















Recommendations for Thread Milling Cutters

Material Group		Hardness		SFM (in/min)	Feed Rate (inch/tooth) for Thread Mill Diameter						
		Rc	Brn		#10	1/4"	3/8"	1/2"	5/8"	3/4"	1"
	Structural Steels		<180	260-400	0.0008	0.0015	0.0020	0.0030	0.0035	0.0035	0.0040
	Free cutting steels		<180	260-400	0.0008	0.0015	0.0020	0.0030	0.0035	0.0035	0.0040
	Unalloyed case hardened steels	<20	<230	260-400	0.0008	0.0015	0.0020	0.0030	0.0035	0.0035	0.0040
	Unalloyed heat-treatable steels	<25	<250	260-400	0.0008	0.0015	0.0020	0.0030	0.0035	0.0035	0.0040
	Alloyed case hardened steels	<25	<250	200-260	0.0004	0.0008	0.0012	0.0016	0.0020	0.0025	0.0030
	Alloyed heat-treatable steels	<30	<280	200-260	0.0004	0.0008	0.0012	0.0016	0.0020	0.0025	0.0030
	Alloyed tool steels	<35	<320	200-260	0.0004	0.0008	0.0012	0.0016	0.0020	0.0025	0.0030
	High speed tool steels	<38	<380	200-260	0.0004	0.0008	0.0012	0.0016	0.0020	0.0025	0.0030
	Hardened Steel (55RHC Max)	<55	<560	130-170	0.0003	0.0006	0.0009	0.0012	0.0016	0.0020	0.0024
	Stainless -- sulphuric		<180	160-230	0.0008	0.0015	0.0020	0.0030	0.0035	0.0035	0.0040
	Stainless - austenitic	<25	<250	160-230	0.0008	0.0015	0.0020	0.0030	0.0035	0.0035	0.0040
	Stainless - martensitic	<30	<280	130-230	0.0008	0.0015	0.0020	0.0030	0.0035	0.0035	0.0040
	Structural Steels	<20	<230	260-330	0.0008	0.0015	0.0020	0.0030	0.0035	0.0035	0.0040
	Case hardened steels	<25	<250	260-330	0.0008	0.0015	0.0020	0.0030	0.0035	0.0035	0.0040
	Heat-treatable steels	<25	<250	260-330	0.0008	0.0015	0.0020	0.0030	0.0035	0.0035	0.0040
	Nitriding steels	<30	<280	260-330	0.0008	0.0015	0.0020	0.0030	0.0035	0.0035	0.0040
	Al wrought alloys		<150	400-750	0.0020	0.0030	0.0040	0.0050	0.0060	0.0070	0.0080
	Al cast alloys <10% Si			500-1000	0.0020	0.0030	0.0040	0.0050	0.0060	0.0070	0.0080
	Al cast alloys >10% Si			330-660	0.0020	0.0030	0.0040	0.0050	0.0060	0.0070	0.0080
	Cast iron - Grey	<25	<240	330-500	0.0020	0.0030	0.0040	0.0050	0.0050	0.0060	0.0060
	Cast iron - ductile (alloyed)	<30	<280	260-400	0.0020	0.0030	0.0040	0.0050	0.0050	0.0060	0.0060
	Cast iron - malleable	<32	<300	260-400	0.0020	0.0030	0.0040	0.0050	0.0050	0.0060	0.0060
	Non-ferrous metals, copper alloys		<180	260-500	0.0020	0.0028	0.0035	0.0045	0.0065	0.0080	0.0100
	Brass, short-chipping		<180	200-300	0.0020	0.0028	0.0035	0.0045	0.0065	0.0080	0.0100
	Plastics, Carbon/glass reinforced			330-660	0.0020	0.0028	0.0035	0.0045	0.0065	0.0080	0.0100
	Titanium and Ti-alloys	<35	<320	130-200	0.0004	0.0008	0.0012	0.0016	0.0020	0.0025	0.0030
	Ni-alloys	<35	<320	130-200	0.0004	0.0008	0.0012	0.0016	0.0020	0.0025	0.0030
		<55	<560	130-170	0.0003	0.0006	0.0009	0.0012	0.0016	0.0020	0.0024

Drilling Parameters for DTMC Thread Mills

Material Group		Hardness		SFM (in/min)	Feed Rate (inch/tooth) for Thread Mill Diameter				
		Rc	Brn		#10	1/4"	3/8"	1/2"	5/8"
	Al wrought alloys		<150	400-750	0.0020	0.0040	0.0060	0.0080	0.0100
	Al cast alloys <10% Si			500-1000	0.0020	0.0060	0.0090	0.0120	0.0160
	Al cast alloys >10% Si			330-660	0.0020	0.0040	0.0070	0.0100	0.0120
	Cast iron - Grey	<25	<240	330-500	0.0020	0.0040	0.0060	0.0080	0.0100
	Cast iron - ductile (alloyed)	<30	<280	260-400	0.0020	0.0030	0.0040	0.0060	0.0080
	Cast iron - malleable	<32	<300	260-400	0.0020	0.0030	0.0040	0.0060	0.0080
	Non-ferrous metals, copper alloys		<180	260-500	0.0020	0.0060	0.0100	0.0120	0.0160
	Brass, short-chipping		<180	200-300	0.0020	0.0040	0.0060	0.0080	0.0100
	Plastics, Carbon/glass reinforced			330-660	0.0020	0.0060	0.0090	0.0120	0.0160