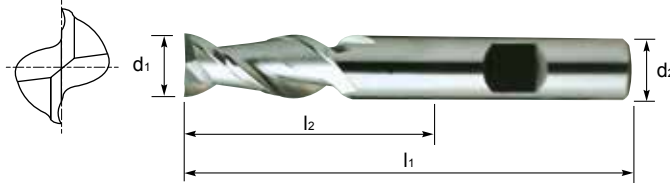


2 FLUTE, SHORT LENGTH, 42° HELIX for ALUMINIUM



Series No. 131102

▶ cutting conditions : p.121



END MILLS FOR ALUMINIUM
Short Length, 2 Flute, Helix 42°, Centre Cutting, with Flatted Shank

Mill Dia. e8(d ₁)	Shank Dia. h6(d ₂)	Length of Cut l ₂	Overall Length l ₁	HSS Co8	TiAIN HSS Co8
2.0	6.0	7.0	51.0	1311020200	1311210200
2.5		8.0	52.0	1311020250	1311210250
3.0		8.0		1311020300	1311210300
3.5		10.0	54.0	1311020350	1311210350
4.0		11.0	55.0	1311020400	1311210400
4.5		11.0		1311020450	1311210450
5.0	10.0	13.0	57.0	1311020500	1311210500
5.5		13.0		1311020550	1311210550
6.0		13.0		1311020600	1311210600
6.5		16.0	66.0	1311020650	1311210650
7.0		16.0		1311020700	1311210700
7.5		16.0		1311020750	1311210750
8.0	12.0	19.0	69.0	1311020800	1311210800
8.5		19.0		1311020850	1311210850
9.0		19.0		1311020900	1311210900
10.0		22.0	72.0	1311021000	1311211000
11.0	16.0	22.0	79.0	1311021100	1311211100
12.0		26.0	83.0	1311021200	1311211200
13.0		26.0		1311021300	1311211300
14.0		26.0		1311021400	1311211400
15.0	20.0	26.0	92.0	1311021500	1311211500
16.0		32.0		1311021600	1311211600
17.0		32.0		1311021700	1311211700
18.0		32.0	104.0	1311021800	1311211800
19.0	25.0	32.0		1311021900	1311211900
20.0		38.0		1311022000	1311212000
21.0		38.0	121.0	1311022100	1311212100
22.0		38.0		1311022200	1311212200
23.0		38.0		1311022300	1311212300
24.0	25.0	45.0	121.0	1311022400	1311212400
25.0		45.0		1311022500	1311212500

▶ TiAIN Coating to Order

Tolerances according to DIN 7160 & 7161
Toleranzen nach DIN 7160 & 7161

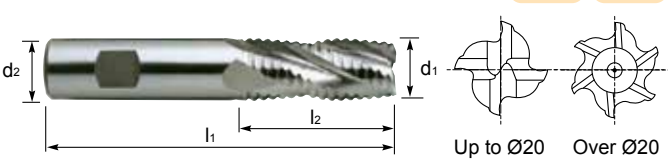
Toleranzwerte in µm / Tolerance range in µm						
Nennmaßbereich in mm / Nominal-Diameter in mm						
	von 1 bis 3 from 1 to 3	über 3 bis 6 over 3 to 6	über 6 bis 10 over 6 to 10	über 10 bis 18 over 10 to 18	über 18 bis 30 over 18 to 30	über 30 bis 50 over 30 to 50
e8	— 14 — 28	— 20 — 38	— 25 — 47	— 32 — 59	— 40 — 73	— 50 — 89
h6	0 — 6	0 — 8	0 — 9	0 — 11	0 — 13	0 — 16

MULTI FLUTE, SHORT LENGTH, COARSE PITCH ROUGHING



Series No. 118102

▶ cutting conditions : p.130-131



ROUGHING END MILLS
Short Length, Multi-Flute, Coarse Pitch, Round Profile, with Flatted Shank

Mill Dia. js12(d ₁)	Shank Dia. h6(d ₂)	Length of Cut l ₂	Overall Length l ₁	No.of Flute	HSS Co8	TiAIN HSS Co8
6.0	6.0	13.0	57.0	3	1181020600	1181210600
7.0	10.0	16.0	66.0	3	1181020700	1181210700
8.0		19.0	69.0	3	1181020800	1181210800
9.0		19.0		3	1181020900	1181210900
10.0	12.0	22.0	72.0	4	1181021000	1181211000
11.0		22.0	79.0	4	1181021100	1181211100
12.0		26.0	83.0	4	1181021200	1181211200
13.0		26.0		4	1181021300	1181211300
14.0	16.0	26.0	92.0	4	1181021400	1181211400
15.0		26.0		4	1181021500	1181211500
16.0		32.0		4	1181021600	1181211600
17.0		32.0	92.0	4	1181021700	1181211700
18.0	20.0	32.0		4	1181021800	1181211800
19.0		32.0		4	1181021900	1181211900
20.0		38.0	98.0	4	1181029001	1181219001
20.0	25.0	38.0	104.0	4	1181022000	1181212000
22.0		38.0		5	1181022200	1181212200
22.0		38.0	114.0	5	1181029002	1181219002
24.0	32.0	45.0	121.0	5	1181022400	1181212400
25.0		45.0		5	1181022500	1181212500
26.0		45.0		6	1181022600	1181212600
28.0		45.0	133.0	6	1181022800	1181212800
30.0	40.0	45.0		6	1181023000	1181213000
32.0		53.0		6	1181023200	1181213200
35.0		53.0	155.0	6	1181023500	1181213500
36.0	50.0	53.0		6	1181023600	1181213600
38.0		63.0		6	1181023800	1181213800
38.0		63.0	155.0	6	1181029003	1181219003
40.0		63.0		6	1181024000	1181214000
40.0	50.0	63.0		6	1181029004	1181219004
50.0		75.0	177.0	6	1181025000	1181215000

▶ Sizes above 25mm available while stocks last

▶ TiAIN Coating to Order

Tolerances according to DIN 7160 & 7161
Toleranzen nach DIN 7160 & 7161

Toleranzwerte in µm / Tolerance range in µm						
Nennmaßbereich in mm / Nominal-Diameter in mm						
	von 1 bis 3 from 1 to 3	über 3 bis 6 over 3 to 6	über 6 bis 10 over 6 to 10	über 10 bis 18 over 10 to 18	über 18 bis 30 over 18 to 30	über 30 bis 50 over 30 to 50
js12	± 50	± 60	± 75	± 90	± 105	± 125
h6	0 — 6	0 — 8	0 — 9	0 — 11	0 — 13	0 — 16