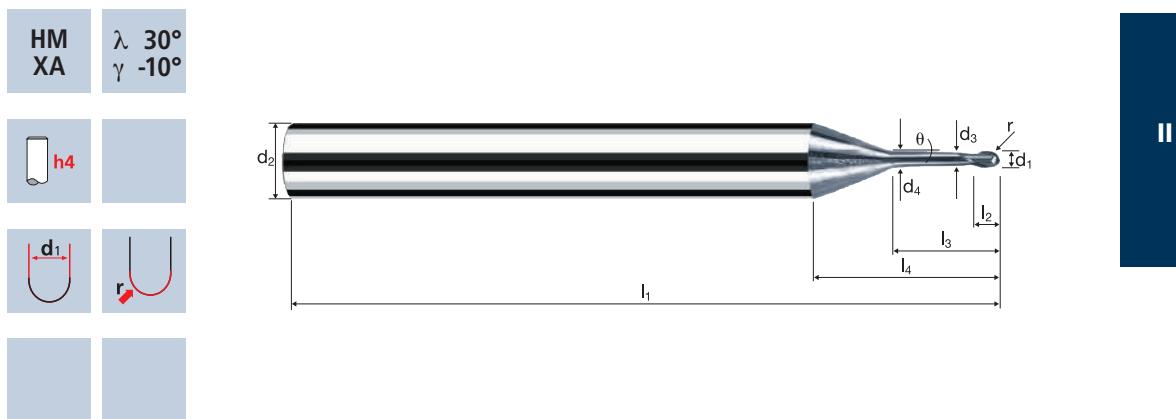


Ball nose end mills MicroX

Shank ø 6mm, conical neck 0.9°, 6xd

X-Generation
X



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56	HRC 56-60	HRC > 60	Inox Stainless	Ti Titanium	Cobalt-Chrome Copper
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Application	Material	d₁ [mm]	z	v_c [m/min]	f_t [mm]	a_p [mm]	a_e [mm]	d_{eff} [mm]	n [min ⁻¹]	v_f [mm/min]	Q [mm ³ /min]
	Hardened tool steel 42 - 48 HRC	0.50	2	21	0.019	0.013	0.100	0.16	41780	1580	2.1
		0.60	2	25	0.023	0.016	0.120	0.19	41885	1900	3.6
		0.80	2	34	0.030	0.021	0.160	0.26	41625	2515	8.5
		1.00	2	42	0.038	0.027	0.200	0.32	41780	3160	17.1
		1.50	2	63	0.057	0.040	0.300	0.48	41780	4740	56.9
		2.00	2	84	0.076	0.053	0.400	0.64	41780	6315	133.9
	Hardened tool steel 48 - 52 HRC	0.50	2	21	0.018	0.013	0.100	0.16	41780	1505	2.0
		0.60	2	25	0.022	0.016	0.120	0.19	41885	1810	3.5
		0.80	2	34	0.029	0.021	0.160	0.26	41625	2400	8.1
		1.00	2	42	0.036	0.027	0.200	0.32	41780	3010	16.2
		1.50	2	63	0.054	0.040	0.300	0.48	41780	4510	54.1
		2.00	2	84	0.072	0.053	0.400	0.64	41780	6015	127.5
	Hardened tool steel 52 - 56 HRC	0.50	2	21	0.015	0.013	0.100	0.16	41780	1255	1.6
		0.60	2	25	0.018	0.016	0.120	0.19	41885	1510	2.9
		0.80	2	34	0.024	0.021	0.160	0.26	41625	2000	6.7
		1.00	2	42	0.030	0.027	0.200	0.32	41780	2505	13.5
		1.50	2	63	0.045	0.040	0.300	0.48	41780	3760	45.1
		2.00	2	84	0.060	0.053	0.400	0.64	41780	5015	106.3
	Hardened tool steel 56 - 60 HRC	0.50	2	21	0.014	0.013	0.100	0.16	41780	1130	1.5
		0.60	2	25	0.016	0.016	0.120	0.19	41885	1355	2.6
		0.80	2	34	0.022	0.021	0.160	0.26	41625	1800	6.0
		1.00	2	42	0.027	0.027	0.200	0.32	41780	2255	12.2
		1.50	2	60	0.041	0.040	0.300	0.48	39790	3225	38.7
		2.00	2	60	0.054	0.053	0.400	0.64	29840	3225	68.3
	Material	d₁ [mm]	z	v_c [m/min]	f_t [mm]	a_p [mm]	a_e [mm]	d_{eff} [mm]	n [min ⁻¹]	v_f [mm/min]	β [°]
	Hardened tool steel 42 - 48 HRC	0.50	2	61	0.024	0.020	0.020	0.46	42210	2025	45°
		0.60	2	74	0.026	0.024	0.024	0.56	42060	2185	45°
		0.80	2	98	0.030	0.032	0.032	0.74	42155	2530	45°
		1.00	2	123	0.034	0.040	0.040	0.93	42100	2865	45°
		1.50	2	183	0.040	0.060	0.060	1.39	41905	3355	45°
		2.00	2	245	0.046	0.080	0.080	1.86	41930	3855	45°
	Hardened tool steel 48 - 52 HRC	0.50	2	61	0.022	0.020	0.020	0.46	42210	1855	45°
		0.60	2	74	0.024	0.024	0.024	0.56	42060	2020	45°
		0.80	2	98	0.028	0.032	0.032	0.74	42155	2360	45°
		1.00	2	123	0.032	0.040	0.040	0.93	42100	2695	45°
		1.50	2	183	0.038	0.060	0.060	1.39	41905	3185	45°
		2.00	2	245	0.044	0.080	0.080	1.86	41930	3690	45°
	Hardened tool steel 52 - 56 HRC	0.50	2	61	0.022	0.020	0.020	0.46	42210	1855	45°
		0.60	2	74	0.024	0.024	0.024	0.56	42060	2020	45°
		0.80	2	98	0.028	0.032	0.032	0.74	42155	2360	45°
		1.00	2	123	0.030	0.040	0.040	0.93	42100	2525	45°
		1.50	2	183	0.036	0.060	0.060	1.39	41905	3015	45°
		2.00	2	200	0.042	0.080	0.080	1.86	34225	2875	45°
	Hardened tool steel 56 - 60 HRC	0.50	2	61	0.020	0.020	0.020	0.46	42210	1690	45°
		0.60	2	74	0.020	0.024	0.024	0.56	42060	1680	45°
		0.80	2	98	0.024	0.032	0.032	0.74	42155	2025	45°
		1.00	2	123	0.028	0.040	0.040	0.93	42100	2360	45°
		1.50	2	150	0.032	0.060	0.060	1.39	34350	2200	45°
		2.00	2	150	0.036	0.080	0.080	1.86	25670	1850	45°