

# GARR TOOL Milling Guide for VRX-6 Series End Mills

## Fractional

	Material Group S	Material Group M	Material Group S	Material Group P	Material Group K
	Nickel or Cobalt-based	Stainless	Titanium Alloys	Carbon Steels	Grey Cast Iron
	Inconel, Cobalt Chrome, Ductile Iron	Invar, 400, 316, pH Series	6Al4V	1000 Series	
	SFM = 150 - 225	SFM = 250 - 400	SFM = 250 - 450	SFM = 400 - 600	SFM = 400 - 500
DIA	CPT (Fz)	CPT (Fz)	CPT (Fz)	CPT (Fz)	CPT (Fz)
1/4"	.0006" - .0012"	.0010" - .0015"	.0010" - .0015"	.0015" - .0020"	.0015" - .0020"
3/8"	.0008" - .0016"	.0015" - .0025"	.0015" - .0025"	.0020" - .0030"	.0020" - .0030"
1/2"	.0012" - .0023"	.0020" - .0030"	.0020" - .0030"	.0025" - .0035"	.0025" - .0035"
5/8"	.0015" - .0025"	.0025" - .0035"	.0025" - .0035"	.0030" - .0040"	.0030" - .0040"
3/4"	.0018" - .0025"	.0030" - .0040"	.0030" - .0040"	.0035" - .0045"	.0035" - .0045"
1"	.0020" - .0030"	.0035" - .0050"	.0035" - .0050"	.0040" - .0055"	.0040" - .0055"

Profile/Trochoidal Milling

Axial (ap)	up to 2xD
Radial (ae)	15% of Dia.

	Nickel or Cobalt-based	Stainless	Titanium Alloys	Carbon Steels	Grey Cast Iron
	Inconel, Cobalt Chrome, Ductile Iron	Invar, 400, 316, pH Series	6Al4V	1000 Series	
	SFM = 200 - 250	SFM = 300 - 500	SFM = 300 - 600	SFM = 450 - 650	SFM = 450 - 550
DIA	CPT (Fz)	CPT (Fz)	CPT (Fz)	CPT (Fz)	CPT (Fz)
1/4"	.0010" - .0015"	.0015" - .0020"	.0015" - .0020"	.0020" - .0025"	.0020" - .0025"
3/8"	.0012" - .0020"	.0020" - .0030"	.0020" - .0030"	.0025" - .0035"	.0025" - .0035"
1/2"	.0015" - .0025"	.0025" - .0035"	.0025" - .0035"	.0030" - .0040"	.0030" - .0040"
5/8"	.0018" - .0028"	.0030" - .0040"	.0030" - .0040"	.0035" - .0045"	.0035" - .0045"
3/4"	.0020" - .0030"	.0035" - .0045"	.0035" - .0045"	.0040" - .0050"	.0040" - .0050"
1"	.0025" - .0035"	.0040" - .0055"	.0040" - .0055"	.0050" - .0065"	.0050" - .0065"

Profile/Trochoidal Milling

Axial (ap)	up to 3xD
Radial (ae)	10% of Dia.

	Nickel or Cobalt-based	Stainless	Titanium Alloys	Carbon Steels	Grey Cast Iron
	Inconel, Cobalt Chrome, Ductile Iron	Invar, 400, 316, pH Series	6Al4V	1000 Series	
	SFM = 225 - 300	SFM = 400 - 600	SFM = 400 - 700	SFM = 500 - 700	SFM = 450 - 600
DIA	CPT (Fz)	CPT (Fz)	CPT (Fz)	CPT (Fz)	CPT (Fz)
1/4"	.0015" - .0025"	.0020" - .0030"	.0020" - .0030"	.0025" - .0035"	.0025" - .0035"
3/8"	.0017" - .0030"	.0025" - .0040"	.0025" - .0040"	.0030" - .0045"	.0030" - .0045"
1/2"	.0020" - .0035"	.0030" - .0045"	.0030" - .0045"	.0035" - .0050"	.0035" - .0050"
5/8"	.0025" - .0040"	.0035" - .0050"	.0035" - .0050"	.0040" - .0055"	.0040" - .0055"
3/4"	.0030" - .0045"	.0040" - .0055"	.0040" - .0055"	.0045" - .0060"	.0045" - .0060"
1"	.0035" - .0050"	.0050" - .0070"	.0050" - .0070"	.0055" - .0070"	.0055" - .0070"

Profile/Trochoidal Milling

Axial (ap)	up to 4xD
Radial (ae)	5% of Dia.

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