



***Carmex***  
*Precision Tools Ltd.*

*x-treme thread cutting™*



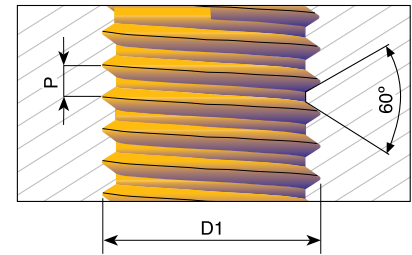
# **Mini Mill Thread & DMTH**

**New Products**  
for small threads



# ISO

## Tools for internal thread



### For thread depth up to 2 x D1

Pitch mm	D1	Ordering Code	d	D	No. of Flutes	I	L
0.35	M5	<b>MTS06045D14 0.35 ISO</b>	6	4.5	4	14.5	58

### For thread depth up to 3 x D1

Pitch mm	D1	Ordering Code	d	D	No. of Flutes	I	L
*0.45	M2.2	<b>MTS03017C7 0.45 ISO</b>	3	1.65	3	7.0	39
1.5	M10	<b>MTS08078C31 1.5 ISO</b>	8	7.80	3	31.5	64
1.75	M12	<b>MTS1009C37 1.75 ISO</b>	10	9.00	3	37.8	73
2.0	M16	<b>MTS12118D50 2.0 ISO</b>	12	11.80	4	50.0	105

\* Specially designed for the production of dental implants

### For thread depth up to 4 x D1

Pitch mm	D1	Ordering Code	d	D	No. of Flutes	I	L
0.5	M3	<b>MTS03024C12 0.5 ISO</b>	3	2.40	3	12.5	39
0.7	M4	<b>MTS06031C16 0.7 ISO</b>	6	3.10	3	16.7	58
0.8	M5	<b>MTS0604C20 0.8 ISO</b>	6	4.00	3	20.8	58
1.0	M6	<b>MTS06048C25 1.0 ISO</b>	6	4.80	3	25.0	58

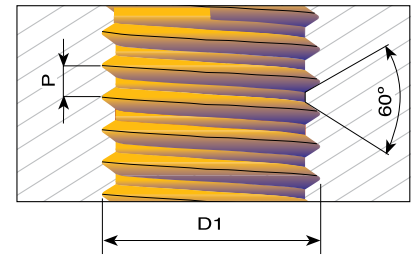
### For thread depth up to 5 x D1

Pitch mm	D1	Ordering Code	d	D	No. of Flutes	I	L
0.5	M3	<b>MTS03024C15 0.5 ISO</b>	3	2.40	3	15.5	39

Order example: MTS 03024C12 0.5 ISO MT7

# UN

## Tools for internal thread



### For thread depth up to 3 x D1

Pitch TPI	UNC	UNF	Ordering Code	d	D	No. of Flutes	I	L
40	4		<b>MTS03021C8 40 UN</b>	3	2.10	3	8.0	58
24	10,12		<b>MTS06035C15 24 UN</b>	6	3.50	3	15.5	58
20		7/16	<b>MTS0808C34 20 UN</b>	8	8.00	3	34.6	64
18		5/8	<b>MTS1212D49 18 UN</b>	12	12.00	4	49.0	105
16	3/8		<b>MTS08067C30 16 UN</b>	8	6.70	3	30.2	64
14	7/16		<b>MTS08077C35 14 UN</b>	8	7.70	3	35.2	64
13	1/2		<b>MTS10092C40 13 UN</b>	10	9.20	3	40.1	73
12	9/16		<b>MTS12105C45 12 UN</b>	12	10.50	3	45.0	105
11	5/8		<b>MTS12114C50 11 UN</b>	12	11.40	3	50.0	105
10	3/4		<b>MTS16144D59 10 UN</b>	16	14.40	4	59.7	105

\* Specially designed for the production of dental implants

### For thread depth up to 4 x D1

Pitch TPI	UNC	UNF	Ordering Code	d	D	No. of Flutes	I	L
56	2	3	<b>MTS03016C9 56 UN</b>	3	1.65	3	9.2	39
40	4		<b>MTS03021C12 40 UN</b>	3	2.10	3	12.0	39
32	6		<b>MTS03025C14 32 UN</b>	3	2.55	3	14.8	39

Order example: MTS 03016C9 56 UN MT7

### For thread depth up to 5 x D1

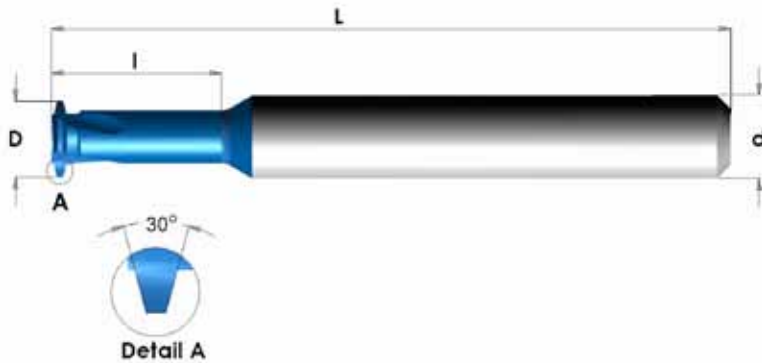
Pitch TPI	UNC	UNF	Ordering Code	d	D	No. of Flutes	I	L
80		0	<b>MTS03012C8 80 UN</b>	3	1.15	3	8.0	39
56	2	3	<b>MTS03016C11 56 UN</b>	3	1.65	3	11.4	39

### Carbide grade MT7:

Sub-Micron Grade with Titanium Aluminum Nitride multi-layer coating (ISO K10 - K20). This is a general purpose grade, which can be used with all materials; it should be run at medium to high cutting speeds.

# Trapez-DIN 103

Tools for internal thread



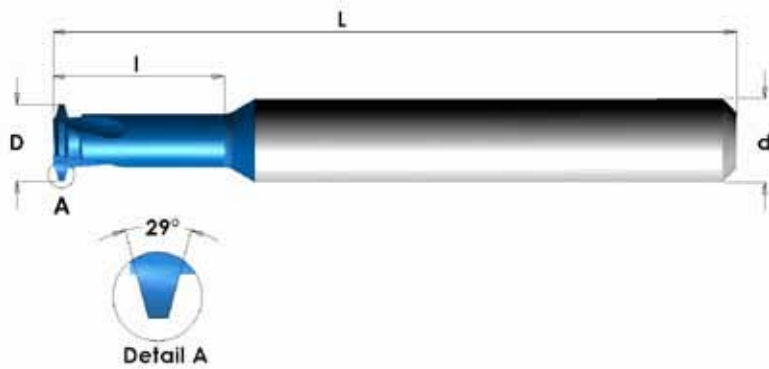
**For thread depth up to 2 x D1**

Pitch mm	Thread size	Ordering Code	d	D	No. of Flutes	l	L
1.5	Tr8x1.5 Tr9x1.5	<b>MTI06055C13 1.5 TR</b>	6	5.5	3	13.5	58
2	Tr10x2 Tr11x2	<b>MTI08066C21 2 TR</b>	8	6.6	3	21.0	64
2	Tr12x2 Tr14x2	<b>MTI10086D25 2 TR</b>	10	8.6	4	25.0	73
3	Tr12x3	<b>MTI0807C25 3 TR</b>	8	7.0	3	25.0	64
3	Tr14x3 Tr22x3	<b>MTI10089D29 3 TR</b>	10	8.9	4	29.0	73
4	Tr16x4 Tr18x4 Tr20x4	<b>MTI10092C33 4 TR</b>	10	9.2	3	33.0	73
5	Tr22x5 Tr24x5 Tr26x5	<b>MTI14135D45 5 TR</b>	14	13.5	4	45.0	105

Order example: **MTI 08066C21 2TR MT8**

# Acme

## Tools for internal thread - Inch Shank



Pitch TPI	Thread size	Ordering Code	d (in)	D	No. of Flutes	l	L
16	1/4-16	<b>MTI0250C04 16 ACME</b>	1/4	4.3	3	9.7	64
14	5/16-14	<b>MTI0250C06 14 ACME</b>	1/4	5.2	3	15.2	64
12	3/8-12 7/16-12	<b>MTI0250C08 12 ACME</b>	1/4	6.1	3	19.1	64
10	1/2-10	<b>MTI0375D10 10 ACME</b>	3/8	8.3	4	25.4	76
8	5/8-8	<b>MTI0500D11 8 ACME</b>	1/2	10.4	4	27.9	89
6	3/4-6 7/8-6	<b>MTI0500D12 6 ACME</b>	1/2	12.0	4	30.5	89
5	1-5 1 1/8-5 1 1/4-5	<b>MTI0625E15 5 ACME</b>	5/8	15.9	5	38.1	102

**Order example: MTI 0250C06 14 ACME MT8**

### Carbide grade MT8:

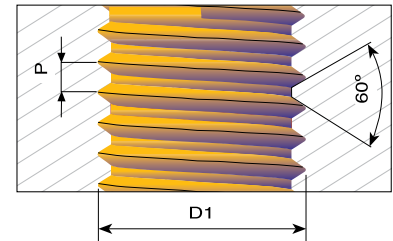
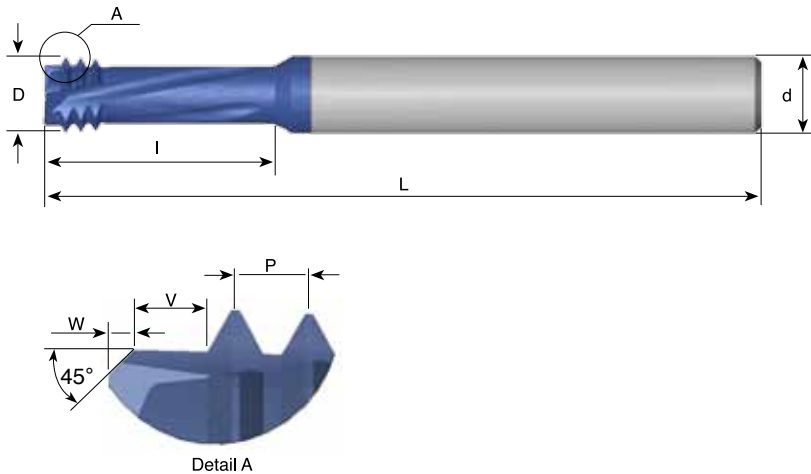
Sub Micron grade with advanced PVD triple coating (ISO K 10-K20).

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

General purpose for all materials.

# DMTH

The new DMTH tools expand the range of the existing DMT line providing the ability to cut steels, hardened materials, stainless steels and super alloys.



Left hand cutting  
For CNC code use M04

## ISO

Tools for Internal Thread

For thread depth up to 2 x D1

Pitch mm	D1	Ordering Code	d	D	No. of Flutes	I	W	V	L
1.0	M6 - M9	<b>DMTH 08047 C14 1.0 ISO</b>	8	4.7	3	14.4	0.4	1.0	64
1.25	M8 - M12	<b>DMTH 08061 D19 1.25 ISO</b>	8	6.1	4	19.0	0.5	1.25	64
1.5	M10- M15	<b>DMTH 08078 D23 1.5 ISO</b>	8	7.8	4	23.6	0.6	1.5	64
1.75	M12	<b>DMTH 1009 D28 1.75 ISO</b>	10	9.0	4	28.1	0.6	1.75	73
2.0	M16- M23	<b>DMTH 12118 D36 2.0 ISO</b>	12	11.8	4	36.6	0.6	2.0	84

## UN

Tools for Internal Thread

For thread depth up to 2 x D1

Pitch TPI	UN, UNEF, UNF UNC, UNS	Ordering Code	d	D	No. of Flutes	I	W	V	L
40	4	<b>DMTH 06021 C7 40 UN</b>	6	2.1	3	7.0	0.1	0.6	58
32	6	<b>DMTH 06026 C8 32 UN</b>	6	2.6	3	8.7	0.1	0.8	58
28	1/4-3/8	<b>DMTH 0805 C14 28 UN</b>	8	5.0	3	14.9	0.4	0.9	64
24	5/16-1/2	<b>DMTH 08065 D18 24 UN</b>	8	6.5	4	18.5	0.5	1.05	64
20	1/4-3/8	<b>DMTH 08048 C15 20 UN</b>	8	4.8	3	15.6	0.4	1.25	64
18	5/16-7/16	<b>DMTH 0806 D19 18 UN</b>	8	6.0	4	19.2	0.5	1.4	64
16	3/8-1/2	<b>DMTH 08067 C22 16 UN</b>	8	6.7	3	22.8	0.5	1.6	64
13	1/2	<b>DMTH 10092 C30 13 UN</b>	10	9.2	3	30.0	0.6	2.0	73
11	5/8	<b>DMTH 12114 C37 11 UN</b>	12	11.4	3	37.0	0.6	2.3	84

Order example: **DMTH 1009 D28 1.75 ISO MT11**

# Cutting Data - DMTH

## Carbide grade MT11:

Ultra-fine Sub-Micron grade with advanced PVD triple coating.

ISO	Materials	Cutting Speed m/min	Feed mm/tooth								
			Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 9	Ø 10	Ø 12
<b>P</b>	Low and Medium Carbon Steels <0.55%C	60-120	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.05
	High Carbon Steels ≥0.55%C	60-90	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.05
	Alloy Steels, Treated Steels	50-80	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04
<b>M</b>	Stainless Steels - Free Cutting	70-100	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
	Stainless Steels - Austenitic	60-90	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
	Cast Steels	70-90	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04
<b>K</b>	Cast Iron	40-80	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.05	0.05
<b>N</b>	Aluminum ≤10%Si, Copper	100-200	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.05	0.05
	Aluminum >10% Si	60-140	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
	Synthetics, Duroplastics, Thermoplastics	50-200	0.04	0.05	0.04	0.05	0.05	0.06	0.06	0.06	0.06
<b>S</b>	Nickel Alloys, Titanium Alloys and High Temp. Alloys	20-40	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.06	0.06
<b>H</b>	Hardened Steels 45-50 HRc	60-70	0.02	0.02	0.02	0.03	0.04	0.04	0.05	0.05	0.05
	Hardened Steels 50-55 HRc	50-60	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.04	0.04



***Carmex***  
***Precision Tools Ltd.***  
***x-treme thread cutting™***



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