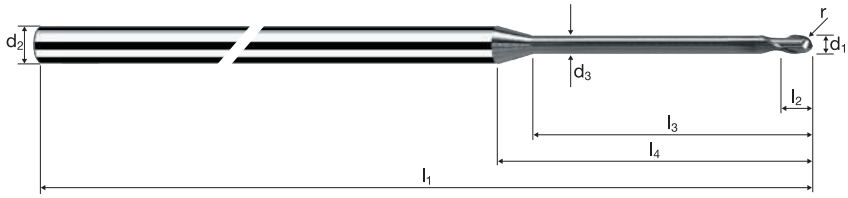
Ball nose end mills Microcut

Shank ø 3mm, cylindrical neck, 15xd

HM MG10	λ 30° γ 5°



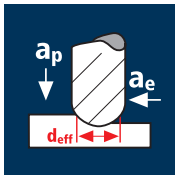
ToolSchool X6848 X6772

Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500				Inox Stainless	Ti Titanium	Gold / Platinum Copper

Example: **Order-N°.** Coating **M** Article-N°. **5793** ø-Code **100**

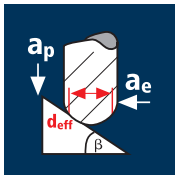
Ø Code	d_1 ±0.01	d_2 h6	d_3	l_1	l_2	l_3	l_4	r ±0.01	α	z	MICRO **M5793**
100	1.00	3.00	0.95	60	1.20	15.00	19.22	0.500	3.2°	2	●
108	1.20	3.00	1.10	60	1.44	18.00	21.94	0.600	2.5°	2	●
120	1.50	3.00	1.40	70	1.80	22.50	25.88	0.750	1.8°	2	●
140	2.00	3.00	1.90	70	2.40	30.00	32.45	1.000	1.0°	2	●
160	2.50	3.00	2.30	70	3.00	37.50	39.20	1.250	0.4°	2	●
180	3.00	3.00	2.80	80	3.60	44.56	45.00	1.500	0.0°	2	●

Application



Material	d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	d_{eff} [mm]	n [min^{-1}]	v_f [mm/min]	Q [mm^3/min]
Steel 850 - 1100 N/mm²	1.00	2	45	0.028	0.030	0.100	0.34	42130	2360	7.1
	1.20	2	57	0.034	0.040	0.120	0.43	42195	2870	13.8
	1.50	2	71	0.042	0.050	0.150	0.54	41850	3515	26.4
	2.00	2	90	0.058	0.060	0.200	0.68	42130	4885	58.6
	2.50	2	116	0.072	0.080	0.250	0.88	41960	6040	120.8
	3.00	2	135	0.086	0.090	0.300	1.02	42130	7245	195.6
Steel 1100 - 1300 N/mm²	1.00	2	45	0.026	0.030	0.100	0.34	42130	2190	6.6
	1.20	2	57	0.030	0.040	0.120	0.43	42195	2530	12.2
	1.50	2	71	0.038	0.050	0.150	0.54	41850	3180	23.9
	2.00	2	90	0.052	0.060	0.200	0.68	42130	4380	52.6
	2.50	2	116	0.064	0.080	0.250	0.88	41960	5370	107.4
	3.00	2	120	0.078	0.090	0.300	1.02	37450	5840	157.7
Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	1.00	2	45	0.022	0.030	0.100	0.34	42130	1855	5.6
	1.20	2	57	0.028	0.040	0.120	0.43	42195	2365	11.3
	1.50	2	70	0.034	0.050	0.150	0.54	41260	2805	21.0
	2.00	2	70	0.046	0.060	0.200	0.68	32765	3015	36.2
	2.50	2	70	0.058	0.080	0.250	0.88	25320	2935	58.7
	3.00	2	70	0.068	0.090	0.300	1.02	21845	2970	80.2
Titanium alloys up to 300 HB [Ti5Al2.5Sn]	1.00	2	45	0.020	0.030	0.100	0.34	42130	1685	5.1
	1.20	2	50	0.024	0.040	0.120	0.43	37015	1775	8.5
	1.50	2	50	0.030	0.050	0.150	0.54	29475	1770	13.3
	2.00	2	50	0.040	0.060	0.200	0.68	23405	1870	22.5
	2.50	2	50	0.050	0.080	0.250	0.88	18085	1810	36.2
	3.00	2	50	0.060	0.090	0.300	1.02	15605	1870	50.6

Application



Material	d1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	d_{eff} [mm]	n [min^{-1}]	v_f [mm/min]	β [°]
Steel 850 - 1100 N/mm²	1.00	2	119	0.020	0.026	0.026	0.90	42090	1685	45°
	1.20	2	143	0.022	0.032	0.032	1.08	42145	1855	45°
	1.50	2	178	0.024	0.040	0.040	1.35	41970	2015	45°
	2.00	2	236	0.026	0.052	0.052	1.79	41965	2180	45°
	2.50	2	250	0.028	0.066	0.066	2.24	35525	1990	45°
	3.00	2	250	0.032	0.078	0.078	2.69	29585	1895	45°
Steel 1100 - 1300 N/mm²	1.00	2	119	0.018	0.026	0.026	0.90	42090	1515	45°
	1.20	2	143	0.020	0.032	0.032	1.08	42145	1685	45°
	1.50	2	178	0.022	0.040	0.040	1.35	41970	1845	45°
	2.00	2	200	0.024	0.052	0.052	1.79	35565	1705	45°
	2.50	2	200	0.026	0.066	0.066	2.24	28420	1480	45°
	3.00	2	200	0.028	0.078	0.078	2.69	23665	1325	45°
Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	1.00	2	100	0.016	0.026	0.026	0.90	35370	1130	45°
	1.20	2	100	0.018	0.032	0.032	1.08	29475	1060	45°
	1.50	2	100	0.020	0.040	0.040	1.35	23580	945	45°
	2.00	2	100	0.020	0.052	0.052	1.79	17785	710	45°
	2.50	2	100	0.022	0.066	0.066	2.24	14210	625	45°
	3.00	2	100	0.026	0.078	0.078	2.69	11835	615	45°
Titanium alloys up to 300 HB [Ti5Al2.5Sn]	1.00	2	80	0.014	0.026	0.026	0.90	28295	790	45°
	1.20	2	80	0.016	0.032	0.032	1.08	23580	755	45°
	1.50	2	80	0.016	0.040	0.040	1.35	18865	605	45°
	2.00	2	80	0.018	0.052	0.052	1.79	14225	510	45°
	2.50	2	80	0.020	0.066	0.066	2.24	11370	455	45°
	3.00	2	80	0.022	0.078	0.078	2.69	9465	415	45°