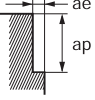


RECOMMENDED CUTTING CONDITIONS

Shoulder milling

Overhang Length DC×3 (DC=Dia.) (inch)

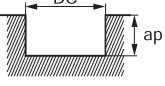
DC		Cutting speed (SFM)	Revolution (min ⁻¹)	Table feed (IPM)	Depth of cut ap	Depth of cut ae
(mm)	(inch)					
16	.630	230	1400	27.6	1.260	.094
20	.787	230	1100	21.7	1.575	.118
25	.984	230	890	17.3	1.969	.150

Work Material	Austenitic stainless steel (≤200HB), Titanium alloy AISI 304, AISI 316, Ti-6Al-4V etc.
Depth of Cut	

Slot milling

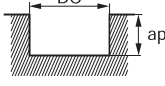
Depth of Cut DC×1 (inch)

DC		Cutting speed (SFM)	Revolution (min ⁻¹)	Table feed (IPM)	Depth of cut ap
(mm)	(inch)				
16	.630	195	1200	16.5	.630
20	.787	195	950	13.0	.787
25	.984	165	640	8.7	.984

Work Material	Austenitic stainless steel (≤200HB), Titanium alloy AISI 304, AISI 316, Ti-6Al-4V etc.
Depth of Cut	 DC : Dia.

Depth of Cut DC×2 (inch)

DC		Cutting speed (SFM)	Revolution (min ⁻¹)	Table feed (IPM)	Depth of cut ap
(mm)	(inch)				
16	.630	195	1200	9.4	1.260
20	.787	195	950	7.5	1.575
25	.984	165	640	5.1	1.969

Work Material	Austenitic stainless steel (≤200HB), Titanium alloy AISI 304, AISI 316, Ti-6Al-4V etc.
Depth of Cut	 DC : Dia.

Note 1) SMART MIRACLE coating has very low electrical conductivity; therefore, an external contact type of tool setter (electric transmitted) may not work.

When measuring the tool length, please use an internal contact type (non-electricity type) or a laser tool setter.

Note 2) When cutting titanium alloy, the use of water-soluble cutting fluid is effective.

Note 3) 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 work material installation is poor, vibration or abnormal sound can occur.

In this case, please reduce the revolution and the feed rate proportionately, or set a lower depth of cut.

Note 4) If the depth of cut is smaller, the revolution and the feed rate can be increased.

Note 5) For slot milling, use a chuck with high clamping force.