

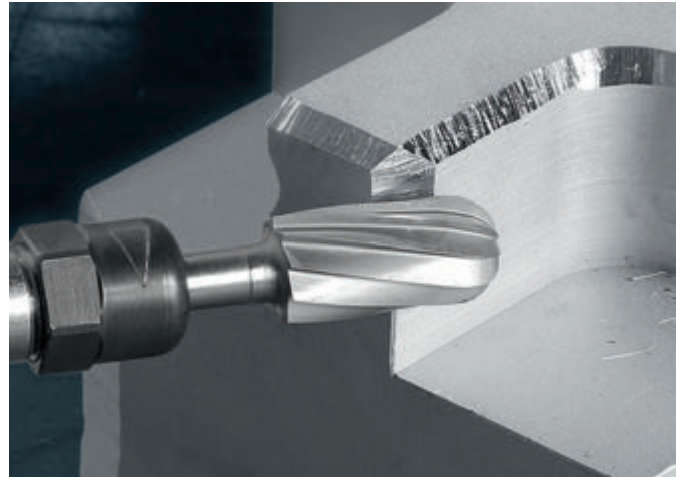
Burrs of HSS

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- 68 Burrs of HSS



Product line marking

Product lines are labelled in the table header with the appropriate tabs. Further information on page **14** and **15**.



Technical Information

Quality

LUKAS HSS burrs are manufactured from high quality and well-proven HSS. Our automatic flute grinding machines and our own heat treatment plant guarantee a top quality product.

Application

Providing the correct type and speed are used, LUKAS HSS burrs will economically machine a wide variety of materials. Regarding cutting speeds, please refer to the table on page **66** or according to the table illustrating the various cuts on page **67**. A rule of thumb: Coarse cuts for soft materials – fine cuts for hard materials. The file cuts H1, H2 and H3 are „rotary files“ and run more smoothly than toothed burrs. For higher stock removal rates, toothed burrs should be used.

Power tools

LUKAS HSS burrs can be used on any air or electric powered machines. To achieve the optimal performance, the machines must be run at the correct speed, the collets must run true, and the bearings to be in good condition.

Shanks

Standard shank length is 40 mm. To reach inaccessible working areas, extra long shanks are available on request.



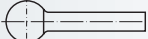









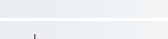
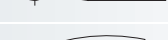


Packaging

Depending on burr dimension and quantity ordered, we choose the most appropriate packing method from our environmentally-friendly unit packs (5 or 10 pieces).

Special tools

We can manufacture HSS burrs to your design and drawing and guarantee the usual high quality LUKAS standard.

A summary of available shapes

Shape	Type	Shape (LUKAS)	Page
	Cylindrical	A	68
	Cylindrical round nose	C	70
	Spherical	D	70
	Oval	E	71
	Arch pointed nose	G	72
	Flame	H	73
	Club	K	73
	Conical round nose	L	74
	Conical pointed nose	M	74
	Inverted cone	N	75
	Edge trimming burr	W	75
	Miniature Burrs, Shank 3 mm		76
	Miniature Burrs, Shank 6 mm		78
	Burrs with internal thread		79
	Tools sets		81
	Power Tools		373

Three steps to your optimum burr:

- 1 Select the **material** and **machining mode** (coarse to fine) from the table and
- 2 read off the recommended **cut** and **cutting speed**.
- 3 Determine the appropriate **speed** for your power tool in the second table.

Recommendations for use burrs of HSS

1				2		
Material	Lukas material group (see also fold-out tab)	Strength [N/mm ²]	Machining	Cut	Recommended cutting speed vc [m/min]	
Steel, cast steel	1 STEEL AND CAST STEEL	< 800	coarse	Z2	50 – 100	
			medium	Z3	100 – 200	
			fine	Z5	50 – 200	
	2 ALLOYED/HARDENED & TEMPERED STEELS	800 to 1200	coarse	Z2	50 – 100	
			medium	Z3	100 – 200	
			fine	Z5	50 – 200	
Non-ferrous metal 1	6 ALUMINIUM, MAGNESIUM AND COPPER ALLOYS	up to 450	coarse	Z1	200 – 300	
			medium	Z2	150 – 300	
Plastics and wood	8 PLASTIC/WOOD/RUBBER	20 to 400	coarse	Z1	200 – 300	
			fine	Z2	150 – 300	

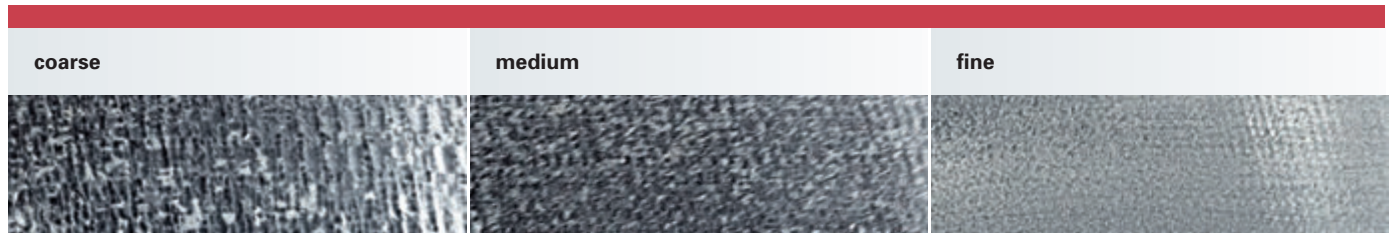
Rotational speeds for milling tools based on the tool diameter and cutting speed

3							
Recommended cutting speed vc [m/min]							
		50	100	150	200	250	300
		Rotational speed [min ⁻¹]					
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

Please see page 373 to 388 for appropriate power tools.

Tip: Page 65 contains a complete overview of the shapes for your chosen milling tool.

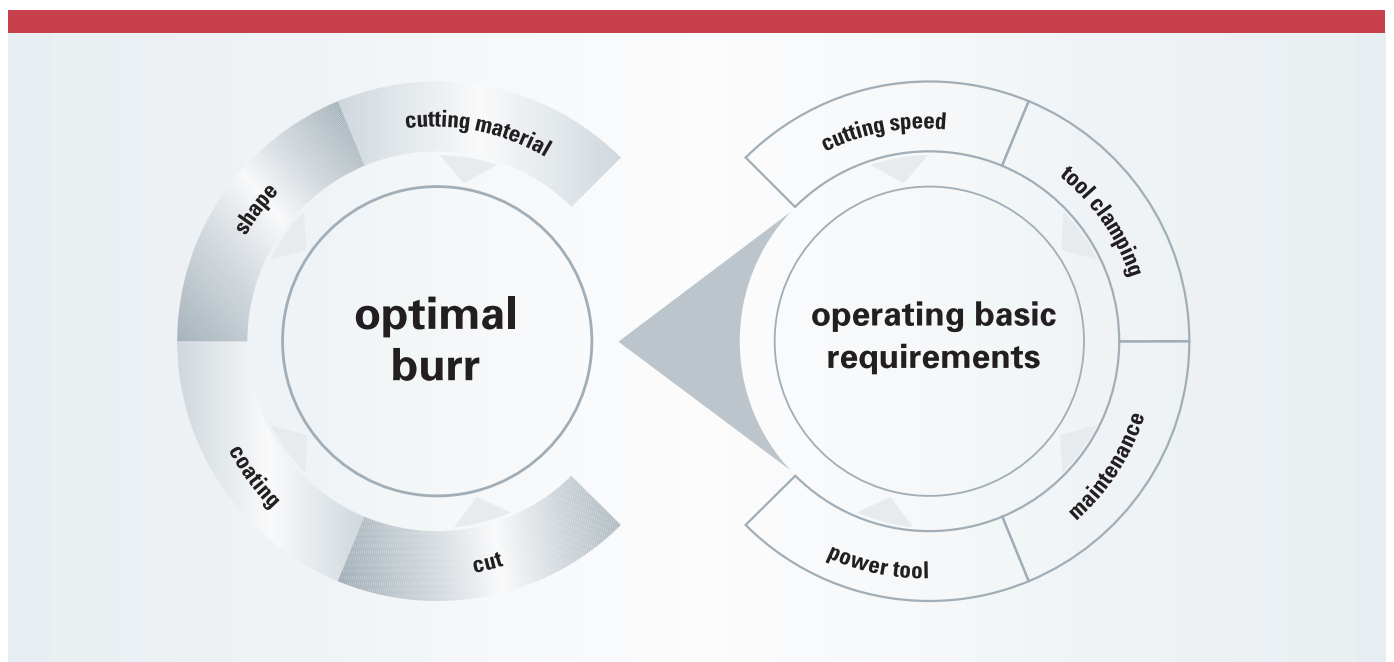
Machining



Cuts



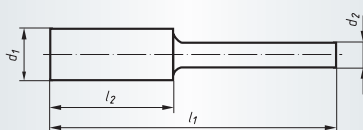
Choosing the appropriate Burr





Shape A, Cylindrical

Ordering example: A12000304605



Packing unit:

up to d_1 10 mm = 10 pc. per type
 from d_1 12 mm = 5 pc. per type

Further dimensions, cuts and shank lengths on request.


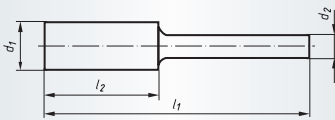
Description	Cut	d ₁ mm	l ₂ mm	l ₁ mm	d ₂ mm	Product-Number	recommended for										New burrs				
							1	2	3	4	5	6	7	8	9	10					
MFA 0304.06	Z5	3	4,5	60	6	A12000304605	1	2					6								■
MFA 0607.06	Z5	6	7	60	6	A12000607605	1	2					6								■
MFA 0616.06	Z1	6	16	56	6	A12000616601							6		8						■
MFA 0616.06	Z2	6	16	56	6	A12000616602							6		8						■
MFA 0616.06	Z3	6	16	56	6	A12000616603	1	2													■
MFA 0616.06	Z5	6	16	56	6	A12000616605	1	2					6								■
MFA 0820.06	Z3	8	20	60	6	A12000820603	1	2													■
MFA 1013.06	Z2	10	13	53	6	A12001013602							6		8						■
MFA 1013.06	Z3	10	13	53	6	A12001013603	1	2													■
MFA 1020.06	Z3	10	20	60	6	A12001020603	1	2													■
MFA 1225.06	Z1	12	25	65	6	A12001225601							6		8						■
MFA 1225.06	Z2	12	25	65	6	A12001225602							6		8						■
MFA 1225.06	Z3	12	25	65	6	A12001225603	1	2													■
MFA 1225.06	Z5	12	25	65	6	A12001225605	1	2					6								■
MFA 1625.06	Z1	16	25	65	6	A12001625601							6		8						■
MFA 1625.06	Z2	16	25	65	6	A12001625602							6		8						■
MFA 1625.06	Z3	16	25	65	6	A12001625603	1	2													■



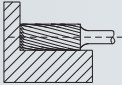
Industry

Shape A, Cylinder with end-cut

Ordering example: A120006166010001

Packing unit:
 up to d₁ 10 mm = 10 pc. per type
 from d₁ 12 mm = 5 pc. per type
 Further dimensions, cuts and shank lengths on request.

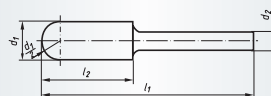
Description	Cut	d ₁ mm	l ₂ mm	l ₁ mm	d ₂ mm	Product-Number	recommended for										New burrs			
																				
MFAS 0616.06	Z1	6	16	56	6	A120006166010001											6	8		■
MFAS 0616.06	Z2	6	16	56	6	A120006166020001											6	8		■
MFAS 0616.06	Z3	6	16	56	6	A120006166030001	1	2												■
MFAS 0616.06	Z5	6	16	56	6	A120006166050001	1	2									6			■
MFAS 0820.06	Z3	8	20	60	6	A120008206030001	1	2												■
MFAS 1013.06	Z2	10	13	53	6	A120010136020001											6	8		■
MFAS 1013.06	Z3	10	13	53	6	A120010136030001	1	2												■
MFAS 1225.06	Z1	12	25	65	6	A120012256010001											6	8		■
MFAS 1225.06	Z2	12	25	65	6	A120012256020001											6	8		■
MFAS 1225.06	Z3	12	25	65	6	A120012256030001	1	2												■
MFAS 1625.06	Z1	16	25	65	6	A120016256010001											6	8		■
MFAS 1625.06	Z2	16	25	65	6	A120016256020001											6	8		■
MFAS 1625.06	Z3	16	25	65	6	A120016256030001	1	2												■



Industry

Shape C, Round nose

Ordering example: A12010304605



Packing unit:

up to d_1 10 mm = 10 pc. per type
from d_1 12 mm = 5 pc. per type

Further dimensions, cuts and shank lengths on request.

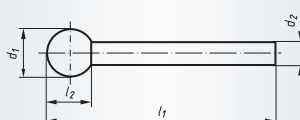
Description	Cut	d_1 mm	l_2 mm	l_1 mm	d_2 mm	Product-Number	recommended for								New burrs		
MFC 0304.06	Z5	3	4,5	60	6	A12010304605	1	2				6					■
MFC 0620.06	Z1	6	20	60	6	A12010620601						6		8			■
MFC 0620.06	Z2	6	20	60	6	A12010620602						6		8			■
MFC 0620.06	Z3	6	20	60	6	A12010620603	1	2									■
MFC 0620.06	Z5	6	20	60	6	A12010620605	1	2				6					■
MFC 0820.06	Z3	8	20	60	6	A12010820603	1	2									■
MFC 0850.06	Z1	8	50	90	6	A12010850601						6		8			■
MFC 0850.06	Z2	8	50	90	6	A12010850602						6		8			■
MFC 1020.06	Z3	10	20	60	6	A12011020603	1	2									■
MFC 1225.06	Z1	12	25	65	6	A12011225601						6		8			■
MFC 1225.06	Z2	12	25	65	6	A12011225602						6		8			■
MFC 1225.06	Z3	12	25	65	6	A12011225603	1	2									■
MFC 1225.06	Z5	12	25	65	6	A12011225605	1	2				6					■



Industry

Shape D, Spherical

Ordering example: A12050303603



Packing unit:

up to d_1 10 mm = 10 pc. per type
from d_1 12 mm = 5 pc. per type

Further dimensions, cuts and shank lengths on request.

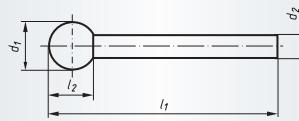
Description	Cut	d_1 mm	l_2 mm	d_2 mm	l_1 mm	Product-Number	recommended for								New burrs		
MFD 0302.06	Z3	3	2	6	60	A12050303603	1	2									■
MFD 0303.06	Z3	3,5	3	6	60	A120503036030001	1	2									■
MFD 0403.06	Z3	4	3	6	60	A12050404603	1	2									■
MFD 0404.06	Z2	4,5	4	6	60	A120504046020001						6		8			■
MFD 0404.06	Z3	4,5	4	6	60	A120504046030001	1	2									■
MFD 0504.06	Z3	5	4	6	60	A12050505603	1	2									■
MFD 0605.06	Z2	6	5	6	60	A12050606602						6		8			■
MFD 0605.06	Z3	6	5	6	60	A12050606603	1	2									■
MFD 0807.06	Z1	8	7	6	60	A12050808601						6		8			■
MFD 0807.06	Z2	8	7	6	60	A12050808602						6		8			■
MFD 0807.06	Z3	8	7	6	60	A12050808603	1	2									■
MFD 0807.06	Z5	8	7	6	60	A12050808605	1	2				6					■



Industry

Shape D, Spherical

Ordering example: A12051010602



Packing unit:

up to d₁ 10 mm = 10 pc. per type
 from d₁ 12 mm = 5 pc. per type
 Further dimensions, cuts and shank lengths on request.

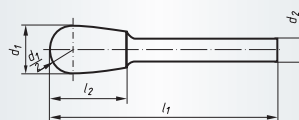
Description	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Product-Number	recommended for								New burrs		
							1	2	3	4	5	6	7	8		9	
MFD 1009.06	Z2	10	9	6	60	A12051010602							6		8		■
MFD 1009.06	Z3	10	9	6	60	A12051010603	1	2									■
MFD 1009.06	Z5	10	9	6	60	A12051010605	1	2					6				■
MFD 1210.06	Z1	12	10	6	60	A12051212601							6		8		■
MFD 1210.06	Z2	12	10	6	60	A12051212602							6		8		■
MFD 1210.06	Z3	12	10	6	60	A12051212603	1	2									■
MFD 1614.06	Z1	16	14	6	60	A12051614601							6		8		■
MFD 1614.06	Z2	16	14	6	60	A12051614602							6		8		■
MFD 1614.06	Z3	16	14	6	60	A12051614603	1	2									■



Industry

Shape E, Oval

Ordering example: A12080607605



Packing unit:

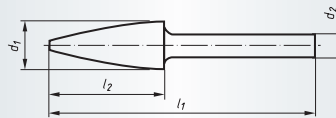
up to d₁ 10 mm = 10 pc. per type
 from d₁ 12 mm = 5 pc. per type
 Further dimensions, cuts and shank lengths on request.

Description	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Product-Number	recommended for								New burrs		
							1	2	3	4	5	6	7	8		9	
MFE 0607.06	Z5	6	7	6	60	A12080607605	1	2					6				■
MFE 1220.06	Z1	12	20	6	60	A12081220601							6		8		■
MFE 1220.06	Z3	12	20	6	60	A12081220603	1	2									■
MFE 1625.06	Z1	16	25	6	60	A12081625601							6		8		■
MFE 1625.06	Z2	16	25	6	60	A12081625602							6		8		■
MFE 1625.06	Z3	16	25	6	60	A12081625603	1	2									■



Shape G, Arch pointed nose

Ordering example: A12060618601



Packing unit:

up to d_1 10 mm = 10 pc. per type
 from d_1 12 mm = 5 pc. per type

Further dimensions, cuts and shank lengths on request.

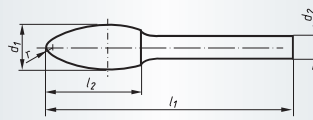
Description	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Product-Number	recommended for										New burrs			
MFG 0618.06	Z1	6	18	6	58	A12060618601												6	8	■
MFG 0618.06	Z2	6	18	6	58	A12060618602												6	8	■
MFG 0618.06	Z3	6	18	6	58	A12060618603	1	2												■
MFG 1220.06	Z1	12	20	6	60	A12061220601												6	8	■
MFG 1220.06	Z2	12	20	6	60	A12061220602												6	8	■
MFG 1220.06	Z3	12	20	6	60	A12061220603	1	2												■
MFG 1225.06	Z3	12	25	6	65	A12061225603	1	2												■
MFG 1230.06	Z1	12	30	6	70	A12061230601												6	8	■
MFG 1230.06	Z2	12	30	6	70	A12061230602												6	8	■
MFG 1230.06	Z3	12	30	6	70	A12061230603	1	2												■
MFG 1230.06	Z5	12	30	6	70	A12061230605	1	2										6		■
MFG 1630.06	Z1	16	30	6	70	A12061630601												6	8	■
MFG 1630.06	Z2	16	30	6	70	A12061630602												6	8	■
MFG 1630.06	Z3	16	30	6	70	A12061630603	1	2												■
MFG 1630.06	Z5	16	30	6	70	A12061630605	1	2										6		■



Industry

Shape H, Flame

Ordering example: A12070305605



Packing unit:

up to d_1 10 mm = 10 pc. per type
 from d_1 12 mm = 5 pc. per type
 Further dimensions, cuts and shank lengths on request.

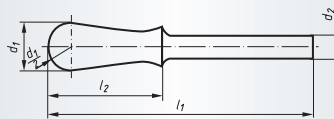
Description	Cut	d_1 mm	l_2 mm	d_2 mm	l_1 mm	$r \approx$ mm	Product-Number	recommended for	New burrs
MFH 0305.06	Z5	3	5	6	60	---	A12070305605		■
MFH 0820.06	Z3	8	20	6	60	1,3	A12070820603		■
MFH 1230.06	Z3	12	30	6	70	1,9	A12071230603		■
MFH 1635.06	Z3	16	35	6	75	2,4	A12071635603		■
MFH 1750.08	Z1	17	50	8	80	---	A12071750801		■



Industry

Shape K, Club

Ordering example: A12090620602



Packing unit:

up to d_1 10 mm = 10 pc. per type
 from d_1 12 mm = 5 pc. per type
 Further dimensions, cuts and shank lengths on request.

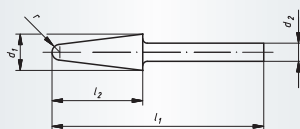
Description	Cut	d_1 mm	l_2 mm	d_2 mm	l_1 mm	Product-Number	recommended for	New burrs
MFK 0620.06	Z2	6	20	6	60	A12090620602		■
MFK 0620.06	Z3	6	20	6	60	A12090620603		■
MFK 1230.06	Z2	12	30	6	70	A12091230602		■
MFK 1230.06	Z3	12	30	6	70	A12091230603		■



Industry

Shape L, Conical round nose

Ordering example: A12031020602



Packing unit:

up to d_1 10 mm = 10 pc. per type
from d_1 12 mm = 5 pc. per type

Further dimensions, cuts and shank lengths on request.

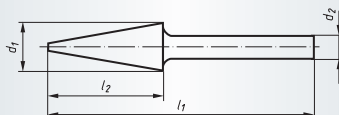
Description	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	r ≈ mm	Product-Number	recommended for								New burrs			
MFL 1020.06	Z2	10	20	6	60	2,9	A12031020602							6		8			■
MFL 1020.06	Z3	10	20	6	60	2,9	A12031020603	1	2										■
MFL 1230.06	Z3	12	30	6	70	2,6	A12031230603	1	2										■
MFL 1630.06	Z1	16	30	6	70	4,8	A12031630601							6		8		■	
MFL 1630.06	Z2	16	30	6	70	4,8	A12031630602							6		8		■	
MFL 1630.06	Z3	16	30	6	70	4,8	A12031630603	1	2									■	
MFL 1630.06	Z5	16	30	6	70	4,8	A12031630605	1	2					6				■	



Industry

Shape M, Conical pointed nose

Ordering example: A12020304605



Packing unit:

up to d_1 10 mm = 10 pc. per type
from d_1 12 mm = 5 pc. per type

Further dimensions, cuts and shank lengths on request.

Description	Cut	d ₁ mm	l ₂ mm	d ₂ mm	l ₁ mm	Product-Number	recommended for								New burrs			
MFM 0304.06	Z5	3	4,5	6	60	A12020304605	1	2						6				■
MFM 0607.06	Z5	6	7	6	60	A12020607605	1	2						6				■
MFM 0618.06	Z1	6	18	6	58	A12020618601								6		8		■
MFM 0618.06	Z2	6	18	6	58	A12020618602								6		8		■
MFM 0618.06	Z3	6	18	6	58	A12020618603	1	2										■
MFM 0820.06	Z3	8	20	6	60	A12020820603	1	2										■
MFM 1020.06	Z2	10	20	6	60	A12021020602								6		8		■
MFM 1020.06	Z3	10	20	6	60	A12021020603	1	2										■
MFM 1225.06	Z1	12	25	6	65	A12021225601								6		8		■
MFM 1225.06	Z3	12	25	6	65	A12021225603	1	2										■
MFM 1230.06	Z1	12	30	6	70	A12021230601								6		8		■
MFM 1230.06	Z2	12	30	6	70	A12021230602								6		8		■
MFM 1230.06	Z3	12	30	6	70	A12021230603	1	2										■
MFM 1230.06	Z5	12	30	6	70	A12021230605	1	2						6				■



Industry

Shape N, Inverted cone

Ordering example: A12040303605

Packing unit:
 up to d_1 10 mm = 10 pc. per type
 from d_1 12 mm = 5 pc. per type
 Further dimensions, cuts and shank lengths on request.

Description	Cut	d_1 mm	l_2 mm	d_2 mm	l_1 mm	α	Product-Number	recommended for	New burrs
MFN 0303.06	Z5	3	3	6	60	20°	A12040303605	① ② ⑥	■
MFN 0606.06	Z5	6	6	6	60	20°	A12040606605	① ② ⑥	■
MFN 1213.06	Z1	12	13	6	53	17°	A12041213601	⑥ ⑧	■
MFN 1213.06	Z3	12	13	6	53	17°	A12041213603	① ②	■
MFN 1230.06	Z3	12	30	6	70	8°	A12041230603	① ②	■



Industry

Shape N, Inverted cone with end-cut

Ordering example: A120412136010001

Packing unit:
 5 pc. per type
 Further dimensions, cuts and shank lengths on request.

Description	Cut	d_1 mm	l_2 mm	d_2 mm	l_1 mm	α	Product-Number	recommended for	New burrs
MFNS 1213.06	Z1	12	13	6	53	17°	A120412136010001	⑥ ⑧	■
MFNS 1213.06	Z3	12	13	6	53	17°	A120412136030001	① ②	■
MFNS 1230.06	Z3	12	30	6	70	8°	A120412306030001	① ②	■



Industry

Shape W, Cylindrical multiple concave burrs

Ordering example: A12430340

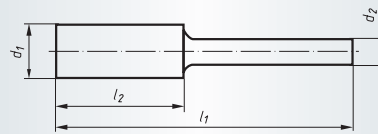
Packing unit:
 10 pc. per type
 Further dimensions, cuts and shank lengths on request.

Description	Cut	d_1 mm	l_2 mm	d_2 mm	l_1 mm	r mm	Product-Number	recommended for	New burrs
MFW 0620.06	16	6	20	6	60	3	A12430340	① ② ⑥	■
MFW 0830.06	18	8	30	6	70	5	A12433401	① ② ⑥	■



Miniature Burrs, shank 3 mm

Ordering example: A1238085405



Packing unit:

up to d_1 10 mm = 10 pc. per type
from d_1 12 mm = 5 pc. per type

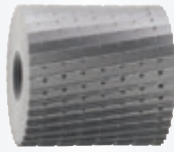
Further dimensions, cuts and shank lengths on request.

Description	Shape	Cut	d ₁ mm	l ₂ mm	l ₁ mm	Product-Number	recommended for										New burrs						
							1	2	3	4	5	6	7	8	9	10							
MF 854		Z5	7	6,7	44	A1238085405	1	2					6										■
MF 855		Z5	8	7,7	45	A1238085505	1	2					6										■
MF 806		Z5	7	7,5	40	A1235080605	1	2					6										■
MF 807		Z5	7	10	42	A1235080705	1	2					6										■
MF 808		Z5	8	11	43	A1235080805	1	2					6										■
MF 813		Z5	7	10	42	A1235081305	1	2					6										■
MF 814		Z5	6	10	42	A1235081405	1	2					6										■
MF 815		Z5	7	12	44	A1235081505	1	2					6										■
MF 864		Z5	8	2	39	A1239086405	1	2					6										■
MF 865		Z5	10	2,5	40	A1239086505	1	2					6										■
MF 866		Z5	12	3	40	A1239086605	1	2					6										■
MF 867		Z5	14	3,5	41	A1239086705	1	2					6										■
MF 868		Z5	8	2	39	A1240086805	1	2					6										■
MF 869		Z5	10	2,3	39	A1240086905	1	2					6										■
MF 870		Z5	12	2,6	40	A1240087005	1	2					6										■
MF 871		Z5	14	3	40	A1240087105	1	2					6										■
MF 872		Z5	6	1	38	A1241087205	1	2					6										■
MF 873		Z5	8	1	38	A1241087305	1	2					6										■
MF 874		Z5	10	1	38	A1241087405	1	2					6										■



Burrs with internal thread

Ordering example: A122022150803



Packing unit:

2 pc. per type

MFAS = with end-cut

Other dimensions and cuts available on request.

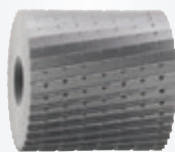
Suitable mounting arbors pages 402

Description	Shape	Cut	d ₁ mm	l ₂ mm	B mm	Product-Number	recommended for	New burrs
MFA 2215.08		Z3	22	15	M 8	A122022150803	① ② ③ ④ ⑦	■
MFA 3030.10		Z2	30	30	M 10	A122030301002	① ⑤ ⑥ ⑧	■
MFAS 2215.08		Z3	22	15	M 8	A1220221508030001	① ② ③ ④ ⑦	■
MFAS 3030.10		Z2	30	30	M 10	A1220303010020001	① ⑤ ⑥ ⑧	■
MFD 2018.08		Z3	20	18	M 8	A122520180803	① ② ③ ④ ⑦	■
MFD 2522.10		Z1	25	22	M 10	A122525221001	⑥ ⑧	■
MFD 2522.10		Z2	25	22	M 10	A122525221002	① ⑤ ⑥ ⑧	■
MFD 3027.12		Z3	30	27	M 12	A122530271203	① ② ③ ④ ⑦	■
MFE 2535.12		Z3	25	35	M 12	A122825351203	① ② ③ ④ ⑦	■
MFG 3555.12		Z1	35	55	M 12	A122635551201	⑥ ⑧	■
MFH 2055.10		Z1	20	55/65	M 10	A122720551001	⑥ ⑧	■
MFH 2055.10		Z2	20	55/65	M 10	A122720551002	① ⑤ ⑥ ⑧	■



Burrs with internal thread

Ordering example: A122320551001



Packing unit:
2 pc. per type
Further dimensions and cuts on request.
Suitable mounting arbors pages 402

Description	Shape	Cut	d ₁ mm	l ₂ mm	B mm	Product-Number	recommended for	New burrs
MFL 2055.10		Z1	20	55	M 10	A122320551001	6 8	■
MFM 2540.10		Z3	25	40	M 10	A122225401003	1 2 3 4 7	■

What is your experience when using this tool?

V3 Control: Fast removal whilst maintaining your workpiece in view – this allows you to grind exactly where you want to (I tested this myself).

Eva Jensch
Sales Department



www.lukas-erzett.com



Industry

Tool-sets, cut 5, shank 3 mm

Ordering example: A1239000110



Packing unit:
1 pc. per type

Description	Shank Ø mm	Cut	Contents	1 piece each	Product-Number	recommended for	
F1	3	Z5	10-pieces	MF 807, MF 813, MF 841, MF 845, MF 850, MF 853, MF 864, MF 866, MF 872, MF 874	A1239000110	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩	■



Industry

Tool-sets, cut 5, shank 6 mm

Ordering example: A123900003



Packing unit:
1 pc. per type

Description	Shank Ø mm	Cut	Contents	1 piece each	Product-Number	recommended for	
F3	6	Z3	10-pieces	MFA 0616, MFA 1225, MFC 1225, MFD 0403, MFD 1210, MFE 1220, MFG 1230, MFH 1230, MFK 0620, MFM 0618	A123900003	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩	■

