

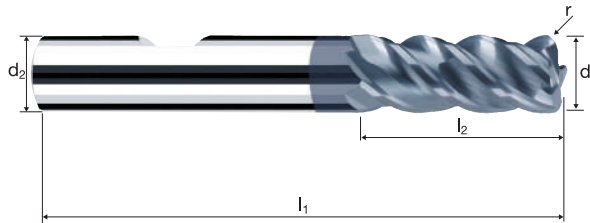
# Corner radius end mills NX

Smooth-edged, normal version



HM  
MG10

$\lambda$  45°  
 $\gamma$  -20°



Roughing

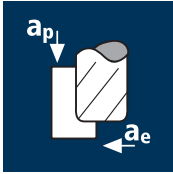
Finishing



Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56	HRC 56-60		Ti Titanium	GG(G) Tool Steel
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										POLYCHROM	
Example: Order-N°.										P15368	
										P15268	
$\emptyset$ Code	$d_1$ e8	$d_2$ h6	$l_1$	$l_2$	$l_4$	$r$ 0/+0.03	$\alpha$	$z$			
178	3.00	6.00	57	8.00	15.56	0.200	6.0°	4	●		
180	3.00	6.00	57	8.00	15.56	0.500	6.0°	4	●		
220	4.00	6.00	57	8.00	14.59	0.500	4.5°	4	●		
260	5.00	6.00	57	10.00	14.72	0.500	2.5°	4	●		
300	6.00	6.00	57	12.00	-	0.500	0.0°	4	●		
388	8.00	8.00	63	19.00	-	0.500	0.0°	4	●		
448	10.00	10.00	72	23.00	-	0.500	0.0°	4	●		
498	12.00	12.00	83	27.00	-	0.500	0.0°	4	●		
302	6.00	6.00	57	12.00	-	1.000	0.0°	4	●		
391	8.00	8.00	63	19.00	-	1.000	0.0°	4	●		
450	10.00	10.00	72	23.00	-	1.000	0.0°	4	●		
501	12.00	12.00	83	27.00	-	1.000	0.0°	4	●		
608	16.00	16.00	92	32.00	-	1.000	0.0°	4	●		
680	20.00	20.00	104	39.00	-	1.000	0.0°	4	●		
393	8.00	8.00	63	19.00	-	1.500	0.0°	4	●		
453	10.00	10.00	72	23.00	-	1.500	0.0°	4	●		
503	12.00	12.00	83	27.00	-	1.500	0.0°	4	●		
610	16.00	16.00	92	32.00	-	1.500	0.0°	4	●		

## Application



## Material

Steel  
850 - 1100 N/mm<sup>2</sup>



Steel  
1100 - 1300 N/mm<sup>2</sup>



Hardened tool steel  
52 - 56 HRC



Titanium alloys  
> 300 HB  
[Ti6Al4V]



Steel  
850 - 1100 N/mm<sup>2</sup>



Steel  
1100 - 1300 N/mm<sup>2</sup>



Hardened tool steel  
52 - 56 HRC



Titanium alloys  
> 300 HB  
[Ti6Al4V]



d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>z</sub> [mm]	a <sub>p</sub> [mm]	a <sub>e</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>r</sub> [mm/min]	Q [cm <sup>3</sup> /min]
4.00	4	150	0.025	6.000	1.600	11935	1195	11.5
5.00	4	150	0.035	7.500	2.000	9550	1335	20.1
6.00	4	150	0.040	9.000	2.400	7960	1275	27.5
8.00	4	150	0.055	12.000	3.200	5970	1315	50.4
10.00	4	150	0.065	15.000	4.000	4775	1240	74.5
12.00	4	150	0.080	18.000	4.800	3980	1275	110.0
16.00	4	150	0.090	24.000	6.400	2985	1075	165.0
20.00	4	150	0.110	30.000	8.000	2385	1050	252.1

4.00	4	115	0.025	6.000	1.600	9150	915	8.8
5.00	4	115	0.035	7.500	2.000	7320	1025	15.4
6.00	4	115	0.040	9.000	2.400	6100	975	21.1
8.00	4	115	0.055	12.000	3.200	4575	1005	38.7
10.00	4	115	0.065	15.000	4.000	3660	950	57.1
12.00	4	115	0.080	18.000	4.800	3050	975	84.3
16.00	4	115	0.090	24.000	6.400	2290	825	126.5
20.00	4	115	0.110	30.000	8.000	1830	805	193.3

4.00	4	55	0.015	6.000	1.200	4375	265	1.9
5.00	4	55	0.018	7.500	1.500	3500	250	2.8
6.00	4	55	0.021	9.000	1.800	2920	245	4.0
8.00	4	55	0.027	12.000	2.400	2190	235	6.8
10.00	4	55	0.036	15.000	3.000	1750	250	11.3
12.00	4	55	0.042	18.000	3.600	1460	245	15.9
16.00	4	55	0.048	24.000	4.800	1095	210	24.2
20.00	4	55	0.060	30.000	6.000	875	210	37.8

4.00	4	50	0.015	6.000	1.600	3980	240	2.3
5.00	4	50	0.020	7.500	2.000	3185	255	3.8
6.00	4	50	0.020	9.000	2.400	2655	210	4.6
8.00	4	50	0.025	12.000	3.200	1990	200	7.6
10.00	4	50	0.035	15.000	4.000	1590	225	13.4
12.00	4	50	0.040	18.000	4.800	1325	210	18.3
16.00	4	50	0.050	24.000	6.400	995	200	30.6
20.00	4	50	0.060	30.000	8.000	795	190	45.8

4.00	4	115	0.020	5.000	4.000	9150	730	14.6
5.00	4	115	0.025	6.250	5.000	7320	730	22.9
6.00	4	115	0.025	7.500	6.000	6100	610	27.5
8.00	4	115	0.035	10.000	8.000	4575	640	51.2
10.00	4	115	0.045	12.500	10.000	3660	660	82.4
12.00	4	115	0.055	15.000	12.000	3050	670	120.8
16.00	4	115	0.065	20.000	16.000	2290	595	190.3
20.00	4	115	0.080	25.000	20.000	1830	585	292.8

4.00	4	90	0.020	5.000	4.000	7160	575	11.5
5.00	4	90	0.025	6.250	5.000	5730	575	17.9
6.00	4	90	0.025	7.500	6.000	4775	475	21.5
8.00	4	90	0.035	10.000	8.000	3580	500	40.1
10.00	4	90	0.045	12.500	10.000	2865	515	64.5
12.00	4	90	0.055	15.000	12.000	2385	525	94.5
16.00	4	90	0.065	20.000	16.000	1790	465	149.0
20.00	4	90	0.080	25.000	20.000	1430	460	229.2

4.00	4	50	0.009	4.000	4.000	3980	145	2.3
5.00	4	50	0.012	5.000	5.000	3185	155	3.8
6.00	4	50	0.015	6.000	6.000	2655	160	5.7
8.00	4	50	0.018	8.000	8.000	1990	145	9.2
10.00	4	50	0.024	10.000	10.000	1590	155	15.3
12.00	4	50	0.030	12.000	12.000	1325	160	22.9
16.00	4	50	0.033	16.000	16.000	995	130	33.6
20.00	4	50	0.042	20.000	20.000	795	135	53.5

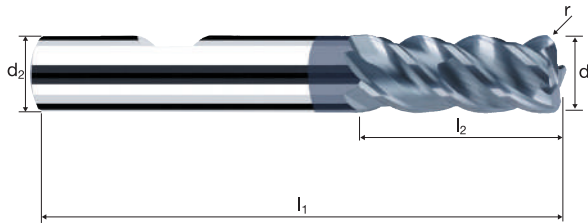
4.00	4	40	0.010	5.000	4.000	3185	125	2.5
5.00	4	40	0.015	6.250	5.000	2545	155	4.8
6.00	4	40	0.020	7.500	6.000	2120	170	7.6
8.00	4	40	0.025	10.000	8.000	1590	160	12.7
10.00	4	40	0.030	12.500	10.000	1275	155	19.1
12.00	4	40	0.040	15.000	12.000	1060	170	30.6
16.00	4	40	0.045	20.000	16.000	795	145	45.8
20.00	4	40	0.055	25.000	20.000	635	140	70.0

# Corner radius end mills NX

Smooth-edged, normal version



**HM**  
**MG10**     $\lambda$  45°  
                   $\gamma$  -20°



Roughing

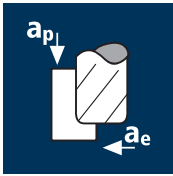
Finishing



<b>Rm</b> 850-1100	<b>Rm</b> 1100-1300	<b>Rm</b> 1300-1500	<b>HRC</b> 48-56	<b>HRC</b> 56-60		<b>Ti</b> Titanium	<b>GG(G)</b> Tool Steel
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Ø Code	d <sub>1</sub> e8	d <sub>2</sub> h6	l <sub>1</sub>	l <sub>2</sub>	l <sub>4</sub>	r 0/+0.03	α	z	Example: Order-N°.		POLYCHROM	
									Coating	Article-N°		ø-Code
									<b>P</b>	<b>15368</b>	<b>306</b>	
<b>306</b>	6.00	6.00	57	12.00	-	2.000	0.0°	4				●
<b>395</b>	8.00	8.00	63	19.00	-	2.000	0.0°	4				●
<b>505</b>	12.00	12.00	83	27.00	-	2.000	0.0°	4				●
<b>611</b>	16.00	16.00	92	32.00	-	2.000	0.0°	4				●
<b>683</b>	20.00	20.00	104	39.00	-	2.000	0.0°	4				●
<b>457</b>	10.00	10.00	72	23.00	-	2.500	0.0°	4				●
<b>506</b>	12.00	12.00	83	27.00	-	2.500	0.0°	4				●
<b>612</b>	16.00	16.00	92	32.00	-	2.500	0.0°	4				●
<b>684</b>	20.00	20.00	104	39.00	-	2.500	0.0°	4				●
<b>508</b>	12.00	12.00	83	27.00	-	4.000	0.0°	4				●
<b>614</b>	16.00	16.00	92	32.00	-	4.000	0.0°	4				●
<b>686</b>	20.00	20.00	104	39.00	-	4.000	0.0°	4				●

## Application



## Material

Steel  
850 - 1100 N/mm<sup>2</sup>



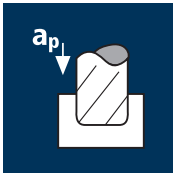
Steel  
1100 - 1300 N/mm<sup>2</sup>



Hardened tool steel  
52 - 56 HRC



Titanium alloys  
> 300 HB  
[Ti6Al4V]



Steel  
850 - 1100 N/mm<sup>2</sup>



Steel  
1100 - 1300 N/mm<sup>2</sup>



Hardened tool steel  
52 - 56 HRC



Titanium alloys  
> 300 HB  
[Ti6Al4V]



d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>z</sub> [mm]	a <sub>p</sub> [mm]	a <sub>e</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>r</sub> [mm/min]	Q [cm <sup>3</sup> /min]
10.00	4	150	0.065	15.000	4.000	4775	1240	74.5
12.00	4	150	0.080	18.000	4.800	3980	1275	110.0
16.00	4	150	0.090	24.000	6.400	2985	1075	165.0
20.00	4	150	0.110	30.000	8.000	2385	1050	252.1

10.00	4	115	0.065	15.000	4.000	3660	950	57.1
12.00	4	115	0.080	18.000	4.800	3050	975	84.3
16.00	4	115	0.090	24.000	6.400	2290	825	126.5
20.00	4	115	0.110	30.000	8.000	1830	805	193.3

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10.00	4	50	0.035	15.000	4.000	1590	225	13.4
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10.00	4	90	0.045	12.500	10.000	2865	515	64.5
12.00	4	90	0.055	15.000	12.000	2385	525	94.5
16.00	4	90	0.065	20.000	16.000	1790	465	149.0
20.00	4	90	0.080	25.000	20.000	1430	460	229.2

10.00	4	50	0.024	10.000	10.000	1590	155	15.3
12.00	4	50	0.030	12.000	12.000	1325	160	22.9
16.00	4	50	0.033	16.000	16.000	995	130	33.6
20.00	4	50	0.042	20.000	20.000	795	135	53.5

10.00	4	40	0.030	12.500	10.000	1275	155	19.1
12.00	4	40	0.040	15.000	12.000	1060	170	30.6
16.00	4	40	0.045	20.000	16.000	795	145	45.8
20.00	4	40	0.055	25.000	20.000	635	140	70.0