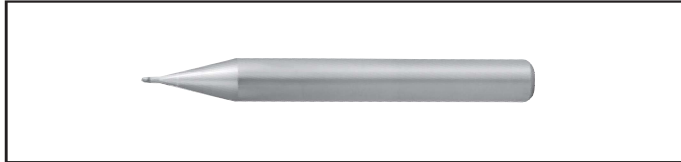


2
No. of teeth

0°
Helix

T-CBN Ball Endmills for die engraving



Cat. No.	Stock		Dimensions (mm)					No. of flute
	T-CBN	R	Mill dia.	Flute length	Neck length	Overall length	Shank dia.	
BBB2006	○	0.3	0.6	0.5	1.2	50	6.0	2
BBB2008	○	0.4	0.8	0.6	1.6	50	6.0	
BBB2010	○	0.5	1.0	0.7	2.0	50	6.0	
BBB2020	○	1.0	2.0	1.5	4.0	50	6.0	

● Tolerance (BBB2000)

Mill dia.	Tolerance on dia.	Tolerance on shank
0.3 ~ 1.0	±0.005	h6

● BBB2000 (T-CBN Ball Endmills)

Work materials	Prehardened steels (NAK80, etc.) Die steels (JIS SKD61, etc.)			Die steels (JIS SKD11, DRM1 & 2, etc.)			High speed steel and die steel (JIS SKH, DRM3, etc.)			Inclined angle of workpiece (θ_1)/ Effective neck length (Z)			
Hardness	~ 52 HRC			~ 62 HRC			~ 70 HRC						
Ball radius (R)	Depth of cut a_p - pf (mm)	Feed rate (in/min)	No. of revolutions n (min ⁻¹)	Depth of cut a_p - pf (mm)	Feed rate (mm/min)	No. of revolutions n (min ⁻¹)	Depth of cut a_p - pf (mm)	Feed rate (mm/min)	No. of revolutions n (min ⁻¹)				
0.3	0.02×0.03	2,000	50,000	0.01×0.02	2,000	50,000	0.01×0.02	1,500	50,000	0°30'/1.25	1°/1.30	2°/1.35	3°/1.45
0.4	0.03×0.05	2,000		0.02×0.03	2,000		0.01×0.03	1,500		0°30'/1.65	1°/1.70	2°/1.80	3°/1.90
0.5	0.05×0.05	3,000		0.03×0.05	3,000		0.02×0.03	2,000		0°30'/2.05	1°/2.10	2°/2.25	3°/2.40
1.0	0.10×0.10	5,000		0.05×0.05	5,000		0.03×0.05	3,000		0°30'/4.15	1°/4.25	2°/4.50	3°/4.80

Notes:

- Depths of cut (a_p) shown in the table are the allowable maximum values.
- Mist cooling or air blow is recommended.
- The maximum number of revolutions of the machine to be used is lower than 50,000 min⁻¹, the revolutions and feed rate should be modified at same rate.
- Use smallest possible overhang.

● : Stocked items.
○ : Stocked in Japan