

COOL STAR END MILLS

VF6MHVRBCH

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

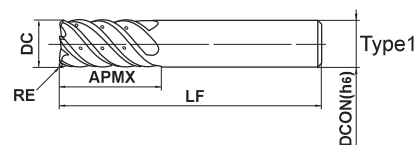


CARBIDE

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
				○	○		

CoolStar

END MILLS



R	0.5 ≤ RE ≤ 3			
	±0.015			
DC	DC ≤ 12	DC > 12		
	⁰ / _{-0.020}	⁰ / _{-0.030}		
h6	DCON=10	DCON=12	DCON=16	DCON=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	DC	RE	APMX	LF	DCON	No. of Flutes	Stock	Type
VF6MHVRBCHD1000R050	10	0.5	22	70	10	6	●	1
VF6MHVRBCHD1000R100	10	1	22	70	10	6	●	1
VF6MHVRBCHD1200R050	12	0.5	26	75	12	6	●	1
VF6MHVRBCHD1200R100	12	1	26	75	12	6	●	1
VF6MHVRBCHD1600R100	16	1	32	90	16	6	●	1
VF6MHVRBCHD1600R300	16	3	32	90	16	6	●	1
VF6MHVRBCHD2000R100	20	1	38	100	20	6	●	1
VF6MHVRBCHD2000R300	20	3	38	100	20	6	●	1

RECOMMENDED CUTTING CONDITIONS

Side milling

Work material	Austenitic stainless steel, Titanium alloy		Heat resistant alloys	
	AISI 304, AISI 306, Ti-6Al-4V		Inconel718	
Dia. DC (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	Austenitic stainless steel, Titanium alloy		Heat resistant alloys	
	≤0.1DC		≤0.05DC	
	0.5DC—1.5DC		0.5DC—1.5DC	

DC: Dia.

Trochoidal slotting

Work material	Austenitic stainless steel, Titanium alloy	
	AISI 304, AISI 306, Ti-6Al-4V	
Dia. DC (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)
10	4800	1400
12	4000	1200
16	3000	1100
20	2400	900

Depth of cut	Austenitic stainless steel, Titanium alloy	
	1.5DC ≤	
	≤0.1DC	
	0.5DC—1.5DC	

DC: 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 in Japan.