

Cylindrical end mills E-Cut Alu

Smooth-edged, long version, neck

Base-X
B

$$l_2 = 2.2 \times d_1$$

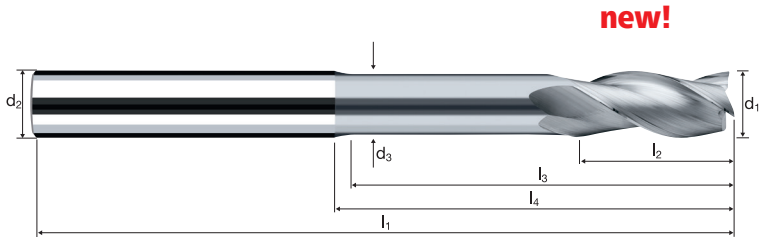
$$l_3 = 5.6 \times d_1$$

HM
MG10 λ **34°**
 γ **24°**

90° **G 2.5**

Vario

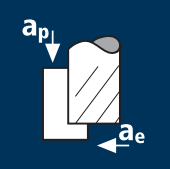









Finishing **Roughing**



ReTool®

Material selection: **Al** Aluminium > 99%, **Al** Aluminium Alloy, **Al** Aluminium Cast, **Cu** Copper, **Plastic** Thermoplast

Ø Code	d ₁ e8	d ₂ h5	d ₃	l ₁	l ₂	l ₃	l ₄	α	z	Example: Order-N°.	
										Coating	Article-N°.
										8680	
										8580	
180	3.00	6.00	2.80	60	6.60	16.80	20.13	4.5°	3	●	
220	4.00	6.00	3.70	65	9.00	22.50	25.04	2.5°	3	●	
260	5.00	6.00	4.60	68	11.00	28.00	29.72	1.2°	3	●	
300	6.00	6.00	5.50	73	13.50	34.00	35.85	0.0°	3	●	
391	8.00	8.00	7.40	84	18.00	45.00	47.37	0.0°	3	●	
450	10.00	10.00	9.20	100	22.00	56.00	59.01	0.0°	3	●	
501	12.00	12.00	11.00	117	27.00	67.50	71.21	0.0°	3	●	
610	16.00	16.00	15.00	144	36.00	90.00	94.27	0.0°	3	●	
682	20.00	20.00	19.00	169	44.00	112.00	116.77	0.0°	3	●	

Application	Material	d_1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min ⁻¹]	v_f [mm/min]	Q [cm ³ /min]
	Wrought aluminium Construction aluminium 	3.00	3	380	0.038	4.500	1.200	40320	4572	24.7
		4.00	3	380	0.050	6.000	1.600	30240	4572	43.9
		5.00	3	380	0.063	7.500	2.000	24190	4572	68.6
		6.00	3	380	0.076	9.000	2.400	20160	4572	98.8
		8.00	3	380	0.101	12.000	3.200	15120	4572	175.6
		10.00	3	380	0.126	15.000	4.000	12095	4572	274.3
		12.00	3	380	0.151	18.000	4.800	10080	4572	395.0
		16.00	3	380	0.161	24.000	6.400	7560	3658	561.8
		20.00	3	380	0.189	30.000	8.000	6050	3430	823.3
			Unalloyed copper 	3.00	3	285	0.029	4.500	1.200	30240
4.00	3			285	0.038	6.000	1.600	22680	2586	24.8
5.00	3			285	0.048	7.500	2.000	18145	2586	38.8
6.00	3			285	0.057	9.000	2.400	15120	2586	55.8
8.00	3			285	0.076	12.000	3.200	11340	2586	99.3
10.00	3			285	0.095	15.000	4.000	9070	2585	155.1
12.00	3			285	0.114	18.000	4.800	7560	2586	223.4
16.00	3			285	0.122	24.000	6.400	5670	2068	317.7
20.00	3			285	0.143	30.000	8.000	4535	1939	465.3
	Thermoplastics 			3.00	3	380	0.045	4.500	1.200	40320
		4.00	3	380	0.060	6.000	1.600	30240	5480	52.6
		5.00	3	380	0.076	7.500	2.000	24190	5479	82.2
		6.00	3	380	0.091	9.000	2.400	20160	5480	118.4
		8.00	3	380	0.121	12.000	3.200	15120	5480	210.4
		10.00	3	380	0.151	15.000	4.000	12095	5479	328.7
		12.00	3	380	0.181	18.000	4.800	10080	5480	473.4
		16.00	3	380	0.193	24.000	6.400	7560	4384	673.3
		20.00	3	380	0.227	30.000	8.000	6050	4111	986.6
			Cast aluminium 	3.00	3	305	0.038	4.500	1.200	32360
4.00	3			305	0.050	6.000	1.600	24270	3670	35.2
5.00	3			305	0.063	7.500	2.000	19415	3669	55.0
6.00	3			305	0.076	9.000	2.400	16180	3670	79.3
8.00	3			305	0.101	12.000	3.200	12135	3670	140.9
10.00	3			305	0.126	15.000	4.000	9710	3670	220.2
12.00	3			305	0.151	18.000	4.800	8090	3670	317.1
16.00	3			305	0.161	24.000	6.400	6070	2937	451.1
20.00	3			305	0.189	30.000	8.000	4855	2753	660.7
	Wrought aluminium Construction aluminium 			3.00	3	300	0.022	3.000	3.000	31830
		4.00	3	300	0.029	4.000	4.000	23875	2076	33.2
		5.00	3	300	0.036	5.000	5.000	19100	2076	51.9
		6.00	3	300	0.043	6.000	6.000	15915	2076	74.7
		8.00	3	300	0.058	8.000	8.000	11935	2075	132.8
		10.00	3	300	0.072	10.000	10.000	9550	2076	207.6
		12.00	3	300	0.087	12.000	12.000	7960	2076	299.0
		16.00	3	300	0.093	16.000	16.000	5970	1661	425.2
		20.00	3	300	0.109	20.000	20.000	4775	1557	622.7
			Unalloyed copper 	3.00	3	225	0.016	3.000	3.000	23875
4.00	3			225	0.022	4.000	4.000	17905	1174	18.8
5.00	3			225	0.027	5.000	5.000	14325	1174	29.3
6.00	3			225	0.033	6.000	6.000	11935	1174	42.2
8.00	3			225	0.044	8.000	8.000	8950	1173	75.1
10.00	3			225	0.055	10.000	10.000	7160	1173	117.3
12.00	3			225	0.066	12.000	12.000	5970	1174	169.1
16.00	3			225	0.070	16.000	16.000	4475	939	240.3
20.00	3			225	0.082	20.000	20.000	3580	880	352.0
	Thermoplastics 			3.00	3	300	0.026	3.000	3.000	31830
		4.00	3	300	0.035	4.000	4.000	23875	2488	39.8
		5.00	3	300	0.043	5.000	5.000	19100	2488	62.2
		6.00	3	300	0.052	6.000	6.000	15915	2487	89.5
		8.00	3	300	0.069	8.000	8.000	11935	2487	159.2
		10.00	3	300	0.087	10.000	10.000	9550	2488	248.8
		12.00	3	300	0.104	12.000	12.000	7960	2488	358.3
		16.00	3	300	0.111	16.000	16.000	5970	1990	509.5
		20.00	3	300	0.130	20.000	20.000	4775	1866	746.3
			Cast aluminium 	3.00	3	240	0.022	3.000	3.000	25465
4.00	3			240	0.029	4.000	4.000	19100	1661	26.6
5.00	3			240	0.036	5.000	5.000	15280	1661	41.5
6.00	3			240	0.043	6.000	6.000	12730	1660	59.8
8.00	3			240	0.058	8.000	8.000	9550	1661	106.3
10.00	3			240	0.072	10.000	10.000	7640	1661	166.1
12.00	3			240	0.087	12.000	12.000	6365	1660	239.1
16.00	3			240	0.093	16.000	16.000	4775	1328	340.1
20.00	3			240	0.109	20.000	20.000	3820	1245	498.2