

THREAD MILLING

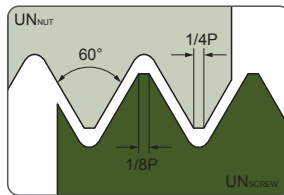


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ISO METRIC Internal Miniature Tools								
Designation	Thread Size	Pitch mm	L	L1	D1	D2	N° of Flutes	Catalog Nr.
TMC03012L5 0.35 ISO	M1.6x0.35	0.35	39	5.1	3	1.20	3	TH400001
TMC06015L6 0.4 ISO	M2.0x0.4	0.40	39	6.1	3	1.54	3	TH400019
TMC06019L7 0.45 ISO	M2.5x0.45	0.45	39	7.6	4	1.96	3	TH400016
TMC06024L9 0.5 ISO	M3.0x0.5	0.50	51	9.3	4	2.40	3	TH400013
TMC06031L12 0.7 ISO	M4.0x0.7	0.70	51	12.4	6	3.15	3	TH400004
TMC06040L15 0.8 ISO	M5.0x0.8	0.80	57	15.6	6	4.00	3	TH400010
TMC06047L19 1.0 ISO	M6.0x1.0	1.00	57	19.0	6	4.75	3	TH400007
TMC06059L24 1.25 ISO	M8.0x1.25	1.25	57	24.3	6	5.95	3	TH400022
TMC08079L31 1.5 ISO	M10x1.5	1.50	63	31.0	8	7.90	3	TH400025

Thread Length - Up to 3D

D = Nominal Thread Size



ISO 965-1:1999-11
DIN 13: 2005-08



UN Internal Miniature Tools									
Designation	Coarse UNC	Fine UNF	Pitch TPI	L	L1	D1	D2	N° of Flutes	Catalog Nr.
TMC03011L3 80UN	-	0-80UNF	80	39	3.9	3	1.18	3	TH400052
TMC03014L5 72UN	-	1-72UNF	72	39	5.8	3	1.44	3	TH400040
TMC03016L6 56UN	2-56UNC	3-56UNF	56	39	6.8	3	1.66	3	TH400034
TMC06021L8 40UN	4-40UNC	-	40	51	8.1	6	2.12	3	TH400028
TMC06024L9 40UN	5-40UNC	6-40UNF	40	51	9.8	6	2.46	3	TH400055
TMC06025L10 32UN	6-32UNC	-	32	51	10.7	6	2.57	3	TH400031
TMC06032L12 32UN	8-32UNC	10-32UNF	32	57	12.7	6	3.22	3	TH400037
TMC06052L19 28 UN	-	1/4-28UNF	28	57	19.3	6	5.20	3	TH400043
TMC08066L24 24 UN	-	5/16-24UNF	24	63	24.2	8	6.65	3	TH400049
TMC06048L19 20UN	1/4-20UNC	7/16-20UNF	20	57	19.4	6	4.85	3	TH400046

Material Group	Gr. N°	VDI Group	Material Exemples	Hardness	V _c [m/min]		
					min	max	
Steel	Non Alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	80	130	
		2		190 HB	70	110	
		3		250 HB	60	100	
	Low Alloyed	2	42CrMo4, S150, Ck60, 4140, 4340, 100Cr6	180 HB	70	110	
		4,6		230 HB	70	110	
		5,7		280 HB	60	100	
		8		350 HB	50	80	
	High Alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	70	110	
		10		280 HB	60	100	
		11		320 HB	50	80	
	Stainless Steel	Austenitic	4	304, 316, X5CrNi18-9	180 HB	70	110
14			240 HB		60	90	
Duplex		5	X2CrNi23-4, S31500	290 HB	60	80	
		14		310 HB	60	80	
Ferritic & Martensitic		6	410, X6Cr17, 17-4 PH, 430	200 HB	70	90	
		13		42 HRc	60	80	
Cast Iron		Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	60	110
			15		200 HB	70	110
			16		250 HB	60	90
		Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	60	110
			17,19		200 HB	60	90
	18,20		250 HB		60	90	
	High Temp. Alloys	Fe, Ni & Co Based	9	Incoloy 800, Inconel 700, Stellite 21	240 HB	40	60
			33		250 HB	30	50
			34		350 HB	20	40
		Ti Based	10	TiAl6V4, T40	-	40	70
			37		-	25	50
Hardened Mat.		Steel	11	X100CrMo13, 440C, G-X260NiCr42	45 HRc	30	50
			38		50 HRc	25	50
			38		55 HRc	25	40
		Chilled Cast Iron	11	Ni-Hard 2, G-X300CrMo15	400 HB	25	40
			41		55 HRc	25	40
		White Cast Iron	12	25	AlSi12	130 HB	80

Feed (mm/tooth) per cutting dia					
1.5-3.0	3.0-5.0	5.0-7.0	7.0-9.0	9.0-11	
0.030	0.040	0.060	0.070	0.090	
0.020	0.030	0.050	0.060	0.070	
0.020	0.030	0.050	0.060	0.070	
0.020	0.030	0.050	0.060	0.070	
0.020	0.030	0.050	0.060	0.070	
0.020	0.030	0.050	0.060	0.060	
0.020	0.030	0.050	0.060	0.060	
0.020	0.030	0.050	0.050	0.050	
0.020	0.020	0.030	0.040	0.050	
0.020	0.020	0.020	0.030	0.040	
0.015	0.020	0.020	0.030	0.040	
0.020	0.020	0.020	0.030	0.040	
0.020	0.030	0.060	0.070	0.080	
0.020	0.030	0.050	0.060	0.070	
0.020	0.030	0.050	0.060	0.070	
0.020	0.020	0.020	0.030	0.040	
0.015	0.015	0.015	0.020	0.020	
0.010	0.010	0.010	0.015	0.015	
0.020	0.020	0.020	0.020	0.025	
0.020	0.020	0.020	0.020	0.020	
0.010	0.010	0.020	0.020	0.020	
0.010	0.010	0.020	0.020	0.020	
0.010	0.010	0.020	0.020	0.020	
0.010	0.010	0.020	0.020	0.020	
0.030	0.030	0.040	0.060	0.120	



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