

Cylindrical end mills E-Cut Alu

Smooth-edged, medium length version, neck

Base-X
B

$$l_2 = 2.2 \times d_1$$

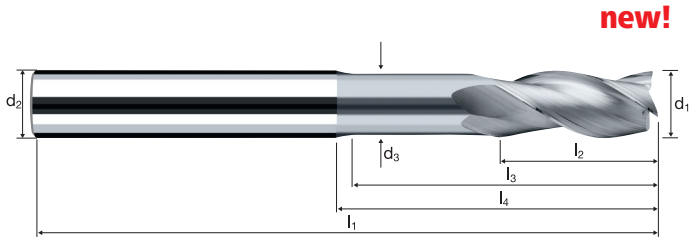
$$l_3 = 4.5 \times d_1$$

HM
MG10 λ **34°**
 γ **24°**

90° **G 2.5**

Vario

Roughing **Finishing**



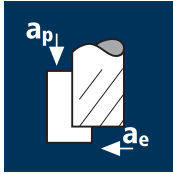
ReTool®

Material compatibility: **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°.
										8670	
										8570	
180	3.00	6.00	2.80	57	6.60	13.50	16.83	5.3°	3	●	
220	4.00	6.00	3.70	60	9.00	18.00	20.54	3.0°	3	●	
260	5.00	6.00	4.60	63	11.00	22.50	24.22	1.4°	3	●	
300	6.00	6.00	5.50	65	13.50	27.00	28.85	0.0°	3	●	
391	8.00	8.00	7.40	76	18.00	36.00	38.37	0.0°	3	●	
450	10.00	10.00	9.20	90	22.00	45.00	48.01	0.0°	3	●	
501	12.00	12.00	11.00	105	27.00	54.00	57.71	0.0°	3	●	
610	16.00	16.00	15.00	125	36.00	72.00	76.27	0.0°	3	●	
682	20.00	20.00	19.00	145	44.00	90.00	94.77	0.0°	3	●	

Application

Material



Wrought aluminium
Construction aluminium



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]
3.00	3	396	0.042	4.500	1.350	42000	5292	32.1
4.00	3	475	0.056	6.000	1.800	37800	6350	68.6
5.00	3	475	0.070	7.500	2.250	30240	6350	107.2
6.00	3	475	0.084	9.000	2.700	25200	6350	154.3
8.00	3	475	0.112	12.000	3.600	18900	6350	274.3
10.00	3	475	0.140	15.000	4.500	15120	6350	428.7
12.00	3	475	0.168	18.000	5.400	12600	6350	617.3
16.00	3	475	0.179	24.000	7.200	9450	5080	877.9
20.00	3	475	0.210	30.000	9.000	7560	4763	1286.0

Unalloyed copper



3.00	3	355	0.032	4.500	1.350	37665	3559	21.6
4.00	3	355	0.042	6.000	1.800	28250	3560	38.4
5.00	3	355	0.053	7.500	2.250	22600	3560	60.1
6.00	3	355	0.063	9.000	2.700	18835	3560	86.5
8.00	3	355	0.084	12.000	3.600	14125	3560	153.8
10.00	3	355	0.105	15.000	4.500	11300	3560	240.3
12.00	3	355	0.126	18.000	5.400	9415	3559	345.9
16.00	3	355	0.134	24.000	7.200	7065	2849	492.2
20.00	3	355	0.158	30.000	9.000	5650	2670	720.8

Thermoplastics



3.00	3	396	0.050	4.500	1.350	42000	6350	38.6
4.00	3	475	0.067	6.000	1.800	37800	7621	82.3
5.00	3	475	0.084	7.500	2.250	30240	7621	128.6
6.00	3	475	0.101	9.000	2.700	25200	7621	185.2
8.00	3	475	0.134	12.000	3.600	18900	7621	329.2
10.00	3	475	0.168	15.000	4.500	15120	7621	514.4
12.00	3	475	0.202	18.000	5.400	12600	7621	740.7
16.00	3	475	0.215	24.000	7.200	9450	6096	1053.5
20.00	3	475	0.252	30.000	9.000	7560	5715	1543.2

Cast aluminium



3.00	3	380	0.042	4.500	1.350	40320	5080	30.9
4.00	3	380	0.056	6.000	1.800	30240	5080	54.9
5.00	3	380	0.070	7.500	2.250	24190	5080	85.7
6.00	3	380	0.084	9.000	2.700	20160	5080	123.5
8.00	3	380	0.112	12.000	3.600	15120	5080	219.5
10.00	3	380	0.140	15.000	4.500	12095	5080	342.9
12.00	3	380	0.168	18.000	5.400	10080	5080	493.8
16.00	3	380	0.179	24.000	7.200	7560	4064	702.3
20.00	3	380	0.210	30.000	9.000	6050	3812	1029.1



Wrought aluminium
Construction aluminium



3.00	3	375	0.024	4.500	3.000	39790	2883	38.9
4.00	3	375	0.032	6.000	4.000	29840	2883	69.2
5.00	3	375	0.040	7.500	5.000	23875	2883	108.1
6.00	3	375	0.048	9.000	6.000	19895	2883	155.7
8.00	3	375	0.064	12.000	8.000	14920	2883	276.7
10.00	3	375	0.081	15.000	10.000	11935	2882	432.3
12.00	3	375	0.097	18.000	12.000	9945	2882	622.5
16.00	3	375	0.103	24.000	16.000	7460	2306	885.5
20.00	3	375	0.121	30.000	20.000	5970	2163	1297.6

Unalloyed copper



3.00	3	280	0.018	4.500	3.000	29710	1614	21.8
4.00	3	280	0.024	6.000	4.000	22280	1614	38.7
5.00	3	280	0.030	7.500	5.000	17825	1614	60.5
6.00	3	280	0.036	9.000	6.000	14855	1614	87.2
8.00	3	280	0.048	12.000	8.000	11140	1614	155.0
10.00	3	280	0.060	15.000	10.000	8915	1615	242.2
12.00	3	280	0.072	18.000	12.000	7425	1614	348.6
16.00	3	280	0.077	24.000	16.000	5570	1291	495.9
20.00	3	280	0.091	30.000	20.000	4455	1210	726.2

Thermoplastics



3.00	3	375	0.029	4.500	3.000	39790	3459	46.7
4.00	3	375	0.039	6.000	4.000	29840	3459	83.0
5.00	3	375	0.048	7.500	5.000	23875	3460	129.7
6.00	3	375	0.058	9.000	6.000	19895	3459	186.8
8.00	3	375	0.077	12.000	8.000	14920	3459	332.1
10.00	3	375	0.097	15.000	10.000	11935	3459	518.8
12.00	3	375	0.116	18.000	12.000	9945	3459	747.0
16.00	3	375	0.124	24.000	16.000	7460	2767	1062.6
20.00	3	375	0.145	30.000	20.000	5970	2595	1557.1

Cast aluminium



3.00	3	300	0.024	4.500	3.000	31830	2306	31.1
4.00	3	300	0.032	6.000	4.000	23875	2306	55.4
5.00	3	300	0.040	7.500	5.000	19100	2306	86.5
6.00	3	300	0.048	9.000	6.000	15915	2306	124.5
8.00	3	300	0.064	12.000	8.000	11935	2306	221.4
10.00	3	300	0.081	15.000	10.000	9550	2306	345.9
12.00	3	300	0.097	18.000	12.000	7960	2307	498.3
16.00	3	300	0.103	24.000	16.000	5970	1845	708.6
20.00	3	300	0.121	30.000	20.000	4775	1730	1037.8