

CBN END MILLS

CBN

CBN2XLB

Ball nose, Short cut length, 2 flute, Long neck

RECOMMENDED CUTTING CONDITIONS

Work material	Hardened steel (45—55HRC)				Hardened steel (55—62HRC)				Hardened steel (62—70HRC)			
	AISI H13				AISI D2				AISI W1, AISI M2			
R PRFRAD (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)
R0.2	50000	1500	0.006	0.01	50000	1200	0.006	0.01	50000	1200	0.004	0.008
R0.3	50000	2000	0.01	0.02	50000	1500	0.01	0.02	50000	1500	0.008	0.015
R0.4	50000	3000	0.02	0.05	50000	2000	0.02	0.04	50000	2000	0.015	0.03
R0.5	50000	3000	0.03	0.06	50000	2000	0.03	0.05	50000	2000	0.02	0.03
R0.75	50000	3500	0.04	0.08	50000	2500	0.03	0.06	50000	2500	0.02	0.04
R1	50000	4000	0.05	0.1	50000	3000	0.04	0.07	50000	3000	0.03	0.05

The diagram illustrates a ball nose end mill cutting a workpiece. It shows the maximum axial depth of cut (ae) and the maximum depth of cut (ap) as indicated by dimension lines and labels.

- 1) If the depth of cut is shallow, the revolution and feed rate can be increased.
- 2) Oil mist coolant is recommended.
- 3) Cutting condition may be considerably different due to the overhang (milling depth), depth of cut, and machine tools. Please see the above table as a standard.

SOLID END MILLS