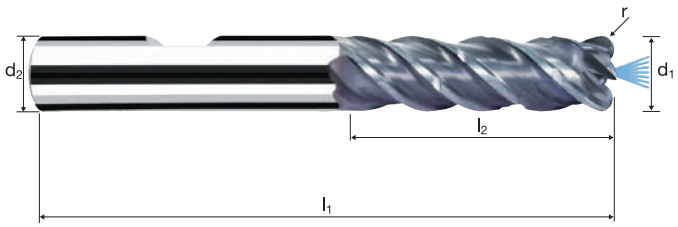
Corner radius end mills MFC

Smooth-edged, chip breaker, medium length version
High-performance penetration edge, central air/cooling channel

HM MG10	λ 45° γ 10°

Vario



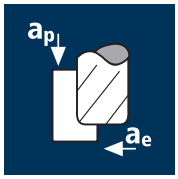
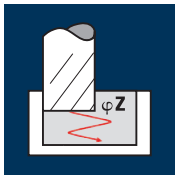
Roughing HPC | Roughing HDC | Finishing

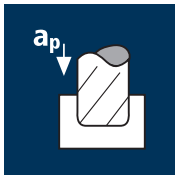
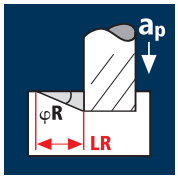
Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56			Inox Stainless	Ti Titanium	GG(G) Tool Steel

Example: **Order-N°.** Coating **P** Article-N°. **8217** ø-Code **218**

Ø Code	d_1 e8	d_2 h5	l_1	l_2	l_4	r 0/+0.03	α	z	POLYCHROM P8217	POLYCHROM P8117
218*	4.00	6.00	63	13.00	19.59	0.200	3.5°	4		●
258*	5.00	6.00	63	16.00	20.72	0.200	1.5°	4		●
297	6.00	6.00	63	21.00	-	0.200	0.0°	4		●
385	8.00	8.00	72	31.00	-	0.200	0.0°	4		●
445	10.00	10.00	84	37.00	-	0.200	0.0°	4		●
496	12.00	12.00	97	44.00	-	0.200	0.0°	4		●
605	16.00	16.00	108	53.00	-	0.200	0.0°	4		●
220*	4.00	6.00	63	13.00	19.59	0.500	3.5°	4		●
260*	5.00	6.00	63	16.00	20.72	0.500	1.5°	4		●
300	6.00	6.00	63	21.00	-	0.500	0.0°	4		●
388	8.00	8.00	72	31.00	-	0.500	0.0°	4		●
448	10.00	10.00	84	37.00	-	0.500	0.0°	4		●
498	12.00	12.00	97	44.00	-	0.500	0.0°	4		●
606	16.00	16.00	108	53.00	-	0.500	0.0°	4		●
302	6.00	6.00	63	21.00	-	1.000	0.0°	4		●
391	8.00	8.00	72	31.00	-	1.000	0.0°	4		●
450	10.00	10.00	84	37.00	-	1.000	0.0°	4		●
501	12.00	12.00	97	44.00	-	1.000	0.0°	4		●
608	16.00	16.00	108	53.00	-	1.000	0.0°	4		●

* without chip breaker only

Application	Material	d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min-1]	v_f [mm/min]	Q [cm³/min]	φZ [°]
	Steel 850 - 1100 N/mm²	4.00	4	135	0.026	8.000	1.200	10745	1115	10.7	12°
		5.00	4	135	0.030	10.000	1.500	8595	1030	15.5	12°
		6.00	4	135	0.034	12.000	1.800	7160	975	21.0	12°
		8.00	4	135	0.043	16.000	2.400	5370	925	35.5	12°
		10.00	4	135	0.055	20.000	3.000	4295	945	56.7	12°
		12.00	4	135	0.064	24.000	3.600	3580	915	79.2	12°
		16.00	4	135	0.072	25.600	4.800	2685	775	95.0	12°
	Steel 1100 - 1300 N/mm²	4.00	4	105	0.021	8.000	1.200	8355	700	6.7	12°
		5.00	4	105	0.026	10.000	1.500	6685	695	10.4	12°
		6.00	4	105	0.030	12.000	1.800	5570	670	14.4	12°
		8.00	4	105	0.038	16.000	2.400	4180	635	24.4	12°
		10.00	4	105	0.047	20.000	3.000	3340	630	37.7	12°
		12.00	4	105	0.055	24.000	3.600	2785	615	52.9	12°
		16.00	4	105	0.064	25.600	4.800	2090	535	65.7	12°
	Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	4.00	4	80	0.017	8.000	1.200	6365	435	4.2	8°
		5.00	4	80	0.021	10.000	1.500	5095	430	6.4	8°
		6.00	4	80	0.026	12.000	1.800	4245	440	9.5	8°
		8.00	4	80	0.030	16.000	2.400	3185	380	14.7	8°
		10.00	4	80	0.038	20.000	3.000	2545	385	23.2	8°
		12.00	4	80	0.047	24.000	3.600	2120	400	34.5	8°
		16.00	4	80	0.055	25.600	4.800	1590	350	43.0	8°

Application	Material	d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min-1]	v_f [mm/min]	Q [cm³/min]	φR [°]	LR [mm]
	Steel 850 - 1100 N/mm²	4.00	4	110	0.017	6.000	4.000	8755	595	14.3	12°	28.2
		5.00	4	110	0.020	7.500	5.000	7005	560	21.0	12°	35.3
		6.00	4	110	0.022	9.000	6.000	5835	515	27.7	12°	42.3
		8.00	4	110	0.028	12.000	8.000	4375	490	47.1	12°	56.5
		10.00	4	110	0.036	15.000	10.000	3500	505	75.6	12°	70.6
		12.00	4	110	0.042	18.000	12.000	2920	490	105.9	12°	84.7
		16.00	4	110	0.047	24.000	16.000	2190	410	158.0	12°	112.9
	Steel 1100 - 1300 N/mm²	4.00	4	85	0.014	6.000	4.000	6765	380	9.1	12°	28.2
		5.00	4	85	0.017	7.500	5.000	5410	370	13.8	12°	35.3
		6.00	4	85	0.020	9.000	6.000	4510	360	19.5	12°	42.3
		8.00	4	85	0.025	12.000	8.000	3380	340	32.5	12°	56.5
		10.00	4	85	0.031	15.000	10.000	2705	335	50.3	12°	70.6
		12.00	4	85	0.036	18.000	12.000	2255	325	70.1	12°	84.7
		16.00	4	85	0.042	24.000	16.000	1690	285	109.1	12°	112.9
	Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	4.00	4	65	0.011	6.000	4.000	5175	230	5.5	12°	28.2
		5.00	4	65	0.014	7.500	5.000	4140	230	8.7	12°	35.3
		6.00	4	65	0.017	9.000	6.000	3450	235	12.7	12°	42.3
		8.00	4	65	0.020	12.000	8.000	2585	205	19.9	12°	56.5
		10.00	4	65	0.025	15.000	10.000	2070	205	31.0	12°	70.6
		12.00	4	65	0.031	18.000	12.000	1725	215	46.2	12°	84.7
		16.00	4	65	0.036	24.000	16.000	1295	185	71.5	12°	112.9

This way to the cutting data software **ToolExpert MFC**. Quick, easy, reliable.

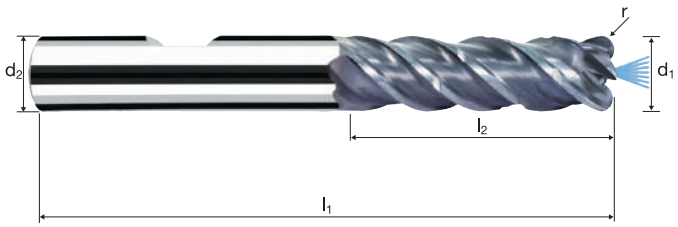
Corner radius end mills MFC

Smooth-edged, chip breaker, medium length version
High-performance penetration edge, central air/cooling channel

HM MG10

λ 45°
γ 10°

Vario

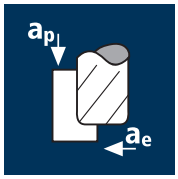
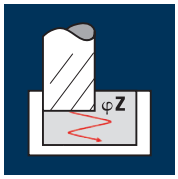


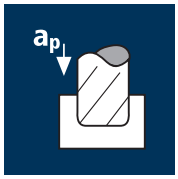
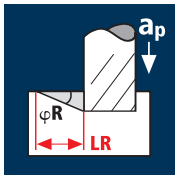
Roughing HPC | Roughing HDC | Finishing

Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56			Inox Stainless	Ti Titanium	GG(G) Tool Steel

Example: **Order-N°.** Coating **P** Article-N°. **8217** ø-Code **393**

Ø Code	d_1 e8	d_2 h5	l_1	l_2	l_4	r 0/+0.03	α	z	POLYCHROM P8217	POLYCHROM P8117
393	8.00	8.00	72	31.00	-	1.500	0.0°	4		●
453	10.00	10.00	84	37.00	-	1.500	0.0°	4		●
503	12.00	12.00	97	44.00	-	1.500	0.0°	4		●
610	16.00	16.00	108	53.00	-	1.500	0.0°	4		●
455	10.00	10.00	84	37.00	-	2.000	0.0°	4		●
505	12.00	12.00	97	44.00	-	2.000	0.0°	4		●
611	16.00	16.00	108	53.00	-	2.000	0.0°	4		●
506	12.00	12.00	97	44.00	-	2.500	0.0°	4		●

Application	Material	d1 [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]	φZ [°]
	Steel 850 - 1100 N/mm²	8.00	4	135	0.043	16.000	2.400	5370	925	35.5	12°
		10.00	4	135	0.055	20.000	3.000	4295	945	56.7	12°
		12.00	4	135	0.064	24.000	3.600	3580	915	79.2	12°
		16.00	4	135	0.072	25.600	4.800	2685	775	95.0	12°
	Steel 1100 - 1300 N/mm²	8.00	4	105	0.038	16.000	2.400	4180	635	24.4	12°
		10.00	4	105	0.047	20.000	3.000	3340	630	37.7	12°
		12.00	4	105	0.055	24.000	3.600	2785	615	52.9	12°
		16.00	4	105	0.064	25.600	4.800	2090	535	65.7	12°
	Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	8.00	4	80	0.030	16.000	2.400	3185	380	14.7	8°
		10.00	4	80	0.038	20.000	3.000	2545	385	23.2	8°
		12.00	4	80	0.047	24.000	3.600	2120	400	34.5	8°
		16.00	4	80	0.055	25.600	4.800	1590	350	43.0	8°

Application	Material	d1 [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]	φR [°]	LR [mm]
	Steel 850 - 1100 N/mm²	8.00	4	110	0.028	12.000	8.000	4375	490	47.1	12°	56.5
		10.00	4	110	0.036	15.000	10.000	3500	505	75.6	12°	70.6
		12.00	4	110	0.042	18.000	12.000	2920	490	105.9	12°	84.7
		16.00	4	110	0.047	24.000	16.000	2190	410	158.0	12°	112.9
	Steel 1100 - 1300 N/mm²	8.00	4	85	0.025	12.000	8.000	3380	340	32.5	12°	56.5
		10.00	4	85	0.031	15.000	10.000	2705	335	50.3	12°	70.6
		12.00	4	85	0.036	18.000	12.000	2255	325	70.1	12°	84.7
		16.00	4	85	0.042	24.000	16.000	1690	285	109.1	12°	112.9
	Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	8.00	4	65	0.020	12.000	8.000	2585	205	19.9	12°	56.5
		10.00	4	65	0.025	15.000	10.000	2070	205	31.0	12°	70.6
		12.00	4	65	0.031	18.000	12.000	1725	215	46.2	12°	84.7
		16.00	4	65	0.036	24.000	16.000	1295	185	71.5	12°	112.9

This way to the cutting data software **ToolExpert MFC**. Quick, easy, reliable.