

GENERAL PURPOSE END MILLS - COBALT - ROUGHING

Technical Information

General Purpose Cobalt Roughing End Mills										
Material Guide		Rc	SFM	Feed Per Tooth						
				1/4"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
COBALT BASE ALLOYS	Stellite, HS-21, Haynes 25/188, X-40, L-605	< 32	5-25	.0009 - .0011	.0012 - .0014	.0018 - .0020	.0026 - .0029	.0033 - .0037	.0040 - .0045	.0053 - .0059
NICKEL BASE ALLOYS	Inconel-625/718, Waspalloy, Rene, Hastelloy	< 32	10-20	.0009 - .0011	.0012 - .0014	.0018 - .0020	.0026 - .0029	.0033 - .0037	.0040 - .0045	.0053 - .0059
IRON BASE ALLOYS	Incoloy 800-802, Multimet N-155, Timkin 16-25-6, Carpeneter 22-b3	< 32	15-35	.0009 - .0011	.0012 - .0014	.0018 - .0020	.0026 - .0029	.0033 - .0037	.0040 - .0045	.0053 - .0059
MONEL	Monel-65% Nickel		10-20	.0009 - .0011	.0012 - .0014	.0018 - .0020	.0026 - .0029	.0033 - .0037	.0040 - .0045	.0053 - .0059
TITANIUM ALLOYS	Commercially Pure, 6AL-4V, Astm 1/2/3, 6Al-25N-4Zr-2Mo-Si		50-90	.0015 - .0017	.0020 - .0022	.0028 - .0030	.0040 - .0045	.0052 - .0057	.0062 - .0067	.0080 - .0090
STAINLESS STEEL (PRECIPITATION)	13/8, 15/5, 17-4, AM-350/355	< 32	60-80	.0011 - .0015	.0016 - .0020	.0026 - .0029	.0036 - .0040	.0046 - .0050	.0054 - .0060	.0070 - .0075
STAINLESS STEEL (AUSTENITIC)	200 Series, 302, 303, 304, 316, 304L, 316L	< 32	60-80	.0015 - .0019	.0020 - .0025	.0030 - .0034	.0045 - .0049	.0056 - .0061	.0067 - .0074	.0090 - .0098
STAINLESS STEEL (MARTENSITIC)	403, 410, 416, 440	< 32	60-100	.0015 - .0019	.0020 - .0025	.0030 - .0034	.0045 - .0049	.0056 - .0061	.0067 - .0074	.0090 - .0098
HIGH STRENGTH TOOL STEELS	4140, 4340, 6150, 5210, A2, D2 P20, H11, H13, S2, 01	< 32	50-80	.0011 - .0015	.0015 - .0020	.0025 - .0028	.0035 - .0039	.0045 - .0050	.0053 - .0059	.0071 - .0079
MEDIUM ALLOY STEELS	200, 250, 300	< 32	60-120	.0016 - .0020	.0023 - .0027	.0033 - .0040	.0050 - .0054	.0032 - .0070	.0075 - .0082	.0093 - .0110
CARBON STEELS	1000's, 1100's, 1300's	< 32	70-150	.0018 - .0022	.0025 - .0029	.0037 - .0042	.0053 - .0059	.0068 - .0074	.0080 - .0090	.0100 - .0115
DUCTILE	Ductile Cast Irons		40-80	.0015 - .0018	.0019 - .0024	.0030 - .0034	.0042 - .0048	.0056 - .0061	.0065 - .0073	.0087 - .0093
CAST IRONS	Gray Cast Irons		60-150	.0010 - .0014	.0014 - .0018	.0024 - .0027	.0034 - .0038	.0044 - .0050	.0053 - .0058	.0070 - .0078
ALUMINUM	2014, 2024, 6061-(T1-T6), 7075, Die Cast, Extruded		400-650	.0024 - .0027	.0058 - .0063	.0067 - .0076	.0103 - .0110	.0112 - .0120	.0180 - .0205	.0210 - .0260

These values are a starting point based on an uncoated tool.

For AlTiN Coated tools increase SFM values by up to +40%