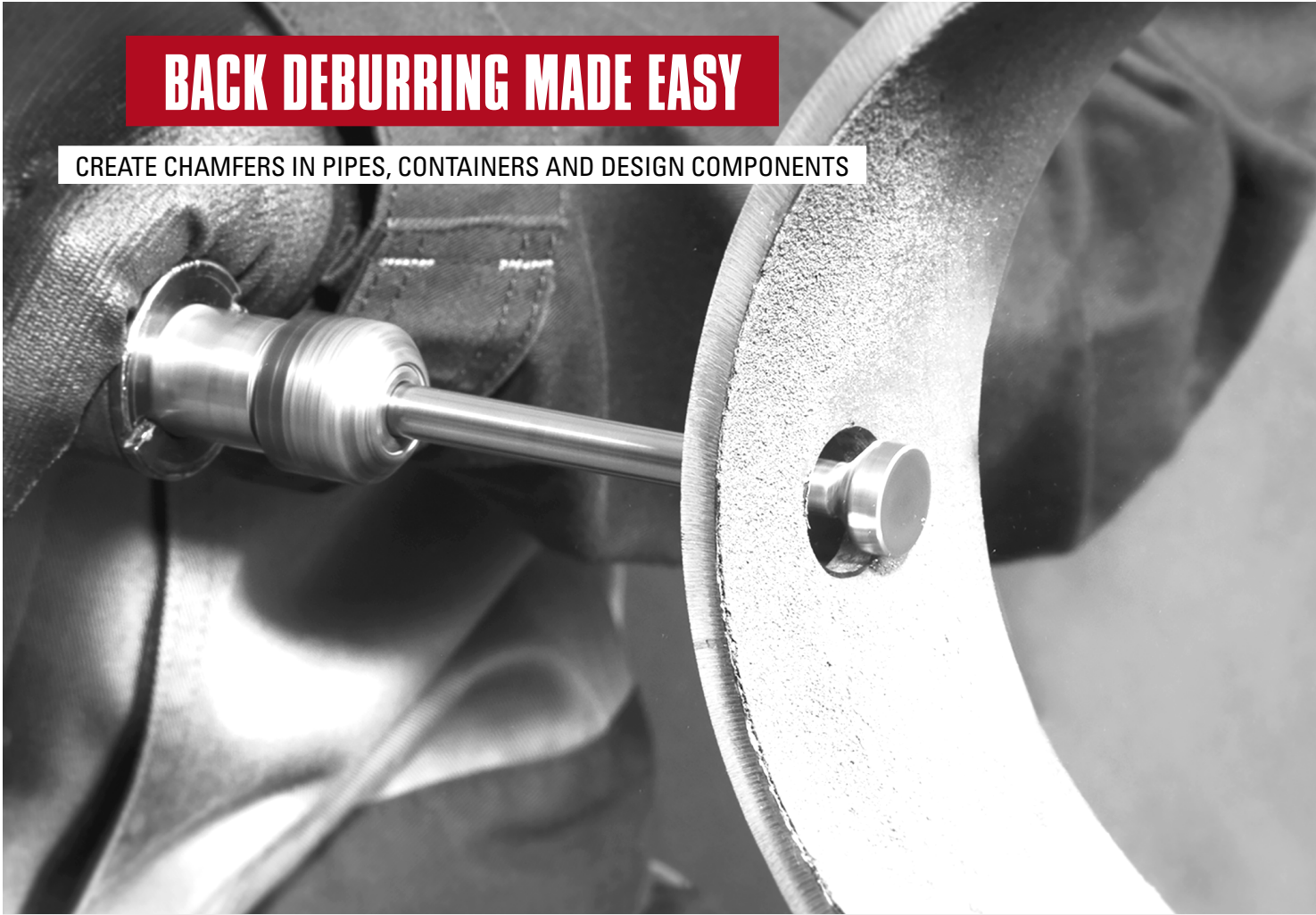
Recommended for: ● Steel ● Inox/Steel ● Titanium

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains		
A10020210305	HFC 0210.03		Z5 Hard	WRC 0210	2	10	3	40	1		
A10020313305	HFC 0313.03		Z5 Hard	WRC 0313	3	13	3	40	1		
A10020613305	HFC 0613.03		Z5 Hard	WRC 0613	6	13	3	43	1		
A10020616605	HFC 0616.06		Z5 Hard	WRC 0616	6	16	6	50	1		
A10020820605	HFC 0820.06		Z5 Hard	WRC 0820	8	20	6	60	1		
A10021020605	HFC 1020.06		Z5 Hard	WRC 1020	10	20	6	60	1		
A10021225605	HFC 1225.06		Z5 Hard	WRC 1225	12	25	6	65	1		
A10030303305	HFD 0302.03		Z5 Hard	KUD 0302	3	2	3	40	1		
A100304043050001	HFD 0403.03		Z5 Hard	KUD 0403	4	3	3	34	1		
A10030606305	HFD 0605.03		Z5 Hard	KUD 0605	6	5	3	35	1		
A10030606605	HFD 0605.06		Z5 Hard	KUD 0605	6	5	6	50	1		
A10030808605	HFD 0807.06		Z5 Hard	KUD 0807	8	7	6	47	1		
A10031010605	HFD 1009.06		Z5 Hard	KUD 1009	10	9	6	49	1		
A10031212605	HFD 1210.06		Z5 Hard	KUD 1210	12	10	6	51	1		
A10060307305	HFE 0307.03		Z5 Hard	TRE 0307	3	7	3	40	1		
A10060610305	HFE 0610.03		Z5 Hard	TRE 0610	6	10	3	40	1		
A10100307305	HFF 0307.03		Z5 Hard	RBF 0307	3	7	3	40	1		
A10100313305	HFF 0313.03		Z5 Hard	RBF 0313	3	13	3	40	1		
A10100613305	HFF 0613.03		Z5 Hard	RBF 0613	6	13	3	43	1		
A10100618605	HFF 0618.06		Z5 Hard	RBF 0618	6	18	6	50	1		
A10040307305	HFG 0307.03		Z5 Hard	SPG 0307	3	7	3	40	1		
A10040313305	HFG 0313.03		Z5 Hard	SPG 0313	3	13	3	40	1		
A10040613305	HFG 0613.03		Z5 Hard	SPG 0613	6	13	3	43	1		
A10040618605	HFG 0618.06		Z5 Hard	SPG 0618	6	18	6	50	1		
A10041020605	HFG 1020.06		Z5 Hard	SPG 1020	10	20	6	60	1		
A10041230605	HFG 1230.06		Z5 Hard	SPG 1230	12	30	6	70	1		
A10090307305	HFH 0307.03		Z5 Hard	-	3	7	3	40	1		
A10090613305	HFH 0613.03		Z5 Hard	-	6	13	3	43	1		
Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	r mm	α	Pack contains
A10071230605	HFL 1230.06		Z5 Hard	KEL 1230	12	30	6	70	2.6	14°	1
Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains		
A10050307305	HFM 0307.03		Z5 Hard	SKM 0307	3	7	3	40	1		
A10050311305	HFM 0311.03		Z5 Hard	SKM 0311	3	11	3	40	1		
A10050613305	HFM 0613.03		Z5 Hard	SKM 0613	6	13	3	43	1		
A10050618605	HFM 0618.06		Z5 Hard	SKM 0618	6	18	6	50	1		
A10120307305	HFN 0307.03		Z5 Hard	WKN 0307	3	7	3	40	1		
A10120607305	HFN 0607.03		Z5 Hard	WKN 0607	6	7	3	37	1		
A101203073050001	HFNS 0307.03		Z5 Hard	WKN-S 0307	3	7	3	40	1		
A101206073050001	HFNS 0607.03		Z5 Hard	WKN-S 0607	6	7	3	37	1		

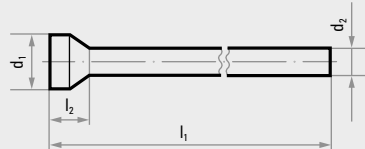
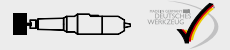
Recommended for: ● Steel ● Inox/Steel ● Titanium

BACK DEBURRING MADE EASY

CREATE CHAMFERS IN PIPES, CONTAINERS AND DESIGN COMPONENTS



Z3 Universal inverse deburring tool (internal)



- defined 45° bevel
- for different bore diameters
- variable chamfer width
- fast work result

Applications:

- back deburring of boreholes on difficult-to-reach areas
- excellent for use in pipes, containers and design components
- back chamfering of boreholes

★★☆

Product number	Description	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10170504303	HFT 0504.03	Z3 Universal	5	4	3	40	1
A10170705303	HFT 0705.03	Z3 Universal	7	5	3	40	1
A10171006603	HFT 1006.06	Z3 Universal	10	6	6	60	1
A10171207603	HFT 1207.06	Z3 Universal	12	7	6	65	1
A10171610603	HFT 1610.06	Z3 Universal	16	10	6	70	1
A10171610803	HFT 1610.08	Z3 Universal	16	10	8	120	1
A10171811803	HFT 1811.08	Z3 Universal	18	11	8	120	1

Recommended for: ● Steel ● Inox/Steel ● Aluminium ● Cast material ● Titanium



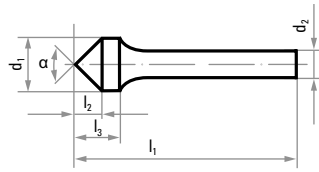
SAFETY ADVICE

Reduced speed for burrs with a total length l₁ = 120 mm: max. 11,000 m²



Z3 Universal burr for deburring

- Remove burrs quickly and easily with the Z3 Universal burr in shape J for perfect deburring.
- for different bore diameters
- with single cut for universal applications



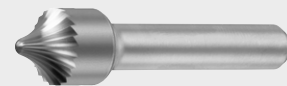
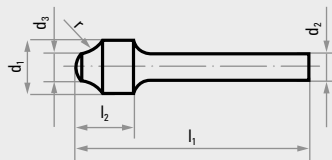
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Product number	Description	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	l ₃ mm	α	Pack contains
A10080660603	HFJ 0605.06	Z3 Universal	KSJ 0605	6	5	6	50	–	60°	1
A10081090603	HFJ 1010.06	Z3 Universal	KSK 1005	10	5	6	50	10	90°	1
A10081060603	HFJ 1013.06	Z3 Universal	KSJ 1008	10	9	6	53	13	60°	1
A10081690603	HFJ 1613.06	Z3 Universal	KSK 1608	16	8	6	53	13	90°	1
A10081690803	HFJ 1613.08	Z3 Universal	KSK 1608	16	8	8	53	13	90°	1
A10081660603	HFJ 1616.06	Z3 Universal	KSJ 1613	16	14	6	56	16	60°	1

Recommended for: Steel Inox/Steel Aluminium Cast material Titanium



Z3 + Z5 burrs for deburring (external)



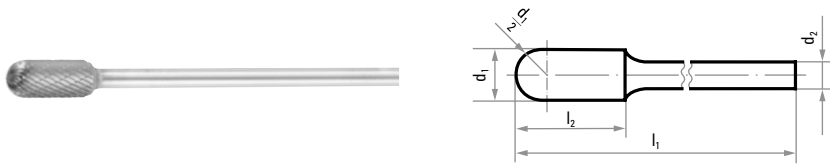
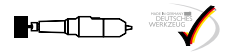
- perfectly shaped to fit boreholes of varying size

★★☆

Product number	Description	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	l ₃ mm	Pack contains
A10140812603	HFR 0812.06	Z3 Universal	8	12	6	52	3	1
A10141015603	HFR 1015.06	Z3 Universal	10	15	6	55	2	1
A10141215603	HFR 1215.06	Z3 Universal	12	15	6	55	6	1
A10141215803	HFR 1215.08	Z3 Universal	12	15	8	55	6	1
A10141315603	HFR 1315.06	Z3 Universal	13	15	6	55	3	1
A10141315803	HFR 1315.08	Z3 Universal	13	15	8	55	3	1
A10141315605	HFR 1315.06	Z5 Hard	13	15	6	55	3	1

Recommended for: Steel Inox/Steel Aluminium Cast material Titanium

Z7 Steel burr with extra-long shank



- shank length: 200 mm
- Thanks to the central cross cut, this burr is perfect for use on steel.

★★☆

Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	n _{max} rpm	Pack contains
A10011225608200	HFA 1225.06 L		Z7 Steel	12	25	6	225	2,300	1
A10020616608200	HFC 0616.06 L		Z7 Steel	6	16	6	216	2,300	1
A10020820608200	HFC 0820.06 L		Z7 Steel	8	20	6	220	4,200	1
A10021020608200	HFC 1020.06 L		Z7 Steel	10	20	6	220	4,200	1
A10021225608200	HFC 1225.06 L		Z7 Steel	12	25	6	225	3,400	1
A10030605608200	HFD 0605.06 L			Z7 Steel	6	5	6	205	3,400
A10030807608200	HFD 0807.06 L	Z7 Steel		8	7	6	207	2,900	1
A10031009608200	HFD 1009.06 L	Z7 Steel		10	9	6	209	2,300	1
A10031210608200	HFD 1210.06 L	Z7 Steel		12	10	6	210	5,200	1
A10031210808200	HFD 1210.08 L	Z7 Steel		12	10	8	210	5,300	1
A10061220608200	HFE 1220.06 L			Z7 Steel	12	20	6	220	2,500
A10100618608200	HFF 0618.06 L		Z7 Steel	6	18	6	218	4,100	1
A10101230808200	HFF 1230.08 L		Z7 Steel	12	30	8	230	3,500	1
A10040618608200	HFG 0618.06 L		Z7 Steel	6	18	6	218	4,100	1
A10041230808200	HFG 1230.08 L		Z7 Steel	12	30	8	230	3,500	1
A10091020608200	HFH 1020.06 L		Z7 Steel	10	20	6	220	2,900	1

Recommended for: ● Steel ● Cast material ● Titanium



SAFETY ADVICE

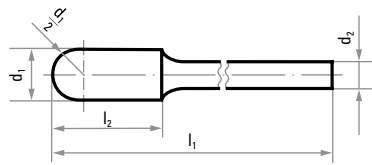
To prevent shank breakage, never exceed the maximum permitted speed when there is no tool contact (see product table). You may work at twice the maximum permitted speed only if the burr is in contact

with the workpiece or inserted into a channel or borehole before the power tool is switched on, and remains there until the power tool comes to a complete standstill.



Z3 Universal burr with extra-long shank

MILLING



- shank length: 200 mm
- with single cut for universal applications

★★☆

Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	n _{max} rpm	Pack contains
A10020616603200	HFC 0616.06 L		Z3 Universal	6	16	6	216	4,200	1
A10020820603200	HFC 0820.06 L		Z3 Universal	8	20	6	220	3,400	1
A10030605603200	HFD 0605.06 L		Z3 Universal	6	5	6	205	5,200	1
A10030807603200	HFD 0807.06 L		Z3 Universal	8	7	6	207	4,600	1
A10031009603200	HFD 1009.06 L		Z3 Universal	10	9	6	209	3,900	1
A10031210603200	HFD 1210.06 L		Z3 Universal	12	10	6	210	3,400	1
A10061220603200	HFE 1220.06 L		Z3 Universal	12	20	6	220	2,500	1
A10100618603200	HFF 0618.06 L		Z3 Universal	6	18	6	218	4,100	1
A10040618603200	HFG 0618.06 L		Z3 Universal	6	18	6	218	4,100	1
A10091020603200	HFH 1020.06 L		Z3 Universal	10	20	6	220	2,900	1

Recommended for: ● Steel ● Inox/Steel ● Titanium

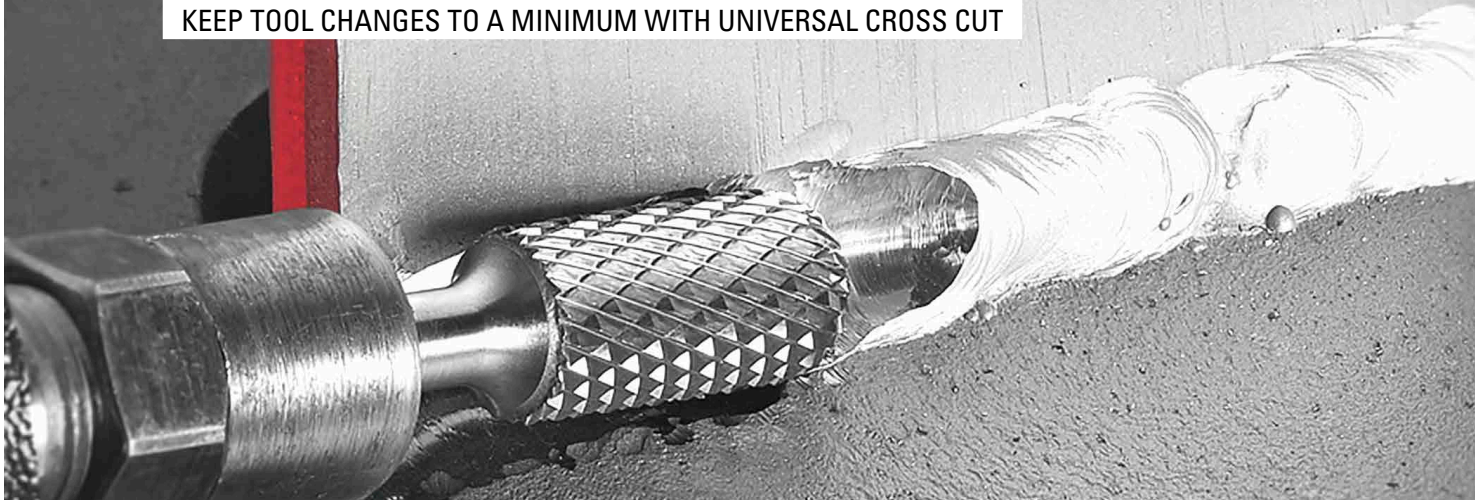
SAFETY ADVICE

To prevent shank breakage, never exceed the maximum permitted speed when there is no tool contact (see product table). You may work at twice the maximum permitted speed only if the burr is in contact

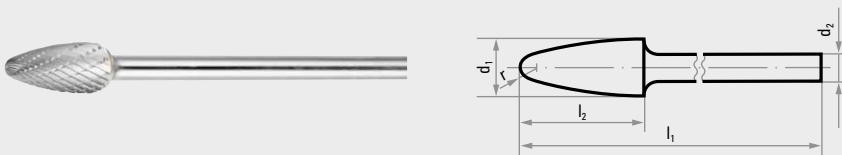
with the workpiece or inserted into a channel or borehole before the power tool is switched on, and remains there until the power tool comes to a complete standstill.

ZX UNIVERSAL – SUCCESSFUL ON EVERY MATERIAL

KEEP TOOL CHANGES TO A MINIMUM WITH UNIVERSAL CROSS CUT



ZX Universal burr with extra-long shank



- shank length: 150 mm
- the all-rounder for universal applications
- with cross cut for high performance

Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	n _{max} rpm	Pack contains
A10020820622150	HFC 0820.06 BASE-X		ZX Universal	8	20	6	170	5,500	1
A10021020622150	HFC 1020.06 BASE-X		ZX Universal	10	20	6	170	4,700	1
A10021225622150	HFC 1225.06 BASE-X		ZX Universal	12	25	6	175	3,600	1
Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	n _{max} rpm	Pack contains
A10030807622150	HFD 0807.06 BASE-X		ZX UNIVERSAL	8	7	6	157	7,900	1
A10031009622150	HFD 1009.06 BASE-X		ZX UNIVERSAL	10	9	6	159	6,600	1
A10100820622150	HFF 0820.06 BASE-X		ZX UNIVERSAL	8	20	6	170	5,600	1
A10101225622150	HFF 1225.06 BASE-X		ZX UNIVERSAL	12	25	6	175	3,600	1

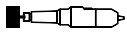
Recommended for: ● Steel ● Cast material ● Inox/Steel ● Titanium



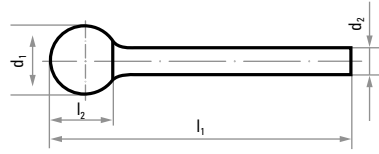
SAFETY ADVICE

To prevent shank breakage, never exceed the maximum permitted speed when there is no tool contact (see product table). You may work at twice the maximum permitted speed only if the burr is in contact

with the workpiece or inserted into a channel or borehole before the power tool is switched on, and remains there until the power tool comes to a complete standstill.



ZX Universal burr



- the all-rounder for universal applications
- with cross cut for high performance

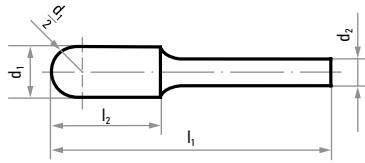


Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A10010313322	HFA 0313.03 BASE-X		ZX Universal	ZYA 0313	3	13	3	40	10
A10010616622	HFA 0616.06 BASE-X		ZX Universal	ZYA 0616	6	16	6	50	10
A10010820622	HFA 0820.06 BASE-X		ZX Universal	ZYA 0820	8	20	6	60	10
A10011020622	HFA 1020.06 BASE-X		ZX Universal	ZYA 1020	10	20	6	60	10
A10011225622	HFA 1225.06 BASE-X		ZX Universal	ZYA 1225	12	25	6	65	5
A10020313322	HFC 0313.03 BASE-X		ZX Universal	WRC 0313	3	13	3	40	10
A10020613322	HFC 0613.03 BASE-X		ZX Universal	WRC 0613	6	13	3	43	10
A10020616622	HFC 0616.06 BASE-X		ZX Universal	WRC 0616	6	16	6	50	10
A10020820622	HFC 0820.06 BASE-X		ZX Universal	WRC 0820	8	20	6	60	10
A10021020622	HFC 1020.06 BASE-X		ZX Universal	WRC 1020	10	20	6	60	10
A10021225622	HFC 1225.06 BASE-X	ZX Universal	WRC 1225	12	25	6	65	5	
A10030403322	HFD 0403.03 BASE-X		ZX Universal	KUD 0403	4	3	3	34	10
A10030605322	HFD 0605.03 BASE-X		ZX Universal	KUD 0605	6	5	3	35	10
A10030807622	HFD 0807.06 BASE-X		ZX Universal	KUD 0807	8	7	6	47	10
A10031009622	HFD 1009.06 BASE-X		ZX Universal	KUD 1009	10	9	6	49	10
A10031210622	HFD 1210.06 BASE-X		ZX Universal	KUD 1210	12	10	6	51	5
A10100313322	HFF 0313.03 BASE-X		ZX Universal	RBF 0313	3	13	3	40	10
A10100618622	HFF 0618.06 BASE-X		ZX Universal	RBF 0618	6	18	6	50	10
A10100820622	HFF 0820.06 BASE-X		ZX Universal	-	8	20	6	60	10
A10101020622	HFF 1020.06 BASE-X		ZX Universal	RBF 1020	10	20	6	60	10
A10101225622	HFF 1225.06 BASE-X		ZX Universal	RBF 1225	12	25	6	65	5
A10040313322	HFG 0313.03 BASE-X		ZX Universal	SPG 0313	3	13	3	40	10
A10040613322	HFG 0613.03 BASE-X		ZX Universal	SPG 0613	6	13	3	43	10
A10040820622	HFG 0820.06 BASE-X		ZX Universal	SPG 0820	8	20	6	60	10
A10041020622	HFG 1020.06 BASE-X		ZX Universal	SPG 1020	10	20	6	60	10
A10041225622	HFG 1225.06 BASE-X		ZX Universal	SPG 1225	12	25	6	65	5
A10041230622	HFG 1230.06 BASE-X		ZX Universal	SPG 1230	12	30	6	65	5

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	r mm	α	Pack contains
A10071230622	HFL 1230.06 BASE-X		ZX Universal	KEL 1230	12	30	6	70	2.6	14°	5
A10050311322	HFM 0311.03 BASE-X		ZX Universal	SKM 0311	3	11	3	40	-	14°	10
A10050618622	HFM 0618.06 BASE-X		ZX Universal	SKM 0618	6	18	6	50	-	16°	10
A10051020622	HFM 1020.06 BASE-X		ZX Universal	SKM 1020	10	20	6	60	-	27°	10
A10051225622	HFM 1225.06 BASE-X		ZX Universal	SKM 1225	12	25	6	65	-	26°	5

Recommended for: ● Steel ● Cast material ● Inox/Steel ● Titan

ZX Universal burr with imperial-sized shank



☆☆☆

- the all-rounder for universal applications
- with cross cut for high performance

Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ inch	l ₁ mm	Pack contains		
A5001082062214	HFA 0820.06 BASE-X		ZX Universal	ZYA 8020	8	20	1/4"	60	10		
A5001102062214	HFA 1020.06 BASE-X		ZX Universal	ZYA 1020	10	20	1/4"	60	10		
A5001122562214	HFA 1225.06 BASE-X		ZX Universal	ZYA 1225	12	25	1/4"	65	5		
A5002061662214	HFC 0616.06 BASE-X		ZX Universal	WRC 0616	6	16	1/4"	50	10		
A5002082062214	HFC 0820.06 BASE-X		ZX Universal	WRC 0820	8	20	1/4"	60	10		
A5002102062214	HFC 1020.06 BASE-X		ZX Universal	WRC 1020	10	20	1/4"	60	10		
A5002122562214	HFC 1225.06 BASE-X		ZX Universal	WRC 1225	12	25	1/4"	65	5		
A5003100962214	HFD 1009.06 BASE-X		ZX Universal	KUD 1009	10	9	1/4"	49	10		
A5003121062214	HFD 1210.06 BASE-X		ZX Universal	KUD 1210	12	10	1/4"	51	5		
A5010082062214	HFF 0820.06 BASE-X		ZX Universal	-	8	20	1/4"	60	10		
A5010102062214	HFF 1020.06 BASE-X		ZX Universal	RBF 1020	10	20	1/4"	60	10		
A5010122562214	HFF 1225.06 BASE-X		ZX Universal	RBF 1225	12	25	1/4"	65	5		
A5004082062214	HFG 0820.06 BASE-X		ZX Universal	SPG 8020	8	20	1/4"	60	10		
A5004102062214	HFG 1020.06 BASE-X		ZX Universal	SPG 1020	10	20	1/4"	60	10		
A5004122562214	HFG 1225.06 BASE-X		ZX Universal	SPG 1225	12	25	1/4"	65	5		
A5004123062214	HFG 1230.06 BASE-X		ZX Universal	SPG 1230	12	30	1/4"	70	5		
Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d ₂ inch	l ₁ mm	r mm	α	Pack contains
A5007123062214	HFL 1230.06 BASE-X		ZX Universal	KEL 1230	12	30	1/4"	70	2.6	14°	5
A5005061862214	HFM 0618.06 BASE-X		ZX Universal	SKM 0618	6	18	1/4"	50	-	16°	10
A5005102062214	HFM 1020.06 BASE-X		ZX Universal	SKM 1020	10	20	1/4"	60	-	27°	10
A5005122562214	HFM 1225.06 BASE-X		ZX Universal	SKM 1225	12	25	1/4"	65	-	26°	5

Recommended for: ● Steel ● Cast material ● Inox/Steel ● Titan



Carbide burrs assortments

- Always the right tool at hand. With our practical tool assortments, you can always have exactly what you need.
- perfectly suited for testing different tools
- just as suitable for use in the home, hobby workshop or in industry



Set HM STEEL S3

Set HM STEEL S6

Set HM INOX S6

Set HM ALU S3

Set HM ALU S6

★★☆

Product number	Description	Cut	Shank Ø mm	Content 1 per pack	Pack contains		
A10390010	Set HM STEEL S3	Z7 Steel	3	10 parts: HFA 0313 HFC 0613 HFG 0313 HFF 0313	HFA 0613 HFD 0302 HFG 0613 HFC 0313 HFD 0605 HFM 0613	1	
A1039001006	Set HM STEEL S6	Z7 Steel	6	10 parts: HFAS 0616 HFC 1225 HFD 1210 HFF 0820	HFAS 1225 HFC 1225 HFG 0618 HFF 1225	HFC 0616 HFD 0605 HFG 1225	1
Recommended for: <input type="radio"/> Steel <input checked="" type="radio"/> Cast material <input type="radio"/> Titanium							
A1039001020	Set HM INOX S6	Z42 Inox/ Steel	6	10 parts: HFA 0616 HFC 1225 HFG 0618 HFF 1225	HFA 1225 HFD 0605 HFG 1225	HFC 0616 HFD 1210 HFF 0618	1
Recommended for: <input checked="" type="radio"/> Inox/Steel <input type="radio"/> Steel <input checked="" type="radio"/> Cast material							
A1039000509	Set HM ALU S3	Z9 Alu	3	5 parts: HFA 0313 HFF 0313	HFC 0313 HFG 0313	HFD 0403	1
A10390005096	Set HM ALU S6	Z9 Alu	6	5 parts: HFA 0616 HFF 0618	HFC 0616 HFD 0605	HFM 0618	1
Recommended for: <input checked="" type="radio"/> Aluminium <input type="radio"/> Plastic/Wood							



ZX Universal carbide burrs assortments

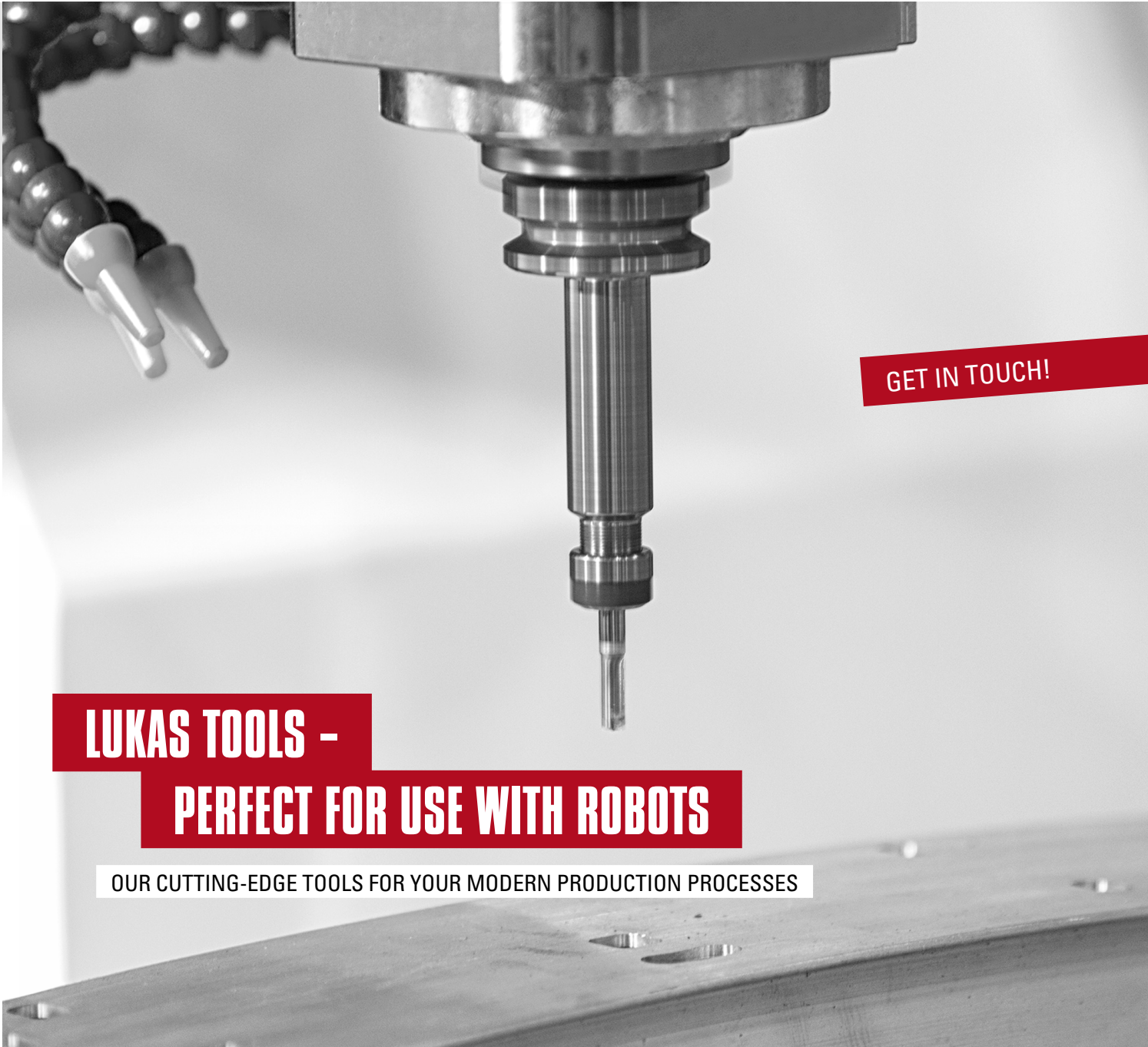
- Always the right tool at hand. With our practical tool assortments, you can always have exactly what you need.
- perfectly suited for testing different tools
- just as suitable for use in the home, hobby workshop or in industry
- the all-round burr for universal applications, with cross cut for high performance



F5 S3 BASE-X

★★☆

Product number	Description	Cut	Shank Ø mm	Content 1 per pack	Pack contains		
A10390053	F5 S3 BASE-X	ZX Universal	3	5 parts: HFA 0313 HFF 0313	HFC 0313 HFD 0605 HFG 0313	1	
A10390056	F5 S6 BASE-X	ZX Universal	6	5 parts: HFA 1225 HFF 1225	HFC 1225 HFG 1225	HFD 1210	1
Recommended for: <input type="radio"/> Steel <input checked="" type="radio"/> Cast material <input type="radio"/> Inox/Steel <input type="radio"/> Titan							

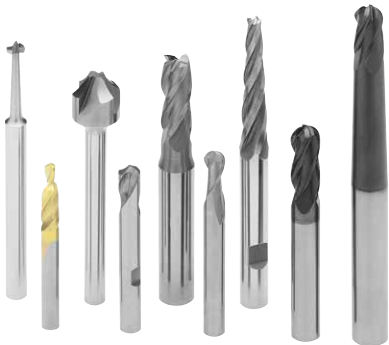


GET IN TOUCH!

**LUKAS TOOLS –
PERFECT FOR USE WITH ROBOTS**

OUR CUTTING-EDGE TOOLS FOR YOUR MODERN PRODUCTION PROCESSES

Tools for stationary use



In addition to rotary burrs, we also produce tungsten carbide milling tools in special shapes and sizes for stationary applications. We supply these milling cutters with a maximum diameter of 20 mm and a maximum length of 250 mm; they differ from our extensive standard range in their shape, tool material and geometry (rake, clearance and helix angles).

- Range of applications:
- tool construction
 - turbine construction
 - aerospace industry
 - general engineering

Differential drill, radius mill, shank-end mill, die mill, profile mill	Available upon request
Recommended for:	● Inox/Steel ● Steel ● Aluminium ● Cast material ● Plastic /Wood ● Titanium

TECHNICAL INFORMATION AND PRODUCT INFORMATION

LUKAS burrs made from HSS

QUALITY

LUKAS burrs are made from tried-and-tested steels. Our modern automatic flute grinding machines and heat treatment ensure consistently high quality.

APPLICATION

Combined with the right cut and speed, LUKAS HSS burrs can be used to efficiently cut a wide range of materials.

Please refer to the table on **page 47** for cutting speeds and the table on **page 46** for information on the various cuts.

As a rule of thumb:

- soft material = coarse cut
- hard material = fine cut

POWER TOOLS

LUKAS HSS burrs can be used on any commercially available pneumatic or electrical machinery. Obtaining the best result requires the machine to be run at the correct speed, the collets to run true and the bearings to be in good condition.

SHANKS

The standard shank length is 40 mm. Extra-long shanks are available on request for inaccessible working areas.

PACKAGING

Depending on the burr dimensions ordered, we select one of our environmentally friendly standard packages (5 or 10 items).

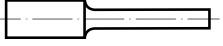
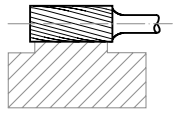

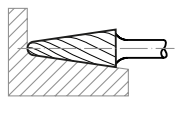

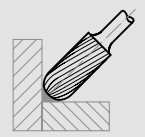
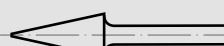
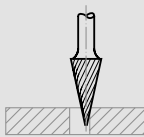

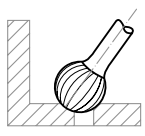

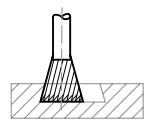
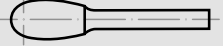
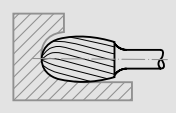


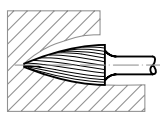
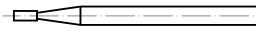

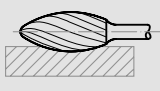
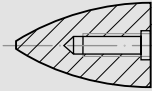

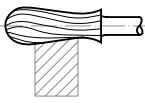
SPECIAL TOOLS

We can produce HSS burrs to the usual high LUKAS quality standards based on your specifications or drawing.




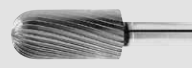
THE PERFECT BURRS FOR USE IN
PATTERN CONSTRUCTION AND
3D PRINTING **FROM PAGE 52**

SHAPE

The available shapes and cuts of our burrs

Shape		Application	Shape		Application
	MFA Cylindrical			MFL Conical round nose	
	MFC Cylindrical round nose			MFM Conical pointed nose	
	MFD Spherical			MFN Inverted cone	
	MFE Oval			MF Miniature burr, shank 3 mm	—
	MFG Arch pointed nose			MF Miniature burr, shank 6 mm	—
	MFH Flame			Burr with internal thread	—
	MFK Club				

CUTS

Cut		Properties	Page	Cut		Properties	Page
	Z1	Coarse cut for soft materials	48		Z3	Medium single cut	50/51
	Z2	Robust single cut for high stock removal	49		Z5	Very fine single cut for high-quality surfaces	51

RECOMMENDED APPLICATIONS

Three steps to your perfect burr made from HSS

STEP 1

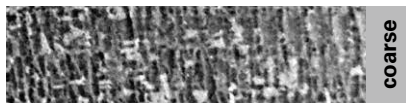
STEP 2

Begin by selecting the right **material** and **machining mode** (coarse to fine) from the table.

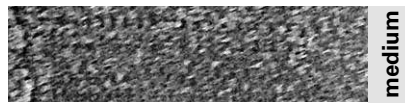
Read off the recommended **cut** and **cutting speed**.

Material	Strength (N/mm ²)	Machining	Cut	Recommended cutting speed v_c (m/min)
● Steel, cast steel	up to 800	coarse	Z2	50–100
		medium	Z3	100–200
		fine	Z5	50–200
	800 to 1,200	coarse	Z2	50–100
		medium	Z3	100–200
		fine	Z5	50–200
● Non-ferrous metal	up to 450	coarse	Z1	200–300
		medium	Z2	150–300
● Plastic and wood	20 to 400	coarse	Z1	200–300
		fine	Z2	150–300

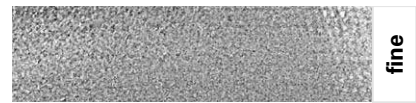
MACHINING



coarse



medium



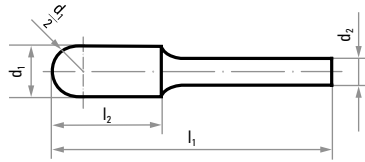
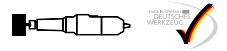
fine

STEP 3

Determine the appropriate **speed** for your power tool in the second table, based on the tool diameter and cutting speed.

		Recommended cutting speed v_c (m/min)					
		50	100	150	200	250	300
Tool diameter (mm)	2	8,000	16,000	24,000	32,000	40,000	48,000
	3	5,000	11,000	16,000	21,000	27,000	32,000
	4	4,000	8,000	12,000	16,000	20,000	24,000
	6	3,000	5,000	8,000	11,000	13,000	16,000
	8	2,000	4,000	6,000	8,000	10,000	12,000
	10	2,000	3,000	5,000	6,000	8,000	10,000
	12	1,000	3,000	4,000	5,000	7,000	8,000
	16	1,000	2,000	3,000	4,000	5,000	6,000
	20	1,000	2,000	2,000	3,000	4,000	5,000
	22	1,000	1,000	2,000	3,000	4,000	4,000
	25	1,000	1,000	2,000	3,000	3,000	4,000
	30	1,000	1,000	2,000	2,000	3,000	3,000
35	–	1,000	1,000	2,000	2,000	3,000	
		Speed (rpm)					

Z1 HSS burr



★★☆

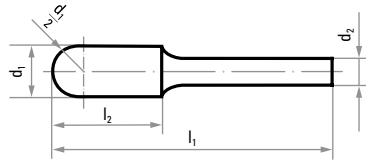
■ coarse cut for soft materials

Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A12001225601	MFA 1225.06		Z1	12	25	6	65	5
A12001625601	MFA 1625.06		Z1	16	25	6	65	5
A120006166010001	MFAS 0616.06		Z1	6	16	6	56	10
A120012256010001	MFAS 1225.06		Z1	12	25	6	65	5
A120016256010001	MFAS 1625.06		Z1	16	25	6	65	5
A12010620601	MFC 0620.06		Z1	6	20	6	60	10
A12010850601	MFC 0850.06		Z1	8	50	6	90	10
A12011225601	MFC 1225.06		Z1	12	25	6	65	5
A12050808601	MFD 0807.06		Z1	8	7	6	60	10
A12051212601	MFD 1210.06		Z1	12	10	6	60	5
A12051614601	MFD 1614.06		Z1	16	14	6	60	5
A12081220601	MFE 1220.06		Z1	12	20	6	60	5
A12081625601	MFE 1625.06		Z1	16	25	6	60	5
A12060618601	MFG 0618.06		Z1	6	18	6	58	10
A12061220601	MFG 1220.06		Z1	12	20	6	60	5
A12061230601	MFG 1230.06		Z1	12	30	6	70	5
A12061630601	MFG 1630.06		Z1	16	30	6	70	5
A12031630601	MFL 1630.06		Z1	16	30	6	70	5
A12020618601	MFM 0618.06		Z1	6	18	6	58	10
A12021230601	MFM 1230.06		Z1	12	30	6	70	5
A120412136010001	MFNS 1213.06		Z1	12	13	6	53	5

Recommended for: ● Aluminium ● Plastic/Wood



Z2 HSS burr



MILLING

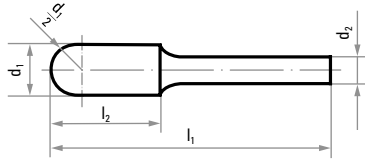
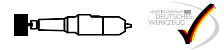
■ robust single cut for high stock removal

★★☆

Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A12000616602	MFA 0616.06		Z2	6	16	6	56	10
A12001013602	MFA 1013.06		Z2	10	13	6	53	10
A12001225602	MFA 1225.06		Z2	12	25	6	65	5
A12001625602	MFA 1625.06		Z2	16	25	6	65	5
A120006166020001	MFAS 0616.06		Z2	6	16	6	56	10
A120010136020001	MFAS 1013.06		Z2	10	13	6	53	10
A120012256020001	MFAS 1225.06		Z2	12	25	6	65	5
A120016256020001	MFAS 1625.06		Z2	16	25	6	65	5
A12010620602	MFC 0620.06		Z2	6	20	6	60	10
A12010850602	MFC 0850.06		Z2	8	50	6	90	10
A12011225602	MFC 1225.06		Z2	12	25	6	65	5
A120504046020001	MFD 0404.06		Z2	4,5	4	6	60	10
A12050606602	MFD 0605.06		Z2	6	5	6	60	10
A12050808602	MFD 0807.06		Z2	8	7	6	60	10
A12051010602	MFD 1009.06		Z2	10	9	6	60	10
A12051614602	MFD 1614.06		Z2	16	14	6	60	5
A12060618602	MFG 0618.06		Z2	6	18	6	58	10
A12061220602	MFG 1220.06		Z2	12	20	6	60	5
A12061230602	MFG 1230.06		Z2	12	30	6	70	5
A12061630602	MFG 1630.06		Z2	16	30	6	70	5
A12090620602	MFK 0620.06		Z2	6	20	6	60	10
A12091230602	MFK 1230.06		Z2	12	30	6	70	5
A12031020602	MFL 1020.06			Z2	10	20	6	60
A12031630602	MFL 1630.06	Z2		16	30	6	70	5
A12020618602	MFM 0618.06		Z2	6	18	6	58	10
A12021020602	MFM 1020.06		Z2	10	20	6	60	10
A12021230602	MFM 1230.06		Z2	12	30	6	70	5

Recommended for: ● Plastic/Wood ● Steel ● Aluminium

Z3 HSS burr



★★☆

■ medium single cut

Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A12000616603	MFA 0616.06		Z3	6	16	6	56	10
A12000820603	MFA 0820.06		Z3	8	20	6	60	10
A12001013603	MFA 1013.06		Z3	10	13	6	53	10
A12001020603	MFA 1020.06		Z3	10	20	6	60	10
A12001225603	MFA 1225.06		Z3	12	25	6	65	5
A12001625603	MFA 1625.06		Z3	16	25	6	65	5
A120006166030001	MFAS 0616.06		Z3	6	16	6	56	10
A120008206030001	MFAS 0820.06		Z3	8	20	6	60	10
A120010136030001	MFAS 1013.06		Z3	10	13	6	53	10
A120012256030001	MFAS 1225.06		Z3	12	25	6	65	5
A120016256030001	MFAS 1625.06		Z3	16	25	6	65	5
A12010620603	MFC 0620.06		Z3	6	20	6	60	10
A12010820603	MFC 0820.06		Z3	8	20	6	60	10
A12011020603	MFC 1020.06		Z3	10	20	6	60	10
A12011225603	MFC 1225.06		Z3	12	25	6	65	5
A12050303603	MFD 0302.06		Z3	3	2	6	60	10
A120503036030001	MFD 0303.06		Z3	3,5	3	6	60	10
A12050404603	MFD 0403.06		Z3	4	3	6	60	10
A120504046030001	MFD 0404.06		Z3	4,5	4	6	60	10
A12050505603	MFD 0504.06		Z3	5	4	6	60	10
A12050606603	MFD 0605.06		Z3	6	5	6	60	10
A12050808603	MFD 0807.06		Z3	8	7	6	60	10
A12051010603	MFD 1009.06		Z3	10	9	6	60	10
A12051212603	MFD 1210.06		Z3	12	10	6	60	5
A12051614603	MFD 1614.06		Z3	16	14	6	60	5
A12081220603	MFE 1220.06		Z3	12	20	6	60	5
A12081625603	MFE 1625.06		Z3	16	25	6	60	5
A12060618603	MFG 0618.06		Z3	6	18	6	58	10
A12061220603	MFG 1220.06		Z3	12	20	6	60	5
A12061225603	MFG 1225.06		Z3	12	25	6	65	5
A12061230603	MFG 1230.06		Z3	12	30	6	70	5
A12061630603	MFG 1630.06		Z3	16	30	6	70	5
A12070820603	MFH 0820.06		Z3	8	20	6	60	10
A12071230603	MFH 1230.06		Z3	12	30	6	70	5
A12071635603	MFH 1635.06		Z3	16	35	6	75	5
A12090620603	MFK 0620.06		Z3	6	20	6	60	10
A12091230603	MFK 1230.06		Z3	12	30	6	70	5
A12031020603	MFL 1020.06		Z3	10	20	6	60	10
A12031230603	MFL 1230.06		Z3	12	30	6	70	5
A12031630603	MFL 1630.06		Z3	16	30	6	70	5

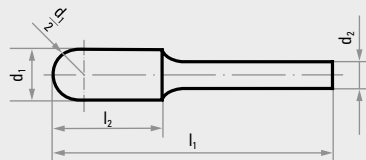
Recommended for: ● Steel

Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A12020618603	MFM 0618.06		Z3	6	18	6	58	10
A12020820603	MFM 0820.06		Z3	8	20	6	60	10
A12021020603	MFM 1020.06		Z3	10	20	6	60	10
A12021225603	MFM 1225.06		Z3	12	25	6	65	5
A12021230603	MFM 1230.06		Z3	12	30	6	70	5
A12041230603	MFN 1230.06		Z3	12	30	6	70	5
A12041213603	MFN 1213.06		Z3	12	13	6	53	5
A120412136030001	MFNS 1213.06		Z3	12	13	6	53	5
A120412306030001	MFNS 1230.06		Z3	12	30	6	70	5

Recommended for: ● Steel



Z5 HSS burr



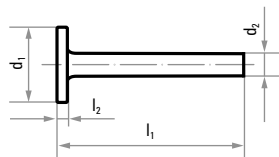
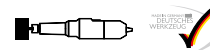
- very fine single cut for high-quality surfaces



Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A12000304605	MFA 0304.06		Z5	3	4.5	6	60	10
A12000607605	MFA 0607.06		Z5	6	7	6	60	10
A12001225605	MFA 1225.06		Z5	12	25	6	65	5
A120006166050001	MFAS 0616.06		Z5	6	16	6	56	10
A12010620605	MFC 0620.06		Z5	6	20	6	60	10
A12011225605	MFC 1225.06		Z5	12	25	6	65	5
A12050808605	MFD 0807.06		Z5	8	7	6	60	10
A12051010605	MFD 1009.06		Z5	10	9	6	60	10
A12061230605	MFG 1230.06		Z5	12	30	6	70	5
A12061630605	MFG 1630.06		Z5	16	30	6	70	5
A12031630605	MFL 1630.06		Z5	16	30	6	70	5
A12040303605	MFN 0303.06		Z5	3	3	6	60	10
A12040606605	MFN 0606.06		Z5	6	6	6	60	10

Recommended for: ● Steel

Z5 HSS miniature burr



- Shank diameter: 3 mm
- very fine single cut for high-quality surfaces

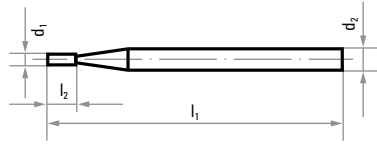
★★☆

Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A1236082705	MF 827		Z5	4	2,8	3	40	10
A1236082905	MF 829		Z5	6	4,2	3	41	10
A1236083105	MF 831		Z5	8	5,5	3	43	10
A1236083705	MF 837		Z5	6	6	3	43	10
A1236083905	MF 839		Z5	8	8	3	45	10
A1237084005	MF 840		Z5	1,6	2,8	3	40	10
A1237084105	MF 841		Z5	2,3	4	3	41	10
A1237084205	MF 842		Z5	3,2	5,6	3	43	10
A1237084305	MF 843		Z5	4	7	3	44	10
A1237084405	MF 844		Z5	5	8,7	3	46	10
A1237084505	MF 845		Z5	6	10,5	3	46	10
A1237084705	MF 847		Z5	8	14	3	46	10
A1238084805	MF 848		Z5	1,6	1,5	3	38	10
A1238084905	MF 849		Z5	2,3	2,1	3	39	10
A1238085005	MF 850		Z5	3,2	3	3	40	10
A1238085105	MF 851		Z5	4	3,8	3	41	10
A1238085205	MF 852		Z5	5	4,8	3	42	10
A1238085305	MF 853		Z5	6	5,6	3	43	10
A1238085405	MF 854		Z5	7	6,7	3	44	10
A1238085505	MF 855		Z5	8	7,7	3	45	10
A1235080705	MF 807		Z5	7	10	3	42	10
A1235081305	MF 813		Z5	7	10	3	42	10
A1235081405	MF 814		Z5	6	10	3	42	10
A1235081505	MF 815		Z5	7	12	3	44	10
A1239086405	MF 864		Z5	8	2	3	39	10
A1239086505	MF 865		Z5	10	2,5	3	40	10
A1239086605	MF 866		Z5	12	3	3	40	5
A1239086705	MF 867		Z5	14	3,5	3	41	5
A1240086805	MF 868		Z5	8	2	3	39	10
A1240087005	MF 870		Z5	12	2,6	3	40	5
A1240087105	MF 871		Z5	14	3	3	40	5
A1241087205	MF 872		Z5	6	1	3	38	10
A1241087305	MF 873		Z5	8	1	3	38	10
A1241087405	MF 874		Z5	10	1	3	38	10

Recommended for: ● Steel



Z3 + Z5 HSS miniature burr



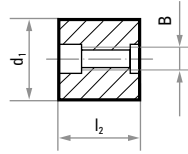
■ shank diameter: 6 mm

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Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Pack contains
A12000304605	MFA 0304.06		Z5	3	4,5	6	60	10
A12000607605	MFA 0607.06		Z5	6	7	6	60	10
A12050303603	MFD 0302.06		Z3	3	2	6	60	10
A120503036030001	MFD 0303.06		Z3	3,5	3	6	60	10
A12040303605	MFN 0303.06		Z5	3	3	6	60	10
A12040606605	MFN 0606.06		Z5	6	6	6	60	10

Recommended for: ● Steel

HSS burr with internal thread



► Suitable mounting arbors for LUKAS burrs with internal thread can be found on **page 317**.

■ Burrs with the designation MFAS have an additional end cut.

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Product number	Description	Shape	Cut	d ₁ mm	l ₂ mm	B Thread	Pack contains
A122030301002	MFA 3030.10		Z2	30	30	M10	2
A122022150803	MFA 2215.08		Z3	22	15	M8	2
A1220303010020001	MFAS 3030.10		Z2	30	30	M10	2
A1220221508030001	MFAS 2215.08		Z3	22	15	M8	2
A122525221001	MFD 2522.10		Z1	25	21	M10	2
A122525221002	MFD 2522.10		Z2	25	21	M10	2
A122520180803	MFD 2018.08		Z3	20	18	M8	2
A122530271203	MFD 3026.12		Z3	30	26	M12	2
A122825351203	MFE 2535.12		Z3	25	35	M12	2
A122635551201	MFG 3555.12		Z1	35	55	M12	2
A122720551001	MFH 2055.10		Z1	20	55/65	M10	2
A122720551002	MFH 2055.10		Z2	20	55/65	M10	2
A122320551001	MFL 2055.10		Z1	20	55	M10	2
A122225401003	MFM 2540.10		Z3	25	40	M10	2

Recommended for: ● Steel ● Aluminium ● Inox/Steel ● Plastic/Wood



HSS burrs assortments

- Always the right tool at hand. With our practical tool assortments, you can always have exactly what you need.
- perfectly suited for testing different tools
- just as suitable for use in the home, hobby workshop or in industry



Set MF Z5 S3



Set MF Z3 S6



Set MF Z3/Z5 S6



Product number	Description	Cut	Shank Ø mm	Content 1 per pack	Pack contains
A123900110	Set MF Z5 S3	Z5	3	10 parts: MF 807 MF 813 MF 841 MF 845 MF 850 MF 853 MF 864 MF 866 MF 872 MF 874	1
A12390003	Set MF Z3 S6	Z3	6	10 parts: MFA 0616 MFA 1225 MFC 1225 MFD 0403 MFD 1210 MFE 1220 MFG 1230 MFH 1230 MFK 0620 MFM 0618	1
A12390004	Set MF Z3/Z5 S6	Z3/Z5	6	20 parts: Z3: MFA 0616 MFA 1013 MFA 1225 MFC 1225 MFD 0807 MFD 1210 MFE 1220 MFE 1625 MFG 1220 MFG 1230 MFK 1230 MFL 1630 MFM 0618 MFM 1230 MFN 1213 MFN 1230 Z5: MFA 0304 MFA 0607 MFN 0303 MFA 0606	1

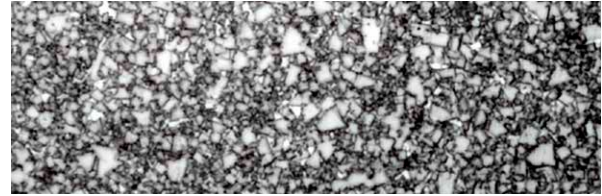
Recommended for: ● Steel ● Aluminium

TECHNICAL INFORMATION AND PRODUCT INFORMATION

Engraving cutters made from solid carbide K10F

K10F SOLID CARBIDE

Fine-grain carbide is best suited for processing steel, grey cast iron, non-ferrous metals and plastics and offers excellent stability.



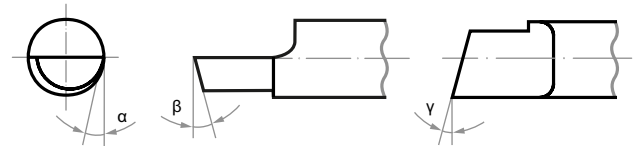
ENGRAVING CUTTER FROM LUKAS

LUKAS has the right engraving cutter for virtually every engraving task. Whether you're working with plastic, acrylic, stainless steels, non-ferrous metals or other materials, we can help you get the job done cleanly, quickly and professionally. We have a variety of engraving cutters in different shapes and hardnesses,

so that you always have the right tool for the job. All LUKAS engraving cutters are designed and produced to last, thus keeping your production costs down. We deliver our LUKAS engraving cutters as semi-finished products with a pre-ground profile (+0.1 mm) or finished and ground to your specifications.

CUSTOMISATIONS

We can customise the application parameters to the respective material to make sure you get perfect results. The values in the following tables are reference values.



Material to be machined	Recommended cutting and lead angles			Recommended cutting speeds in v_c m/min	Recommended feed rates f_z mm
	α	β	γ		
Cast material, cast steel	25°	15°	5°	60–100	0.04–0.10
Steel up to 900 N/mm ²	25°	15°	5°	120–160	0.05–0.08
Steel above 900 N/mm ²	25°	15°	5°	50–70	0.04–0.08
Brass, aluminium	30°	15°	5°	200–400	0.08–0.15
Plastic, reinforced and non-reinforced	35°	15°	5°	200–600	0.05–0.20

PERFECT ENGRAVINGS WITH

LUKAS ENGRAVING CUTTERS

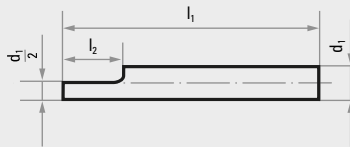
MADE TO LAST



Engraving cutters made from solid carbide

Note on the listed dimensions:

- as semi-finished cutting edge with 0.1 mm tolerance
- optional: precise halving with tolerance of +0.02 mm (10% surcharge)
- optional: relief grinding (25% surcharge)
- optional: finished cut on request



Applications for spiral-fluted engraving cutters (HGS):

- zero-burr engraving of non-ferrous metals and plastics



Product number	Description	Shape	Profile	d ₁ mm	l ₁ mm	l ₂ mm	Pack contains		
A1300404012	HGA 04.040			4	40	6	1		
A1300405012	HGA 04.060			4	60	6	1		
A1300407012	HGA 06.070			6	70	8	1		
A1300408112	HGA 08.100			8	100	12	1		
A1300409112	HGA 10.100			10	100	14	1		
A1300410112	HGA 12.100			12	100	16	1		
A1300403042	HGA 03.040					3	40	6	1
A1300405042	HGA 04.060					4	60	6	1
A1300407042	HGA 06.070					6	70	8	1
A1300404062	HGA 04.040					4	40	6	1
A1300484071	HGS 03.040	3	40			15	1		
A1300485071	HGS 04.040	4	40			20	1		
A1300486071	HGS 06.050			6	50	22	1		

Recommended for: ● Steel ● Aluminium ● Cast material ● Plastic/Wood