PROUDLY MADE IN THE USA

SUN PRO CARBIDE

Technical Data / Speeds and Feeds

End Mills - General Purpose

Material	SFM RANGE	Chipload Per Tooth 1/8	1/4	5/16	3/8	1/2	5/8	3/4	1
Aluminum/Aluminum Alloys	800-1300	0.0015"	0.0020"	0.0025"	0.0030"	0.0040"	0.0050"	0.0060"	0.0080"
	300-450	0.0018"	0.0020"	0.0023"	0.0025"	0.0030"	0.0035"	0.0040"	0.0050"
Bronze	250-350	0.0018"	0.0020"	0.0023"	0.0025"	0.0030"	0.0035"	0.0040"	0.0050"
Cast Iron (Malleable)	150-300	0.0008"	0.0010"	0.0013"	0.0015"	0.0020"	0.0030"	0.0040"	0.0060"
Cast Iron (Medium)	100-350	0.0005"	0.0010"	0.0015"	0.0020"	0.0030"	0.0040"	0.0050"	0.0080"
Cast Iron (Soft)	250-500	0.0009"	0.0015"	0.0022"	0.0028"	0.0040"	0.0050"	0.0060"	0.0080"
Coppers/Copper Alloys	400-900	0.0018"	0.0020"	0.0023"	0.0025"	0.0030"	0.0040"	0.0050"	0.0070"
Magnesium	1000 min	0.0015"	0.0020"	0.0025"	0.0030"	0.0040"	0.0050"	0.0060"	0.0080"
Nickel Alloys	100-300	0.0008"	0.0010"	0.0012"	0.0015"	0.0020"	0.0025"	0.0030"	0.0040"
Plastic	600-1200	0.0023"	0.0030"	0.0038"	0.0045"	0.0060"	0.0080"	.1000"	0.0150"
Plastic (Glass Filled)	300-800	0.0015"	0.0020"	0.0025"	0.0030"	0.0040"	0.0060"	0.0080"	0.0120"
Stainless Steel (Free Machining)	300-400	0.0008"	0.0010"	0.0013"	0.0015"	0.0020"	0.0030"	0.0040"	0.0060"
Stainless Steel (Work Hardening)	150-300	0.0004"	0.0005"	0.0007"	0.0008"	0.0010"	0.0020"	0.0030"	0.0050"
Steel (High Tensile 35-40 Rc)	175-300	0.0004"	0.0005"	0.0007"	0.0008"	0.0010"	0.0015"	0.0020"	0.0030"
Steel (High Tensile 40-45 Rc)	150-250	0.0004"	0.0005"	0.0007"	0.0008"	0.0010"	0.0015"	0.0020"	0.0030"
Steel (High Tensile 45+ Rc)	75-150	0.0004"	0.0005"	0.0007"	0.0008"	0.0010"	0.0015"	0.0020"	0.0030"
Steel (Low Carbon)	300-600	0.0005"	0.0010"	0.0015"	0.0020"	0.0030"	0.0040"	0.0050"	0.0060"
Steel (Medium Carbon)	200-500	0.0005"	0.0010"	0.0015"	0.0020"	0.0030"	0.0040"	0.0050"	0.0060"
Titanium (Hard)	60-150	0.0004"	0.0005"	0.0007"	0.0008"	0.0010"	0.0015"	0.0020"	0.0040"
Titanium (Soft)	75-250	0.0008"	0.0010"	0.0012"	0.0015"	0.0020"	0.0030"	0.0040"	0.0060"
Tool Steel	150-300	0.0008"	0.0010"	0.0012"	0.0015"	0.0020"	0.0025"	0.0030"	0.0040"

Speeds and Feeds Formulas

IF YOU WANT TO FIND THIS:	AND YOU KNOW THIS:	DO THIS:
RPM	SFM	(SFM. x 12) / (Dia. x 3.1416)
SFM	RPM	(Dia. x RPM x 3.1416) / 12
Feedrate Per RPM (FR)	SFM and FM	(Dia. x FM x 3.1416) / (SFM x 12)
Feedrate Per RPM (FR)	RPM and FM	FM / RPM
Feedrate Per Minute (FM)	RPM AND FR	FR x RPM
SFM	RPM and Diameter	.26 x RPM x Dia.
RPM	SFM and Diameter	(SFM / Dia.) x 3.8

SPT SUNCOAST INC. PRECISION TOOLS ESTABLISHED 1963