



General Purpose Carbide Micro End Mills											
Material Guide		Conditions	SFM	FEED PER TOOTH							
				.005" .015"	.015" .003"	.003" .045"	.045" .060"	.060" .075"	.075" .090"	.090" .105"	.105" .125"
COBALT BASE ALLOYS	Stellite, HS-21, Haynes 25/188, X-40, L-605	Slotting at ≤7% of D	50	.0001	.0001	.0002	.0002	.0003	.0003	.0004	.0004
		Profiling at 5% of D Axial/≤20% of D Radial	80	.0001	.0001	.0002	.0002	.0003	.0003	.0004	.0004
NICKEL BASE ALLOYS	Inconel-625/718, Waspalloy, Rene, Hastelloy	Slotting at ≤7% of D	40	.0001	.0001	.0002	.0002	.0003	.0003	.0004	.0004
		Profiling at 5% of D Axial/≤20% of D Radial	60	.0001	.0001	.0002	.0002	.0003	.0003	.0004	.0004
IRON BASE ALLOYS	Incoloy 800-802, Multimet N-155, Timkin 16-25-6, Carpeneter 22-b3	Slotting at ≤7% of D	80	.0001	.0001	.0002	.0002	.0003	.0003	.0004	.0004
		Profiling at 5% of D Axial/≤20% of D Radial	100	.0001	.0001	.0002	.0002	.0003	.0003	.0004	.0004
MONEL	Monel-65% Nickel	Slotting at ≤7% of D	40	.0001	.0001	.0002	.0002	.0003	.0003	.0004	.0004
		Profiling at 5% of D Axial/≤20% of D Radial	60	.0001	.0001	.0002	.0002	.0003	.0003	.0004	.0004
TITANIUM ALLOYS	Commercially Pure, 6AL-4V, Astm 1/2/3, 6AL-25N-4Zr-2Mo-Si	Slotting at ≤15% of D	125	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005
		Profiling at 6% of D Axial/≤20% of D Radial	250	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005
STAINLESS STEEL (PRECIPITATION)	13/8, 15/5, 17-4, AM-350/355	Slotting at ≤10% of D	90	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005
		Profiling at 6% of D Axial/≤20% of D Radial	250	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005
STAINLESS STEEL (AUSTENITIC)	200 Series, 302, 303, 304, 316, 304L, 316L	Slotting at ≤15% of D	100	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005
		Profiling at 6% of D Axial/≤30% of D Radial	250	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005
STAINLESS STEEL (MARTENSITIC)	403, 410, 416, 440	Slotting at ≤15% of D	100	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005
		Profiling at 6% of D Axial/≤30% of D Radial	250	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005
HIGH STRENGTH TOOL STEELS	4140, 4340, 6150, 5210, A2, D2 P20, H11, H13, S2, 01	Slotting at ≤15% of D	100	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005
		Profiling at 6% of D Axial/≤30% of D Radial	180	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005
MEDIUM ALLOY STEELS	200, 250, 300	Slotting at ≤15% of D	125	.0003	.0003	.0004	.0004	.0005	.0005	.0006	.0006
		Profiling at 6% of D Axial/≤30% of D Radial	250	.0003	.0003	.0004	.0004	.0005	.0005	.0006	.0006
CARBON STEELS	A36, 12L14, 12L15, 1005, 1018, 1020, 1108-1119, 1213-1215, 1513-1518, 4012, 5015, 9310	Slotting at ≤15% of D	150	.0004	.0004	.0005	.0005	.0006	.0006	.0007	.0007
		Profiling at 6% of D Axial/≤35% of D Radial	300	.0004	.0004	.0005	.0005	.0006	.0006	.0007	.0007
DUCTILE	Ductile Cast Irons	Slotting at ≤15% of D	100	.0004	.0004	.0005	.0005	.0006	.0006	.0007	.0007
		Profiling at 10% of D Axial/≤25% of D Radial	250	.0004	.0004	.0005	.0005	.0006	.0006	.0007	.0007
CAST IRONS	Gray Cast Irons	Slotting at ≤25% of D	125	.0004	.0004	.0005	.0005	.0008	.0008	.0010	.0010
		Profiling at 10% of D Axial/≤35% of D Radial	400	.0004	.0004	.0005	.0005	.0008	.0008	.0010	.0010
ALUMINUM	2014, 2024, 6061-(T1-T6), 7075, Die Cast, Extruded	Slotting at ≤15% of D	650	.0004	.0004	.0005	.0006	.0008	.0008	.0010	.0010
		Profiling at 10% of D Axial/≤35% of D Radial	775	.0004	.0004	.0005	.0006	.0008	.0008	.0010	.0010

THESE VALUES ARE A STARTING POINT BASED ON AN UNCOATED TOOL.
FOR AlTiN COATED TOOLS INCREASE VALUES BY UP TO +40%