

# Corner radius end mills Torocut

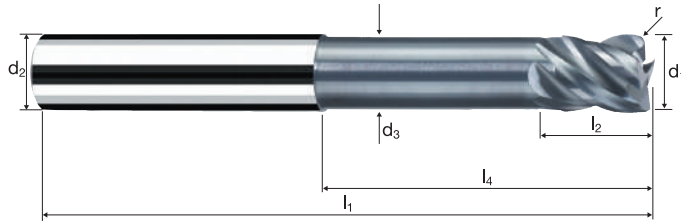
Tolerance r 0/+0.03, 6xd



HM  
MG10

$\lambda$  40°  
 $\gamma$  5°

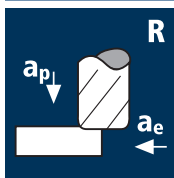
Vario



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56		Inox Stainless	Ti Titanium	GG(G) Tool Steel Nickel-Alloys
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												POLYCHROM	
Example: Order-N°.													
												P7344	
$\emptyset$ Code	$d_1$ e8	$d_2$ h6	$d_3$	$l_1$	$l_2$	$l_3$	$l_4$	r 0/+0.03	$\alpha$	z			
138	2.00	6.00	1.90	66	3.00	12.00	20.31	0.200	5.9°	4	●		
178	3.00	6.00	2.80	66	4.00	18.00	24.63	0.200	3.7°	4	●		
218	4.00	6.00	3.70	69	5.00	24.00	28.95	0.200	2.1°	4	●		
258	5.00	6.00	4.60	75	6.00	30.00	33.27	0.200	0.9°	4	●		
297	6.00	6.00	5.50	80	7.00	42.34	43.00	0.200	0.0°	4	●		
385	8.00	8.00	7.40	90	9.00	52.29	53.00	0.200	0.0°	4	●		
445	10.00	10.00	9.20	105	11.00	63.20	64.00	0.200	0.0°	4	●		
496	12.00	12.00	11.00	120	13.00	73.13	74.00	0.200	0.0°	4	●		
140	2.00	6.00	1.90	66	3.00	12.00	20.31	0.500	6.0°	4	●		
180	3.00	6.00	2.80	66	4.00	18.00	24.63	0.500	3.7°	4	●		
220	4.00	6.00	3.70	69	5.00	24.00	28.95	0.500	2.1°	4	●		
260	5.00	6.00	4.60	75	6.00	30.00	33.27	0.500	0.9°	4	●		
300	6.00	6.00	5.50	80	7.00	42.34	43.00	0.500	0.0°	4	●		
388	8.00	8.00	7.40	90	9.00	52.29	53.00	0.500	0.0°	4	●		
448	10.00	10.00	9.20	105	11.00	63.20	64.00	0.500	0.0°	4	●		
498	12.00	12.00	11.00	120	13.00	73.13	74.00	0.500	0.0°	4	●		

## Application



## Material

Inox normal  
[Cr-Ni/1.4301]  
[Cr-Ni-Mo/1.4571]



d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>s</sub> [mm]	a <sub>p</sub> [mm]	a <sub>e</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>t</sub> [mm/min]	r [mm]
2.00	4	80	0.015	0.600	0.800	12730	765	0.50
3.00	4	80	0.020	0.600	1.200	8490	680	0.50
4.00	4	80	0.030	0.600	1.600	6365	765	0.50
5.00	4	80	0.035	0.600	2.000	5095	715	0.50
6.00	4	80	0.045	0.600	2.400	4245	765	0.50
8.00	4	80	0.055	0.600	3.200	3185	700	0.50
10.00	4	80	0.070	0.600	4.000	2545	715	0.50
12.00	4	80	0.085	0.600	4.800	2120	720	0.50

Inox medium  
[Cr-Ni-Mo+/1.4539]  
Duplex steel  
[17-4 PH]



2.00	4	70	0.015	0.600	0.800	11140	670	0.50
3.00	4	70	0.020	0.600	1.200	7425	595	0.50
4.00	4	70	0.025	0.600	1.600	5570	555	0.50
5.00	4	70	0.030	0.600	2.000	4455	535	0.50
6.00	4	70	0.040	0.600	2.400	3715	595	0.50
8.00	4	70	0.050	0.600	3.200	2785	555	0.50
10.00	4	70	0.065	0.600	4.000	2230	580	0.50
12.00	4	70	0.075	0.600	4.800	1855	555	0.50

Inox difficile  
[Cr-Ni-Mo+/1.4529]  
Heat resistant steel  
[1.4841]



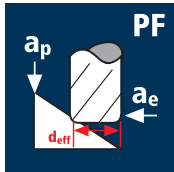
2.00	4	50	0.010	0.600	0.800	7960	320	0.50
3.00	4	50	0.015	0.600	1.200	5305	320	0.50
4.00	4	50	0.020	0.600	1.600	3980	320	0.50
5.00	4	50	0.025	0.600	2.000	3185	320	0.50
6.00	4	50	0.030	0.600	2.400	2655	320	0.50
8.00	4	50	0.040	0.600	3.200	1990	320	0.50
10.00	4	50	0.050	0.600	4.000	1590	320	0.50
12.00	4	50	0.060	0.600	4.800	1325	320	0.50

Steel  
< 850 N/mm<sup>2</sup>



2.00	4	180	0.020	0.600	0.800	28650	2290	0.50
3.00	4	180	0.025	0.600	1.200	19100	1910	0.50
4.00	4	180	0.040	0.600	1.600	14325	2290	0.50
5.00	4	180	0.045	0.600	2.000	11460	2065	0.50
6.00	4	180	0.060	0.600	2.400	9550	2290	0.50
8.00	4	180	0.070	0.600	3.200	7160	2005	0.50
10.00	4	180	0.090	0.600	4.000	5730	2065	0.50
12.00	4	180	0.110	0.600	4.800	4775	2100	0.50

## Application



## Material

Inox normal  
[Cr-Ni/1.4301]  
[Cr-Ni-Mo/1.4571]



d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>s</sub> [mm]	a <sub>p</sub> [mm]	a <sub>e</sub> [mm]	d <sub>eff</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>t</sub> [mm/min]	β [°]
2.00	4	160	0.030	0.100	0.100	1.99	25595	3070	45°
3.00	4	160	0.040	0.120	0.120	3.00	16975	2715	45°
4.00	4	160	0.060	0.120	0.120	4.00	12730	3055	45°
5.00	4	160	0.070	0.160	0.160	5.00	10185	2850	45°
6.00	4	160	0.090	0.180	0.180	6.00	8490	3055	45°
8.00	4	160	0.110	0.200	0.200	7.99	6375	2805	45°
10.00	4	160	0.140	0.240	0.240	9.97	5110	2860	45°
12.00	4	160	0.170	0.260	0.260	11.96	4260	2895	45°

Inox medium  
[Cr-Ni-Mo+/1.4539]  
Duplex steel  
[17-4 PH]



2.00	4	140	0.030	0.100	0.100	1.99	22395	2685	45°
3.00	4	140	0.040	0.120	0.120	3.00	14855	2375	45°
4.00	4	140	0.050	0.120	0.120	4.00	11140	2230	45°
5.00	4	140	0.060	0.160	0.160	5.00	8915	2140	45°
6.00	4	140	0.080	0.180	0.180	6.00	7425	2375	45°
8.00	4	140	0.100	0.200	0.200	7.99	5575	2230	45°
10.00	4	140	0.130	0.240	0.240	9.97	4470	2325	45°
12.00	4	140	0.150	0.260	0.260	11.96	3725	2235	45°

Inox difficile  
[Cr-Ni-Mo+/1.4529]  
Heat resistant steel  
[1.4841]



2.00	4	110	0.020	0.100	0.100	1.99	17595	1410	45°
3.00	4	110	0.030	0.120	0.120	3.00	11670	1400	45°
4.00	4	110	0.040	0.120	0.120	4.00	8755	1400	45°
5.00	4	110	0.050	0.160	0.160	5.00	7005	1400	45°
6.00	4	110	0.060	0.180	0.180	6.00	5835	1400	45°
8.00	4	110	0.080	0.200	0.200	7.99	4380	1400	45°
10.00	4	110	0.100	0.240	0.240	9.97	3510	1405	45°
12.00	4	110	0.120	0.260	0.260	11.96	2930	1405	45°

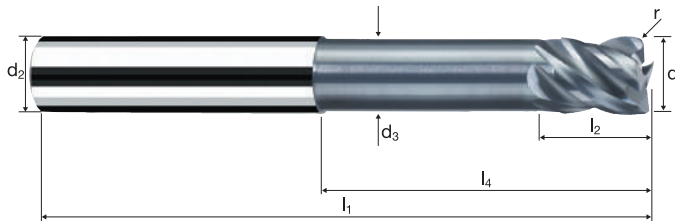
Steel  
< 850 N/mm<sup>2</sup>



2.00	4	263	0.040	0.100	0.100	1.99	42070	6730	45°
3.00	4	396	0.050	0.120	0.120	3.00	42015	8405	45°
4.00	4	400	0.080	0.120	0.120	4.00	31830	10185	45°
5.00	4	400	0.090	0.160	0.160	5.00	25465	9165	45°
6.00	4	400	0.120	0.180	0.180	6.00	21220	10185	45°
8.00	4	400	0.140	0.200	0.200	7.99	15935	8925	45°
10.00	4	400	0.180	0.240	0.240	9.97	12770	9195	45°
12.00	4	400	0.220	0.260	0.260	11.96	10645	9370	45°

# Corner radius end mills Torocut

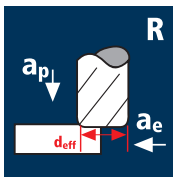
Tolerance r 0/+0.03, 6xd



<b>Rm</b> < 850	<b>Rm</b> 850-1100	<b>Rm</b> 1100-1300	<b>Rm</b> 1300-1500	<b>HRC</b> 48-56		<b>Inox</b> Stainless	<b>Ti</b> Titanium	<b>GG(G)</b> Tool Steel Nickel-Alloys
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Ø Code	d <sub>1</sub> e8	d <sub>2</sub> h6	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	POLYCHROM	
											Example: Order-N°.	
												<b>P7344</b>
<b>222</b>	4.00	6.00	3.70	69	5.00	24.00	28.95	1.000	2.1°	4		●
<b>262</b>	5.00	6.00	4.60	75	6.00	30.00	33.27	1.000	1.0°	4		●
<b>302</b>	6.00	6.00	5.50	80	7.00	42.34	43.00	1.000	0.0°	4		●
<b>391</b>	8.00	8.00	7.40	90	9.00	52.29	53.00	1.000	0.0°	4		●
<b>450</b>	10.00	10.00	9.20	105	11.00	63.20	64.00	1.000	0.0°	4		●
<b>501</b>	12.00	12.00	11.00	120	13.00	73.13	74.00	1.000	0.0°	4		●

## Application



## Material

Inox normal  
[Cr-Ni/1.4301]  
[Cr-Ni-Mo/1.4571]

Inox medium  
[Cr-Ni-Mo+/1.4539]  
Duplex steel  
[17-4 PH]

Inox difficile  
[Cr-Ni-Mo+/-1.4529]  
Heat resistant steel  
[1.4841]

Steel  
< 850 N/mm<sup>2</sup>

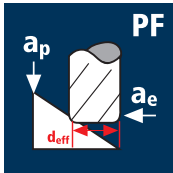
d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>c</sub> [mm]	a <sub>s</sub> [mm]	a <sub>e</sub> [mm]	d <sub>eff</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>f</sub> [mm/min]	r [mm]
4.00	4	100	0.030	0.600	1.600	3.83	8310	995	1.00
5.00	4	100	0.040	0.600	2.000	4.83	6590	1055	1.00
6.00	4	100	0.045	0.600	2.400	5.83	5460	985	1.00
8.00	4	100	0.060	0.600	3.200	7.83	4065	975	1.00
10.00	4	100	0.080	0.600	4.000	9.83	3240	1035	1.00
12.00	4	100	0.095	0.600	4.800	11.83	2690	1020	1.00

4.00	4	80	0.025	0.600	1.600	3.83	6650	665	1.00
5.00	4	80	0.035	0.600	2.000	4.83	5270	740	1.00
6.00	4	80	0.040	0.600	2.400	5.83	4370	700	1.00
8.00	4	80	0.055	0.600	3.200	7.83	3250	715	1.00
10.00	4	80	0.070	0.600	4.000	9.83	2590	725	1.00
12.00	4	80	0.085	0.600	4.800	11.83	2155	730	1.00

4.00	4	55	0.020	0.600	1.600	3.83	4570	365	1.00
5.00	4	55	0.030	0.600	2.000	4.83	3625	435	1.00
6.00	4	55	0.030	0.600	2.400	5.83	3005	360	1.00
8.00	4	55	0.040	0.600	3.200	7.83	2235	360	1.00
10.00	4	55	0.055	0.600	4.000	9.83	1780	390	1.00
12.00	4	55	0.065	0.600	4.800	11.83	1480	385	1.00

4.00	4	200	0.040	0.600	1.600	3.83	16620	2660	1.00
5.00	4	200	0.050	0.600	2.000	4.83	13180	2635	1.00
6.00	4	200	0.060	0.600	2.400	5.83	10920	2620	1.00
8.00	4	200	0.080	0.600	3.200	7.83	8130	2600	1.00
10.00	4	200	0.105	0.600	4.000	9.83	6475	2720	1.00
12.00	4	200	0.125	0.600	4.800	11.83	5380	2690	1.00

## Application



## Material

Inox normal  
[Cr-Ni/1.4301]  
[Cr-Ni-Mo/1.4571]

Inox medium  
[Cr-Ni-Mo+/1.4539]  
Duplex steel  
[17-4 PH]

Inox difficile  
[Cr-Ni-Mo+/-1.4529]  
Heat resistant steel  
[1.4841]

Steel  
< 850 N/mm<sup>2</sup>

d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>c</sub> [mm]	a <sub>s</sub> [mm]	a <sub>e</sub> [mm]	d <sub>eff</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>f</sub> [mm/min]	β [°]
4.00	4	160	0.060	0.180	0.180	3.97	12830	3080	45°
5.00	4	160	0.080	0.240	0.240	4.99	10205	3265	45°
6.00	4	160	0.090	0.270	0.270	6.00	8490	3055	45°
8.00	4	160	0.120	0.300	0.300	8.00	6365	3055	45°
10.00	4	160	0.160	0.360	0.360	9.99	5100	3265	45°
12.00	4	160	0.190	0.390	0.390	11.98	4250	3230	45°

4.00	4	140	0.050	0.180	0.180	3.97	11225	2245	45°
5.00	4	140	0.070	0.240	0.240	4.99	8930	2500	45°
6.00	4	140	0.080	0.270	0.270	6.00	7425	2375	45°
8.00	4	140	0.110	0.300	0.300	8.00	5570	2450	45°
10.00	4	140	0.140	0.360	0.360	9.99	4460	2500	45°
12.00	4	140	0.170	0.390	0.390	11.98	3720	2530	45°

4.00	4	110	0.040	0.180	0.180	3.97	8820	1410	45°
5.00	4	110	0.060	0.240	0.240	4.99	7015	1685	45°
6.00	4	110	0.060	0.270	0.270	6.00	5835	1400	45°
8.00	4	110	0.080	0.300	0.300	8.00	4375	1400	45°
10.00	4	110	0.110	0.360	0.360	9.99	3505	1540	45°
12.00	4	110	0.130	0.390	0.390	11.98	2925	1520	45°

4.00	4	400	0.080	0.180	0.180	3.97	32070	10265	45°
5.00	4	400	0.100	0.240	0.240	4.99	25515	10205	45°
6.00	4	400	0.120	0.270	0.270	6.00	21220	10185	45°
8.00	4	400	0.160	0.300	0.300	8.00	15915	10185	45°
10.00	4	400	0.210	0.360	0.360	9.99	12745	10705	45°
12.00	4	400	0.250	0.390	0.390	11.98	10630	10630	45°