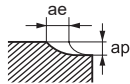


Recommended Cutting Conditions

(inch)

Workpiece Material		Titanium Alloys					Cobalt Chromium Alloys				
		Ti-6Al-4V ELI, ASTM F136, etc.					ASTM F75: Casting, F1537: Wrought Bar, F799: Forgings, etc.				
DC		Revolution	Cutting Speed	Feed Rate	Depth of cut	Width of cut	Revolution	Cutting Speed	Feed Rate	Depth of cut	Width of cut
(mm)	(inch)	n (min ⁻¹)	vc (SFM)	vf (IPM)	ap	ae	n (min ⁻¹)	vc (SFM)	vf (IPM)	ap	ae
3	.118	8500	260	82.7	.008	.051	6400	195	118.1	.008	.051
4	.157	6400	260	86.6	.008	.067	4800	195	106.3	.008	.067
6	.236	4200	260	55.1	.012	.079	3200	195	82.7	.012	.102
Depth of Cut											

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 alloys, the use of water-soluble cutting fluid is effective.

Note 3) If the depth of cut is smaller, the revolution and the feed rate can be increased.