

Carbide End Mill Feeds & Speeds

	Materials	Speed S.F.M Under 32 HRC	Speed S.F.M Over 32 HRC	Feed (Inch/Tooth) End Mill Diameter							
				1/8"	3/16"	1/4"	3/8"	1/2"	5/8"	3/4"	1"
NONFERROUS MATERIALS	Aluminum + Aluminum Alloys	800-2000	500-1000	0.001	0.002	0.002	0.003	0.004	0.005	0.006	0.007
	Copper	800-1500	800-1000	0.001	0.001	0.002	0.0025	0.003	0.004	0.004	0.005
	Copper Alloys	800-1000	700-1000	0.001	0.001	0.002	0.0025	0.003	0.004	0.004	0.005
	Magnesium	1000 min	700-1000	0.001	0.002	0.002	0.003	0.004	0.006	0.008	0.009
	Plastics, Acrylics, Phenolics	200-600	200-500	0.001	0.002	0.003	0.004	0.006	0.008	0.01	0.015
	Carbon, Graphites	200-400		0.004	0.004	0.006	0.008	0.01	0.01	0.015	0.02
STAINLESS STEEL	Precipitation	80-250	90-150	0.0005	.0005	0.001	0.001	0.002	0.002	0.004	0.006
	Austenitic	100-350	100-150	0.0001	0.0002	0.0005	0.001	0.0015	0.002	0.003	0.004
	Martensitic	100-250	100-175	0.0001	0.0002	0.0005	0.0005	0.001	0.001	0.003	0.004
HIGH TEMP ALLOYS	Cobalt Base	60-100	40-80	0.0004	.0005	0.001	0.001	0.001	0.001	0.0015	0.002
	Nickel Base		50-90	0.0005	0.0005	0.001	0.001	0.002	0.0025	0.003	0.004
	Iron Base	80-130	60-120	0.0005	0.0005	0.001	0.0015	0.002	0.0025	0.003	0.004
STEELS	High Steel Strength	50-250	80-180	0.0005	0.0005	0.001	0.001	0.001	0.0015	0.002	0.004
	High Alloy Steels	100-300	80-180	0.0005	0.0005	0.001	0.001	0.001	0.0015	0.002	0.004
	Medium Alloy Steels	150-350	80-180	0.0005	0.0005	0.001	0.002	0.0025	0.0035	0.004	0.005
	Low Alloy Steels Maraging	100-400	100-200	0.0005	0.001	0.0015	0.002	0.003	0.004	0.005	0.006
CAST IRON	Ductile Cast Iron	100-400	80-140	0.0005	0.001	0.0015	0.002	0.002	0.003	0.004	0.005
	Gray Cast Iron	100-400	90-160	0.0005	0.001	0.002	0.003	0.004	0.005	0.006	0.008
TITANIUM	Titanium Alloys	50-250	90-160	0.0005	0.0005	0.0005	0.001	0.001	0.0015	0.002	0.004