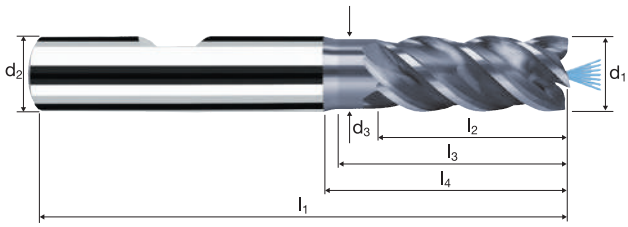
Cylindrical end mills MFC

Smooth-edged, normal version, short neck
High-performance penetration edge, central air/cooling channel

HM MG10	λ 45° γ 10°

r

Vario



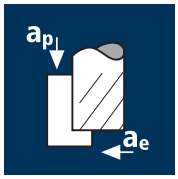
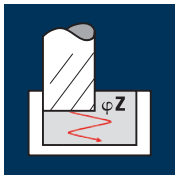
Roughing HPC | Roughing HDC | Finishing

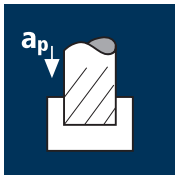
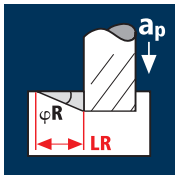
Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56			Inox Stainless	Ti Titanium	GG(G) Tool Steel

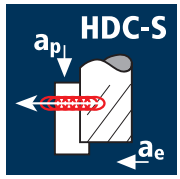
Example: **Order-N°.** Coating **P** Article-N°. **8201** ø-Code **220**

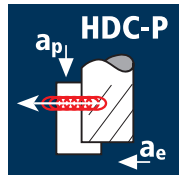
Ø Code	d_1 e8	d_2 h5	d_3	l_1	l_2	l_3	l_4	r	α	z	POLYCHROM P8201	POLYCHROM P8101
220	4.00	6.00	3.70	57	8.00	16.00	20.82	0.100	3.0°	4		●
260	5.00	6.00	4.60	57	10.00	18.00	21.27	0.100	1.5°	4		●
300	6.00	6.00	5.50	57	12.00	18.15	20.00	0.100	0.0°	4		●
391	8.00	8.00	7.40	63	19.00	23.63	26.00	0.150	0.0°	4		●
450	10.00	10.00	9.20	72	23.00	27.99	31.00	0.200	0.0°	4		●
501	12.00	12.00	11.00	83	27.00	33.29	37.00	0.200	0.0°	4		●
503*	12.00	12.00	11.00	83	27.00	33.29	37.00	0.200	0.0°	4		●
610	16.00	16.00	15.00	92	32.00	38.73	43.00	0.200	0.0°	4		●
612*	16.00	16.00	15.00	92	32.00	38.73	43.00	0.200	0.0°	4		●
682	20.00	20.00	19.00	104	39.00	48.23	53.00	0.200	0.0°	4		●
684*	20.00	20.00	19.00	104	39.00	48.23	53.00	0.200	0.0°	4		●

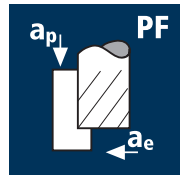
* with chip breaker

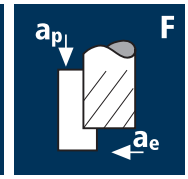
Application	Material	d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min^{-1}]	v_f [mm/min]	Q [cm^3/min]	φZ [°]
	Steel 850 - 1100 N/mm²	4.00	4	150	0.030	7.200	1.600	11935	1430	16.5	18°
		5.00	4	150	0.035	9.000	2.000	9550	1335	24.1	18°
		6.00	4	150	0.040	10.800	2.400	7960	1275	33.0	18°
		8.00	4	150	0.050	14.400	3.200	5970	1195	55.0	18°
		10.00	4	150	0.065	18.000	4.000	4775	1240	89.4	18°
		12.00	4	150	0.075	21.600	4.800	3980	1195	123.8	18°
		16.00	4	150	0.085	24.000	6.400	2985	1015	155.8	18°
		20.00	4	150	0.100	30.000	8.000	2385	955	229.2	18°
	Steel 1100 - 1300 N/mm²	4.00	4	115	0.025	7.200	1.600	9150	915	10.5	15°
		5.00	4	115	0.030	9.000	2.000	7320	880	15.8	15°
		6.00	4	115	0.035	10.800	2.400	6100	855	22.1	15°
		8.00	4	115	0.045	14.400	3.200	4575	825	38.0	15°
		10.00	4	115	0.055	18.000	4.000	3660	805	58.0	15°
		12.00	4	115	0.065	21.600	4.800	3050	795	82.2	15°
		16.00	4	115	0.075	24.000	6.400	2290	685	105.4	15°
		20.00	4	115	0.090	30.000	8.000	1830	660	158.1	15°
	Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	4.00	4	90	0.020	7.200	1.600	7160	575	6.6	12°
		5.00	4	90	0.025	9.000	2.000	5730	575	10.3	12°
		6.00	4	90	0.030	10.800	2.400	4775	575	14.9	12°
		8.00	4	90	0.035	14.400	3.200	3580	500	23.1	12°
		10.00	4	90	0.045	18.000	4.000	2865	515	37.1	12°
		12.00	4	90	0.055	21.600	4.800	2385	525	54.5	12°
		16.00	4	90	0.065	24.000	6.400	1790	465	71.5	12°
		20.00	4	90	0.080	30.000	8.000	1430	460	110.0	12°

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	4.00	4	120	0.020	6.000	4.000	9550	765	18.3	20°	16.5
		5.00	4	120	0.023	7.500	5.000	7640	705	26.4	20°	20.6
		6.00	4	120	0.026	9.000	6.000	6365	660	35.8	20°	24.7
		8.00	4	120	0.033	12.000	8.000	4775	630	60.5	20°	33.0
		10.00	4	120	0.042	15.000	10.000	3820	640	96.3	20°	41.2
		12.00	4	120	0.049	18.000	12.000	3185	625	134.8	20°	49.5
		16.00	4	120	0.055	24.000	16.000	2385	525	201.7	20°	65.9
		20.00	4	120	0.065	25.000	20.000	1910	495	248.3	20°	68.7
	Steel 1100 - 1300 N/mm²	4.00	4	90	0.016	6.000	4.000	7160	460	11.0	20°	16.5
		5.00	4	90	0.020	7.500	5.000	5730	460	17.2	20°	20.6
		6.00	4	90	0.023	9.000	6.000	4775	440	23.7	20°	24.7
		8.00	4	90	0.029	12.000	8.000	3580	415	39.9	20°	33.0
		10.00	4	90	0.036	15.000	10.000	2865	415	61.9	20°	41.2
		12.00	4	90	0.042	18.000	12.000	2385	400	86.6	20°	49.5
		16.00	4	90	0.049	24.000	16.000	1790	350	134.8	20°	65.9
		20.00	4	90	0.058	25.000	20.000	1430	330	166.2	20°	68.7
	Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	4.00	4	70	0.013	6.000	4.000	5570	290	7.0	14°	24.1
		5.00	4	70	0.016	7.500	5.000	4455	285	10.7	14°	30.1
		6.00	4	70	0.020	9.000	6.000	3715	295	16.0	14°	36.1
		8.00	4	70	0.023	12.000	8.000	2785	255	24.6	14°	48.1
		10.00	4	70	0.029	15.000	10.000	2230	260	38.8	14°	60.2
		12.00	4	70	0.036	18.000	12.000	1855	265	57.8	14°	72.2
		16.00	4	70	0.042	24.000	16.000	1395	235	89.8	14°	96.3
		20.00	4	70	0.052	25.000	20.000	1115	230	115.9	14°	100.3









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