Recommendations for Micro-Thread Milling Cutters

Material Group		Hardness		SFM (in/min)	Feed Rate (inch/tooth) for Thread Mill Diameter												
		Rc	Brn		1 mm	1.5 mm	2 mm	3 mm	4 mm	5 mm	6 mm	7 mm	8 mm	9 mm	10 mm	12 mm	14 mm
	Structural Steels		<180	230-400	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0035	0.0040	0.0047
	Free cutting steels		<180	230-400	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0035	0.0040	0.0047
	Unalloyed case hardened steels	<20	<230	230-400	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0035	0.0040	0.0047
	Unalloyed heat-treatable steels	<25	<250	230-400	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0035	0.0040	0.0047
	Alloyed case hardened steels	<25	<250	200-300	0.0012	0.0012	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0040
	Alloyed heat-treatable steels	<30	<280	200-300	0.0012	0.0012	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0040
	Alloyed tool steels	<35	<320	200-300	0.0012	0.0012	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0040
	High speed tool steels	<38	<380	200-260	0.0010	0.0010	0.0013	0.0013	0.0016	0.0016	0.0020	0.0020	0.0024	0.0024	0.0026	0.0030	0.0035
	Hardened Steel (55RHC Max)	<55	<560	130-170	0.0004	0.0007	0.0007	0.0012	0.0012	0.0014	0.0014	0.0015	0.0018	0.0018	0.0019	0.0019	0.0024
	Stainless -- sulpheric		<180	130-260	0.0008	0.0008	0.0008	0.0012	0.0012	0.0015	0.0019	0.0019	0.0019	0.0024	0.0024	0.0024	0.0028
	Stainless - austenitic	<25	<250	130-260	0.0008	0.0008	0.0008	0.0012	0.0012	0.0015	0.0019	0.0019	0.0019	0.0024	0.0024	0.0024	0.0028
	Stainless - martensitic	<30	<280	130-260	0.0008	0.0012	0.0012	0.0015	0.0015	0.0019	0.0019	0.0019	0.0024	0.0028	0.0028	0.0031	0.0035
	Structural Steels	<20	<230	230-400	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0035	0.0040	0.0047
	Case hardened steels	<25	<250	200-300	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0035	0.0040	0.0047
	Heat-treatable steels	<25	<250	230-400	0.0012	0.0012	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0040
	Nitriding steels	<30	<280	200-300	0.0012	0.0012	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0040
	Al wrought alloys		<150	260-500	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0040	0.0043	0.0047	0.0055
	Al cast alloys <10% Si			500-1000	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0040	0.0043	0.0047	0.0055
	Al cast alloys >10% Si			330-650	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0035	0.0040	0.0047
	Cast iron - Grey	<25	<250	325-500	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0035	0.0040	0.0047
	Cast iron - ductile (alloyed)	<30	<280	260-500	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0035	0.0040	0.0047
	Cast iron - malleable	<35	<320	260-500	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0035	0.0040	0.0047
	Non-ferrous metals, copper alloys		<180	260-500	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0040	0.0043	0.0047	0.0055
	Brass, short-chipping		<180	200-300	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0040	0.0043	0.0047	0.0055
	Plastics, Carbon/glass reinforced			200-650	0.0019	0.0019	0.0024	0.0028	0.0028	0.0031	0.0035	0.0035	0.0040	0.0043	0.0047	0.0051	0.0059
	Titanium and Ti-alloys		140-300	65-130	0.0007	0.0007	0.0007	0.0012	0.0012	0.0015	0.0019	0.0019	0.0019	0.0024	0.0024	0.0024	0.0028
			300-380	200-300	0.0012	0.0012	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0040
	Ni-alloys	<32	<300	200-300	0.0012	0.0012	0.0015	0.0015	0.0019	0.0019	0.0024	0.0024	0.0028	0.0028	0.0031	0.0035	0.0040
		<55	<560	130-170	0.0004	0.0007	0.0007	0.0012	0.0012	0.0014	0.0014	0.0015	0.0018	0.0018	0.0019	0.0019	0.0024