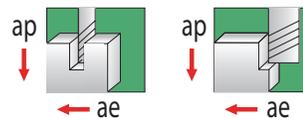


GARR TOOL Milling Guide for VHM Series 4-Flute Rougher

ISO Material	SFM (Vc)	CHIPLOAD PER TOOTH (Fz)								
		3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	
S	NICKEL BASE ALLOYS									
	High Temperature Alloys: Inconel 625/718, A286	100 - 175	.0007" - .0010"	.0008" - .0010"	.0010" - .0015"	.0010" - .0015"	.0010" - .0015"	.0012" - .0020"	.0015" - .0025"	.0015" - .0025"
M	TITANIUM ALLOYS									
	Titanium: 6AL4V, CP	150 - 200	.0008" - .0010"	.0010" - .0015"	.0010" - .0020"	.0015" - .0020"	.0020" - .0030"	.0025" - .0030"	.0030" - .0035"	.0030" - .0040"
M	STAINLESS STEELS									
	Stainless Steel: 303	290 - 375	.0008" - .0010"	.0010" - .0015"	.0013" - .0020"	.0015" - .0020"	.0020" - .0030"	.0025" - .0035"	.0030" - .0040"	.0035" - .0045"
	Stainless Steel: 304, 316, 400 Series, Kovar, Invar	250 - 300	.0006" - .0010"	.0008" - .0015"	.0010" - .0020"	.0012" - .0020"	.0015" - .0020"	.0020" - .0025"	.0025" - .0030"	.0025" - .0035"
P	CAST MATERIAL									
	Cast Iron	400 - 500	.0010" - .0020"	.0010" - .0020"	.0015" - .0020"	.0015" - .0025"	.0020" - .0035"	.0025" - .0035"	.0030" - .0040"	.0040" - .0050"
	High Strength Tool Steel: 4130, 4140, A2, D2, P20, H13	250 - 400	.0006" - .0008"	.0007" - .0010"	.0008" - .0010"	.0010" - .0015"	.0010" - .0020"	.0015" - .0025"	.0020" - .0030"	.0020" - .0030"
P	CARBON STEELS									
	Carbon Steels: 1000 Series	275 - 425	.0006" - .0008"	.0008" - .0012"	.0010" - .0015"	.0010" - .0020"	.0015" - .0025"	.0020" - .0025"	.0020" - .0030"	.0025" - .0035"

	Slotting	Profiling
Axial (ap)	0.5xD	2xD
Radial (ae)	1xD	0.2xD

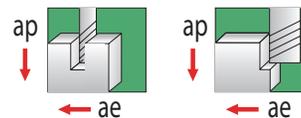


NOTE - ABOVE ARE STARTING PARAMETERS ONLY. HIGHER RESULTS MAY BE ACHIEVED WITH OPTIMUM CONDITIONS.

GARR TOOL Milling Guide for VHM Series 4-Flute Rougher

ISO Material	M/Min. (Vc)	CHIPLOAD PER TOOTH (Fz)									
		4.0mm	5.0mm	6.0mm	8.0mm	10.0mm	12.0mm	16.0mm	20.0mm	25.0mm	
S	NICKEL BASE ALLOYS										
	High Temperature Alloys: Inconel 625/718, A286	30 - 55	.008 - .015	.018 - .025	.020 - .025	.025 - .038	.025 - .038	.025 - .038	.030 - .050	.038 - .063	.038 - .063
M	TITANIUM ALLOYS										
	Titanium: 6AL4V, CP	45 - 60	.010 - .020	.020 - .025	.025 - .038	.025 - .050	.038 - .050	.050 - .076	.063 - .076	.076 - .089	.076 - .102
M	STAINLESS STEELS										
	Stainless Steel: 303	90 - 115	.010 - .020	.020 - .025	.025 - .038	.033 - .050	.038 - .050	.050 - .076	.063 - .089	.076 - .102	.089 - .114
	Stainless Steel: 304, 316, 400 Series, Kovar, Invar	75 - 90	.008 - .015	.015 - .025	.020 - .038	.025 - .050	.030 - .050	.038 - .050	.050 - .063	.063 - .076	.063 - .089
P	Stainless Steel: 304L, 316L, 8620, 17/4, 15/5, 13/8, PH Mat'l	60 - 75	.008 - .015	.015 - .020	.018 - .025	.020 - .025	.025 - .038	.025 - .050	.038 - .063	.050 - .076	.050 - .076
	HIGH STRENGTH TOOL STEELS										
	High Strength Tool Steel: 4130, 4140, A2, D2, P20, H13	75 - 125	.006 - .015	.015 - .020	.018 - .025	.020 - .025	.025 - .038	.025 - .050	.038 - .063	.050 - .076	.050 - .076
K	CARBON STEELS										
	Carbon Steels: 1000 Series	85 - 130	.008 - .015	.015 - .020	.020 - .030	.025 - .038	.025 - .050	.038 - .063	.050 - .063	.050 - .076	.063 - .089
K	CAST MATERIAL										
	Cast Iron	125 - 150	.013 - .025	.025 - .050	.025 - .050	.038 - .050	.038 - .063	.050 - .089	.063 - .089	.076 - .102	.102 - .127

	Slotting	Profiling
Axial (ap)	0.5xD	2xD
Radial (ae)	1xD	0.2xD



NOTE - ABOVE ARE STARTING PARAMETERS ONLY. HIGHER RESULTS MAY BE ACHIEVED WITH OPTIMUM CONDITIONS.