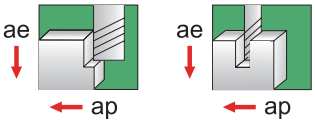
GARR TOOL Milling Guide for V5 End Mills in Titanium, Inconel, and Stainless

Metric

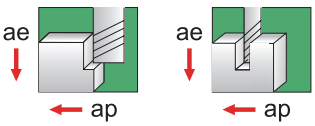
DIAMETER	Titanium Alloys SMM = 45 - 75 CPT (Fz)	Nickel or Cobalt-based Material SMM = 20 - 40 CPT (Fz)	Stainless (400 Series, pH Series) SMM = 45 - 90 CPT (Fz)
6.0 - 8.0	.020 - .030	.010 - .020	.020 - .030
8.0 - 10.0	.025 - .040	.013 - .025	.025 - .045
10.0 - 12.0	.030 - .045	.018 - .030	.030 - .050
12.0 - 14.0	.030 - .050	.020 - .040	.035 - .055
14.0 - 16.0	.035 - .060	.025 - .045	.045 - .075
16.0 - 18.0	.045 - .075	.030 - .050	.050 - .080
18.0 - 20.0	.050 - .080	.035 - .055	.055 - .095
22.0 - 25.0	.060 - .090	.045 - .065	.065 - 0.105

	Profiling Side Cutting	Slotting Pocket Milling
Axial (ae)	1xD	50% of Dia.
Radial (ap)	50% of Dia.	1xD



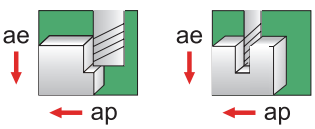
DIAMETER	Titanium Alloys SMM = 90 - 150 CPT (Fz)	Nickel or Cobalt-based Material SMM = 30 - 60 CPT (Fz)	Stainless (400 Series, pH Series) SMM = 75 - 120 CPT (Fz)
6.0 - 8.0	.020 - .030	.010 - .020	.020 - .030
8.0 - 10.0	.025 - .045	.013 - .025	.030 - .045
10.0 - 12.0	.035 - .055	.020 - .035	.045 - .060
12.0 - 14.0	.045 - .060	.025 - .040	.050 - .070
14.0 - 16.0	.050 - .075	.030 - .045	.055 - .075
16.0 - 18.0	.055 - .080	.035 - .055	.065 - .085
18.0 - 20.0	.060 - .085	.040 - .065	.070 - .090
22.0 - 25.0	.065 - .090	.045 - .075	.080 - .100

	Profiling Side Cutting	Slotting Pocket Milling
Axial (ae)	1xD	20% of Dia.
Radial (ap)	20% of Dia.	1xD



DIAMETER	Titanium Alloys SMM = 120 - 210 CPT (Fz)	Nickel or Cobalt-based Material SMM = 45 - 75 CPT (Fz)	Stainless (400 Series, pH Series) SMM = 90 - 150 CPT (Fz)
6.0 - 8.0	.020 - .040	.010 - .020	.025 - .045
8.0 - 10.0	.040 - .055	.013 - .025	.040 - .060
10.0 - 12.0	.050 - .060	.020 - .040	.050 - .070
12.0 - 14.0	.055 - .065	.025 - .045	.055 - .075
14.0 - 16.0	.060 - .075	.030 - .050	.065 - .085
16.0 - 18.0	.070 - .090	.035 - .060	.080 - .100
18.0 - 20.0	.085 - .100	.040 - .070	.090 - .110
22.0 - 25.0	.090 - .110	.045 - .080	.095 - .120

	Profiling Side Cutting	Slotting Pocket Milling
Axial (ae)	1xD	5% of Dia.
Radial (ap)	5% of Dia.	1xD



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