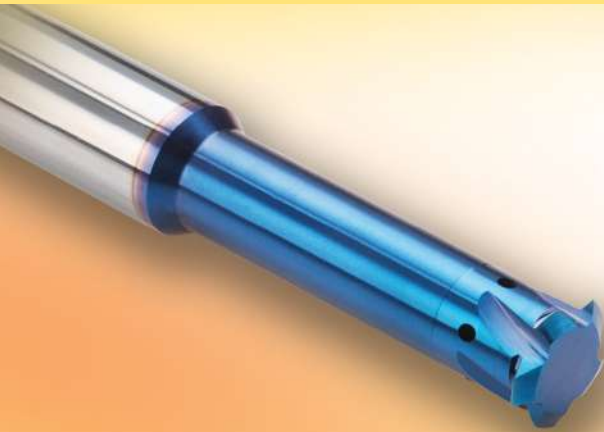


Mini Mill-Thread



MTS

- Threading from ISO M1 x 0.25 and 0-80UN.
- Working in high cutting speed.
- Short machining time.
- Low cutting forces thanks to the short profile.
- No broken taps.
- Machining of hardened materials up to 45 HRc.

Carbide grade: MT7

Sub-Micron grade with Titanium Aluminum Nitride multi-layer coating (ISO K10 - K20). To be run at medium to high cutting speeds. General purpose for all materials

MTI - For threading deep parts

Carbide grade: MT8 Sub-micron grade with advanced PVD triple coating (ISO K10-K20). Extremely high heat resistant and smooth cutting operation, for high performance, and normal machining conditions. General purpose for all materials.

MT11 Ultra-fine Sub-micron grade with advanced PVD triple blue coating

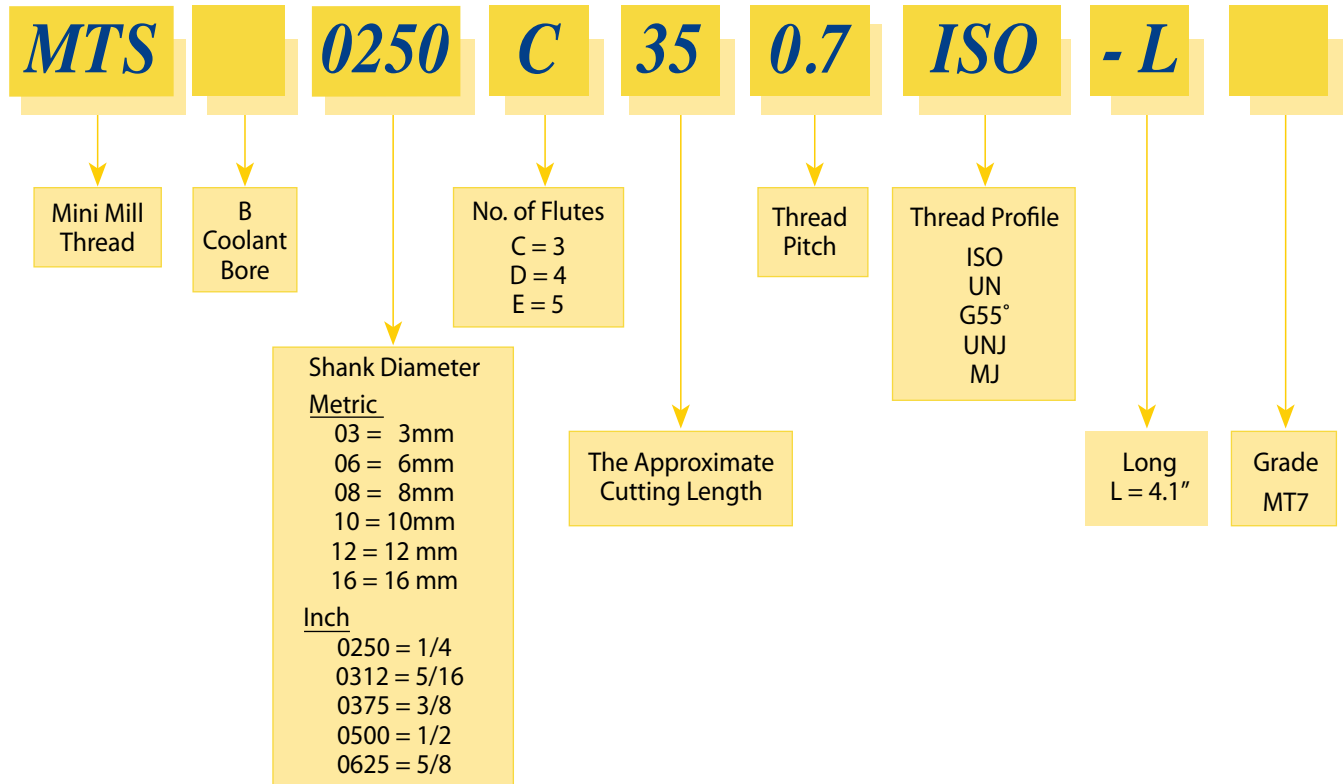
Advantages

- Enables machining in deep holes.
- Same tool can produce a wide range of threads and pitches.
- Same tool can produce both External and Internal threads.
- Coolant through the flutes is very effective for deep holes.
- Spiral flutes allow smooth cutting action.
- Shorter machining time due to multi (3 to 5) flutes.
- Longer tool life due to special triple coating.

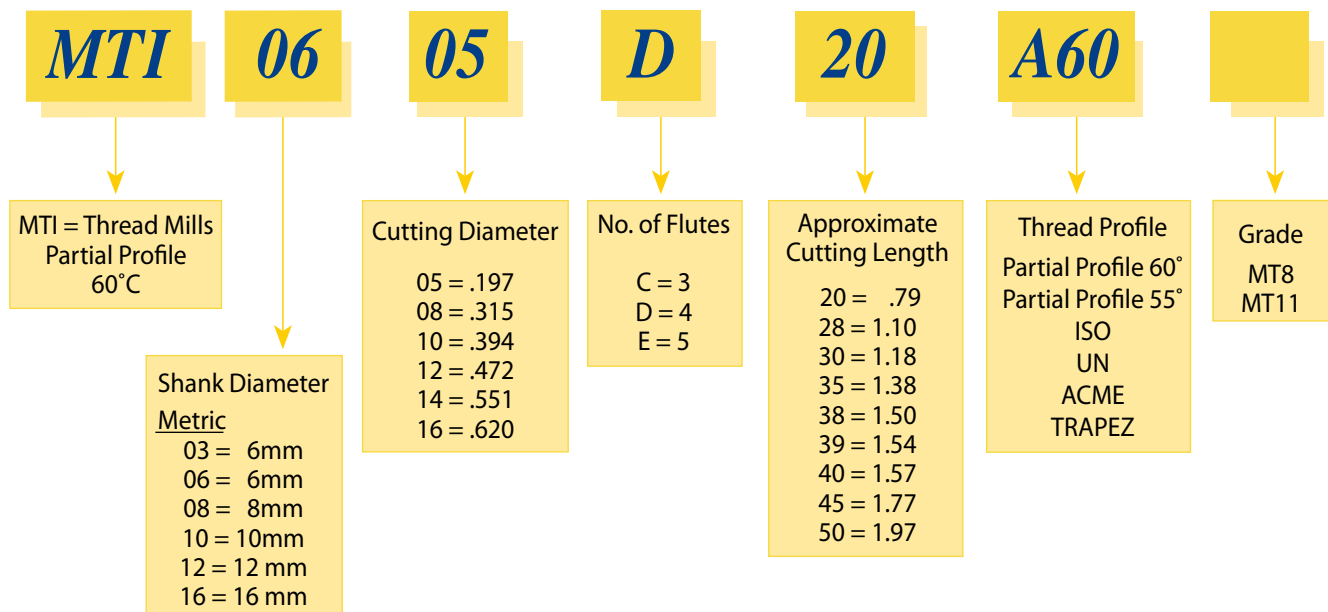
Contents:	Page:	Contents:	Page:
Product Identification	262	UN	271
MTS		MTI	
ISO	263-264	Partial Profile 60°	272
UN	265-266	Partial Profile 60° - with Internal Coolant through the flutes	272
G55°	267	Partial Profile 55°	273
UNJ - with Internal Coolant through the flutes	268	ISO	274
MJ - with Internal Coolant through the flutes	268	UN	274
MTSB		Trapez	275
ISO	270	Acme	276

Product Identification

Mini Mill-Thread MTS Ordering Codes

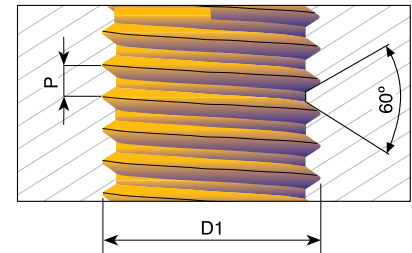


Mini Mill-Thread MTI Ordering Codes



ISO

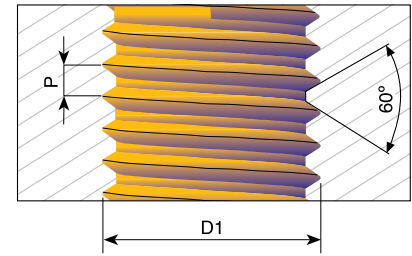
Tools for Internal Thread



Pitch mm	M coarse	M fine	Ordering Code	d	D	No. of Flutes	I	L	Thread depth
0.25	M1		MTS03007C2 0.25 ISO	3 mm	.028	3	.10	1.5	2.5xD1
0.25	M1.2	M1.4	MTS03009C3 0.25 ISO	3 mm	.035	3	.12	1.5	2xD1
0.3	M1.4		MTS03011C4 0.3 ISO	3 mm	.041	3	.16	1.5	3xD1
0.35	M1.6	M2	MTS03012C5 0.35 ISO	3 mm	.047	3	.19	1.5	3xD1
	M1.6	M2	MTS06012C5 0.35 ISO-L	6 mm	.047	3	.19	4.1	3xD1
0.35		M5, M6	MTS06045D14 0.35 ISO	6 mm	.177	4	.57	2.3	3xD1
0.4	M2		MTS0250C18 0.4 ISO	1/4	.060	3	.18	2.5	2xD1
	M2		MTS06016C4 0.4 ISO-L	6 mm	.060	3	.18	4.1	2xD1
	M2		MTS03016C6 0.4 ISO	3 mm	.060	3	.24	1.5	3xD1
	M2		MTS03016C10 0.4 ISO	3 mm	.060	3	.41	1.5	5xD1
0.45	M2.2		MTS0250C20 0.45 ISO	1/4	.065	3	.20	2.5	2xD1
	M2.2		MTS03017C7 0.45 ISO	3 mm	.065	3	.28	1.5	3xD1
0.45	M2.5		MTS0250C22 0.45 ISO	1/4	.077	3	.22	2.5	2xD1
	M2.5		MTS0602C5 0.45 ISO-L	6 mm	.077	3	.22	4.1	2xD1
	M2.5		MTS0250C30 0.45 ISO	1/4	.077	3	.30	2.5	3xD1
	M2.5		MTS0602C8 0.45 ISO-L	6 mm	.077	3	.31	4.1	3xD1
	M2.5		MTS0302C10 0.45 ISO	3 mm	.077	3	.41	1.5	4xD1
0.5	M3		MTS0250C26 0.5 ISO	1/4	.093	3	.26	2.5	2xD1
	M3		MTS06024C6 0.5 ISO-L	6 mm	.093	3	.26	4.1	2xD1
	M3		MTS0250C37 0.5 ISO	1/4	.093	3	.37	2.5	3xD1
	M3		MTS06024C9 0.5 ISO-L	6 mm	.093	3	.37	4.1	3xD1
	M3		MTS03024C12 0.5 ISO	3 mm	.094	3	.49	1.5	4xD1
	M3		MTS03024C15 0.5 ISO	3 mm	.094	3	.61	1.5	5xD1
		M4, M5		MTS06034D8 0.5 ISO	6 mm	.134	4	.33	2.3
	M4, M5		MTS06034D12 0.5 ISO	6 mm	.134	4	.49	2.3	3xD1
0.5		M6, M7	MTS06054D20 0.5 ISO	6 mm	.211	4	.79	2.3	3xD1
0.6	M3.5		MTS0250C30 0.6 ISO	1/4	.108	3	.30	2.5	2xD1
	M3.5		MTS06028C10 0.6 ISO	6 mm	.108	3	.41	2.3	3xD1
0.7	M4		MTS0250C35 0.7 ISO	1/4	.122	3	.35	2.5	2xD1
	M4		MTS0250C49 0.7 ISO	1/4	.122	3	.49	2.5	3xD1
	M4		MTS06031C12 0.7 ISO-L	6 mm	.122	3	.49	4.1	3xD1
	M4		MTS06031C16 0.7 ISO	6 mm	.122	3	.66	2.3	4xD1
0.75	M4.5	M5	MTS06034C9 0.75 ISO	6 mm	.134	3	.39	2.3	2xD1
		M6	MTS06049D12 0.75 ISO	6 mm	.193	4	.50	2.3	2xD1
		M10, M12	MTS0808D25 0.75 ISO	8 mm	.315	4	.98	2.5	2.5xD1
0.8	M5		MTS0250C49 0.8 ISO	1/4	.150	3	.49	2.5	2xD1
	M5		MTS0250C63 0.8 ISO	1/4	.150	3	.63	2.5	3xD1
	M5		MTS06038C16 0.8 ISO-L	6 mm	.150	3	.63	4.1	3xD1
	M5		MTS0604C20 0.8 ISO	6 mm	.157	3	.82	2.3	4xD1

Order example: MTS 0250 C26 0.5 ISO MT7

ISO Tools for Internal Thread



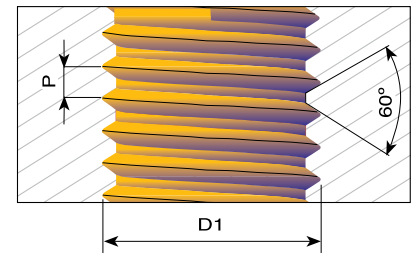
Pitch mm	M coarse	M fine	Ordering Code	d	D	No. of Flutes	I	L	Thread depth
1.0	M6	M8	MTS0250C55 1.0 ISO	1/4	.183	3	.55	2.5	2xD1
	M6	M8	MTS0250C79 1.0 ISO	1/4	.183	3	.79	2.5	3xD1
	M6	M8	MTS06047C20 1.0 ISO-L	6 mm	.183	3	.79	4.1	3xD1
	M6	M8	MTS06048C25 1.0 ISO	6 mm	.189	3	.98	2.3	4xD1
1.0		M10, M12	MTS0808D31 1.0 ISO	8 mm	.315	4	1.22	2.5	3xD1
1.25	M8	M10, M12	MTS0250C71 1.25 ISO	1/4	.236	3	.71	2.5	2xD1
	M8	M10, M12	MTS0250C94 1.25 ISO	1/4	.236	3	.94	2.5	3xD1
	M8	M10, M12	MTS0606C24 1.25 ISO-L	6 mm	.236	3	.94	4.1	3xD1
	M8	M10, M12	MTS08064C33 1.25 ISO	8 mm	.252	3	1.32	2.5	4xD1
1.5	M10	M14, M16	MTS0312C91 1.5 ISO	5/16	.307	3	.91	2.5	2xD1
	M10	M14, M16	MTS08078C31 1.5 ISO	8 mm	.307	3	1.24	2.5	3xD1
	M10	M14, M16	MTS08078C31 1.5 ISO-L	8 mm	.307	3	1.24	4.1	3xD1
	M10	M14, M16	MTS0808C41 1.5 ISO	8 mm	.315	3	1.63	3.1	4xD1

- Machining Titanium, surgical stainless steels and hardened materials up to 45 HRC.
- Suitable for high speed air turbine machines (30,000-40,000 RPM) and for standard machining centers (6,000 RPM and higher).
- Can also be used for general purpose threading.

Order example: [MTS 03024C12 0.5 ISO MT7](#)

UN

Tools for Internal Thread

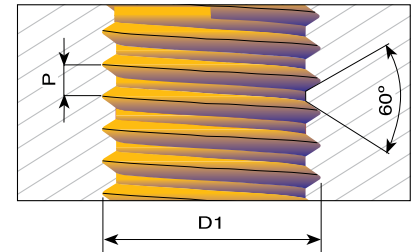


Pitch TPI	UNC	UNF	Ordering Code	d	D	No. of Flutes	l	L	Thread depth
80		0	MTS0250C16 80 UN	1/4	.045	3	.16	2.5	3xD1
		0	MTS03012C8 80 UN	3 mm	.045	3	.31	1.5	5xD1
72		1	MTS0250C15 72 UN	1/4	.057	3	.15	2.5	2xD1
		1	MTS03015C6 72 UN	3 mm	.057	3	.24	1.5	3xD1
64	1	2	MTS0250C15 64 UN	1/4	.055	3	.15	2.5	2xD1
56	2	3	MTS03016C4 56 UN	3 mm	.065	3	.17	1.5	2xD1
	2	3	MTS0250C17 56 UN	1/4	.065	3	.17	2.5	2xD1
	2	3	MTS03016C6 56 UN	3 mm	.065	3	.26	1.5	3xD1
	2	3	MTS0250C26 56 UN	1/4	.065	3	.26	2.5	3xD1
	2	3	MTS06016C6 56 UN-L	6 mm	.065	3	.26	4.1	3xD1
	2	3	MTS03016C9 56 UN	3 mm	.065	3	.36	1.5	4xD1
	2	3	MTS03016C11 56 UN	3 mm	.065	3	.45	1.5	5xD1
48	3	4	MTS0250C20 48 UN	1/4	.075	3	.20	2.5	2xD1
40	4		MTS0250C25 40 UN	1/4	.083	3	.25	2.5	2xD1
	4		MTS06021C6 40 UN-L	6 mm	.083	3	.25	4.1	2xD1
	4		MTS03021C8 40 UN	3 mm	.083	3	.31	1.5	3xD1
	4		MTS0250C31 40 UN	1/4	.083	3	.31	2.5	3xD1
	4		MTS06021C8 40 UN-L	6 mm	.083	3	.31	4.1	3xD1
	4		MTS03021C12 40 UN	3 mm	.083	3	.47	1.5	4xD1
40	5	6	MTS0250C28 40 UN	1/4	.096	3	.28	2.5	2xD1
	5	6	MTS0250C38 40 UN	1/4	.096	3	.38	2.5	3xD1
36		8	MTS0250C35 36 UN	1/4	.130	3	.35	2.5	2xD1
32	6		MTS0250C28 32 UN	1/4	.100	3	.28	2.5	2xD1
	6		MTS06025C7 32 UN-L	6 mm	.100	3	.28	4.1	2xD1
	6		MTS03025C10 32 UN	3 mm	.100	3	.41	1.5	3xD1
	6		MTS0250C40 32 UN	1/4	.100	3	.41	2.5	3xD1
	6		MTS06025C10 32 UN-L	6 mm	.100	3	.41	4.1	3xD1
	6		MTS03025C14 32 UN	3 mm	.100	3	.58	1.5	4xD1
32	8		MTS0250C37 32 UN	1/4	.126	3	.37	2.5	2xD1
	8		MTS06032C9 32 UN-L	6 mm	.126	3	.37	4.1	2xD1
	8		MTS0250C49 32 UN	1/4	.126	3	.49	2.5	3xD1
	8		MTS06032C12 32 UN-L	6 mm	.126	3	.49	4.1	3xD1
	8		MTS06032C17 32 UN	6 mm	.126	3	.69	2.3	4xD1
32		10	MTS0250C41 32 UN	1/4	.146	3	.41	2.5	2xD1
		10	MTS0250C59 32 UN	1/4	.146	3	.59	2.5	3xD1
		10	MTS06037C15 32 UN-L	6	.146	3	.59	4.1	3xD1
		10	MTS06037C20 32 UN	6	.146	3	.79	2.3	4xD1

Order example: MTS 0250C28 40 UN MT7

UN

Tools for Internal Thread



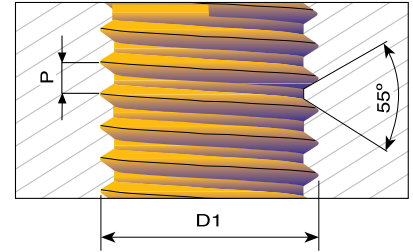
Pitch TPI	UNC	UNF	Ordering Code	d	D	No. of Flutes	l	L	Thread depth
28		12	MTS0250C43 28 UN	1/4	.165	3	.43	2.5	2xD1
28		1/4	MTS0250C57 28 UN	1/4	.197	3	.57	2.5	2xD1
		1/4	MTS0250C75 28 UN	1/4	.197	3	.75	2.5	3xD1
		1/4	MTS0605C19 28 UN-L	6 mm	.197	3	.75	4.1	3xD1
		1/4							
24	10, 12		MTS0250C42 24 UN	1/4	.138	3	.42	2.5	2xD1
	10, 12		MTS06035C15 24 UN	6 mm	.138	3	.61	2.3	3xD1
24		5/16, 3/8	MTS0312C67 24 UN	5/16	.260	3	.67	2.5	2xD1
		5/16, 3/8	MTS0312C94 24 UN	5/16	.260	3	.94	2.5	3xD1
20	1/4		MTS0250C55 20 UN	1/4	.187	3	.55	2.5	2xD1
	1/4		MTS06047C14 20 UN-L	6 mm	.187	3	.55	4.1	2xD1
	1/4		MTS0250C75 20 UN	1/4	.187	3	.75	2.5	3xD1
	1/4		MTS06047C19 20 UN-L	6 mm	.187	3	.75	4.1	3xD1
20		7/16	MTS0312C98 20 UN	5/16	.312	3	.98	2.5	2xD1
		7/16	MTS0808C34 20 UN	8 mm	.315	3	1.36	2.5	3xD1
18	5/16		MTS0250C67 18 UN	1/4	.236	3	.67	2.5	2xD1
	5/16		MTS0250C91 18 UN	1/4	.236	3	.91	2.5	3xD1
18		5/8	MTS0500D14 18 UN	1/2	.500	4	1.38	3.5	2xD1
		5/8	MTS1212D49 18 UN	12 mm	.472	4	1.93	4.1	3xD1
16	3/8		MTS0312C87 16 UN	5/16	.264	3	.87	2.5	2xD1
	3/8		MTS08067C30 16 UN	8 mm	.264	3	1.19	2.5	3xD1
14	7/16		MTS0312C98 14 UN	5/16	.303	3	.98	2.5	2xD1
	7/16		MTS08077C35 14 UN	8 mm	.303	3	1.39	2.5	3xD1
13	1/2		MTS0375C10 13 UN	3/8	.362	3	1.08	3.0	2xD1
	1/2		MTS10092C40 13 UN	10 mm	.362	3	1.58	2.9	3xD1
12	9/16		MTS0500C12 12 UN	1/2	.413	3	1.24	3.5	2xD1
	9/16		MTS12105C45 12 UN	12 mm	.413	3	1.77	4.1	3xD1
11	5/8		MTS0500C13 11 UN	1/2	.449	3	1.36	3.5	2xD1
	5/8		MTS12114C50 11 UN	12 mm	.449	3	1.97	4.1	3xD1
10	3/4		MTS16144D41 10 UN	5/8	.567	4	1.63	4.0	2xD1
	3/4		MTS16144D59 10 UN	16 mm	.567	4	2.35	4.1	3xD1

Order example: MTS 0250C26 56UN MT7

- Machining Titanium, surgical stainless steels and hardened materials up to 45 HRC.
- Suitable for high speed air turbine machines (30,000-40,000 RPM) and for standard machining centers (6,000 RPM and higher).
- Can also be used for general purpose threading.

G 55° BSW, BSP

Same Tool for Internal and External Thread - Metric Shanks



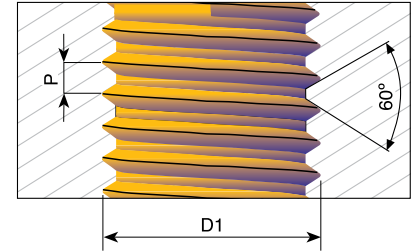
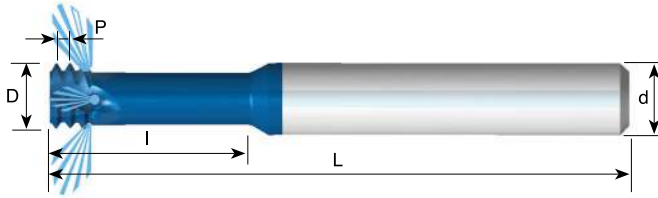
For thread depth up to 2 x D1

Pitch TPI	Standard	Ordering Code	d mm	D	No. of Flutes	I	L
28	G 1/8	MTS08078C19 28 W	8	.307	3	0.77	2.5
19	G 1/4 - 3/8	MTS1010D30 19 W	10	.393	4	1.18	2.9
14	G 1/2 - 7/8	MTS1212D37 14 W	12	.472	4	1.46	3.3
11	G ≥ 1	MTS1616D44 11 W	16	.630	4	1.73	4.1

Order example: MTS 1212D37 14 W MT7

UNJ With internal coolant through the flutes

Tools for Internal Thread - Metric Shanks



For thread depth up to 2.5 x D1

Pitch TPI	UNJC	UNJF	Ordering Code	d mm	D	No. of Flutes	l	L
* 32	6		MTS06025C7 32 UNJ	6	.100	3	.28	2.3
* 32	8	10	MTS06033C10 32 UNJ	6	.130	3	.41	2.3
28		1/4	MTS08051C16 28 UNJ	8	.201	3	.63	2.5
24		5/16, 3/8	MTS08067C20 24 UNJ	8	.264	3	.79	2.5
* 20	1/4		MTS06049C16 20 UNJ	6	.193	3	.63	2.3
20		7/16	MTS0808C28 20 UNJ	8	.315	3	1.10	2.5
18	5/16		MTS08061C20 18 UNJ	8	.242	3	.79	2.5
16	3/8		MTS08069C24 16 UNJ	8	.272	3	.94	2.5
14	7/16		MTS08079C25 14 UNJ	8	.311	3	.98	2.5
13	1/2		MTS10094C27 13 UNJ	10	.370	3	1.08	2.9

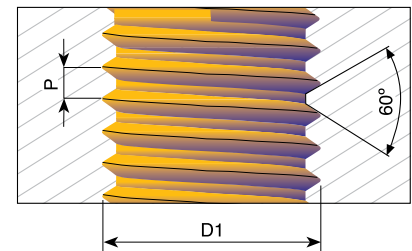
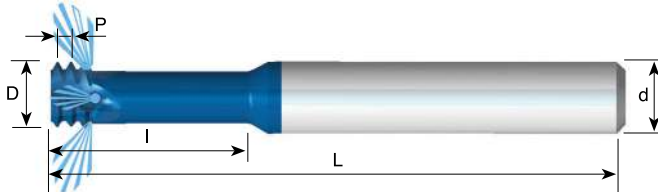
* Cutters without coolant

Order example: MTS 06049C16 20 UNJ MT8

Carbide grade MT8 Sub Micron grade with advanced PVD triple coating (ISO K 10-K20). Extremely high heat resistant and smooth cutting operation, for high performance, and normal machining conditions. General purpose for all materials

MJ With internal coolant through the flutes

Tools for Internal Thread - Metric Shanks



For thread depth up to 2.5 x D1

Pitch TPI	D1	Ordering Code	d mm	D	No. of Flutes	l	L
* 0.7	MJ4	MTS06032C10 0.7 MJ	6	.126	3	.39	2.3
* 0.8	MJ5	MTS06039C12 0.8 MJ	6	.154	3	.49	2.3
* 1.0	MJ6	MTS06048C15 1.0 MJ	6	.189	3	.59	2.3
1.25	MJ8	MTS08061C20 1.25 MJ	8	.240	3	.79	2.5
1.5	MJ10	MTS0808C25 1.5 MJ	8	.315	3	.98	2.5
1.75	MJ12	MTS10092C30 1.75 MJ	10	.362	3	1.18	2.9
2.0	MJ14, MJ16	MTS1010C35 2.0 MJ	10	.394	3	1.38	2.9

* Cutters without coolant

Order example: MTS 06048C15 1.0 MJ MT8

Carbide grade MT8 Sub Micron grade with advanced PVD triple coating (ISO K 10-K20). Extremely high heat resistant and smooth cutting operation, for high performance, and normal machining conditions. General purpose for all materials

MTSB

Carmex has developed new innovative solid carbide thread milling cutters **MTSB** with internal coolant **Bore**.

The coolant bores provides high coolant pressure through the tool into the application pre-hole, and wash the chips away.

High pressure coolant extends tool life.

The coolant liquid cools the tool cutting edge efficiently.

Excellent solution for:



- Small and deep threads.
- Thread milling operation on horizontal machining centers, where chips are concentrated at the bottom of the thread, and external coolant can't wash the chips away.
- Complicated applications, when external coolant is inefficient, or can't reach the machined area.
- In cases where the tool collet is close to the application pre-hole, and blocks the external coolant.

Can be also used on any other thread milling operation (blind or through hole) requiring improved performance with highest thread quality.

Features:

- Increased number of flutes for high performance, shorter cycle time and improved tool life.
- Works at high machining parameters (increased productivity).
- Advanced PVD triple coating.
- Threads size: M1.2 up to M8
0-80 up to 12-24UNC

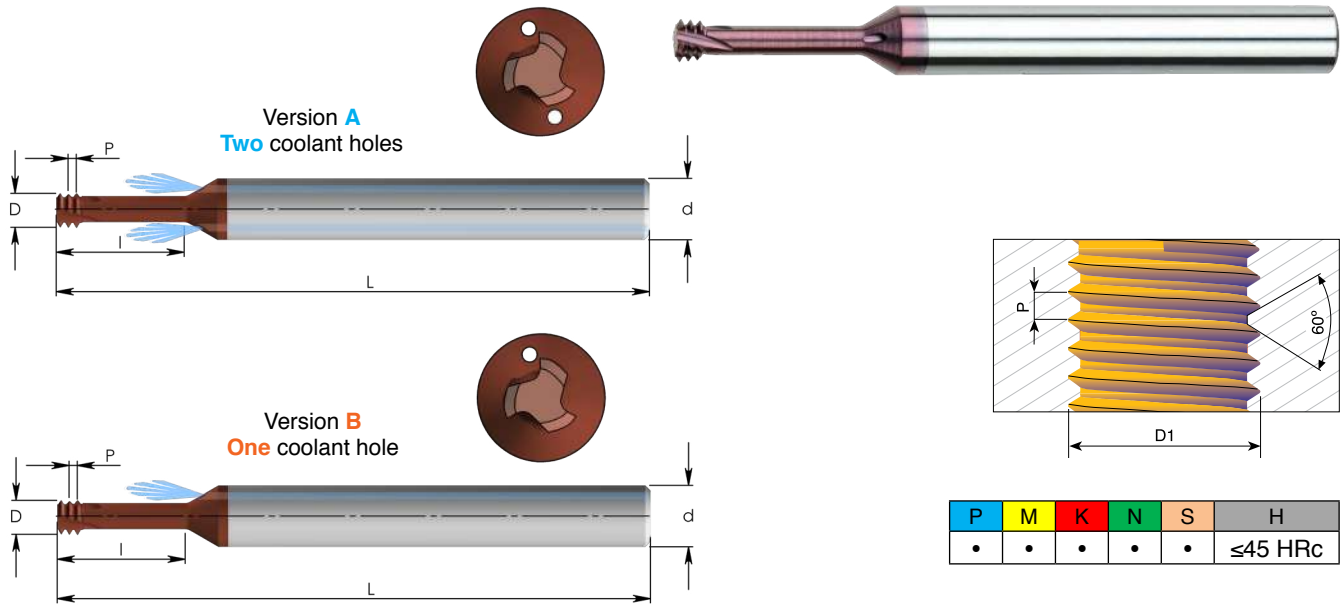
Carbide grade: MT7

Sub-Micron grade with advance PVD triple coating.

Extremely high heat resistance and smooth cutting operation, for high performance and normal machining conditions.

ISO

Tools for Internal Thread

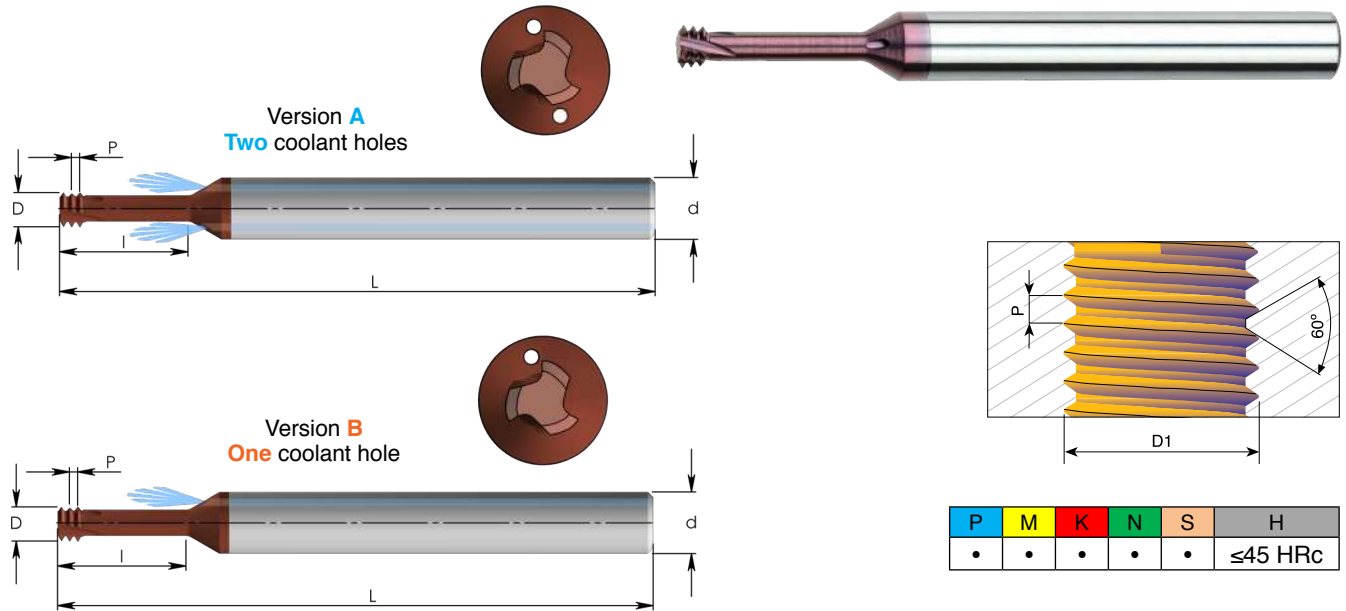


Pitch mm	M coarse	M Fine	Ordering Code	d mm	D	No. of Flutes	I	L	Thread depth	Version
0.25	M1.2	M1.4	MTSB 06009 C2 0.25 ISO	6	.035	3	.11	2.3	2xD1	A
0.3	M1.4		MTSB 06011 C4 0.3 ISO	6	.041	3	.18	2.3	3xD1	A
0.35	M1.6	M2	MTSB 06012 C5 0.35 ISO	6	.047	3	.20	2.3	3xD1	A
0.4	M2		MTSB 06016 C4 0.4 ISO	6	.061	3	.17	2.3	2xD1	A
0.4	M2		MTSB 06016 C6 0.4 ISO	6	.061	3	.25	2.3	3xD1	A
0.45	M2.5		MTSB 0602 D5 0.45 ISO	6	.077	4	.22	2.3	2xD1	A
0.45	M2.5		MTSB 0602 D7 0.45 ISO	6	.077	4	.31	2.3	3xD1	A
0.5	M3		MTSB 06024 D6 0.5 ISO	6	.094	4	.26	2.3	2xD1	A
0.5	M3		MTSB 06024 D9 0.5 ISO	6	.094	4	.37	2.3	3xD1	A
0.6	M3.5		MTSB 06028 D7 0.6 ISO	6	.110	4	.30	2.3	2xD1	A
0.7	M4		MTSB 06032 D8 0.7 ISO	6	.126	4	.34	2.3	2xD1	B
0.7	M4		MTSB 06032 D12 0.7 ISO	6	.126	4	.50	2.3	3xD1	B
0.8	M5		MTSB 06038 D10 0.8 ISO	6	.150	4	.43	2.3	2xD1	B
0.8	M5		MTSB 06038 D15 0.8 ISO	6	.150	4	.62	2.3	3xD1	B
1.0	M6	M8	MTSB 08048 D13 1.0 ISO	8	.189	4	.51	2.5	2xD1	B
1.0	M6	M8	MTSB 08048 D19 1.0 ISO	8	.189	4	.75	2.5	3xD1	B

Order example: MTSB 06012 C5 0.35 ISO MT7

UN

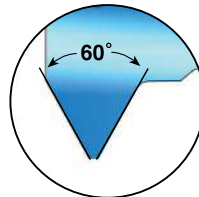
Tools for Internal Thread



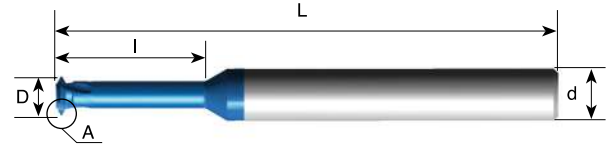
Pitch TPI	UNC	UNF	Ordering Code	d mm	D	No. of Flutes	I	L	Thread depth	Version
80		0	MTSB 06012 C4 80 UN	6	.045	3	.19	2.3	3xD1	A
72		1	MTSB 06014 C5 72 UN	6	.057	3	.23	2.3	3xD1	A
56	2	3	MTSB 06016 C4 56 UN	6	.065	3	.19	2.3	2xD1	A
56	2	3	MTSB 06016 C7 56 UN	6	.065	3	.28	2.3	3xD1	A
48	3	4	MTSB 06019 D5 48 UN	6	.075	4	.22	2.3	2xD1	A
40	4		MTSB 06021 D6 40 UN	6	.083	4	.25	2.3	2xD1	A
40	4		MTSB 06021 D9 40 UN	6	.083	4	.36	2.3	3xD1	A
40	4		MTSB 06021 D12 40 UN	6	.083	4	.47	2.3	4xD1	A
40	5	6	MTSB 06024 D7 40 UN	6	.096	4	.28	2.3	2xD1	A
32	6		MTSB 06025 D7 32 UN	6	.100	4	.31	2.3	2xD1	A
32	6		MTSB 06025 D11 32 UN	6	.100	4	.44	2.3	3xD1	A
32	8		MTSB 06032 D9 32 UN	6	.126	4	.36	2.3	2xD1	B
32	8		MTSB 06032 D13 32 UN	6	.126	4	.52	2.3	3xD1	B
32		10	MTSB 06037 D10 32 UN	6	.146	4	.41	2.3	2xD1	B
32		10	MTSB 06037 D15 32 UN	6	.146	4	.60	2.3	3xD1	B
24	10, 12		MTSB 06035 D10 24 UN	6	.138	4	.42	2.3	2xD1	B
24	10, 12		MTSB 06035 D15 24 UN	6	.138	4	.61	2.3	3xD1	B

Order example: MTSB 06016 C4 56 UN MT7

Partial Profile 60° Same Tool for Internal and External Thread Metric Shanks



Detail A

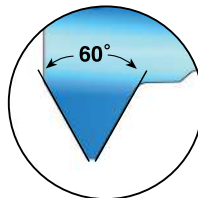


Pitch mm	Pitch TPI	Ordering Code	M Coarse	M Fine	UN, UNC, UNS UNF, UNEF	d mm	D	No. of Flutes	I	L
0.25-0.35	100-72	MTI03012C3 A60	M1.6 x 0.35	M1.6 x 0.25 M1.8 x 0.25 M2.0 x 0.25	0-80 UNF	3	.045	3	.12	1.5
0.35-0.45	72-56	MTI03014C4 A60	M2 x 0.4 M2.2 x 0.45	M2 x 0.35 M2.2 x 0.35	1-64 UNC, 1-72 UNF, 2-56 UNC, 2-64 UNF	3	.055	3	.15	1.5
0.35-0.6	72-40	MTI03019C5 A60	M2.5 x 0.45	M2.5 x 0.35 M3 x 0.35	3-84 UNC, 3-56 UNF, 4-40 UNC, 4-48 UNF	3	.075	3	.20	1.5
0.5 -0.8	48-32	MTI03024C7 A60	M3 x 0.5 M3.5 x 0.6	M3.5 x 0.5	5-40 UNC, 5-44 UNF, 6-32 UNC, 6-40 UNF	3	.096	3	.28	1.5
0.5 -1.0	48-24	MTI06032C9 A60	M4 x 0.7 M4.5 x 0.75	M4 x 0.5	8-32 UNC, 8-36 UNF, 10-24 UNC, 10-28 UNS, 10-32 UNF	6	.126	3	.37	2.3
0.5 -1.0	48-24	MTI0604C12 A60	M5 x 0.8 M6 x 1.0	M5 x 0.5 M5.5 x 0.5 M5 x 0.75	10-36 UNS, 10-40 UNS, 10-48 UNS, 12-24 UNC, 12-28 UNF	6	.157	3	.49	2.3

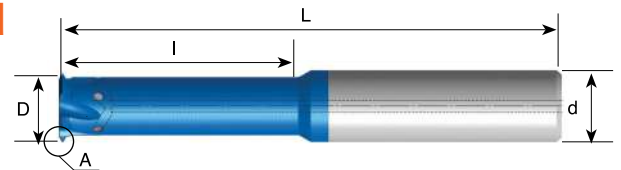
Order example: MTI 03024C7 A60 MT11

Carbide grade: **MT11** Ultra-fine Sub-micron grade with PVD triple Blue coating

Partial Profile 60° With internal coolant through the flutes Same Tool for Internal and External Thread Metric Shanks



Detail A



For threading deep parts

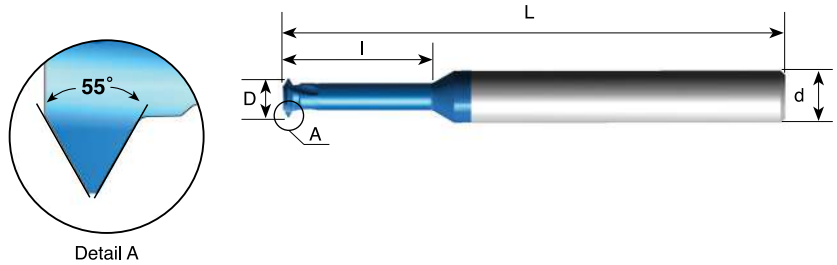
Pitch mm	Pitch TPI	Thread Dia. (mm)	Ordering Code	d mm	D	No. of Flutes	I	L
Int. 0.5 - 0.8 Ex. 0.4 - 0.8	56-28 64-32	ø ≥ 6	MTI0605D20 A60	6	.197	4	.79	2.3
		ø ≥ 9	MTI0808D28 A60	8	.315	4	1.10	2.5
		ø ≥ 13	MTI1212E38 A60	12	.472	5	1.50	3.3
Int. 1.0 - 1.75 Ex. 0.8 - 1.5	28-14 32-16	ø ≥ 10	MTI0808D30 A60	8	.315	4	1.18	2.5
		ø ≥ 12	MTI1010D35 A60	10	.394	4	1.38	2.9
		ø ≥ 14	MTI1212E39 A60	12	.472	5	1.54	3.3
Int. 2.0 - 3.0 Ex. 1.75-2.5	13- 8 15-10	ø ≥ 16	MTI1212E40 A60	12	.472	5	1.57	3.3
		ø ≥ 18	MTI1614E45 A60	16	.551	5	1.77	4.0
		ø ≥ 20	MTI1616E50 A60	16	.630	5	1.97	4.0

Order example: MTI 0808D28 A60 MT8

Carbide grade: **MT8** With triple Blue coating

Partial Profile 55°

Same Tool for Internal and External Thread - Metric Shanks



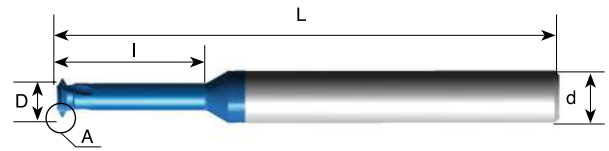
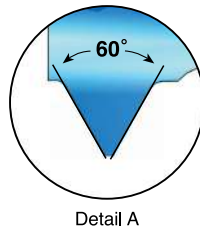
Pitch TPI	Ordering Code	d mm	D	No. of Flutes	l	L
40-32	MTI03023C7 A55	3	.089	3	.28	1.5
28-20	MTI06044C14 A55	6	.171	3	.55	2.3
28-18	MTI06059C20 A55	6	.230	3	.81	2.3
20-14	MTI0807C23 A55	8	.276	3	.91	2.5

Order example: MTI 06044C14A55 MT11

Carbide grade: MT11 Ultra-fine Sub-micron grade with PVD triple Blue coating

ISO

Tools for Internal Thread Metric Shanks



For thread depth up to 3.5 x D1

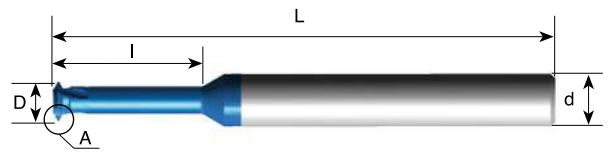
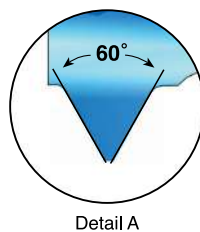
Pitch mm	M Coarse	M Fine	Ordering Code	d mm	D	No. of Flutes	I	L
0.25	M1 x 0.25		MTI03007C3 0.25 ISO	3	.028	3	.14	1.5
0.25	M1.2 x 0.25	M1.4 x 0.25 M1.6 x 0.25	MTI03009C4 0.25 ISO	3	.035	3	.17	1.5
0.3	M1.4 x 0.3		MTI03011C5 0.3 ISO	3	.041	3	.20	1.5
0.35	M1.6 x 0.35	M2 x 0.35 M2.2 x 0.35	MTI03012C6 0.35 ISO	3	.047	3	.22	1.5
0.4	M2 x 0.4		MTI03016C7 0.4 ISO	3	.061	3	.28	1.5
0.5	M3 x 0.5	M3.5 x 0.5 M4 x 0.5	MTI03024C10 0.5 ISO	3	.093	3	.42	1.5

Order example: MTI 03012C6 0.35 ISO MT11

Carbide grade: MT11 Ultra-fine Sub-micron grade with PVD triple Blue coating

UN

Tools for Internal Thread Metric Shanks



For thread depth up to 3.5 x D1

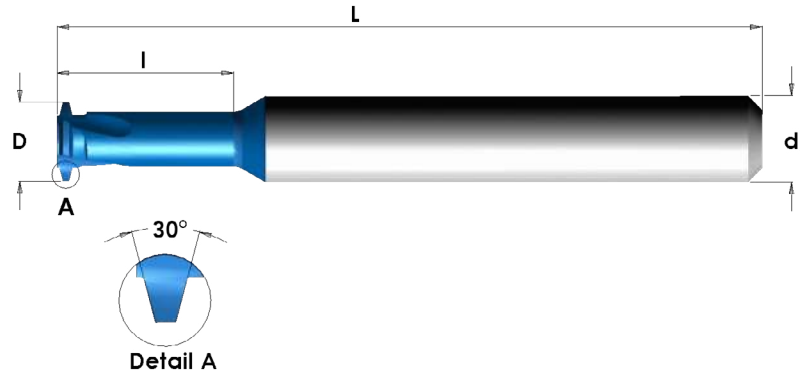
Pitch TPI	UNC	UNF	Ordering Code	d mm	D	No. of Flutes	I	L
80		0	MTI03012C5 80 UN	3	.045	3	.22	1.5
72		1	MTI03015C7 72 UN	3	.057	3	.26	1.5
56	2	3	MTI03016C9 56 UN	3	.065	3	.35	1.5
40	4		MTI03021C10 40 UN	3	.083	3	.40	1.5

Order example: MTI 03016C9 56 UN MT11

Carbide grade: MT11 Ultra-fine Sub-micron grade with PVD triple Blue coating

Trapez-DIN 103

Tools for Internal Thread

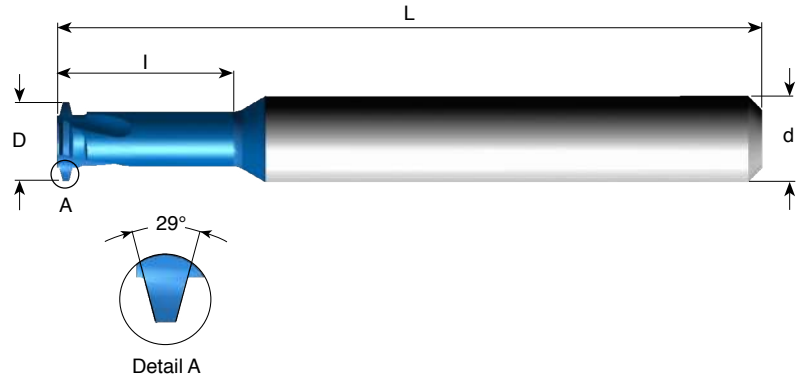


For thread depth up to 2 x D1

Pitch mm	Thread size	Ordering Code	d mm	D	No. of Flutes	I	L
1.5	Tr8x1.5 Tr9x1.5	MTI06055C13 1.5 TR	6	.217	3	.53	2.3
2	Tr10x2 Tr11x2	MTI08066C21 2 TR	8	.260	3	.83	2.5
2	Tr12x2 Tr14x2	MTI10086D25 2 TR	10	.339	4	.98	2.9
3	Tr12x3	MTI0807C25 3 TR	8	.276	3	.98	2.5
3	Tr14x3 Tr22x3	MTI10089D29 3 TR	10	.350	4	1.14	2.9
4	Tr16x4 Tr18x4 Tr20x4	MTI10092C33 4 TR	10	.362	3	1.30	2.9
5	Tr22x5 Tr24x5 Tr26x5	MTI14135D45 5 TR	14	.531	4	1.77	4.1

Order example: MTI 08066C21 2TR MT8

Acme Tools for Internal Thread



Pitch TPI	Thread size	Ordering Code	d	D	No. of Flutes	I	L
16	1/4-16	MTI0250C04 16 ACME	1/4	.170	3	.38	2.5
14	5/16-14	MTI0250C06 14 ACME	1/4	.205	3	.60	2.5
12	3/8-12 7/16-12	MTI0250C08 12 ACME	1/4	.240	3	.75	2.5
10	1/2-10	MTI0375D10 10 ACME	3/8	.327	4	1.00	3.0
8	5/8-8	MTI0500D11 8 ACME	1/2	.410	4	1.10	3.5
6	3/4-6 7/8-6	MTI0500D12 6 ACME	1/2	.472	4	1.20	3.5
5	1-5 1 1/8-5 1 1/4-5	MTI 0625E15 5 ACME	5/8	.625	5	1.50	4.0

Order example: MTI 0375D10 10ACME MT8