

Speeds and Feeds



Carbide Roughing End Mills (TiAlN Coated)

P/N 03-0675A thru 03-0679A

Side Milling

ISO	Material Description	Depth of Cut (ap)	Width of Cut (ae)	Parameter	Diameter (inch)								
					0.375	0.500	0.625	0.750	1.000				
P	Carbon Steels Alloy Steels Tool Steels < HRc 30			Number of Flutes	3	4	4	4	5				
				SFM	905	1045	980	1020	1125				
				RPM	9219	7984	5990	5195	4298				
				IPT	.0033	.0030	.0039	.0044	.0039				
				IPM	91.27	95.81	93.44	91.44	83.80				
	Carbon Steels Alloy Steels Tool Steels HRc 30 - HRc 45			SFM	745	785	785	865	840				
				RPM	7589	5997	4798	4406	3209				
				IPT	.0015	.0013	.0016	.0016	.0015				
				IPM	34.15	31.19	30.71	28.20	24.07				
				M	Stainless steel	<p>A: $\text{Ø}1/4\sim3/8 = 0.15D$ $\text{Ø}1/2\sim5/8 = 0.10D$ $\text{Ø}3/4\sim1" = 0.05D$</p>		SFM	500	550	540	530	565
RPM	5093	4202	3300					2699	2158				
IPT	.0015	.0013	.0017					.0015	.0015				
IPM	22.92	21.85	22.44					16.20	16.19				
S	Heat Resistant Super Alloys							SFM	130	155	130	135	155
								RPM	1324	1184	795	688	592
				IPT	.0019	.0016	.0013	.0014	.0014				
	Titanium Alloys			IPM	7.55	7.58	4.13	3.85	4.14				
				SFM	165	205	170	180	205				
				RPM	1681	1566	1039	917	783				
IPM	10.08	10.02	5.82	5.50	5.09								

*The feed rates may need to be reduced by as much as 50% due to long flute length.

Speeds and Feeds



Carbide Roughing End Mills (TiAlN Coated) P/N 03-0675A thru 03-0679A									
Slot Milling									
ISO	Material Description	Depth of Cut (ap)	Width of Cut (ae)	Parameter	Diameter (inch)				
				Number of Flutes	0.375	0.500	0.625	0.750	1.000
P	Carbon Steels Alloy Steels Tool Steels < HRc 30			SFM	905	1045	980	1020	1125
				RPM	9219	7984	5990	5195	4298
				IPT	.0033	.0030	.0039	.0044	.0039
				IPM	91.27	95.81	93.44	91.44	83.80
	Carbon Steels Alloy Steels Tool Steels HRc 30 - HRc 45			SFM	745	785	785	865	840
				RPM	7589	5997	4798	4406	3209
				IPT	.0015	.0013	.0016	.0016	.0015
				IPM	34.15	31.19	30.71	28.20	24.07
M	Stainless steel	<p>A: $\text{Ø}1/4 \sim 3/8 = 0.25D$ $\text{Ø}1/2 \sim 5/8 = 0.15D$ $\text{Ø}3/4 \sim 1" = 0.10D$</p>		SFM	500	550	540	530	565
				RPM	5093	4202	3300	2699	2158
				IPT	.0015	.0013	.0017	.0015	.0015
				IPM	22.92	21.85	22.44	16.20	16.19
S	Heat Resistant Super Alloys			SFM	130	155	130	135	155
				RPM	1324	1184	795	688	592
				IPT	.0019	.0016	.0013	.0014	.0014
				IPM	7.55	7.58	4.13	3.85	4.14
	Titanium Alloys			SFM	165	205	170	180	205
				RPM	1681	1566	1039	917	783
				IPT	.0020	.0016	.0014	.0015	.0013
				IPM	10.08	10.02	5.82	5.50	5.09

*The feed rates may need to be reduced by as much as 50% due to long flute length.