

Cutting Speed recommendations: Threading

Materials		HBN	GC10F	AC350M	AC200M	K15
		Cutting Speed Vc = M/min				
Carbon Steel	c = 0.10-0.25%	125	185	220	220	
	c = 0.25-0.55%	150	155	185	185	
	c = 0.55-0.80%	170	145	175	175	
Low Alloy Steel	Non-Hardened	180	125	150	150	
	Hardened & Tempered	275	95	110	110	
	Hardened & Tempered	350	75	90	90	
High Alloy Steel	Annealed HSS	200	110	130	130	
	Hardened Tool Steel	325	80	95	95	
Steel Casting	Unalloyed	180	200	240	240	
	Low-Alloy	200	110	132	132	
	High-Alloy	225	110	132	132	
	Manganese Steel	250	35	40	40	
Stainless Steel <i>Bars / Forged</i> <i>Ferritic / Martensitic</i>	Free Machining	200	170	200	200	115
	Non - Hardened	200	130	150	150	90
	PH Hardened	330	90	110	110	65
	Hardened	330	85	100	100	65
Stainless Steel <i>Bars / Forged</i> <i>Austenitic</i>	Free Machining	200	140	170	170	
	Austenitic	180	130	155	155	
	PH Hardened	330	80	95	95	
	Super Austenitic	200	70	80	80	
Stainless Steel <i>Bars / Forged / Austenitic</i> <i>Ferritic (Duplex)</i>	Non-weldable c > 0.05%	230	95	110	110	80
	Weldable c > 0.05%	260	75	90	90	60
Stainless Steel - Cast <i>Ferritic / Martensitic</i>	Non Hardened	200	90	110	110	65
	Hardened	330	65	80	80	50
Stainless Steel - Cast <i>Austenitic</i>	Austenitic	200	85	100	100	
	PH Hardened	330	60	70	70	
Stainless Steel - Cast <i>Austenitic / Ferritic</i> <i>(Duplex)</i>	Non-weldable c > 0.05%	200	85	100	100	70
	Weldable c > 0.05%	300	65	75	75	50
Heat Resistant Alloy	Annealed Iron Based	230	45	50	50	
	Aged	260	30	35	35	
	Annealed	250	20	20	20	20
	Aged - Nickel based	350	15	15	15	15
	Cast	320	10	10	10	10
	Annealed	200	20	20	20	
Titanium Alloys	Aged - Cobalt based	300	15	15	15	
	Cast	320	10	10	10	
	Commercially Pure 99.5% Ti		140	170	170	120
Malleable Cast Iron	Ferritic Short chipping	130	135	160	160	85
	Ferritic long chipping	230	100	20	20	70
Grey Cast Iron	Low tensile Strength	130	130	155	155	100
	High Tensile Strength	230	110	130	130	50
Nodular SG Iron	Ferritic	160	125	150	150	100
	Pearlitic	230	90	110	110	50
Aluminium Alloys	Cold Worked, non aging	60	1400	1400	1400	500
	Wrought, Wrought & Aged	100	490	450	450	450
Aluminium Alloys	Cast, non aging	75	455	455	455	455
	Cast or cast & aged	90	280	280	280	250
Aluminium Alloys	Cast Si 13-15%	130	245	295	295	210
	Cast Si 16-22%	130	245	295	295	210
Copper & Copper Alloys	Free Cutting >1% Pb	110	420	500	500	370
	brass, leaded bronze <1% Pb	90	245	245	245	210
	Bronze, non-leaded copper Electrolytic Copper	150	175	175	175	150