
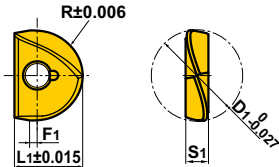


High precision indexable ball nose end mill

SRF

Increased performance for precision semi-finishing and finishing of mould and die materials.

INSERTS

Shape	Order Number	Coated			Dimensions (mm)					Geometry
		NEW EP6120	VP15TF	MP8010	D1	R	L1	F1	S1	
	SRFT10	●	●	●	10	5	8.5	0.5	2.6	
	12	●	●	●	12	6	10	0.5	3	
	16	●	●	●	16	8	12	1	4	
	20	●	●	●	20	10	15	1	5	
	25	●	●	●	25	12.5	18.5	1	6	
	30	●	●	●	30	15	22.5	1	7	
	32	●	●	●	32	16	23.5	1	7	

* 2 inserts supplied per case.

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed vc (m/min)	Feed per Tooth fz (mm/tooth)	Depth of Cut ap (mm)
P	Carbon Steel Alloy Steel	180–280HB	EP6120 VP15TF	200 (80–300)	0.2 (0.1–0.3)	≤0.05D ₁
	Pre-Hardened Steel	≤45HRC	EP6120 VP15TF	150 (80–200)	0.2 (0.1–0.3)	≤0.05D ₁
	Alloy Tool Steel	180–380HB	EP6120 VP15TF	150 (80–200)	0.2 (0.1–0.3)	≤0.05D ₁
K	Gray Cast Iron	Tensile Strength ≤350MPa	MP8010	250 (180–450)	0.2 (0.1–0.3)	≤0.05D ₁
	Ductile Cast Iron	Tensile Strength ≤800MPa	MP8010	200 (80–300)	0.2 (0.1–0.3)	≤0.05D ₁
H	Hardened Steel	45–55HRC	MP8010	100 (60–120)	0.2 (0.1–0.3)	≤0.05D ₁
	Hardened Steel	55–65HRC	MP8010	80 (60–120)	0.2 (0.1–0.3)	≤0.01D ₁

(Note 1) The above values are average condition values at actual cutting speeds. The values change slightly according to the state of a machine to be used and method of workholding. Adjust the values depending on an actual machine condition, referring to the above values.

(Note 2) For end mills with a carbide shank, you will be able to set about 20 percent higher cutting conditions.

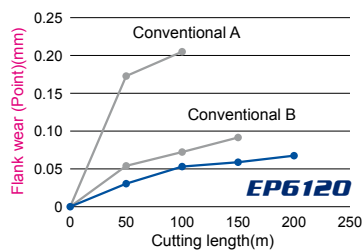
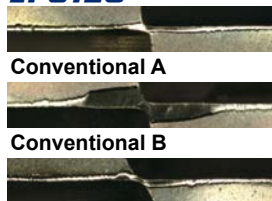
(Note 3) Please note the following when machining hardened steel with MP8010.

- Shorten tool overhang as much as possible.
- Use a carbide shank type.
- Depth of cut setting is important to prevent fracture.

EP6120 provides a long tool life with excellent wear resistance.

Steel

EP6120

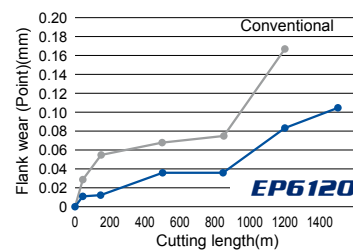


<Cutting conditions>

Work material : Ck45
 Insert : SRFT20
 Overhang : 70mm
 Revolution : 5500min⁻¹
 Cutting speed : 150m/min
 Table feed : 2200mm/min
 Feed per tooth : 0.2mm
 Axial depth of cut : 1mm
 Pick feed : 0.5mm
 Down cut, Air blow

Hardened steel

EP6120



<Cutting conditions>

Work material : 1.2379
 Insert : SRFT20
 Overhang : 70mm
 Revolution : 3650min⁻¹
 Cutting speed : 100m/min
 Table feed : 1460mm/min
 Feed per tooth : 0.2mm
 Axial depth of cut : 1mm
 Pick feed : 0.5mm
 Down cut, Air blow



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