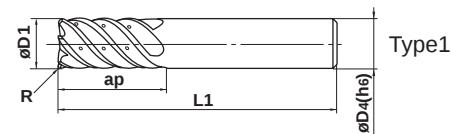


IMPACT MIRACLE END MILLS

VF6MHVRBCHCorner radius end mill, Medium cut length, 6 flute,
Irregular helix flutes, with multiple internal through coolant holes

Carbon Steel, Alloy Steel, Cast Iron (<30HRC)	Tool Steel, Pre-Hardened Steel, Hardened Steel (≤45HRC)	Hardened Steel (≤55HRC)	Hardened Steel (>55HRC)	Austenitic Stainless Steel	Titanium Alloy, Heat Resistant Alloy	Copper Alloy	Aluminium Alloy
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CoolStar
END MILLS

SQUARE

BALL

RADIUS

TAPER

SOLID END MILLS

R	0.5 ≤ R ≤ 3				
	±0.015				
D1	D1 ≤ 12	D1 > 12			
	0 - 0.020	0 - 0.030			
D4	D4 = 10	D4 = 12	D4 = 16	D4 = 20	
	0 - 0.009	0 - 0.011	0 - 0.011	0 - 0.013	

- Vibration control corner radius end mill with multiple internal through coolant holes ensures stable machining on difficult-to-cut materials and applications requiring long overhangs.

Unit : mm

Order Number	D1	R	ap	L1	D4	Flutes	Stock	Type
VF6MHVRBCHD1000R050	10	0.5	22	70	10	6	●	1
D1000R100	10	1	22	70	10	6	●	1
D1200R050	12	0.5	26	75	12	6	●	1
D1200R100	12	1	26	75	12	6	●	1
D1600R100	16	1	32	90	16	6	●	1
D1600R300	16	3	32	90	16	6	●	1
D2000R100	20	1	38	100	20	6	●	1
D2000R300	20	3	38	100	20	6	●	1

RECOMMENDED CUTTING CONDITIONS

Shoulder milling

Work material	Austenitic stainless steel, Titanium alloy X5CrNi1810, X5CrNiMo17-12-2, Ti6Al4V		Heat resistant alloys Inconel718	
Dia. (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)
10	4800	2000	1300	260
12	4000	2000	1100	230
16	3000	1600	800	180
20	2400	1400	640	150
Depth of cut	 ≤0.1D 0.5D—1.5D		 ≤0.05D 0.5D—1.5D	

D: Dia.

Trochoid milling

Work material	Austenitic stainless steel, Titanium alloy X5CrNi1810, X5CrNiMo17-12-2	
Dia. (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)
10	4800	1400
12	4000	1200
16	3000	1100
20	2400	900
Depth of cut	 1.5D ≤ ≤0.1D 0.5D—1.5D	

D: Dia.

- 1) If the depth of cut is shallow, the revolution and feed rate can be increased.
- 2) The irregular helix flute end mill has a larger effect on controlling vibration when compared to standard end mills. However, if the rigidity of the machine or the workpiece installation is poor, vibration or abnormal sound can occur. In this case, please reduce the revolution and feed rate proportionately, or set a lower depth of cut.

● : Inventory maintained.