



ALLIED MACHINE & ENGINEERING

Holemaking Solutions for Today's Manufacturing



Drilling



Boring



Reaming



Burnishing



AccuThread® T3

▶ *THREADING*

Solid Carbide Thread Mills



Specials

OTHER THREADING SOLUTIONS

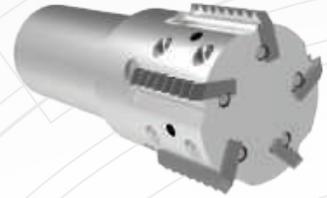
AccuThread® 856



Solid Carbide



Bolt-in Style Replaceable Inserts



Pin Style Replaceable Inserts



Solid Carbide



Coolant Through Solid Carbide

visit www.alliedmachine.com to see more



Hard Materials Just Got Easy

Allied Machine's thread milling program has developed into a comprehensive range of high precision tooling that offers outstanding productivity with exceptional levels of tool life and thread accuracy. The thread mill range covers both solid carbide and indexable replaceable insert tools offering an extensive range of thread forms.

The AccuThread T3 is built for machining hardened or hard-to-machine materials such as stainless steel, tool steel, and high-temp alloys. It is designed to machine only three threads at a time, reducing tool pressure and dramatically increasing the chances of tool survival.

AccuThread® T3 Contents

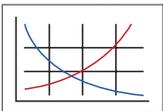
Reference Icons

The following icons will appear throughout the catalog to help you navigate between products.



Setup / Assembly Information

Detailed instructions and information regarding the corresponding part(s)



Recommended Cutting Data

Speed and feed recommendations for optimum and safe threading

Introduction Information

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Solid Carbide Thread Mills

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Online Tools

Insta-Code®

Find your thread mill. Create your program.



The all new software lets you choose the best thread mill product for your application and create the program code for your machine. Insta-Code is available as a PC download app (that can be used offline) and an online web app available 24/7 at www.alliedmachine.com/InstaCode.

Eliminate the wait. Get your program now.



Insta-Code also has a **Cycle Time Calculator**

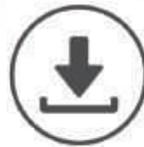


Online Version



- Generates thread mill G-code programs
- Available online 24/7
- No log-in required
- No updates needed
- Easily share the program code
- Supported on all web browsers

Download Version



- Creates program code for multiple machine platforms
- Suggests a thread mill based on application details
- Provides estimated cycle time for improved production
- Available for use offline

Offline Version Updates



- Update your offline Insta-Code software
- Download the updated .zip file, then transfer to the offline computer. Click "check for update" in your Insta-Code software and navigate to the downloaded .zip file
- This allows you to keep all your saved programs

1

Download and open
Allied_Machine_Insta-Code.zip

2

Click on **setup.exe**
to install the program

3

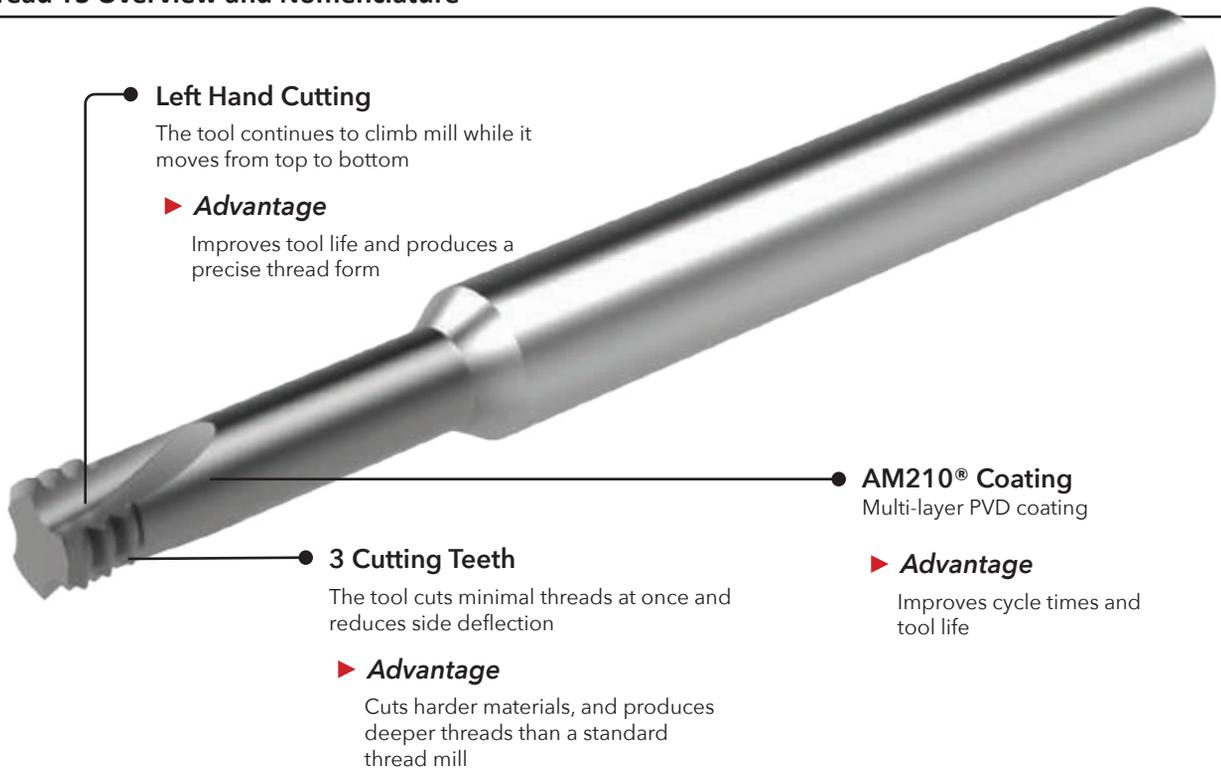
One click updates are
available for online computers

 Supported on all Windows OS

www.alliedmachine.com/InstaCode

A DRILLING
B BORING
C REAMING
D BURNISHING
E THREADING
X SPECIALS

AccuThread T3 Overview and Nomenclature



Left Hand Cutting
The tool continues to climb mill while it moves from top to bottom

► **Advantage**
Improves tool life and produces a precise thread form

AM210® Coating
Multi-layer PVD coating

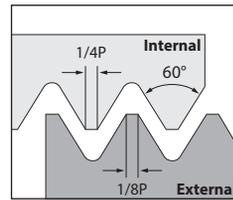
► **Advantage**
Improves cycle times and tool life

3 Cutting Teeth
The tool cuts minimal threads at once and reduces side deflection

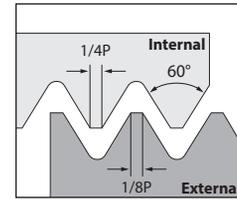
► **Advantage**
Cuts harder materials, and produces deeper threads than a standard thread mill

Additional Information

- Available in UN and ISO thread forms
- Available in imperial and metric shanks
- Available in 2xD and 3xD lengths



UN Thread Form



ISO Thread Form

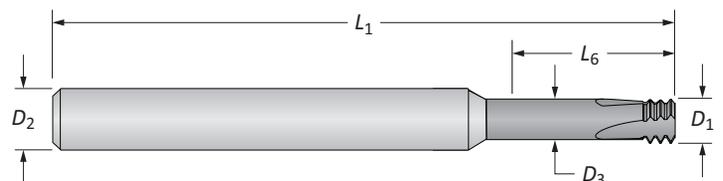
AccuThread T3 Solid Carbide Thread Mills

TM	073	64	M	-	3T	2X
1	2	3	4		5	6

1. Thread Mill	2. Min Thread Diameter	3. Pitch	4. Shank	5. Style	6. Depth to Diameter Ratio
TM = Standard	250 = 1/4 (English) 45 = M4.5 (Metric)	20 = UN 20 TPI 075 = Metric 0.75	Blank = Imperial M = Metric	3T = 3 tooth	2X = 2xD 3X = 3xD

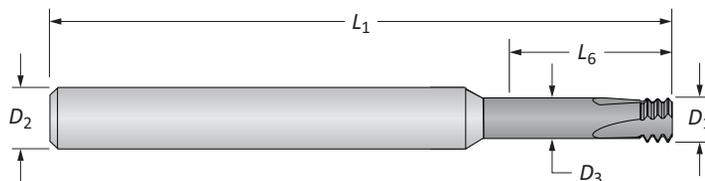
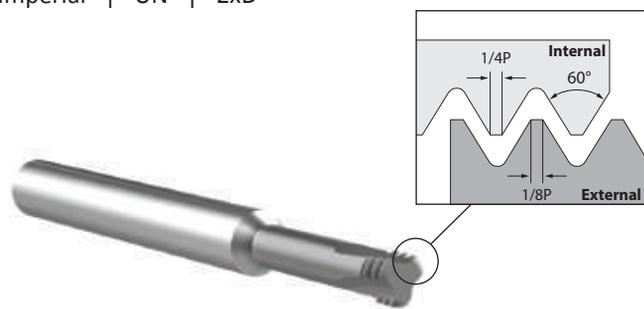
Reference Key

Symbol	Attribute
D_1	Maximum cutter diameter
D_2	Shank diameter
D_3	Undercut diameter
L_1	Overall length
L_6	Length of cut



Solid Carbide Thread Mills

Imperial | UN | 2xD



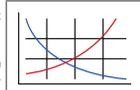
UN | Non-Coolant

TPI (Pitch)	Min Thread Ø	Flutes	Thread Mill					Part No.  AccuThread® T3
			D_1	D_3	D_2	L_6	L_1	
64	#1	3	0.055	0.035	0.250	0.150	2.500	TM07364-3T2X
56	#2	3	0.065	0.042	0.250	0.170	2.500	TM08656-3T2X
48	#3	3	0.075	0.049	0.250	0.200	2.500	TM09948-3T2X
40	#4	3	0.085	0.054	0.250	0.250	2.500	TM11240-3T2X
36	#8	3	0.130	0.095	0.250	0.350	2.500	TM16436-3T2X
32	#6	3	0.100	0.061	0.250	0.280	2.500	TM13832-3T2X
32	#8	3	0.126	0.087	0.250	0.370	2.500	TM16432-3T2X
32	#10	3	0.145	0.106	0.250	0.410	2.500	TM19032-3T2X
28	1/4	3	0.197	0.153	0.250	0.570	2.500	TM25028-3T2X
24	#10	3	0.138	0.086	0.250	0.420	2.500	TM19024-3T2X
24	5/16	3	0.260	0.208	0.312	0.670	2.500	TM31224-3T2X
20	1/4	3	0.187	0.125	0.250	0.550	2.500	TM25020-3T2X
i 20	7/16	4	0.312	0.250	0.312	0.980	2.500	TM43720-3T2X
18	5/16	3	0.236	0.168	0.250	0.670	2.500	TM31218-3T2X
16	3/8	3	0.264	0.187	0.312	0.870	2.500	TM37516-3T2X
16	3/4	4	0.495	0.414	0.500	1.500	3.500	TM75016-3T2X
14	7/16	4	0.300	0.212	0.312	0.980	2.500	TM43714-3T2X
14	7/8	4	0.620	0.528	0.625	1.750	4.000	TM87514-3T2X
13	1/2	4	0.360	0.266	0.375	1.080	3.000	TM50013-3T2X
12	9/16	4	0.410	0.308	0.500	1.240	3.500	TM56212-3T2X
12	3/4	4	0.495	0.389	0.500	1.500	3.500	TM75012-3T2X
11	5/8	4	0.470	0.355	0.500	1.250	3.500	TM62511-3T2X
10	3/4	4	0.495	0.369	0.500	1.500	3.500	TM75010-3T2X
9	7/8	4	0.620	0.480	0.625	1.750	4.000	TM87509-3T2X
8	1	4	0.620	0.463	0.625	2.000	4.000	TM10008-3T2X

E: 8 - 9

E: 10

Key on E: 1

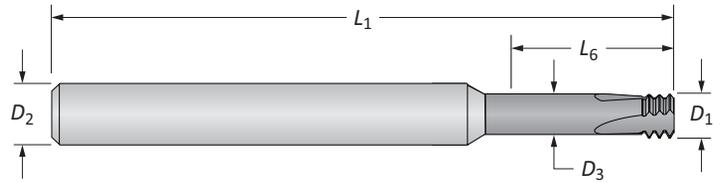
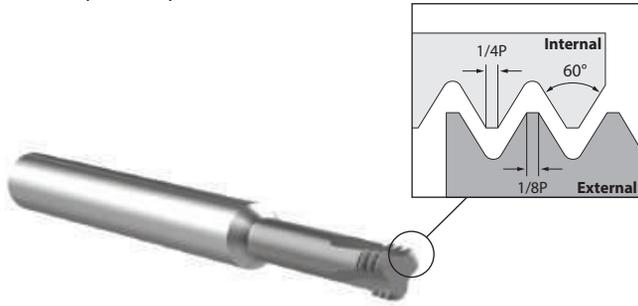


i = Imperial (in)
m = Metric (mm)



Solid Carbide Thread Mills

Metric | UN | 2xD



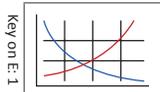
UN | Non-Coolant

TPI (Pitch)	Min Thread ϕ	Flutes	Thread Mill					Part No.  AccuThread® T3
			D_1	D_3	D_2	L_6	L_1	
64	#1	3	1.40	0.89	6.00	3.81	63.00	TM07364M-3T2X
56	#2	3	1.65	1.08	6.00	4.32	63.00	TM08656M-3T2X
48	#3	3	1.91	1.24	6.00	5.08	63.00	TM09948M-3T2X
40	#4	3	2.16	1.36	6.00	6.35	63.00	TM11240M-3T2X
36	#8	3	3.30	2.42	6.00	8.89	63.00	TM16436M-3T2X
32	#6	3	2.54	1.55	6.00	7.11	63.00	TM13832M-3T2X
32	#8	3	3.20	2.21	6.00	9.40	63.00	TM16432M-3T2X
32	#10	3	3.68	2.70	6.00	10.41	63.00	TM19032M-3T2X
28	1/4	3	5.00	3.88	6.00	14.48	63.00	TM25028M-3T2X
24	#10	3	3.51	2.20	6.00	10.67	63.00	TM19024M-3T2X
24	5/16	3	6.60	5.30	8.00	17.02	64.00	TM31224M-3T2X
M 20	1/4	3	4.75	3.18	6.00	13.97	63.00	TM25020M-3T2X
20	7/16	4	7.92	6.36	8.00	24.89	64.00	TM43720M-3T2X
18	5/16	3	5.94	4.26	6.00	17.02	63.00	TM31218M-3T2X
16	3/8	3	6.71	4.76	8.00	22.10	64.00	TM37516M-3T2X
16	3/4	4	11.94	9.88	12.00	38.10	88.90	TM75016M-3T2X
14	7/16	4	7.62	5.39	8.00	24.89	64.00	TM43714M-3T2X
14	7/8	4	15.75	13.42	16.00	44.45	100.00	TM87514M-3T2X
12	3/4	4	11.94	9.24	12.00	38.10	88.90	TM75012M-3T2X
11	5/8	4	11.94	9.01	12.00	31.75	88.90	TM62511M-3T2X
10	3/4	4	11.94	8.73	12.00	38.10	88.90	TM75010M-3T2X
9	7/8	4	15.75	12.20	16.00	44.45	100.00	TM87509M-3T2X
8	1	4	15.75	11.77	16.00	50.80	100.00	TM10008M-3T2X

M

E: 8-9

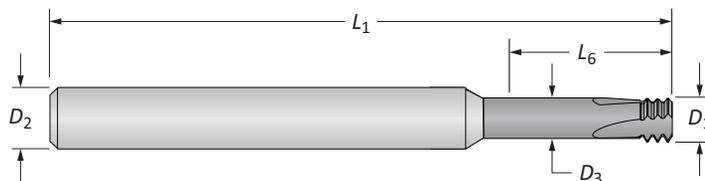
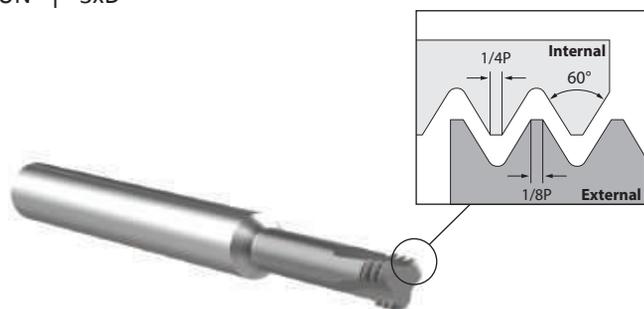
E: 10



I = Imperial (in)
 M = Metric (mm)

Solid Carbide Thread Mills

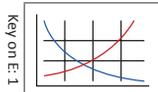
UN | 3xD



UN | Non-Coolant

TPI (Pitch)	Min Thread Ø	Flutes	Thread Mill					Part No.  AccuThread® T3
			D_1	D_3	D_2	L_6	L_1	
40	#4	3	0.085	0.054	0.250	0.310	2.500	TM11240-3T3X
32	#6	3	0.100	0.061	0.250	0.410	2.500	TM13832-3T3X
32	#8	3	0.126	0.087	0.250	0.490	2.500	TM16432-3T3X
32	#10	3	0.145	0.106	0.250	0.590	2.500	TM19032-3T3X
28	1/4	3	0.197	0.153	0.250	0.750	2.500	TM25028-3T3X
24	#10	3	0.138	0.086	0.250	0.590	2.500	TM19024-3T3X
24	5/16	3	0.260	0.208	0.312	0.940	2.500	TM31224-3T3X
20	1/4	3	0.187	0.125	0.250	0.750	2.500	TM25020-3T3X
18	5/16	3	0.236	0.168	0.250	0.910	2.500	TM31218-3T3X
16	3/4	4	0.495	0.414	0.500	2.250	4.000	TM75016-3T3X
14	7/8	4	0.620	0.528	0.625	2.625	4.000	TM87514-3T3X
12	3/4	4	0.495	0.389	0.500	2.250	4.000	TM75012-3T3X
11	5/8	4	0.470	0.355	0.500	1.875	4.000	TM62511-3T3X
10	3/4	4	0.495	0.369	0.500	2.250	4.000	TM75010-3T3X
9	7/8	4	0.620	0.480	0.625	2.625	4.000	TM87509-3T3X
8	1	4	0.620	0.463	0.625	3.000	4.500	TM10008-3T3X
40	#4	3	2.16	1.36	6.00	7.87	63.00	TM11240M-3T3X
32	#6	3	2.54	1.55	6.00	10.41	63.00	TM13832M-3T3X
32	#8	3	3.20	2.21	6.00	12.45	63.00	TM16432M-3T3X
32	#10	3	3.68	2.70	6.00	14.99	63.00	TM19032M-3T3X
28	1/4	3	5.00	3.88	6.00	19.05	63.00	TM25028M-3T3X
24	#10	3	3.51	2.20	6.00	14.99	63.00	TM19024M-3T3X
24	5/16	3	6.60	5.30	8.00	23.88	64.00	TM31224M-3T3X
20	1/4	3	4.75	3.18	6.00	19.05	63.00	TM25020M-3T3X
18	5/16	3	5.94	4.21	6.00	23.11	63.00	TM31218M-3T3X
16	3/4	4	11.94	9.88	12.00	57.15	88.90	TM75016M-3T3X
14	7/8	4	15.75	13.42	16.00	66.68	100.00	TM87514M-3T3X
12	3/4	4	11.94	9.24	12.00	57.15	88.90	TM75012M-3T3X
11	5/8	4	11.94	9.01	12.00	47.63	88.90	TM62511M-3T3X
10	3/4	4	11.94	8.73	12.00	57.15	88.90	TM75010M-3T3X
9	7/8	4	15.75	12.20	16.00	66.68	100.00	TM87509M-3T3X
8	1	4	15.75	11.77	16.00	76.20	114.30	TM10008M-3T3X

E: 8 - 9



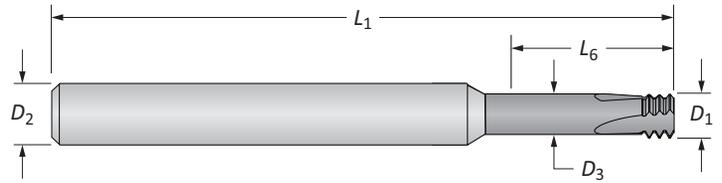
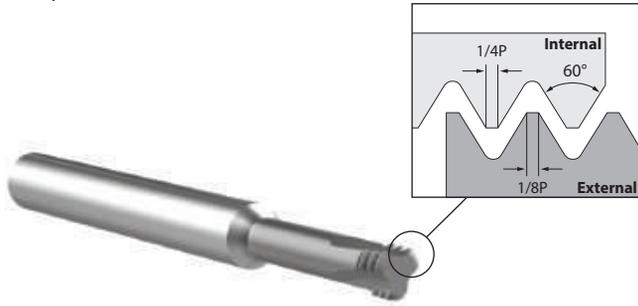
E: 10





Solid Carbide Thread Mills

ISO | 2xD



ISO | Non-Coolant

	Pitch	Min Thread ϕ	Flutes	Thread Mill					Part No.
				D_1	D_3	D_2	L_6	L_1	AccuThread® T3
i	0.35	M1.8	3	0.053	0.033	0.250	0.170	2.500	TM18035-3T2X
	0.40	M2	3	0.061	0.041	0.250	0.180	2.500	TM20040-3T2X
	0.45	M2.5	3	0.077	0.055	0.250	0.220	2.500	TM25045-3T2X
	0.50	M3	3	0.093	0.068	0.250	0.260	2.500	TM30050-3T2X
	0.60	M3.5	3	0.108	0.078	0.250	0.300	2.500	TM35060-3T2X
	0.70	M4	3	0.122	0.088	0.250	0.350	2.500	TM40070-3T2X
	0.75	M4.5	3	0.133	0.095	0.250	0.430	2.500	TM45075-3T2X
	0.80	M5	3	0.150	0.111	0.250	0.490	2.500	TM50080-3T2X
	1.00	M6	3	0.183	0.134	0.250	0.550	2.500	TM60100-3T2X
	1.25	M8	3	0.234	0.173	0.250	0.710	2.500	TM80125-3T2X
	1.50	M10	4	0.307	0.234	0.312	0.910	2.500	TM10150-3T2X
	1.50	M14	4	0.370	0.293	0.375	1.100	3.500	TM14150-3T2X
	1.50	M18	4	0.495	0.418	0.500	1.420	3.500	TM18150-3T2X
	1.75	M12	4	0.310	0.225	0.312	0.945	2.500	TM12175-3T2X
2.00	M16	4	0.470	0.370	0.500	1.260	3.500	TM16200-3T2X	
2.50	M20	4	0.590	0.466	0.625	1.570	4.000	TM20250-3T2X	
3.00	M24	4	0.620	0.472	0.625	1.890	4.000	TM24300-3T2X	
m	0.35	M1.8	3	1.35	0.84	6.00	4.32	63.00	TM18035M-3T2X
	0.40	M2	3	1.55	1.04	6.00	4.60	63.00	TM20040M-3T2X
	0.45	M2.5	3	1.96	1.38	6.00	5.60	63.00	TM25045M-3T2X
	0.50	M3	3	2.36	1.73	6.00	6.60	63.00	TM30050M-3T2X
	0.60	M3.5	3	2.74	1.99	6.00	7.60	63.00	TM35060M-3T2X
	0.70	M4	3	3.10	2.22	6.00	8.90	63.00	TM40070M-3T2X
	0.75	M4.5	3	3.38	2.41	6.00	10.92	63.00	TM45075M-3T2X
	0.80	M5	3	3.81	2.81	6.00	12.40	63.00	TM50080M-3T2X
	1.00	M6	3	4.65	3.41	6.00	14.00	63.00	TM60100M-3T2X
	1.25	M8	3	5.94	4.40	6.00	18.00	63.00	TM80125M-3T2X
	1.50	M10	4	7.80	5.95	8.00	23.10	64.00	TM10150M-3T2X
	1.50	M14	4	9.40	7.45	10.00	27.94	88.90	TM14150M-3T2X
	1.50	M18	4	11.94	9.98	12.00	36.07	88.90	TM18150M-3T2X
	1.75	M12	4	7.92	5.78	8.00	24.00	64.00	TM12175M-3T2X
2.00	M16	4	11.94	9.40	12.00	32.00	88.90	TM16200M-3T2X	
2.50	M20	4	14.99	11.83	16.00	39.88	100.00	TM20250M-3T2X	
3.00	M24	4	15.75	11.98	16.00	48.01	100.00	TM24300M-3T2X	

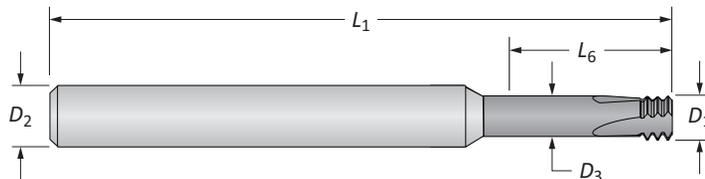
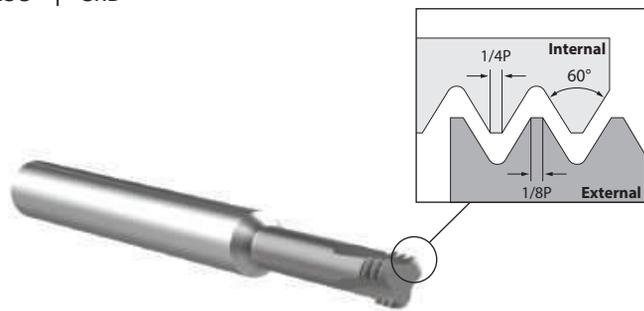
E: 8-9 E: 10

i = Imperial (in)
m = Metric (mm)

A DRILLING
B BORING
C REAMING
D BURNISHING
E THREADING
X SPECIALS

Solid Carbide Thread Mills

ISO | 3xD

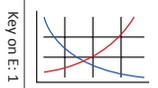


ISO | Non-Coolant

Pitch	Min Thread Ø	Flutes	Thread Mill					Part No.
			D_1	D_3	D_2	L_6	L_1	
0.45	M2.5	3	0.077	0.055	0.250	0.300	2.500	TM25045-3T3X
0.50	M3	3	0.093	0.068	0.250	0.370	2.500	TM30050-3T3X
0.60	M3.5	3	0.108	0.078	0.250	0.450	2.500	TM35060-3T3X
0.70	M4	3	0.122	0.088	0.250	0.490	2.500	TM40070-3T3X
0.80	M5	3	0.150	0.111	0.250	0.630	2.500	TM50080-3T3X
1.00	M6	3	0.183	0.134	0.250	0.790	2.500	TM60100-3T3X
1.25	M8	3	0.234	0.173	0.250	0.940	2.500	TM80125-3T3X
1.50	M10	4	0.307	0.234	0.312	1.120	2.500	TM10150-3T3X
1.50	M14	4	0.370	0.293	0.375	1.650	3.500	TM14150-3T3X
1.50	M18	4	0.495	0.418	0.500	2.120	4.000	TM18150-3T3X
1.75	M12	4	0.310	0.225	0.312	1.418	2.500	TM12175-3T3X
2.00	M16	4	0.470	0.370	0.500	1.950	4.000	TM16200-3T3X
2.50	M20	4	0.590	0.466	0.625	2.360	4.000	TM20250-3T3X
3.00	M24	4	0.620	0.472	0.625	2.830	4.000	TM24300-3T3X
0.45	M2.5	3	1.96	1.38	6.00	7.60	63.00	TM25045M-3T3X
0.50	M3	3	2.36	1.73	6.00	9.40	63.00	TM30050M-3T3X
0.60	M3.5	3	2.74	1.99	6.00	11.40	63.00	TM35060M-3T3X
0.70	M4	3	3.10	2.22	6.00	12.40	63.00	TM40070M-3T3X
0.80	M5	3	3.81	2.81	6.00	16.00	63.00	TM50080M-3T3X
1.00	M6	3	4.65	3.41	6.00	20.10	63.00	TM60100M-3T3X
1.25	M8	3	5.94	4.40	6.00	23.90	63.00	TM80125M-3T3X
1.50	M10	4	7.80	5.95	8.00	28.40	64.00	TM10150M-3T3X
1.50	M14	4	9.40	7.45	10.00	41.91	88.90	TM14150M-3T3X
1.50	M18	4	11.94	9.98	12.00	53.85	88.90	TM18150M-3T3X
1.75	M12	4	7.92	5.78	8.00	36.00	64.00	TM12175M-3T3X
2.00	M16	4	11.94	9.40	12.00	49.53	88.90	TM16200M-3T3X
2.50	M20	4	14.99	11.83	16.00	59.94	100.00	TM20250M-3T3X
3.00	M24	4	15.75	11.98	16.00	71.88	100.00	TM24300M-3T3X

E: 8 - 9

E: 10



i = Imperial (in)
m = Metric (mm)

Recommended Cutting Data | Imperial (inch)

Solid Carbide | AccuThread® T3

ISO	Material	Hardness (BHN)	Speed (SFM)	Chipload per Tooth (IPT) by Cutter Diameter						
				0.055" - 0.125"	0.126" - 0.188"	0.189" - 0.250"	0.251" - 0.312"	0.313" - 0.375"	0.376" - 0.500"	0.501" - 0.750"
P	Free-Machining Steel 1118, 1215, 12L14, etc.	100 - 150	375	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
		150 - 200	275	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
		200 - 250	225	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
	Low-Carbon Steel 1010, 1020, 1025, 1522, 1144, etc.	85 - 125	375	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
		125 - 175	275	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
		175 - 225	225	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
		225 - 275	200	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
	Medium-Carbon Steel 1030, 1040, 1050, 1527, 1140, 1151, etc.	125 - 175	225	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031
		175 - 225	200	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031
		225 - 275	175	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031
		275 - 325	150	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031
	Alloy Steel 4140, 5140, 8640, etc.	125 - 175	225	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031
175 - 225		200	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031	
225 - 275		175	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031	
275 - 325		150	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031	
325 - 375		125	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031	
High-Strength Alloy 4340, 4330V, 300M, etc.	225 - 300	175	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031	
	300 - 350	150	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031	
	350 - 400	125	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031	
Structural Steel A36, A285, A516, etc.	100 - 150	225	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035	
	150 - 250	200	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035	
	250 - 350	150	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035	
Tool Steel H-13, H-21, A-4, O-2, S-3, etc.	150 - 200	175	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031	
	200 - 250	125	0.0008	0.0010	0.0012	0.0016	0.0020	0.0026	0.0031	
S	High-Temp Alloy Hastelloy B, Inconel 600, etc.	140 - 220	100	0.0006	0.0008	0.0012	0.0016	0.0018	0.0020	0.0025
		220 - 310	75	0.0006	0.0008	0.0012	0.0016	0.0018	0.0020	0.0025
	Titanium Alloy	140 - 220	100	0.0006	0.0008	0.0012	0.0016	0.0018	0.0020	0.0025
		220 - 310	75	0.0006	0.0008	0.0012	0.0016	0.0018	0.0020	0.0025
Aerospace Alloy S82	185 - 275	100	0.0006	0.0008	0.0012	0.0016	0.0018	0.0020	0.0025	
	275 - 350	75	0.0006	0.0008	0.0012	0.0016	0.0018	0.0020	0.0025	
M	Stainless Steel 416, 420, etc.	185 - 275	225	0.0008	0.0010	0.0012	0.0016	0.0018	0.0020	0.0025
		275 - 350	200	0.0008	0.0010	0.0012	0.0016	0.0018	0.0020	0.0025
	Stainless Steel 300 Series 304, 316, 17-4PH, etc.	135 - 185	125	0.0008	0.0010	0.0012	0.0016	0.0018	0.0020	0.0025
		185 - 275	75	0.0008	0.0010	0.0012	0.0016	0.0018	0.0020	0.0025
	Super Duplex Stainless Steel	135 - 185	125	0.0006	0.0008	0.0012	0.0016	0.0018	0.0020	0.0025
185 - 275		75	0.0006	0.0008	0.0012	0.0016	0.0018	0.0020	0.0025	
H	Hardened Steels	450 - 500	175	0.0006	0.0008	0.0012	0.0016	0.0018	0.0020	0.0025
		500 - 550	125	0.0006	0.0008	0.0012	0.0016	0.0018	0.0020	0.0025
K	Cast Iron Grey, Ductile, Nodular	120 - 150	275	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
		150 - 200	250	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
		200 - 220	225	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
		220 - 260	200	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
		260 - 320	200	0.0008	0.0010	0.0014	0.0018	0.0020	0.0030	0.0035
N	Wrought Aluminum	30	500	0.0010	0.0012	0.0018	0.0020	0.0030	0.0040	0.0048
		180	450	0.0010	0.0012	0.0018	0.0020	0.0030	0.0040	0.0048
	Cast Aluminum	30 - 180	250	0.0010	0.0012	0.0018	0.0020	0.0030	0.0040	0.0048
	Brass	30 - 100	500	0.0010	0.0012	0.0018	0.0020	0.0030	0.0040	0.0048

NOTICE: Reduce feed and speed by 30% for tapered thread forms due to additional material removal

*Refer to recommended pass chart in the AMPC (Allied Master Product Catalog) on page E: 53 when referencing material machinability

**Uncoated thread mills are recommended for cast aluminum applications

Recommended Cutting Data | Metric (mm)

Solid Carbide | AccuThread® T3

ISO	Material	Hardness (BHN)	Speed (M/min)	Chipload per Tooth (mm/tooth) by Cutter Diameter						
				1.40 mm - 3.17 mm	3.18 mm - 4.77 mm	4.78 mm - 6.35 mm	6.36 mm - 7.92 mm	7.93 mm - 9.52 mm	9.53 mm - 12.70 mm	12.71 mm - 19.05 mm
P	Free-Machining Steel 1118, 1215, 12L14, etc.	100 - 150	115	0.020	0.025	0.035	0.045	0.050	0.075	0.090
		150 - 200	85	0.020	0.025	0.035	0.045	0.050	0.075	0.090
		200 - 250	70	0.020	0.025	0.035	0.045	0.050	0.075	0.090
	Low-Carbon Steel 1010, 1020, 1025, 1522, 1144, etc.	85 - 125	115	0.020	0.025	0.035	0.045	0.050	0.075	0.090
		125 - 175	85	0.020	0.025	0.035	0.045	0.050	0.075	0.090
		175 - 225	70	0.020	0.025	0.035	0.045	0.050	0.075	0.090
	Medium-Carbon Steel 1030, 1040, 1050, 1527, 1140, 1151, etc.	225 - 275	60	0.020	0.025	0.035	0.045	0.050	0.075	0.090
		125 - 175	70	0.020	0.025	0.030	0.040	0.050	0.065	0.080
		175 - 225	60	0.020	0.025	0.030	0.040	0.050	0.065	0.080
	Alloy Steel 4140, 5140, 8640, etc.	225 - 275	50	0.020	0.025	0.030	0.040	0.050	0.065	0.080
		275 - 325	45	0.020	0.025	0.030	0.040	0.050	0.065	0.080
		325 - 375	38	0.020	0.025	0.030	0.040	0.050	0.065	0.080
		275 - 325	45	0.020	0.025	0.030	0.040	0.050	0.065	0.080
	High-Strength Alloy 4340, 4330V, 300M, etc.	325 - 375	38	0.020	0.025	0.030	0.040	0.050	0.065	0.080
		225 - 300	50	0.020	0.025	0.030	0.040	0.050	0.065	0.080
		300 - 350	45	0.020	0.025	0.030	0.040	0.050	0.065	0.080
	Structural Steel A36, A285, A516, etc.	350 - 400	38	0.020	0.025	0.030	0.040	0.050	0.065	0.080
		100 - 150	70	0.020	0.025	0.035	0.045	0.050	0.075	0.090
150 - 250		60	0.020	0.025	0.035	0.045	0.050	0.075	0.090	
Tool Steel H-13, H-21, A-4, O-2, S-3, etc.	250 - 350	45	0.020	0.025	0.035	0.045	0.050	0.075	0.090	
	150 - 200	50	0.020	0.025	0.030	0.040	0.050	0.065	0.080	
200 - 250	38	0.020	0.025	0.030	0.040	0.050	0.065	0.080		
	140 - 220	30	0.015	0.020	0.030	0.040	0.045	0.050	0.065	
S	High-Temp Alloy Hastelloy B, Inconel 600, etc.	220 - 310	23	0.015	0.020	0.030	0.040	0.045	0.050	0.065
		140 - 220	30	0.015	0.020	0.030	0.040	0.045	0.050	0.065
	Titanium Alloy	220 - 310	23	0.015	0.020	0.030	0.040	0.045	0.050	0.065
		185 - 275	30	0.015	0.020	0.030	0.040	0.045	0.050	0.065
Aerospace Alloy S82	275 - 350	23	0.015	0.020	0.030	0.040	0.045	0.050	0.065	
	185 - 275	30	0.015	0.020	0.030	0.040	0.045	0.050	0.065	
M	Stainless Steel 416, 420, etc.	275 - 350	60	0.020	0.025	0.030	0.040	0.045	0.050	0.065
		135 - 185	38	0.020	0.025	0.030	0.040	0.045	0.050	0.065
	Stainless Steel 300 Series 304, 316, 17-4PH, etc.	185 - 275	23	0.020	0.025	0.030	0.040	0.045	0.050	0.065
		135 - 185	38	0.015	0.020	0.030	0.040	0.045	0.050	0.065
	Super Duplex Stainless Steel	185 - 275	23	0.015	0.020	0.030	0.040	0.045	0.050	0.065
H	Hardened Steels	450 - 500	50	0.015	0.020	0.030	0.040	0.045	0.050	0.065
		500 - 550	38	0.015	0.020	0.030	0.040	0.045	0.050	0.065
K	Cast Iron Grey, Ductile, Nodular	120 - 150	85	0.020	0.025	0.035	0.045	0.050	0.075	0.090
		150 - 200	75	0.020	0.025	0.035	0.045	0.050	0.075	0.090
		200 - 220	70	0.020	0.025	0.035	0.045	0.050	0.075	0.090
		220 - 260	60	0.020	0.025	0.035	0.045	0.050	0.075	0.090
		260 - 320	60	0.020	0.025	0.035	0.045	0.050	0.075	0.090
N	Wrought Aluminum	30	150	0.025	0.030	0.045	0.050	0.075	0.100	0.120
		180	135	0.025	0.030	0.045	0.050	0.075	0.100	0.120
	Cast Aluminum	30 - 180	75	0.025	0.030	0.045	0.050	0.075	0.100	0.120
		Brass	30 - 100	150	0.025	0.030	0.045	0.050	0.075	0.100

NOTICE: Reduce feed and speed by 30% for tapered thread forms due to additional material removal

*Refer to recommended pass chart in the AMPC (Allied Master Product Catalog) on page E: 53 when referencing material machinability

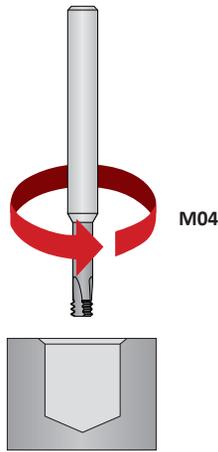
**Uncoated thread mills are recommended for cast aluminum applications

A DRILLING
B BORING
C REAMING
D BURNISHING
E THREADING
X SPECIALS

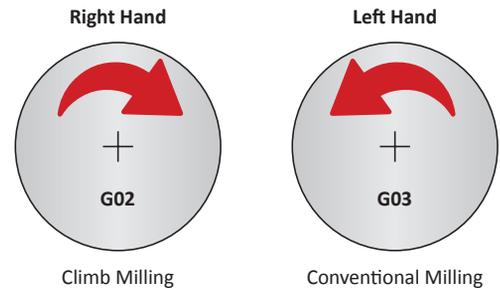
Technical Information

Spindle Rotation

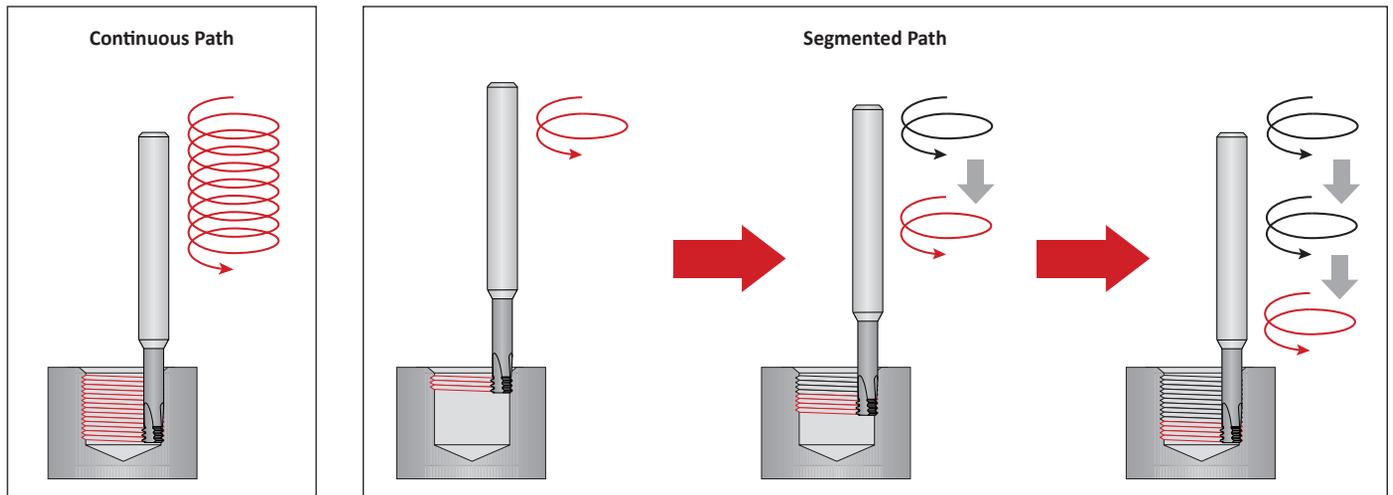
! Tools are left hand cutting. The left hand cut allows the tool to climb mill when creating a right hand thread with an AccuThread T3. Climb milling reduces deflection and heat generated during the cut.



Direction of Helical Interpolation



Programming Z-Axis Cutting Path



Start Point

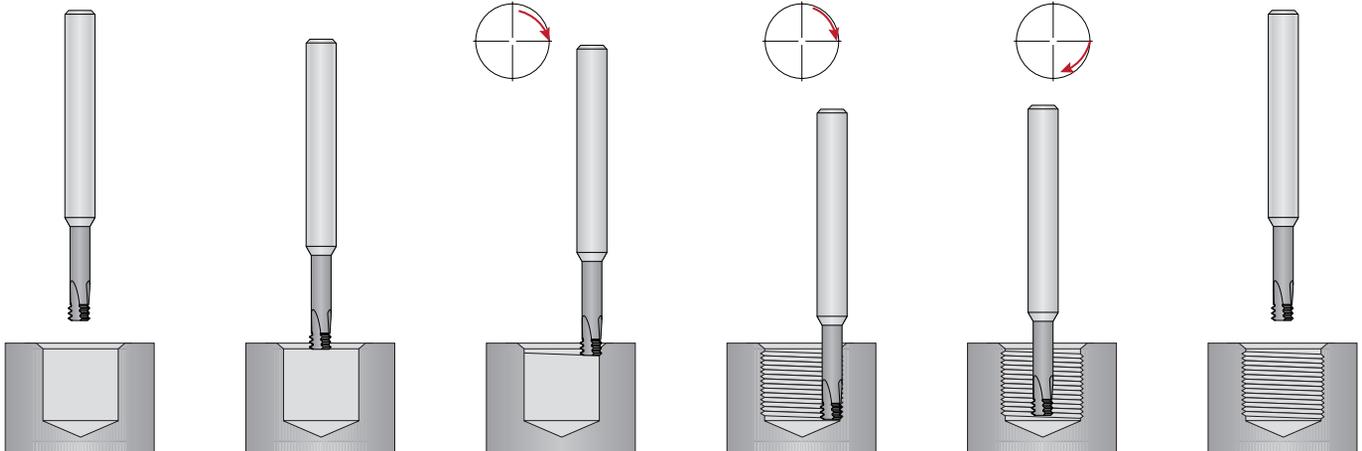
Center Location

Arc Entrance

Thread Milling

Arc Exit

End Point



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Complete information as to operating conditions, machine, setup, and the application of cutting fluid should accompany any product returned for inspection. This warranty shall not apply to any Allied Machine products which have been subjected to misuse, abuse, improper operating conditions, improper machine setup or improper application of cutting fluid or which have been repaired or altered if such repair or alteration, in the judgement of Allied Machine, would adversely affect the performance of the product.

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