

# Corner radius end mills E-Cut Alu

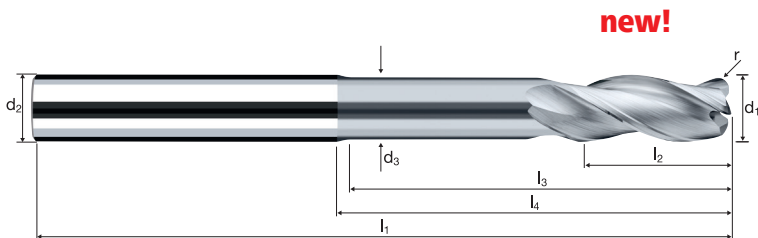
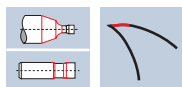
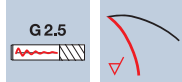
Smooth-edged, long version, neck

Base-X  
**B**

$$l_2 = 2.2 \times d_1$$

$$l_3 = 5.6 \times d_1$$

**HM**  
**MG10**     $\lambda$  **34°**  
                   $\gamma$  **24°**



Roughing

Finishing



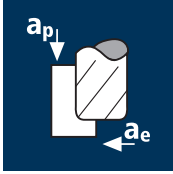
**ReTool®**

			Al Aluminium > 99%	Al Aluminium Alloy	Al Aluminium Cast		Cu Copper	Plastic Thermoplast	
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Ø Code	d <sub>1</sub> e8	d <sub>2</sub> h5	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	r 0/+0.03	α	z	Order-N°	
											Coating	Article-N°
<b>178</b>	3.00	6.00	2.80	60	6.60	16.80	20.13	0.200	4.5°	3	●	
<b>218</b>	4.00	6.00	3.70	65	9.00	22.50	25.04	0.200	2.5°	3	●	
<b>258</b>	5.00	6.00	4.60	68	11.00	28.00	29.72	0.200	1.2°	3	●	
<b>180</b>	3.00	6.00	2.80	60	6.60	16.80	20.13	0.500	4.5°	3	●	
<b>220</b>	4.00	6.00	3.70	65	9.00	22.50	25.04	0.500	2.5°	3	●	
<b>260</b>	5.00	6.00	4.60	68	11.00	28.00	29.72	0.500	1.2°	3	●	
<b>300</b>	6.00	6.00	5.50	73	13.50	34.00	35.85	0.500	0.0°	3	●	
<b>388</b>	8.00	8.00	7.40	84	18.00	45.00	47.37	0.500	0.0°	3	●	
<b>448</b>	10.00	10.00	9.20	100	22.00	56.00	59.01	0.500	0.0°	3	●	
<b>302</b>	6.00	6.00	5.50	73	13.50	34.00	35.85	1.000	0.0°	3	●	
<b>391</b>	8.00	8.00	7.40	84	18.00	45.00	47.37	1.000	0.0°	3	●	
<b>450</b>	10.00	10.00	9.20	100	22.00	56.00	59.01	1.000	0.0°	3	●	
<b>501</b>	12.00	12.00	11.00	117	27.00	67.50	71.21	1.000	0.0°	3	●	
<b>608</b>	16.00	16.00	15.00	144	36.00	90.00	94.27	1.000	0.0°	3	●	
<b>455</b>	10.00	10.00	9.20	100	22.00	56.00	59.01	2.000	0.0°	3	●	
<b>505</b>	12.00	12.00	11.00	117	27.00	67.50	71.21	2.000	0.0°	3	●	
<b>611</b>	16.00	16.00	15.00	144	36.00	90.00	94.27	2.000	0.0°	3	●	
<b>683</b>	20.00	20.00	19.00	169	44.00	112.00	116.77	2.000	0.0°	3	●	

# Application

# Material

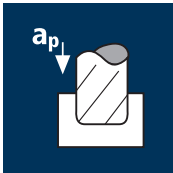


**Wrought aluminium  
Construction aluminium**

**Unalloyed copper**

**Thermoplastics**

**Cast aluminium**



**Wrought aluminium  
Construction aluminium**

**Unalloyed copper**

**Thermoplastics**

**Cast aluminium**

$d_1$ [mm]	z	$v_c$ [m/min]	$f_z$ [mm]	$a_p$ [mm]	$a_e$ [mm]	n [min <sup>-1</sup> ]	$v_f$ [mm/min]	Q [cm <sup>3</sup> /min]
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
3.00	3	285	0.029	4.500	1.200	30240	2586	14.0
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
3.00	3	380	0.045	4.500	1.200	40320	5480	29.6
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
3.00	3	305	0.041	4.500	1.200	32360	3961	21.4
4.00	3	305	0.054	6.000	1.600	24270	3961	38.0
5.00	3	305	0.068	7.500	2.000	19415	3961	59.4
6.00	3	305	0.082	9.000	2.400	16180	3961	85.6
8.00	3	305	0.109	12.000	3.200	12135	3961	152.1
10.00	3	305	0.136	15.000	4.000	9710	3962	237.7
12.00	3	305	0.163	18.000	4.800	8090	3961	342.2
16.00	3	305	0.174	24.000	6.400	6070	3170	486.9
20.00	3	305	0.204	30.000	8.000	4855	2971	713.1
3.00	3	304	0.022	3.000	3.000	32255	2103	18.9
4.00	3	304	0.029	4.000	4.000	24190	2103	33.6
5.00	3	304	0.036	5.000	5.000	19355	2103	52.6
6.00	3	304	0.043	6.000	6.000	16130	2104	75.7
8.00	3	304	0.058	8.000	8.000	12095	2103	134.6
10.00	3	304	0.072	10.000	10.000	9675	2103	210.3
12.00	3	304	0.087	12.000	12.000	8065	2104	302.9
16.00	3	304	0.093	16.000	16.000	6050	1683	430.9
20.00	3	304	0.109	20.000	20.000	4840	1578	631.2
3.00	3	228	0.016	3.000	3.000	24190	1189	10.7
4.00	3	228	0.022	4.000	4.000	18145	1189	19.0
5.00	3	228	0.027	5.000	5.000	14515	1189	29.7
6.00	3	228	0.033	6.000	6.000	12095	1189	42.8
8.00	3	228	0.044	8.000	8.000	9070	1189	76.1
10.00	3	228	0.055	10.000	10.000	7255	1189	118.9
12.00	3	228	0.066	12.000	12.000	6050	1190	171.3
16.00	3	228	0.070	16.000	16.000	4535	951	243.5
20.00	3	228	0.082	20.000	20.000	3630	892	356.9
3.00	3	304	0.026	3.000	3.000	32255	2521	22.7
4.00	3	304	0.035	4.000	4.000	24190	2520	40.3
5.00	3	304	0.043	5.000	5.000	19355	2521	63.0
6.00	3	304	0.052	6.000	6.000	16130	2521	90.8
8.00	3	304	0.069	8.000	8.000	12095	2520	161.3
10.00	3	304	0.087	10.000	10.000	9675	2520	252.0
12.00	3	304	0.104	12.000	12.000	8065	2521	363.0
16.00	3	304	0.111	16.000	16.000	6050	2017	516.4
20.00	3	304	0.130	20.000	20.000	4840	1891	756.4
3.00	3	244	0.023	3.000	3.000	25890	1822	16.4
4.00	3	244	0.031	4.000	4.000	19415	1822	29.2
5.00	3	244	0.039	5.000	5.000	15535	1822	45.6
6.00	3	244	0.047	6.000	6.000	12945	1822	65.6
8.00	3	244	0.063	8.000	8.000	9710	1822	116.6
10.00	3	244	0.078	10.000	10.000	7765	1822	182.2
12.00	3	244	0.094	12.000	12.000	6470	1821	262.3
16.00	3	244	0.100	16.000	16.000	4855	1458	373.2
20.00	3	244	0.117	20.000	20.000	3885	1367	546.8

# Corner radius end mills E-Cut Alu

Smooth-edged, long version, neck

Base-X **B**

$$l_2 = 2.2 \times d_1$$

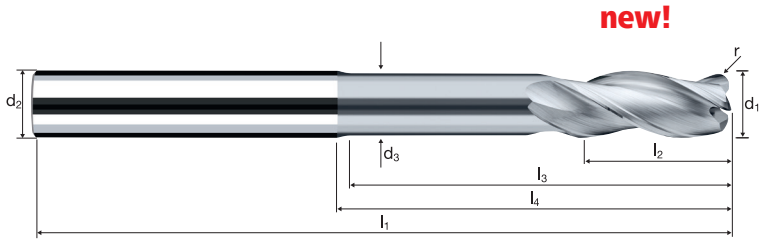
$$l_3 = 5.6 \times d_1$$

**HM**  
**MG10**

$\lambda$  **34°**  
 $\gamma$  **24°**

**G2.5**

**Vario**



Roughing

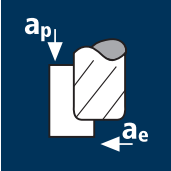



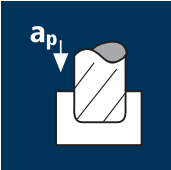



Finishing



**ReTool®**

Al Aluminium > 99%    Al Aluminium Alloy    Al Aluminium Cast    Cu Copper    Plastic Thermoplast

Ø Code	d1 e8	d2 h5	d3	l1	l2	l3	l4	r 0/+0.03	α	z	Coating	Article-N°	Ø-Code
											Example: Order-N°.	8587	507
507	12.00	12.00	11.00	117	27.00	67.50	71.21	3.000	0.0°	3			
613	16.00	16.00	15.00	144	36.00	90.00	94.27	3.000	0.0°	3			
685	20.00	20.00	19.00	169	44.00	112.00	116.77	3.000	0.0°	3			

Application	Material	$d_1$ [mm]	z	$v_c$ [m/min]	$f_z$ [mm]	$a_p$ [mm]	$a_e$ [mm]	n [min <sup>-1</sup> ]	$v_f$ [mm/min]	Q [cm <sup>3</sup> /min]
	Wrought aluminium Construction aluminium	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	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	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	12.00	3	305	0.163	18.000	4.800	8090	3961	342.2
		16.00	3	305	0.174	24.000	6.400	6070	3170	486.9
		20.00	3	305	0.204	30.000	8.000	4855	2971	713.1
	Wrought aluminium Construction aluminium	12.00	3	304	0.087	12.000	12.000	8065	2104	302.9
		16.00	3	304	0.093	16.000	16.000	6050	1683	430.9
		20.00	3	304	0.109	20.000	20.000	4840	1578	631.2
	Unalloyed copper	12.00	3	228	0.066	12.000	12.000	6050	1190	171.3
		16.00	3	228	0.070	16.000	16.000	4535	951	243.5
		20.00	3	228	0.082	20.000	20.000	3630	892	356.9
	Thermoplastics	12.00	3	304	0.104	12.000	12.000	8065	2521	363.0
		16.00	3	304	0.111	16.000	16.000	6050	2017	516.4
		20.00	3	304	0.130	20.000	20.000	4840	1891	756.4
	Cast aluminium	12.00	3	244	0.094	12.000	12.000	6470	1821	262.3
		16.00	3	244	0.100	16.000	16.000	4855	1458	373.2
		20.00	3	244	0.117	20.000	20.000	3885	1367	546.8