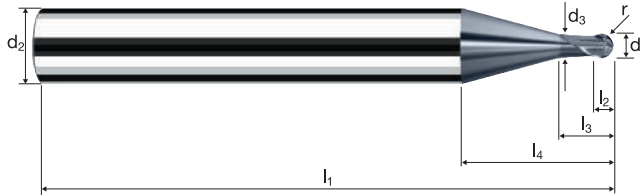
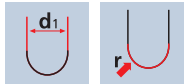


# Ball nose end mills MicroHX

Shank  $\varnothing$  6mm, cylindrical neck, 1xd



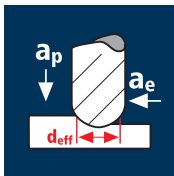
HM  $\lambda$  30°  
XA  $\gamma$  -10°



		Rm 1100-1300	Rm 1300-1500	HRC 48-56	HRC 56-60	HRC > 60	Inox Stainless	Ti Titanium	HSS
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Example: Order-N°.												DURO-AI
		Coating <b>Y</b>		Article-N° <b>6460</b>		ø-Code <b>040</b>						<b>Y6460</b>
Ø Code	d <sub>1</sub>	d <sub>2</sub> h4	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	r ±0.005	α	z		
040	0.40	6.00	0.35	57	0.40	0.40	16.78	0.200	14.6°	2		●
050	0.50	6.00	0.45	57	0.50	0.50	11.50	0.250	14.5°	2		●
060	0.60	6.00	0.55	57	0.60	0.60	11.43	0.300	14.5°	2		●
080	0.80	6.00	0.75	57	0.80	0.80	11.30	0.400	14.3°	2		●
100	1.00	6.00	0.95	57	1.00	1.00	11.19	0.500	14.1°	2		●
120	1.50	6.00	1.40	57	1.50	1.50	10.86	0.750	13.5°	2		●
140	2.00	6.00	1.90	57	2.00	2.00	10.52	1.000	12.9°	2		●

## Application



## Material

Hardened tool steel  
52 - 56 HRC

**Y**

Hardened tool steel  
56 - 60 HRC

**Y**

Hardened tool steel  
> 60 HRC

**Y**

High speed steel,  
hardened  
64 - 70 HRC

**Y**

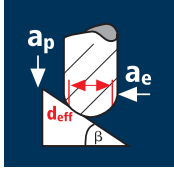
d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>t</sub> [mm]	a <sub>s</sub> [mm]	a <sub>e</sub> [mm]	d <sub>eff</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>t</sub> [mm/min]	Q [mm <sup>3</sup> /min]
0.40	2	40	0.013	0.067	0.080	0.30	42440	1105	5.9
0.50	2	49	0.016	0.083	0.100	0.37	42155	1350	11.2
0.60	2	59	0.019	0.100	0.120	0.45	41735	1585	19.0
0.80	2	79	0.026	0.134	0.160	0.60	41910	2180	46.7
1.00	2	99	0.032	0.167	0.200	0.75	42015	2690	89.8
1.50	2	100	0.048	0.250	0.300	1.12	28420	2730	204.6
2.00	2	100	0.064	0.334	0.400	1.49	21365	2735	365.3

0.40	2	40	0.012	0.067	0.080	0.30	42440	995	5.3
0.50	2	49	0.014	0.083	0.100	0.37	42155	1215	10.1
0.60	2	59	0.017	0.100	0.120	0.45	41735	1425	17.1
0.80	2	60	0.023	0.134	0.160	0.60	31830	1490	31.9
1.00	2	60	0.029	0.167	0.200	0.75	25465	1465	49.0
1.50	2	60	0.043	0.250	0.300	1.12	17050	1475	110.5
2.00	2	60	0.058	0.334	0.400	1.49	12820	1475	197.3

0.40	2	36	0.009	0.054	0.080	0.27	42440	795	3.4
0.50	2	45	0.012	0.066	0.100	0.34	42130	970	6.4
0.60	2	50	0.014	0.080	0.120	0.41	38820	1060	10.2
0.80	2	50	0.019	0.107	0.160	0.55	28935	1085	18.6
1.00	2	50	0.023	0.134	0.200	0.68	23405	1080	28.8
1.50	2	50	0.035	0.200	0.300	1.02	15605	1080	64.7
2.00	2	50	0.046	0.267	0.400	1.36	11705	1080	115.3

0.40	2	33	0.007	0.043	0.080	0.25	42015	630	2.2
0.50	2	40	0.009	0.053	0.100	0.31	41070	755	4.0
0.60	2	40	0.011	0.064	0.120	0.37	34410	755	5.8
0.80	2	40	0.015	0.086	0.160	0.49	25985	780	10.7
1.00	2	40	0.018	0.107	0.200	0.62	20535	755	16.2
1.50	2	40	0.028	0.160	0.300	0.93	13690	755	36.3
2.00	2	40	0.037	0.214	0.400	1.24	10270	755	64.7

## Application



## Material

Hardened tool steel  
52 - 56 HRC

**Y**

Hardened tool steel  
56 - 60 HRC

**Y**

Hardened tool steel  
> 60 HRC

**Y**

High speed steel,  
hardened  
64 - 70 HRC

**Y**

d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>t</sub> [mm]	a <sub>s</sub> [mm]	a <sub>e</sub> [mm]	d <sub>eff</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>t</sub> [mm/min]	β [°]
0.40	2	49	0.012	0.016	0.016	0.37	42155	1010	45°
0.50	2	62	0.018	0.022	0.022	0.47	41990	1510	45°
0.60	2	74	0.018	0.026	0.026	0.56	42060	1515	45°
0.80	2	99	0.020	0.034	0.034	0.75	42015	1680	45°
1.00	2	123	0.026	0.042	0.042	0.93	42100	2190	45°
1.50	2	185	0.030	0.064	0.064	1.40	42060	2525	45°
2.00	2	200	0.034	0.084	0.084	1.86	34225	2325	45°

0.40	2	49	0.012	0.016	0.016	0.37	42155	1010	45°
0.50	2	62	0.016	0.022	0.022	0.47	41990	1345	45°
0.60	2	74	0.016	0.026	0.026	0.56	42060	1345	45°
0.80	2	99	0.018	0.034	0.034	0.75	42015	1515	45°
1.00	2	123	0.022	0.042	0.042	0.93	42100	1850	45°
1.50	2	150	0.028	0.064	0.064	1.40	34105	1910	45°
2.00	2	150	0.030	0.084	0.084	1.86	25670	1540	45°

0.40	2	48	0.010	0.010	0.010	0.36	42440	850	45°
0.50	2	61	0.015	0.020	0.020	0.46	42210	1265	45°
0.60	2	73	0.015	0.020	0.020	0.55	42250	1265	45°
0.80	2	98	0.015	0.030	0.030	0.74	42155	1265	45°
1.00	2	120	0.020	0.040	0.040	0.93	41070	1645	45°
1.50	2	120	0.020	0.060	0.060	1.39	27480	1100	45°
2.00	2	120	0.025	0.080	0.080	1.86	20535	1025	45°

0.40	2	48	0.010	0.010	0.010	0.36	42440	850	45°
0.50	2	61	0.010	0.020	0.020	0.46	42210	845	45°
0.60	2	73	0.010	0.020	0.020	0.55	42250	845	45°
0.80	2	85	0.010	0.020	0.030	0.71	38110	760	45°
1.00	2	85	0.015	0.030	0.040	0.91	29730	890	45°
1.50	2	85	0.015	0.040	0.050	1.35	20040	600	45°
2.00	2	85	0.015	0.050	0.060	1.79	15115	455	45°