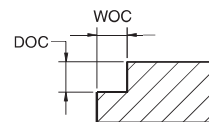


# Recommended Starting Speed and Feeds



## End Mill Series – HPFT..S6..

- 1) Starting parameters are based on using regular-length tools; for long-length tools, decrease feed by 20%.
- 2) For WOC equal to .05 x diameter, increase feed rate by 20%.
- 3) These guidelines may require possible variations to achieve optimum results.



### Austenitic Stainless Steels (200 & 300 Series) Including Duplex (135-275 HB) <28 HRC

AISI: 201, 209, 219, 302, 303, 304, 316, 321, 347, 329, ASTM: XM-1, XM-7, XM-21, CF-8M

application	maximum cutting parameters		cutting speed	feed per tooth						
				1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"
	DOC	WOC	SFM	6 mm	8 mm	10 mm	12 mm	16 mm	20 mm	25 mm
profiling	1 x dia.	.1 x dia.	300-375	.0015	.0020	.0022	.0030	.0036	.0047	.0050

### Ferritic, Martensitic (400 & 500 Series) & PH Stainless Steels (<371 HB) <40 HRC

AISI: 416, 416F, 416Se, 420F, PH Steels 15-5 PH, 17-4 H, 17-7 PH

application	maximum cutting parameters		cutting speed	feed per tooth						
				1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"
	DOC	WOC	SFM	6 mm	8 mm	10 mm	12 mm	16 mm	20 mm	25 mm
profiling	1 x dia.	.1 x dia.	250-325	.0015	.0020	.0022	.0030	.0036	.0047	.0050

### Titanium Alloys

Commercially pure: Ti98.8, Alpha: Ti6Al4V, Alpha/Beta: Ti-6Al-4V

application	maximum cutting parameters		cutting speed	feed per tooth						
				1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"
	DOC	WOC	SFM	6 mm	8 mm	10 mm	12 mm	16 mm	20 mm	25 mm
profiling	1 x dia.	.1 x dia.	275-325	.0013	.0015	.0020	.0026	.0036	.0047	.0050

### Titanium Alloys, Nickel Base

Inconel: 601, 617, 625, 718, X-750, 901, Waspaloy, Hastelloy

application	maximum cutting parameters		cutting speed	feed per tooth						
				1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"
	DOC	WOC	SFM	6 mm	8 mm	10 mm	12 mm	16 mm	20 mm	25 mm
profiling	1 x dia.	.1 x dia.	200-250	.0013	.0015	.002	.0026	.0036	.0047	.0050

Inserts

Face Mills

End Mills

Die and Mold

Slotting

Thread Milling

Widia Cutters

Vintage Cutters

Accessories

Technical Data

Mat'l Database

Index