

COOL STAR END MILLS

VFMHVRBCH

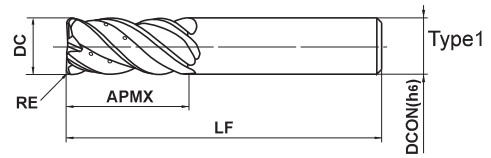
Corner radius end mill, Medium cut length, 4 flute, Irregular helix flutes, with multiple internal through coolant holes



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	1 ≤ RE ≤ 3				
	±0.015				
N	16 ≤ DC ≤ 20				
	0 - 0.03				
h6	DCON=16	DCON=20			
	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
VFMHVRBCHD1600R100	16	1	35	90	16	4	●	1
VFMHVRBCHD1600R300	16	3	35	90	16	4	●	1
VFMHVRBCHD2000R100	20	1	45	110	20	4	●	1
VFMHVRBCHD2000R300	20	3	45	110	20	4	●	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)
16	2000	560	800	110
20	1600	510	600	100
Depth of cut				

DC: Dia.

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)
16	1400	170
20	1100	130
Depth of cut		

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.

SQUARE

BALL

RADIUS

TAPER

SOLID END MILLS