

Ball nose end mills MicroHX

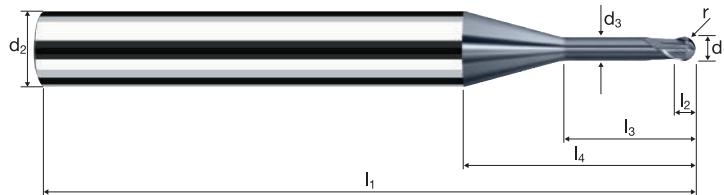
Shank ø 6mm, cylindrical neck, 4.5xd

X-Generation



**HM
XA**

λ 30°
 γ -10°



II

Rm

1100-1300 **Rm**
1300-1500

HRC

48-56

HRC

56-60

HRC

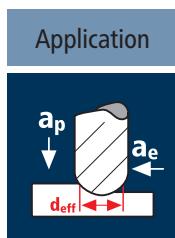
> 60

Inox
Stainless

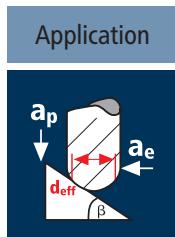
Ti
Titanium

HSS

Example: Order-N°.	Coating Y	Article-N°. 6483	ø-Code 040											DURO-AI	
				Y6483											
\varnothing Code	d_1	d_2 h_4	d_3	l_1	l_2	l_3	l_4	r ± 0.005	α	z					
040	0.40	6.00	0.35	57	0.24	1.80	17.76	0.200	13.0°	2	●	●	●	●	●
050	0.50	6.00	0.45	57	0.30	2.25	12.76	0.250	12.6°	2	●	●	●	●	●
060	0.60	6.00	0.55	57	0.36	2.70	13.03	0.300	12.1°	2	●	●	●	●	●
080	0.80	6.00	0.75	57	0.48	3.60	13.55	0.400	11.3°	2	●	●	●	●	●
100	1.00	6.00	0.95	57	0.60	4.50	14.08	0.500	10.6°	2	●	●	●	●	●



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 52 - 56 HRC	0.40	2	20	0.010	0.014	0.080	0.15	42440	850	1.0
		0.50	2	25	0.013	0.018	0.100	0.19	41885	1090	2.0
		0.60	2	29	0.015	0.021	0.120	0.22	41960	1260	3.2
		0.80	2	40	0.020	0.029	0.160	0.30	42440	1700	7.9
		1.00	2	49	0.025	0.036	0.200	0.37	42155	2110	15.2
	Hardened tool steel 56 - 60 HRC	0.40	2	20	0.009	0.014	0.080	0.15	42440	765	0.9
		0.50	2	25	0.012	0.018	0.100	0.19	41885	980	1.8
		0.60	2	29	0.014	0.021	0.120	0.22	41960	1135	2.9
		0.80	2	40	0.018	0.029	0.160	0.30	42440	1530	7.1
		1.00	2	49	0.023	0.036	0.200	0.37	42155	1895	13.7
	Hardened tool steel > 60 HRC	0.40	2	17	0.007	0.011	0.080	0.13	41625	600	0.5
		0.50	2	22	0.009	0.014	0.100	0.17	41195	770	1.1
		0.60	2	26	0.011	0.017	0.120	0.20	41380	895	1.8
		0.80	2	36	0.014	0.023	0.160	0.27	42440	1220	4.5
		1.00	2	44	0.018	0.029	0.200	0.33	42440	1530	8.8
	High speed steel, hardened 64 - 70 HRC	0.40	2	12	0.001	0.005	0.080	0.09	42440	100	0.0
		0.50	2	15	0.002	0.006	0.100	0.11	43405	150	0.1
		0.60	2	17	0.002	0.008	0.120	0.13	41625	145	0.1
		0.80	2	24	0.002	0.010	0.160	0.18	42440	195	0.3
		1.00	2	29	0.003	0.013	0.200	0.22	41960	240	0.6



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]	β [°]
	Hardened tool steel 52 - 56 HRC	0.40	2	49	0.012	0.016	0.016	0.37	42155	1010	45°
		0.50	2	61	0.018	0.020	0.020	0.46	42210	1520	45°
		0.60	2	74	0.018	0.024	0.024	0.56	42060	1515	45°
		0.80	2	98	0.020	0.032	0.032	0.74	42155	1685	45°
		1.00	2	123	0.026	0.042	0.042	0.93	42100	2190	45°
	Hardened tool steel 56 - 60 HRC	0.40	2	49	0.012	0.016	0.016	0.37	42155	1010	45°
		0.50	2	61	0.016	0.020	0.020	0.46	42210	1350	45°
		0.60	2	74	0.016	0.024	0.024	0.56	42060	1345	45°
		0.80	2	98	0.018	0.032	0.032	0.74	42155	1520	45°
		1.00	2	123	0.022	0.042	0.042	0.93	42100	1850	45°
	Hardened tool steel > 60 HRC	0.40	2	49	0.012	0.016	0.016	0.37	42155	1010	45°
		0.50	2	61	0.016	0.020	0.020	0.46	42210	1350	45°
		0.60	2	74	0.016	0.024	0.024	0.56	42060	1345	45°
		0.80	2	98	0.018	0.032	0.032	0.74	42155	1520	45°
		1.00	2	120	0.022	0.042	0.042	0.93	41070	1805	45°
	High speed steel, hardened 64 - 70 HRC	0.40	2	49	0.010	0.016	0.016	0.37	42155	845	45°
		0.50	2	61	0.010	0.020	0.020	0.46	42210	845	45°
		0.60	2	74	0.010	0.024	0.024	0.56	42060	840	45°
		0.80	2	85	0.010	0.032	0.032	0.74	36565	730	45°
		1.00	2	85	0.015	0.042	0.042	0.93	29095	875	45°