

Ball nose end mills

Cylindrical neck, 3xd

X-Generation

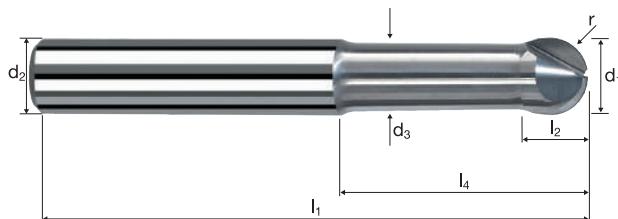


CBN λ 0°
 γ 0°

h5

r

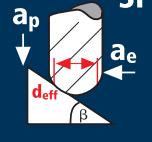
F



II

				HRC 48-56	HRC 56-60	HRC > 60			HSS
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Ø Code	Coating Article-Nº. ø-Code											31700
	d ₁ 0/-0.01	d ₂ h5	d ₃	l ₁	l ₂	l ₃	l ₄	r ±0.005	β	z		
220	4.00	6.00	3.70	80	3.20	12.00	16.95	2.000	4°	2	●	
260	5.00	6.00	4.60	80	4.00	15.00	18.27	2.500	2°	2	●	
300	6.00	6.00	5.50	80	4.80	20.00	-	3.000	0°	2	●	
391	8.00	8.00	7.40	100	6.40	26.00	-	4.000	0°	2	●	
450	10.00	10.00	9.20	100	8.00	31.00	-	5.000	0°	2	●	
501	12.00	12.00	11.00	120	9.60	37.00	-	6.000	0°	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]	β [°]
	Hardened tool steel 52 - 56 HRC	4.00	2	488	0.020	0.018	0.018	3.70	41980	1680	60°
		5.00	2	608	0.025	0.020	0.020	4.61	41980	2100	60°
		6.00	2	700	0.030	0.022	0.022	5.52	40365	2420	60°
		8.00	2	700	0.040	0.026	0.026	7.34	30355	2430	60°
		10.00	2	700	0.040	0.028	0.028	9.14	24380	1950	60°
		12.00	2	700	0.050	0.032	0.032	10.96	20330	2035	60°
	Hardened tool steel 56 - 60 HRC	4.00	2	488	0.020	0.018	0.018	3.70	41980	1680	60°
		5.00	2	608	0.025	0.020	0.020	4.61	41980	2100	60°
		6.00	2	650	0.025	0.022	0.022	5.52	37480	1875	60°
		8.00	2	650	0.035	0.026	0.026	7.34	28190	1975	60°
		10.00	2	650	0.035	0.028	0.028	9.14	22635	1585	60°
		12.00	2	650	0.045	0.032	0.032	10.96	18880	1700	60°
	Hardened tool steel > 60 HRC	4.00	2	488	0.015	0.018	0.018	3.70	41980	1260	60°
		5.00	2	600	0.020	0.020	0.020	4.61	41430	1655	60°
		6.00	2	600	0.025	0.022	0.022	5.52	34600	1730	60°
		8.00	2	600	0.030	0.026	0.026	7.34	26020	1560	60°
		10.00	2	600	0.030	0.028	0.028	9.14	20895	1255	60°
		12.00	2	600	0.040	0.032	0.032	10.96	17425	1395	60°