

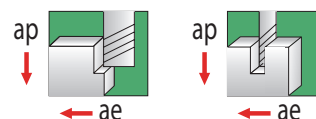
GARR TOOL Milling Guide for V5 End Mills in Titanium, Inconel, and Stainless

(CHIP THINNING CALCULATION ALREADY APPLIED)

Metric

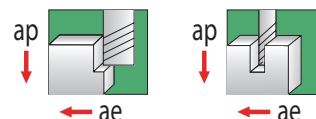
	Titanium Alloys	Nickel or Cobalt-based Material	Stainless (400 Series, pH Series)
	SMM = 45 - 75	SMM = 20 - 40	SMM = 45 - 90
DIAMETER	CPT (Fz)	CPT (Fz)	CPT (Fz)
6.0 - 8.0	.020 - .030	.010 - .020	.020 - .030
8.0 - 10.0	.025 - .040	.013 - .025	.025 - .045
10.0 - 12.0	.030 - .045	.018 - .030	.030 - .050
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 - .105

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



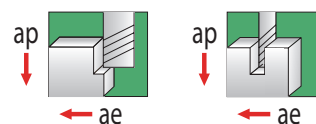
	Titanium Alloys	Nickel or Cobalt-based Material	Stainless (400 Series, pH Series)
	SMM = 90 - 150	SMM = 30 - 60	SMM = 75 - 120
DIAMETER	CPT (Fz)	CPT (Fz)	CPT (Fz)
6.0 - 8.0	.027 - .037	.017 - .027	.027 - .037
8.0 - 10.0	.032 - .052	.020 - .032	.037 - .052
10.0 - 12.0	.042 - .062	.027 - .042	.052 - .067
12.0 - 14.0	.052 - .067	.032 - .047	.057 - .077
14.0 - 16.0	.057 - .082	.037 - .052	.062 - .082
16.0 - 18.0	.062 - .087	.042 - .062	.072 - .092
18.0 - 20.0	.067 - .092	.047 - .072	.077 - .097
22.0 - 25.0	.072 - .097	.052 - .082	.087 - .107

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



	Titanium Alloys	Nickel or Cobalt-based Material	Stainless (400 Series, pH Series)
	SMM = 120 - 210	SMM = 45 - 75	SMM = 90 - 150
DIAMETER	CPT (Fz)	CPT (Fz)	CPT (Fz)
6.0 - 8.0	.045 - .065	.035 - .045	.050 - .070
8.0 - 10.0	.065 - .080	.038 - .050	.065 - .085
10.0 - 12.0	.075 - .085	.045 - .065	.075 - .095
12.0 - 14.0	.080 - .090	.050 - .070	.080 - .100
14.0 - 16.0	.085 - .100	.055 - .075	.090 - .110
16.0 - 18.0	.095 - .115	.060 - .085	.105 - .125
18.0 - 20.0	.110 - .125	.065 - .095	.115 - .135
22.0 - 25.0	.115 - .135	.070 - .105	.120 - .145

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



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