



## Advantages of Mill-Thread Solid Carbide

- Thread is generated in one pass.
- Spiral flutes allow smooth cutting action.
- Shorter machining time due to multi, 3 to 6 flutes.
- 2.2 mm and up cutting diameter.
- Threads up to shoulder in blind hole.
- Longer tool life due to special multi-layer coating.
- Same tool can be used for a variety of materials.
- Excellent surface finish.
- Low cutting pressure allows thin wall machining.
- Same tool used for R.H and L.H. threads.



Demonstration

**MT** - Thread Mills without internal coolant

**MTB** - Thread Mills with internal coolant bore for blind holes

**MTZ** - Thread Mills with internal coolant through the flutes

**MTQ** - Thread Mills that include relieved neck for deep work pieces

**FMT** - Fast Thread Mills with internal coolant bore

**AMT** - Solid Carbide Thread Mills for Aluminum machining

**EMT** - Thread Mills For External Threads



Demonstration

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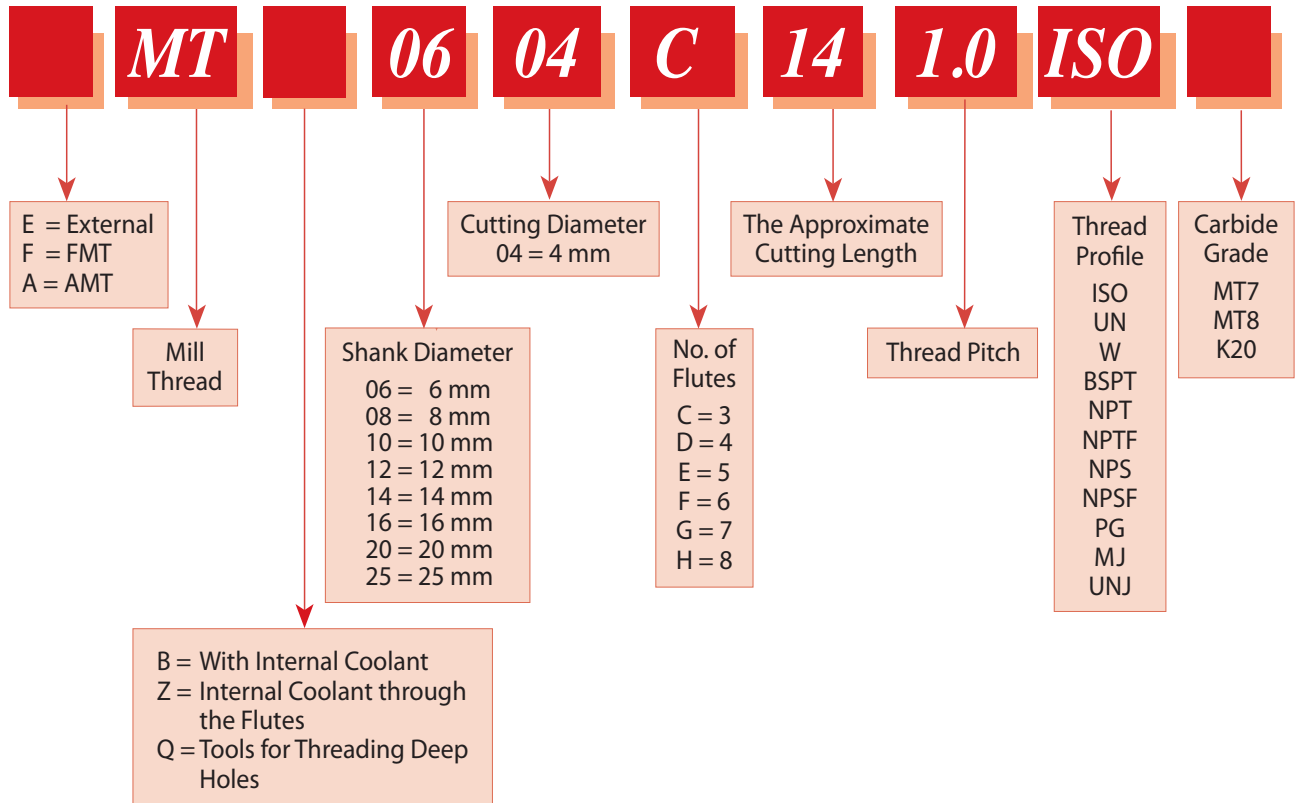
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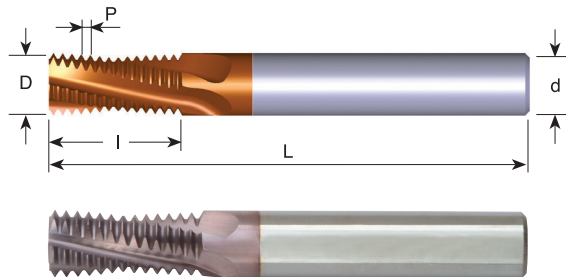
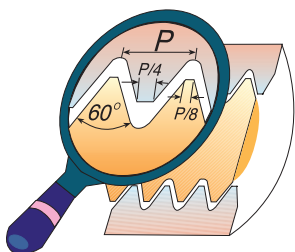
## Product Identification

### Mill-Thread Solid Carbide Ordering Codes



## ISO

### Tools for Internal Thread



Grade	P	M	K	N	S	H
MT7	●	○	●	○	○	

Pitch mm	M coarse	M fine	Ordering Code	d	D	No. of Flutes	I	L
0.5	M3	M4	<b>MT 06022 C5 0.5 ISO</b>	6	2.2	3	5.3	58
0.5		M5	<b>MT 06038 C10 0.5 ISO</b>	6	3.8	3	10.3	58
0.5		M6, M8	<b>MT 06053 D10 0.5 ISO</b>	6	5.3	4	10.3	58
0.7	M4		<b>MT 06031 C7 0.7 ISO</b>	6	3.1	3	7.4	58
0.75		M6, M8	<b>MT 06045 C10 0.75 ISO</b>	6	4.5	3	10.1	58
0.75		M6, M8	<b>MT 0605 C13 0.75 ISO</b>	6	5.0	3	13.1	58
0.8	M5		<b>MT 06036 C9 0.8 ISO</b>	6	3.6	3	9.2	58
0.8	M5		<b>MT 0604 C13 0.8 ISO</b>	6	4.0	3	13.2	58
1.0	M6	M8	<b>MT 0604 C10 1.0 ISO</b>	6	4.0	3	10.5	58
1.0	M6	M8	<b>MT 0604 C14 1.0 ISO</b>	6	4.0	3	14.5	58
1.0		M9	<b>MT 0606 C12 1.0 ISO</b>	6	6.0	3	12.5	58
1.0		M10	<b>MT 0808 D16 1.0 ISO</b>	8	8.0	4	16.5	64
1.25	M8	M10	<b>MT 0605 C14 1.25 ISO</b>	6	5.0	3	14.4	58
1.25	M8	M10	<b>MT 0605 C19 1.25 ISO</b>	6	5.0	3	19.4	58
1.5	M10	M12	<b>MT 0807 C17 1.5 ISO</b>	8	7.0	3	17.3	64
1.5	M10	M12	<b>MT 0807 C24 1.5 ISO</b>	8	7.0	3	24.8	76
1.5		M14	<b>MT 1010 D21 1.5 ISO</b>	10	10.0	4	21.8	73
1.5		M14	<b>MT 1212 D29 1.5 ISO</b>	12	12.0	4	29.3	84
1.5		M16, M18	<b>MT 1414 D32 1.5 ISO</b>	14	14.0	4	32.3	84
1.5		M20	<b>MT 1616 F33 1.5 ISO</b>	16	16.0	6	33.8	105
1.75	M12		<b>MT 0808 C20 1.75 ISO</b>	8	8.0	3	20.1	64
1.75	M12		<b>MT 0808 C28 1.75 ISO</b>	8	8.0	3	28.9	76
2.0	M14	M17	<b>MT 1010 C27 2.0 ISO</b>	10	10.0	3	27.0	73
2.0	M14	M17	<b>MT 1010 C39 2.0 ISO</b>	10	10.0	3	39.0	105
2.0	M16	M18, M20	<b>MT 1212 D27 2.0 ISO</b>	12	12.0	4	27.0	84
2.0	M16	M18, M20	<b>MT 14128 D39 2.0 ISO</b>	14	12.8	4	39.0	105
2.0		M26	<b>MT 2020 F41 2.0 ISO</b>	20	20.0	6	41.0	105
2.5	M18, M20		<b>MT 1414 D33 2.5 ISO</b>	14	14.0	4	33.8	84
2.5	M18, M20		<b>MT 1414 D48 2.5 ISO</b>	14	14.0	4	48.8	105
3.0	M24	M28	<b>MT 1616 C40 3.0 ISO</b>	16	16.0	3	40.5	105
3.0	M24	M28	<b>MT 1616 C58 3.0 ISO</b>	16	16.0	3	58.5	120
3.0	M27	M28, M30	<b>MT 2020 D43 3.0 ISO</b>	20	20.0	4	43.5	105

Order example: MT 1212 D27 2.0 ISO MT7

● First choice    ○ Alternative

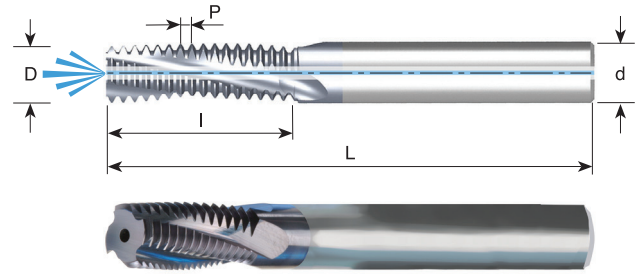
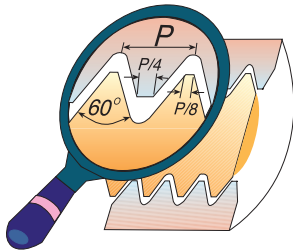
For thread mills with coolant bore see following pages

For small thread mills see pages B09-3, 4, 11, 15, 17 and B11-3, 6



## ISO With internal coolant bore

### Tools for Internal Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch mm	M coarse	M fine	Ordering Code	d	D	No. of Flutes	I	L
0.5		M5	<b>MTB 06038 C10 0.5 ISO</b>	6	3.8	3	10.3	58
0.7	M4		<b>MTB 06031 C7 0.7 ISO</b>	6	3.1	3	7.4	58
0.75		M6, M8	<b>MTB 06045 C10 0.75 ISO</b>	6	4.5	3	10.1	58
0.75		M12, M14	<b>MTB 1010 D24 0.75 ISO</b>	10	10.0	4	24.4	73
0.8	M5		<b>MTB 06038 C9 0.8 ISO</b>	6	3.8	3	9.2	58
0.8	M5		<b>MTB 0604 C13 0.8 ISO</b>	6	4.0	3	13.2	58
1.0	M6		<b>MTB 06046 C10 1.0 ISO</b>	6	4.6	3	10.5	58
1.0	M6		<b>MTB 06046 C14 1.0 ISO</b>	6	4.6	3	14.5	58
1.0		M8	<b>MTB 0606 C12 1.0 ISO</b>	6	6.0	3	12.5	58
1.0		M10	<b>MTB 0808 D16 1.0 ISO</b>	8	8.0	4	16.5	64
1.0		M12	<b>MTB 1010 D24 1.0 ISO</b>	10	10.0	4	24.5	73
1.25	M8	M10	<b>MTB 0606 C14 1.25 ISO</b>	6	6.0	3	14.4	58
1.25	M8	M10	<b>MTB 0606 C19 1.25 ISO</b>	6	6.0	3	19.4	58
1.5	M10	M12	<b>MTB 08078 C17 1.5 ISO</b>	8	7.8	3	17.0	64
1.5	M10	M12	<b>MTB 08078 C24 1.5 ISO</b>	8	7.8	3	24.8	76
1.5		M14	<b>MTB 1010 D21 1.5 ISO</b>	10	10.0	4	21.8	73
1.5		M14-M18	<b>MTB 1212 D26 1.5 ISO</b>	12	12.0	4	26.3	84
1.5		M20	<b>MTB 1616 F33 1.5 ISO</b>	16	16.0	6	33.8	105
1.75	M12		<b>MTB 1009 C20 1.75 ISO</b>	10	9.0	3	20.1	73
1.75	M12		<b>MTB 1009 C28 1.75 ISO</b>	10	9.0	3	28.9	73
2.0	M14	M17	<b>MTB 1010 C27 2.0 ISO</b>	10	10.0	3	27.0	73
2.0	M14	M17	<b>MTB 1211 D39 2.0 ISO</b>	12	11.0	4	39.0	105
2.0	M16	M18, M20	<b>MTB 12118 D27 2.0 ISO</b>	12	11.8	4	27.0	84
2.0	M16	M18, M20	<b>MTB 12118 D39 2.0 ISO</b>	12	11.8	4	39.0	105
2.0		M26	<b>MTB 2020 F41 2.0 ISO</b>	20	20.0	6	41.0	105
2.5	M20		<b>MTB 1615 E33 2.5 ISO</b>	16	15.0	5	33.8	105
2.5	M20		<b>MTB 1615 E48 2.5 ISO</b>	16	15.0	5	48.8	105
3.0	M24	M28	<b>MTB 2018 D40 3.0 ISO</b>	20	18.0	4	40.5	105
3.0	M24	M28	<b>MTB 2018 D58 3.0 ISO</b>	20	18.0	4	58.5	120
3.0	M27	M28, M30	<b>MTB 2020 D43 3.0 ISO</b>	20	20.0	4	43.5	105

Order example: MTB 08078 C17 1.5 ISO MT7

● First choice

○ Alternative

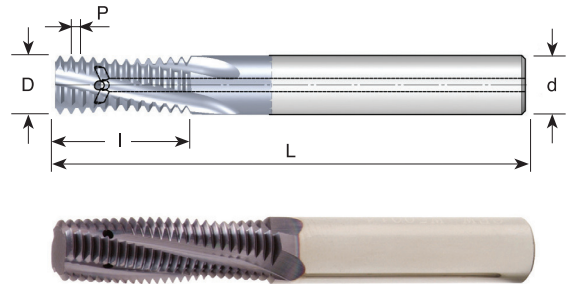
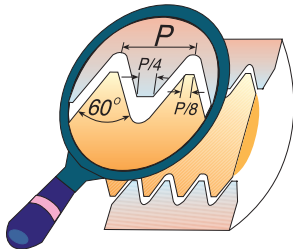
For thread mills with coolant through the flutes see next page

For small thread mills see pages B09-3, 4, 11, 15, 17 and B11-3, 6



## ISO With internal coolant through the flutes

### Tools for Internal Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch mm	M coarse	M fine	Ordering Code	d	D	No. of Flutes	I	L
1.0	M6	M8	<b>MTZ 06048 C10 1.0 ISO</b>	6	4.8	3	10.5	58
1.0		M8, M9	<b>MTZ 0606 C12 1.0 ISO</b>	6	6.0	3	12.5	58
1.0		M10	<b>MTZ 0808 D16 1.0 ISO</b>	8	8.0	4	16.5	64
1.25	M8	M10	<b>MTZ 0606 C14 1.25 ISO</b>	6	6.0	3	14.4	58
1.25	M8	M10	<b>MTZ 0606 C19 1.25 ISO</b>	6	6.0	3	19.4	58
1.5	M10	M12	<b>MTZ 08078 C17 1.5 ISO</b>	8	7.8	3	17.0	64
1.5	M10	M12	<b>MTZ 0808 C23 1.5 ISO</b>	8	8.0	3	23.3	64
1.5		M14	<b>MTZ 1010 D21 1.5 ISO</b>	10	10.0	4	21.8	73
1.5		M14, M16	<b>MTZ 1212 D26 1.5 ISO</b>	12	12.0	4	26.3	84
1.5		M16, M18	<b>MTZ 1414 D32 1.5 ISO</b>	14	14.0	4	32.3	101
1.5		M20	<b>MTZ 1616 E33 1.5 ISO</b>	16	16.0	5	33.8	101
1.75	M12		<b>MTZ 1009 C20 1.75 ISO</b>	10	9.0	3	20.1	73
1.75	M12		<b>MTZ 1009 C28 1.75 ISO</b>	10	9.0	3	28.9	73
2.0	M14	M17	<b>MTZ 1010 C27 2.0 ISO</b>	10	10.0	3	27.0	73
2.0	M16	M18, M20	<b>MTZ 12118 D27 2.0 ISO</b>	12	11.8	4	27.0	84
2.5	M20		<b>MTZ 1615 E33 2.5 ISO</b>	16	15.0	5	33.8	101

Order example: MTZ 08078 C17 1.5 ISO MT7

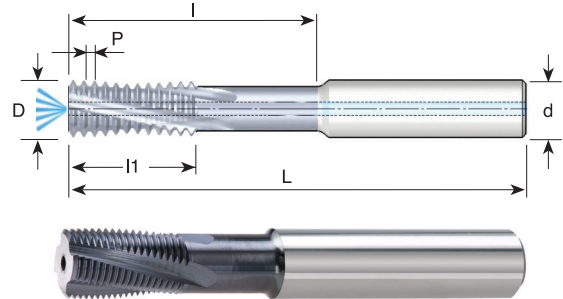
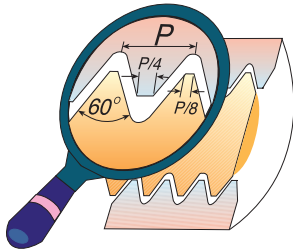
● First choice    ○ Alternative

For small thread mills see pages B09-3, 4, 11, 15, 17 and B11-3, 6



## ISO With relieved neck and internal coolant bore

### Tools for Internal Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch mm	M fine	Ordering Code	d	D	No. of Flutes	l1	l	L
1.0	$\varnothing \geq 12$	<b>MTQ 1010 D32 1.0 ISO</b>	10	10.0	4	18.0	32.0	73
1.0	$\varnothing \geq 14$	<b>MTQ 1212 D38 1.0 ISO</b>	12	12.0	4	21.0	38.0	84
1.0	$\varnothing \geq 18$	<b>MTQ 1616 F45 1.0 ISO</b>	16	16.0	6	26.0	45.0	105
1.5	$\varnothing \geq 13$	<b>MTQ 1010 D30 1.5 ISO</b>	10	10.0	4	18.0	30.0	73
1.5	$\varnothing \geq 15$	<b>MTQ 1212 D34 1.5 ISO</b>	12	12.0	4	19.5	34.5	84
1.5	$\varnothing \geq 19$	<b>MTQ 1616 F43 1.5 ISO</b>	16	16.0	6	25.5	43.5	105
1.5	$\varnothing \geq 23$	<b>MTQ 2020 F60 1.5 ISO</b>	20	20.0	6	36.0	60.0	105
2.0	$\varnothing \geq 16$	<b>MTQ 1212 D42 2.0 ISO</b>	12	12.0	4	24.0	42.0	84
2.0	$\varnothing \geq 20$	<b>MTQ 1616 E45 2.0 ISO</b>	16	16.0	5	26.0	45.0	105
2.0	$\varnothing \geq 24$	<b>MTQ 2020 F56 2.0 ISO</b>	20	20.0	6	34.0	56.0	105
3.0	$\varnothing \geq 22$	<b>MTQ 1616 D45 3.0 ISO</b>	16	16.0	4	30.0	45.0	105
3.0	$\varnothing \geq 26$	<b>MTQ 2020 E54 3.0 ISO</b>	20	20.0	5	33.0	54.0	105
3.5	$\varnothing \geq 26$	<b>MTQ 2020 D45 3.5 ISO</b>	20	20.0	4	28.0	45.5	105
4.0	$\varnothing \geq 31$	<b>MTQ 2525 D64 4.0 ISO</b>	25	25.0	4	40.0	64.0	160

Order example: MTQ 1010 D30 1.5 ISO MT7

● First choice    ○ Alternative

For small thread mills see pages B09-3, 4, 11, 15, 17 and B11-3, 6



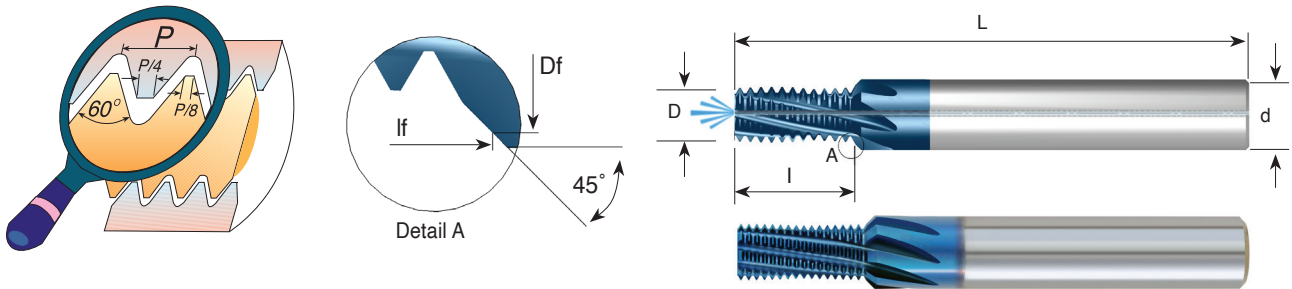
## ISO Fast MT with internal coolant bore

### Tools for Internal Thread

- A unique line of solid carbide thread milling tools (FMT) for increased productivity and extended tool life.
- Large number of flutes results in significantly shorter machining time.

### Carbide grade MT8:

Sub Micron grade with advanced PVD triple coating (ISO K10-K20). Extremely high heat resistance and smooth cutting operation for high performance in normal and general machining conditions on all materials.



Grade	P	M	K	N	S	H
MT8	●	●	●	○	●	≤52 HRc

Pitch mm	M coarse	M fine	Ordering Code	d	D	Df	Flutes	I	lf	L
0.5	M3	M3.5	*FMT 06024 D6 0.5 ISO	6	2.4	4.4	4	6.3	7.3	58
0.5		M4,M5	FMT 06033 E8 0.5 ISO	6	3.3	5.3	5	8.3	9.3	58
0.7	M4		FMT 06032 E7 0.7 ISO	6	3.2	4.8	5	7.4	8.2	58
0.75		M6	FMT 0805 F12 0.75 ISO	8	5.0	7.0	6	12.4	13.4	64
0.8	M5		FMT 0604 E9 0.8 ISO	6	4.0	5.7	5	9.2	10.1	58
1.0	M6	M8	FMT 08048 F10 1.0 ISO	8	4.8	6.8	6	10.5	11.5	64
1.0		M10,M12	FMT 12087 G20 1.0 ISO	12	8.7	11.7	7	20.5	22.0	84
1.25	M8	M10	FMT 10064 G14 1.25 ISO	10	6.4	9.6	7	14.4	16.0	73
1.5	M10	M14	FMT 1008 G17 1.5 ISO	10	8.0	9.8	7	17.3	18.2	73
1.75	M12		FMT 12095 G20 1.75 ISO	12	9.5	11.7	7	20.1	21.2	84
2.0	M14, M16	M18	FMT 1411 G29 2.0 ISO	14	11.0	13.4	7	29.0	30.2	83

Order example: FMT 1008 G17 1.5 ISO MT8

● First choice    ○ Alternative

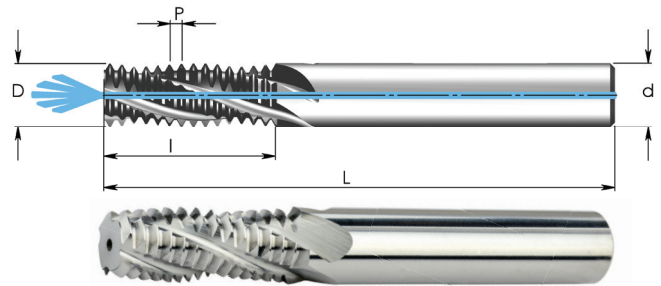
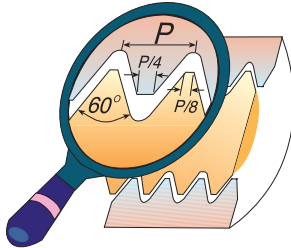
\* Without internal coolant

For small thread mills see page B09-17



## ISO With internal coolant bore

### Tools for Internal Thread



**Thread length: 2xD**

Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

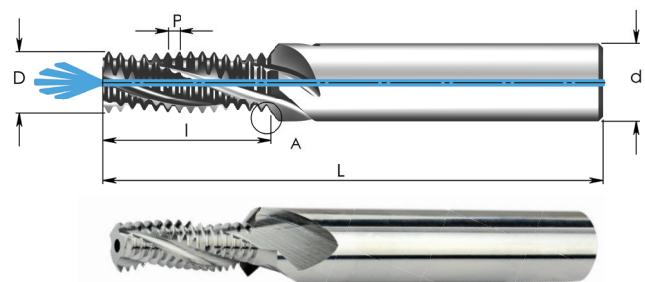
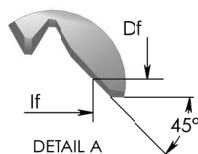
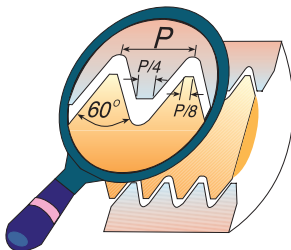
Pitch mm	M coarse	M fine	Ordering Code	d	D	No. of Flutes	I	L
0.5	M3	M4	* AMT 03024 C6 0.5 ISO	3	2.4	3	6.8	39
0.5		M5	AMT 06043 C10 0.5 ISO	6	4.3	3	10.8	58
0.7	M4		AMT 06031 C8 0.7 ISO	6	3.1	3	8.8	58
0.75		M6	AMT 0605 C13 0.75 ISO	6	5.0	3	13.1	58
0.8	M5		AMT 0604 C10 0.8 ISO	6	4.0	3	10.8	58
1.0	M6		AMT 06048 C13 1.0 ISO	6	4.8	3	13.5	58
1.0		M10	AMT 0808 D21 1.0 ISO	8	8.0	4	21.5	64
1.25	M8	M10	AMT 08064 C16 1.25 ISO	8	6.4	3	16.9	64
1.5	M10		AMT 0808 C21 1.5 ISO	8	8.0	3	21.8	64
1.5		M14	AMT 12112 D29 1.5 ISO	12	11.2	4	29.3	84
1.75	M12		AMT 10095 D25 1.75 ISO	10	9.5	4	25.4	73
2.0	M16	M17	AMT14126 D35 2.0 ISO	14	12.6	4	35.0	83

Order example: AMT 08064 C16 1.25 ISO K20

\* Without internal coolant

## ISO With internal coolant bore and cutting chamfer

### Tools for Internal thread



**Thread length: 2xD**

Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

Pitch mm	M coarse	M fine	Ordering Code	d	D	Df	No. of Flutes	I	lf	L
0.8	M5		AMT 0604 C10 0.8 ISO-C	6	4.0	5.3	3	10.8	11.5	58
1.0	M6		AMT 08048 C13 1.0 ISO-C	8	4.8	6.4	3	13.5	14.3	64
1.25	M8	M10	AMT 10064 C16 1.25 ISO-C	10	6.4	8.3	3	16.9	17.9	73
1.5	M10		AMT 1208 C21 1.5 ISO-C	12	8.0	10.4	3	21.8	23.0	84

Order example: AMT 10064 C16 1.25 ISO-C K20

For information about AMT Thread Mills and cutting data see page B12-16

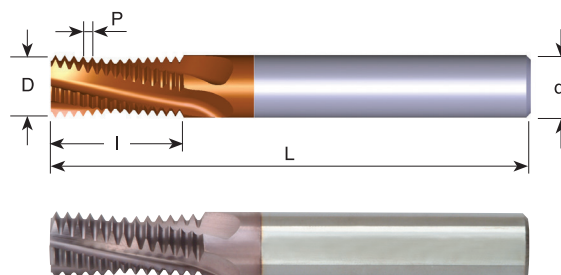
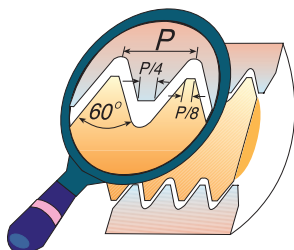
● First choice

○ Alternative



## UN

### Tools for Internal Thread



Grade	P	M	K	N	S	H
MT7	●	○	●	○	○	

Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	No. of Flutes	I	L
40	5			<b>MT 06025 C6 40 UN</b>	6	2.5	3	6.0	58
32	8	10	12	<b>MT 06032 C6 32 UN</b>	6	3.2	3	6.8	58
28		1/4		<b>MT 0604 C11 28 UN</b>	6	4.0	3	11.3	58
28		1/4		<b>MT 06052 C15 28 UN</b>	6	5.2	3	15.0	58
28			7/16-1/2	<b>MT 0606 C14 28 UN</b>	6	6.0	3	14.1	58
24		5/16		<b>MT 0605 C14 24 UN</b>	6	5.0	3	14.3	58
24		3/8	9/16-5/8	<b>MT 0807 C21 24 UN</b>	8	7.0	3	20.6	64
20	1/4			<b>MT 06045 C12 20 UN</b>	6	4.5	3	12.1	58
20		7/16-1/2		<b>MT 0807 C21 20 UN</b>	8	7.0	3	21.0	64
20			3/4-1	<b>MT 1212 E27 20 UN</b>	12	12.0	5	27.3	84
18	5/16			<b>MT 0605 C14 18 UN</b>	6	5.0	3	14.8	58
18	5/16			<b>MT 0606 C20 18 UN</b>	6	6.0	3	20.5	58
18		9/16-5/8	1 1/8-1 5/8	<b>MT 1010 D26 18 UN</b>	10	10.0	4	26.1	73
16	3/8			<b>MT 0606 C16 16 UN</b>	6	6.0	3	16.7	58
16	3/8			<b>MT 08074 C24 16 UN</b>	8	7.4	3	24.6	64
16		3/4		<b>MT 1212 D31 16 UN</b>	12	12.0	4	31.0	84
14	7/16			<b>MT 0807 C20 14 UN</b>	8	7.0	3	20.9	64
14	7/16			<b>MT 10085 C28 14 UN</b>	10	8.5	3	28.1	73
14		7/8		<b>MT 1615 E37 14 UN</b>	16	15.0	5	37.2	105
13	1/2			<b>MT 0808 C22 13 UN</b>	8	8.0	3	22.5	64
13	1/2			<b>MT 10098 D32 13 UN</b>	10	9.8	4	32.2	73
12	9/16			<b>MT 1010 C26 12 UN</b>	10	10.0	3	26.5	73
12	9/16			<b>MT 12116 D37 12 UN</b>	12	11.6	4	37.0	84
12		1-1 1/2		<b>MT 1616 E41 12 UN</b>	16	16.0	5	41.3	105
11	5/8			<b>MT 1010 C28 11 UN</b>	10	10.0	3	28.9	73
11	5/8			<b>MT 1212 D38 11 UN</b>	12	12.0	4	38.1	84
10	3/4			<b>MT 1212 C34 10 UN</b>	12	12.0	3	34.3	84
10	3/4			<b>MT 16147 E49 10 UN</b>	16	14.7	5	49.5	105
9	7/8			<b>MT 1615 C38 9 UN</b>	16	15.0	3	38.1	105
8	1			<b>MT 1616 C42 8 UN</b>	16	16.0	3	42.9	105
7	1 1/8 - 1 1/4			<b>MT 2020 D45 7 UN</b>	20	20.0	4	45.3	105

Order example: MT 1615 E37 14 UN MT7

● First choice    ○ Alternative

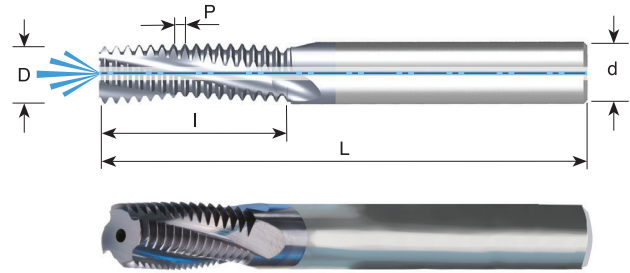
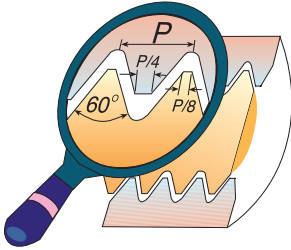
For thread mills with coolant bore see following pages

For small thread mills see pages B09-5, 6, 12, 15, 17 and B11-4, 6



## UN With internal coolant bore

### Tools for Internal Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	No. of Flutes	I	L
32	8	10	12	<b>MTB 06032 C6 32 UN</b>	6	3.2	3	6.8	58
32			5/16	<b>MTB 0606 C14 32 UN</b>	6	6.0	3	14.7	58
32			3/8	<b>MTB 0808 D18 32 UN</b>	8	8.0	4	18.7	64
28		1/4		<b>MTB 0605 C11 28 UN</b>	6	5.0	3	11.3	58
28		1/4		<b>MTB 06052 C15 28 UN</b>	6	5.2	3	15.0	58
28			7/16-1/2	<b>MTB 0606 C14 28 UN</b>	6	6.0	3	14.1	58
24		5/16		<b>MTB 08066 C14 24 UN</b>	8	6.6	3	14.3	64
24		3/8	9/16-5/8	<b>MTB 0808 D21 24 UN</b>	8	8.0	4	20.6	64
20	1/4			<b>MTB 06047 C12 20 UN</b>	6	4.7	3	12.1	58
20		7/16-1/2		<b>MTB 0808 C21 20 UN</b>	8	8.0	3	21.0	64
20		1/2		<b>MTB 1010 D22 20 UN</b>	10	10.0	4	22.3	73
20			3/4-1	<b>MTB 1212 E27 20 UN</b>	12	12.0	5	27.3	84
18	5/16			<b>MTB 06056 C14 18 UN</b>	6	5.6	3	14.8	58
18	5/16			<b>MTB 0606 C20 18 UN</b>	6	6.0	3	20.5	58
18		9/16-5/8	1 1/8-1 5/8	<b>MTB 12113 D26 18 UN</b>	12	11.3	4	26.1	84
16	3/8			<b>MTB 08067 C16 16 UN</b>	8	6.7	3	16.7	64
16	3/8			<b>MTB 08074 C24 16 UN</b>	8	7.4	3	24.6	64
16		3/4		<b>MTB 1212 D31 16 UN</b>	12	12.0	4	31.0	84
14	7/16			<b>MTB 08077 C20 14 UN</b>	8	7.7	3	20.9	64
14	7/16			<b>MTB 10085 C28 14 UN</b>	10	8.5	3	28.1	73
14		7/8		<b>MTB 1616 E37 14 UN</b>	16	16.0	5	37.2	105
13	1/2			<b>MTB 10092 C22 13 UN</b>	10	9.2	3	22.5	73
13	1/2			<b>MTB 10098 D32 13 UN</b>	10	9.8	4	32.2	73
12	9/16			<b>MTB 12105 C26 12 UN</b>	12	10.5	3	26.5	84
12	9/16			<b>MTB 12116 D37 12 UN</b>	12	11.6	4	37.0	84
12		1-1 1/2		<b>MTB 1616 E41 12 UN</b>	16	16.0	5	41.3	105
11	5/8			<b>MTB 12114 C28 11 UN</b>	12	11.4	3	28.9	84
11	5/8			<b>MTB 1212 D38 11 UN</b>	12	12.0	4	38.1	84
10	3/4			<b>MTB 16144 D34 10 UN</b>	16	14.4	4	34.3	105
10	3/4			<b>MTB 16147 E49 10 UN</b>	16	14.7	5	49.5	105
9	7/8			<b>MTB 1616 C38 9 UN</b>	16	16.0	3	38.1	105
8	1			<b>MTB 20195 D42 8 UN</b>	20	19.5	4	42.9	105
7	1 1/8 - 1 1/4			<b>MTB 2020 D45 7 UN</b>	20	20.0	4	45.3	105

Order example: MTB 1212 D31 16 UN MT7

● First choice

○ Alternative

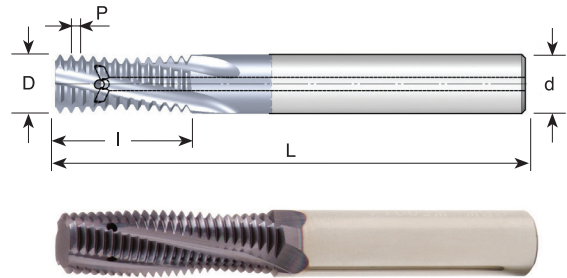
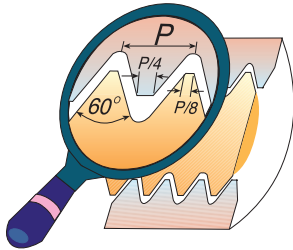
For thread mills with coolant through the flutes see next page

For small thread mills see pages B09-5, 6, 12, 15, 17 and B11-4, 6



## UN With internal coolant through the flutes

### Tools for Internal Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	No. of Flutes	I	L
28		1/4		<b>MTZ 0605 C11 28 UN</b>	6	5.0	3	11.3	58
28			7/16-1/2	<b>MTZ 0606 C14 28 UN</b>	6	6.0	3	14.1	58
24		5/16		<b>MTZ 08066 C14 24 UN</b>	8	6.6	3	14.3	64
24		3/8	9/16-5/8	<b>MTZ 0808 D21 24 UN</b>	8	8.0	4	20.6	64
20		7/16		<b>MTZ 0808 C21 20 UN</b>	8	8.0	3	21.0	64
20		1/2		<b>MTZ 1010 D22 20 UN</b>	10	10.0	4	22.3	73
20			3/4-1	<b>MTZ 1212 E27 20 UN</b>	12	12.0	5	27.3	84
18	5/16			<b>MTZ 06056 C14 18 UN</b>	6	5.6	3	14.8	58
18	5/16			<b>MTZ 0606 C20 18 UN</b>	6	6.0	3	20.5	58
18		9/16-5/8	1 1/8-1 5/8	<b>MTZ 12113 D26 18 UN</b>	12	11.3	4	26.1	84
16	3/8			<b>MTZ 08067 C16 16 UN</b>	8	6.7	3	16.7	64
16	3/8			<b>MTZ 08074 C24 16 UN</b>	8	7.4	3	24.6	64
16		3/4		<b>MTZ 1212 D31 16 UN</b>	12	12.0	4	31.0	84
14	7/16			<b>MTZ 08077 C20 14 UN</b>	8	7.7	3	20.9	64
14	7/16			<b>MTZ 10085 C28 14 UN</b>	10	8.5	3	28.1	73
14		7/8		<b>MTZ 1616 E37 14 UN</b>	16	16.0	5	37.2	101
13	1/2			<b>MTZ 10092 C22 13 UN</b>	10	9.2	3	22.5	73
13	1/2			<b>MTZ 10098 D32 13 UN</b>	10	9.8	4	32.2	73
12	9/16			<b>MTZ 12105 C26 12 UN</b>	12	10.5	3	26.5	84
12	9/16			<b>MTZ 12116 D37 12 UN</b>	12	11.6	4	37.0	84
12		1-1 1/2		<b>MTZ 1616 E41 12 UN</b>	16	16.0	5	41.3	101
11	5/8			<b>MTZ 12114 C28 11 UN</b>	12	11.4	3	28.9	84
10	3/4			<b>MTZ 16144 D34 10 UN</b>	16	14.4	4	34.3	105

Order example: MTZ 0808 D21 24 UN MT7

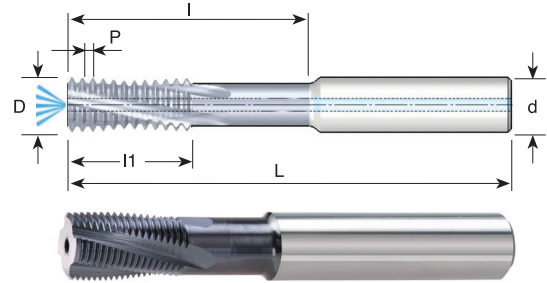
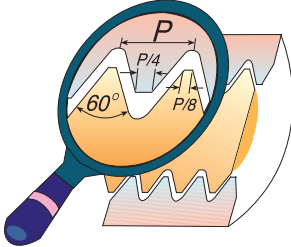
● First choice

○ Alternative



## UN With relieved neck and internal coolant bore

### Tools for Internal Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	Thread size	Ordering Code	d	D	No. of Flutes	l1	l	L
20	$\varnothing \geq 12$	<b>MTQ 1010 D30 20 UN</b>	10	10.0	4	17.8	30.5	73
20	$\varnothing \geq 14$	<b>MTQ 1212 E35 20 UN</b>	12	12.0	5	20.3	35.6	84
20	$\varnothing \geq 18$	<b>MTQ 1616 F43 20 UN</b>	16	16.0	6	25.4	43.2	105
18	$\varnothing \geq 15$	<b>MTQ 1212 D35 18 UN</b>	12	12.0	4	19.7	35.3	84
16	$\varnothing \geq 15$	<b>MTQ 1212 D35 16 UN</b>	12	12.0	4	20.7	35.0	84
16	$\varnothing \geq 19$	<b>MTQ 1616 E42 16 UN</b>	16	16.0	5	25.4	42.9	105
16	$\varnothing \geq 23$	<b>MTQ 2020 F58 16 UN</b>	20	20.0	6	36.5	58.8	105
14	$\varnothing \geq 20$	<b>MTQ 1616 E45 14 UN</b>	16	16.0	5	25.4	45.3	105
12	$\varnothing \geq 16$	<b>MTQ 1212 D42 12 UN</b>	12	12.0	4	25.4	42.3	84
12	$\varnothing \geq 24$	<b>MTQ 2020 E55 12 UN</b>	20	20.0	5	33.9	55.1	105

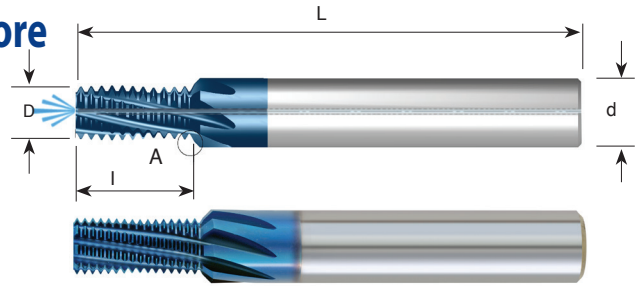
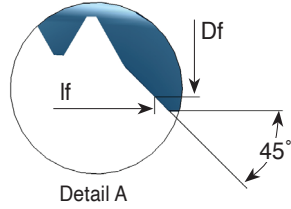
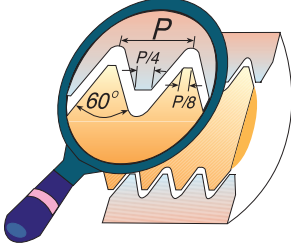
Order example: MTQ 1212 D35 16 UN MT7

● First choice    ○ Alternative



## UN Fast MT with internal coolant bore

### Tools for Internal Thread



Grade	P	M	K	N	S	H
MT8	●	●	●	○	●	≤52 HRc

Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	Df	No. of Flutes	I	If	L
28		1/4		<b>FMT 08052 F11 28 UN</b>	8	5.2	7.0	6	11.3	12.3	64
28			7/16-1/2	<b>FMT 12098 H19 28 UN</b>	12	9.8	11.8	8	19.5	20.5	84
24		5/16		<b>FMT 10066 G14 24 UN</b>	10	6.6	9.6	7	14.3	15.8	73
24		3/8	9/16, 5/8, 11/16	<b>FMT 12082 G17 24 UN</b>	12	8.2	10.6	7	17.5	18.7	84
20	1/4			<b>*FMT 08048 E12 20 UN</b>	8	4.8	6.8	5	12.1	13.1	64
20		7/16		<b>FMT 12092 H21 20 UN</b>	12	9.2	11.4	8	21.0	22.1	84
20		1/2	3/4, 7/8, 1	<b>FMT 14111 H22 20 UN</b>	14	11.1	13.5	8	22.2	23.4	84
18	5/16			<b>FMT 1006 F14 18 UN</b>	10	6.0	8.4	6	14.8	16.0	73
18		9/16, 5/8	1 1/16, 1 1/8	<b>FMT 16125 H26 18 UN</b>	16	12.5	15.0	8	26.1	27.4	105
16	3/8			<b>FMT 10074 F16 16 UN</b>	10	7.4	9.6	6	16.7	17.8	73
16		3/4		<b>FMT 20167 H34 16 UN</b>	20	16.7	19.3	8	34.1	35.4	105
14	7/16	7/8		<b>FMT 12085 F20 14 UN</b>	12	8.5	10.7	6	20.9	22.0	84
13	1/2			<b>FMT 12098 F24 13 UN</b>	12	9.8	11.8	6	24.4	25.4	84
12	9/16	1		<b>FMT 16116 F26 12 UN</b>	16	11.6	15.2	6	26.5	28.3	105
11	5/8			<b>FMT 1612 F33 11 UN</b>	16	12.0	15.4	6	33.4	35.1	105

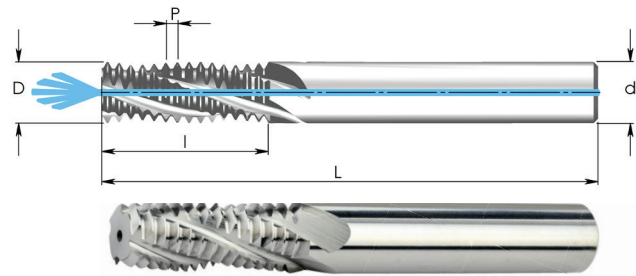
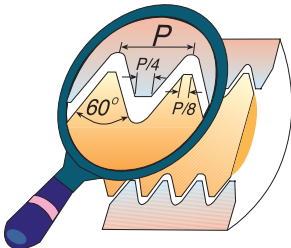
Order example: FMT 12092 H21 20 UN

\* without internal coolant

For small thread mills see page B09-17

## UN With internal coolant bore

### Tools for Internal Thread



Thread length: 2xD

Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	No. of Flutes	I	L
32	8	10	12	<b>AMT 06032 C9 32 UN</b>	6	3.2	3	9.1	58
28		1/4		<b>AMT 06052 C14 28 UN</b>	6	5.2	3	14.0	58
24		3/8	9/16-5/8	<b>AMT 0808 D20 24 UN</b>	8	8.0	4	20.6	64
20	1/4			<b>AMT 06048 C14 20 UN</b>	6	4.8	3	14.6	58
20		7/16		<b>AMT 10092 C23 20 UN</b>	10	9.2	3	23.5	73
18	5/16			<b>AMT 0606 C17 18 UN</b>	6	6.0	3	17.6	58
18		9/16-5/8	1 1/8 - 1 5/8	<b>AMT 1212 D30 18 UN</b>	12	12.0	4	30.3	84
16	3/8			<b>AMT 08074 C21 16 UN</b>	8	7.4	3	21.4	64
16		3/4		<b>AMT 1616 E38 16 UN</b>	16	16.0	5	38.9	105

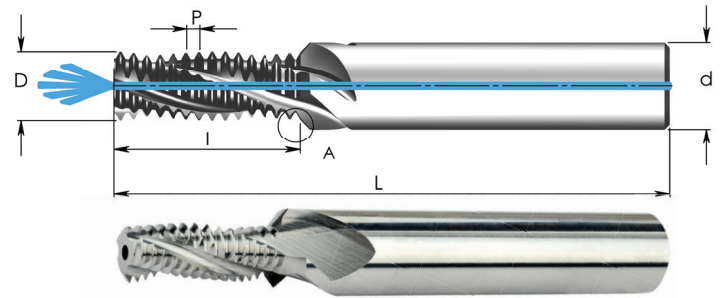
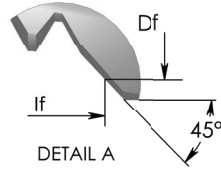
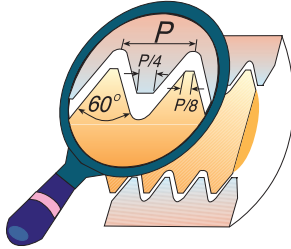
For information about AMT Thread Mills and cutting data see page B12-16

● First choice

○ Alternative

## UN With internal coolant bore and cutting chamfer

### Tools for Internal Thread



### Thread length: 2xD

Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

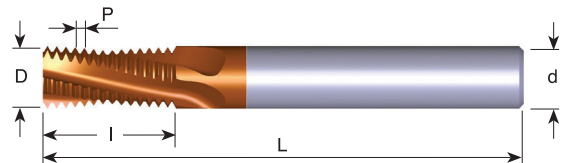
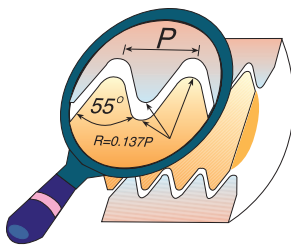
Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	Df	No. of Flutes	I	lf	L
20	1/4			<b>AMT 08048 C14 20UN-C</b>	8	4.8	6.8	3	14.6	15.6	64
18	5/16			<b>AMT 1006 C17 18UN-C</b>	10	6.0	8.4	3	17.6	18.8	73
16	3/8			<b>AMT 12074 C21 16UN-C</b>	12	7.4	10.0	3	21.4	22.7	84

Order example: AMT 12074 C21 16UN-C K20

For information about AMT Thread Mills and cutting data see page B12-16

## G (55°) BSF, BSP

### Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT7	●	○	●	○	○	

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	G1/16-G1/8	<b>MT 0606 C9 28 W</b>	6	6.0	3	9.5	58
19	G1/4-3/8	<b>MT 0808 C14 19 W</b>	8	8.0	3	14.0	64
14	G1/2-7/8	<b>MT 1212 D19 14 W</b>	12	12.0	4	19.0	84
14	G1/2-7/8	<b>MT 1212 D26 14 W</b>	12	12.0	4	26.3	84
11	G≥1	<b>MT 1212 C24 11 W</b>	12	12.0	3	24.2	84
11	G≥1	<b>MT 1616 D38 11 W</b>	16	16.0	4	38.1	105
11	G≥1	<b>MT 2020 E47 11 W</b>	20	20.0	5	47.3	105

Order example: MT 1212 D19 14 W MT7

For small thread mills see pages B09-7, B09-14 and B11-5

For thread mills with coolant see next page

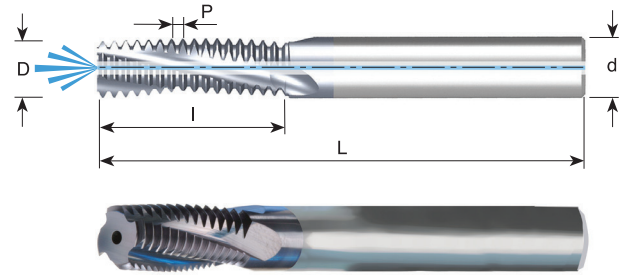
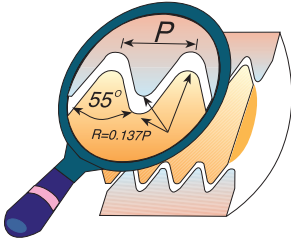


● First choice

○ Alternative

## G (55°) BSF, BSP With internal coolant bore

Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

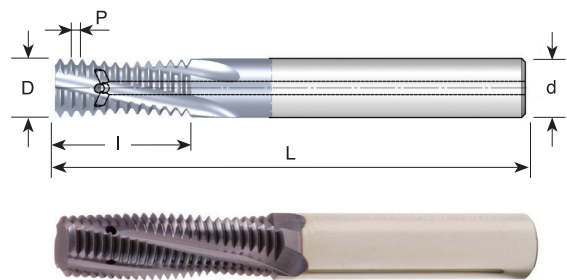
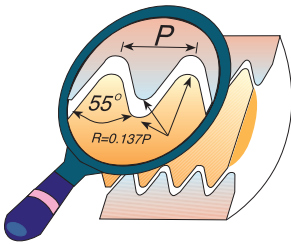
Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	G1/8	<b>MTB 08078 C14 28 W</b>	8	7.8	3	14.1	64
28	G1/8	<b>MTB 0808 C20 28 W</b>	8	8.0	3	20.4	64
19	G1/4	<b>MTB 1010 D16 19 W</b>	10	10.0	4	16.7	73
19	G1/4	<b>MTB 1211 D27 19 W</b>	12	11.0	4	27.4	84
19	G3/8	<b>MTB 1414 D26 19 W</b>	14	14.0	4	26.1	83
19	G3/8	<b>MTB 1414 D34 19 W</b>	14	14.0	4	34.1	83
14	G1/2-7/8	<b>MTB 1616 E26 14 W</b>	16	16.0	5	26.3	105
11	G≥1	<b>MTB 1616 D38 11 W</b>	16	16.0	4	38.1	105
11	G≥1	<b>MTB 2020 E47 11 W</b>	20	20.0	5	47.3	105

Order example: MTB 1010 D16 19 W MT7

For small thread mills see pages B09-7, B09-14 and B11-5

## G (55°) BSF, BSP With internal coolant through the flutes

Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	G1/8	<b>MTZ 08078 C14 28 W</b>	8	7.8	3	14.1	64
19	G1/4-3/8	<b>MTZ 1010 D16 19 W</b>	10	10.0	4	16.7	73
14	G1/2-7/8	<b>MTZ 1616 E26 14 W</b>	16	16.0	5	26.3	101
11	G≥1	<b>MTZ 1616 D38 11 W</b>	16	16.0	4	38.1	101

Order example: MTZ 08078 C14 28 W MT7

For small thread mills see pages B09-7, B09-14 and B11-5

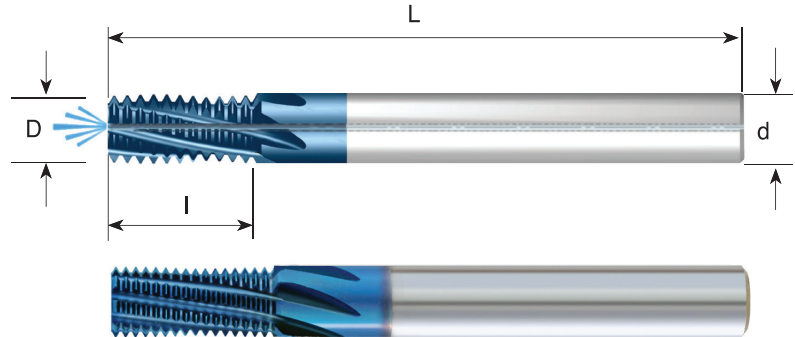
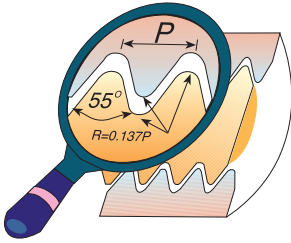


● First choice

○ Alternative

## G (55°) Fast MT With internal coolant bore

Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT8	●	●	●	○	●	≤52 HRc

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	G1/8	<b>FMT 08078 H14 28 W</b>	8	7.8	8	14.1	64
19	G1/4-3/8	<b>FMT 1010 G16 19 W</b>	10	10.0	7	16.7	73
14	G1/2-7/8	<b>FMT 1414 H26 14 W</b>	14	14.0	8	26.3	84
11	G≥1	<b>FMT 1616 H38 11 W</b>	16	16.0	8	38.1	105

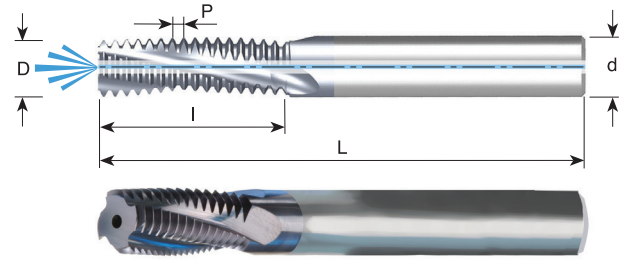
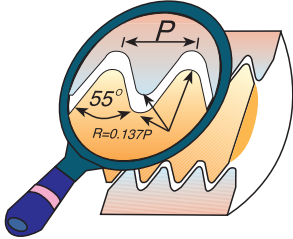
Order example: FMT 1616 H38 11W MT8

● First choice    ○ Alternative



## Whitworth with internal coolant bore

Same Tool for Internal and External Thread



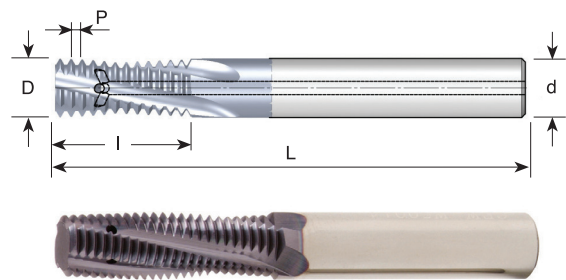
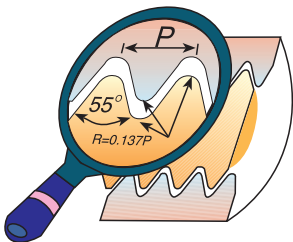
Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	BSW	BSF	Ordering Code	d	D	No. of Flutes	I	L
20	1/4		<b>MTB 06046 C13 20 W</b>	6	4.6	3	13.3	58
20		3/8	<b>MTB 08076 D19 20 W</b>	8	7.6	4	19.7	64
18	5/16		<b>MTB 06056 C16 18 W</b>	6	5.6	3	16.2	58
18		7/16	<b>MTB 10088 D23 18 W</b>	10	8.8	4	23.3	73
16	3/8		<b>MTB 0807 D19 16 W</b>	8	7.0	4	19.8	64
16		1/2-9/16	<b>MTB 1010 E26 16 W</b>	10	10.0	5	26.1	73
14	7/16		<b>MTB 0808 D22 14 W</b>	8	8.0	4	22.7	64
14		5/8-11/16	<b>MTB 14128 E31 14 W</b>	14	12.8	5	31.8	83
12	1/2-9/16	3/4-13/16	<b>MTB 1009 D26 12 W</b>	10	9.0	4	26.5	73
11	5/8	7/8	<b>MTB 12118 E33 11 W</b>	12	11.8	5	33.5	84
10	3/4	1	<b>MTB 1414 E39 10 W</b>	14	14.0	5	39.4	105
9	7/8	1 1/8	<b>MTB 1616 E43 9 W</b>	16	16.0	5	43.7	105

Order example: MTB 06046 C13 20 W MT7

## Whitworth with internal coolant through the flutes

Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	BSW	BSF	Ordering Code	d	D	No. of Flutes	I	L
20	1/4	3/8	<b>* MTZ 06046 C12 20 W</b>	6	4.6	3	12.1	58
18	5/16	7/16	<b>MTZ 06053 C14 18 W</b>	6	5.3	3	14.8	58
16	3/8		<b>MTZ 08068 C16 16 W</b>	8	6.8	3	16.7	64
16		1/2-9/16	<b>MTZ 10092 D24 16 W</b>	10	9.2	4	24.6	73
14	7/16	5/8-11/16	<b>MTZ 08078 D20 14 W</b>	8	7.8	4	20.9	64
12	1/2	3/4-13/16	<b>MTZ 10086 D24 12 W</b>	10	8.6	4	24.4	73
11	5/8	7/8	<b>MTZ 12109 D28 11 W</b>	12	10.9	4	28.9	84

Order example: MTZ 08068 C16 16 W MT7

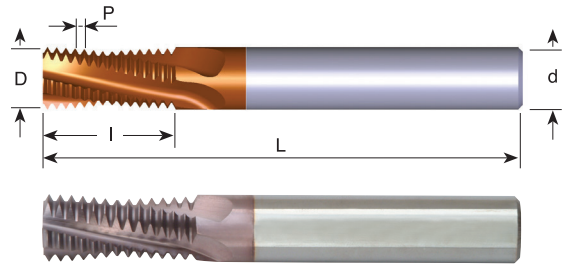
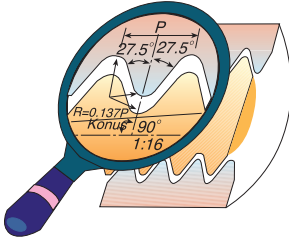
\* Cutter without coolant

● First choice

○ Alternative

## BSPT

Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT7	●	○	●	○	○	

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	RC1/16-1/8	<b>MT 0606 C9 28 BSPT</b>	6	6.0	3	9.5	58
19	RC1/4-3/8	<b>MT 0808 C14 19 BSPT</b>	8	8.0	3	14.0	64
14	RC1/2-7/8	<b>MT 1212 D19 14 BSPT</b>	12	12.0	4	19.1	84
11	RC1-2	<b>MT 1616 D28 11 BSPT</b>	16	16.0	4	28.9	105

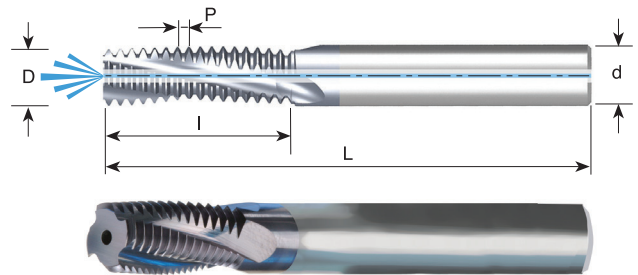
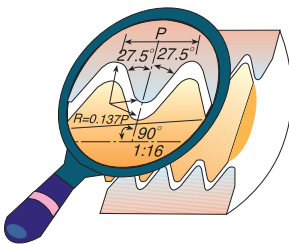
Order example: MT 1616 D28 11 BSPT MT7

For thread mills with coolant through the flutes see next page

For conical preparation end mills see page B08-23

## BSPT With internal coolant bore

Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

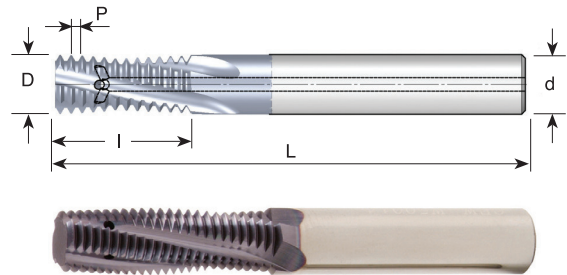
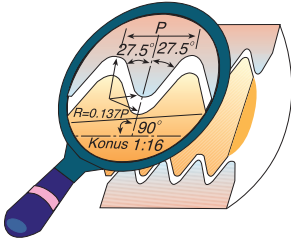
Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	RC1/8	<b>MTB 08078 C14 28 BSPT</b>	8	7.8	3	14.1	64
19	RC1/4-3/8	<b>MTB 1010 D16 19 BSPT</b>	10	10.0	4	16.7	73
14	RC1/2-7/8	<b>MTB 1616 E26 14 BSPT</b>	16	16.0	5	26.3	105
11	RC1-2	<b>MTB 1616 D28 11 BSPT</b>	16	16.0	4	28.9	105

Order example: MTB 08078 C14 28 BSPT MT7

● First choice    ○ Alternative

## BSPT With internal coolant through the flutes

Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	RC1/8	<b>MTZ 08078 C14 28 BSPT</b>	8	7.8	3	14.1	64
19	RC1/4-3/8	<b>MTZ 1010 D16 19 BSPT</b>	10	10.0	4	16.7	73
14	RC1/2-7/8	<b>MTZ 1616 E26 14 BSPT</b>	16	16.0	5	26.3	101
11	RC1-2	<b>MTZ 1616 D28 11 BSPT</b>	16	16.0	4	28.9	101

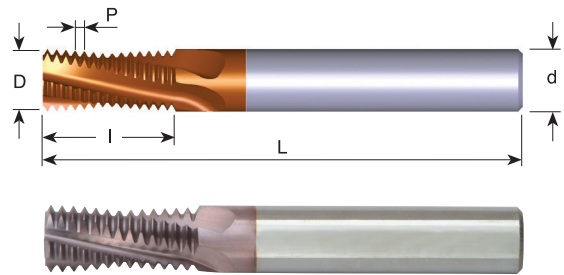
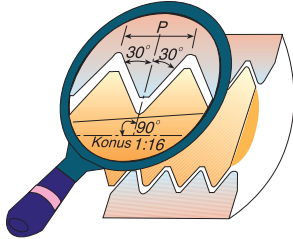
Order example: MTZ 1010 D16 19 BSPT MT7

● First choice    ○ Alternative

For conical preparation end mills see page B08-23

## NPT

Same Tool for Internal and External Thread



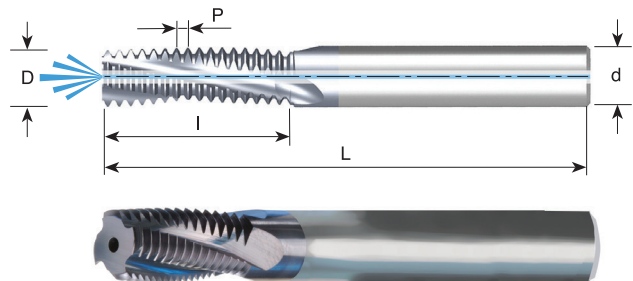
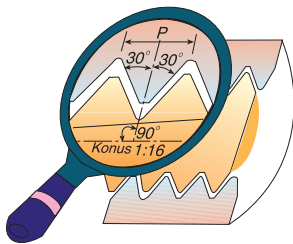
Grade	P	M	K	N	S	H
MT7	●	○	●	○	○	

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/16-1/8	<b>MT 0606 C9 27 NPT</b>	6	6.0	3	9.9	58
18	1/4-3/8	<b>MT 0808 C14 18 NPT</b>	8	8.0	3	14.8	64
14	1/2-3/4	<b>MT 1212 D20 14 NPT</b>	12	12.0	4	20.9	84
11.5	1-2	<b>MT 1616 D27 11.5 NPT</b>	16	16.0	4	27.6	105
8	≥2 1/2	<b>MT 2020 D39 8 NPT</b>	20	20.0	4	39.7	105

Order example: MT 0808 C14 18 NPT MT7

## NPT With internal coolant bore

Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/8	<b>MTB 08076 C10 27 NPT</b>	8	7.6	3	10.8	64
18	1/4-3/8	<b>MTB 1010 D16 18 NPT</b>	10	10.0	4	16.2	73
14	1/2-3/4	<b>MTB 16155 D22 14 NPT</b>	16	15.5	4	22.7	105
11.5	1-2	<b>MTB 2020 D29 11.5 NPT</b>	20	20.0	4	29.8	105
8	≥2 1/2	<b>MTB 2020 D39 8 NPT</b>	20	20.0	4	39.7	105

Order example: MTB 1010 D16 18 NPT MT7

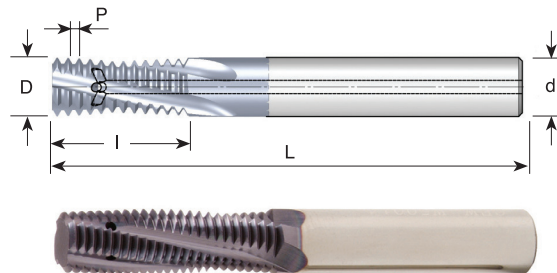
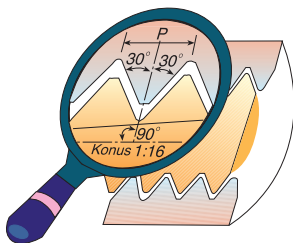
For thread mills with coolant through the flutes see next page

For conical preparation end mills see page B08-23

● First choice    ○ Alternative

## NPT With internal coolant through the flutes

Same Tool for Internal and External Thread



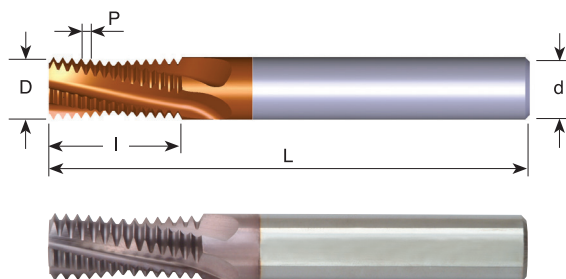
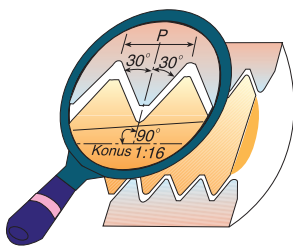
Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/8	<b>MTZ 08076 C10 27 NPT</b>	8	7.6	3	10.8	64
18	1/4-3/8	<b>MTZ 1010 D16 18 NPT</b>	10	10.0	4	16.2	73
14	1/2-3/4	<b>MTZ 16155 D22 14 NPT</b>	16	15.5	4	22.7	101

Order example: MTZ 08076 C10 27 NPT MT7

## NPTF

Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT7	●	○	●	○	○	

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/16-1/8	<b>MT 0606 C9 27 NPTF</b>	6	6.0	3	9.9	58
18	1/4-3/8	<b>MT 0808 C14 18 NPTF</b>	8	8.0	3	14.8	64
14	1/2-3/4	<b>MT 1212 D20 14 NPTF</b>	12	12.0	4	20.9	84
11.5	1-2	<b>MT 1616 D27 11.5 NPTF</b>	16	16.0	4	27.6	105
8	≥2 1/2	<b>MT 2020 D39 8 NPTF</b>	20	20.0	4	39.7	105

Order example: MT 1212 D20 14 NPTF MT7

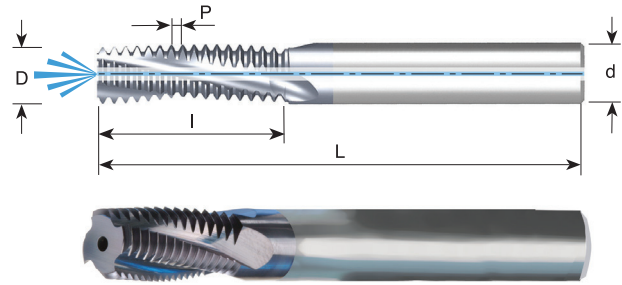
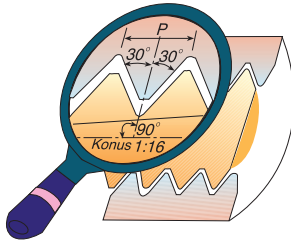
For thread mills with coolant bore see next page

For conical preparation end mills see page B08-23

● First choice    ○ Alternative

## NPTF With internal coolant bore

Same Tool for Internal and External Thread



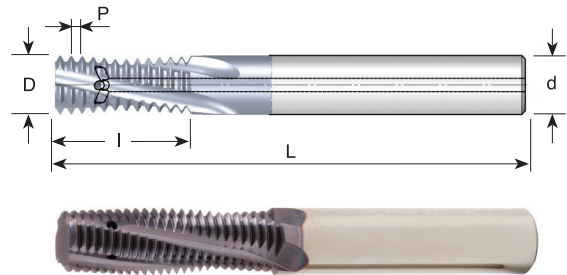
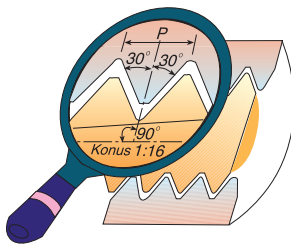
Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	l	L
27	1/8	<b>MTB 08076 C10 27 NPTF</b>	8	7.6	3	10.8	64
18	1/4-3/8	<b>MTB 1010 D16 18 NPTF</b>	10	10.0	4	16.2	73
14	1/2-3/4	<b>MTB 16155 D22 14 NPTF</b>	16	15.5	4	22.7	105
11.5	1-2	<b>MTB 2020 D29 11.5 NPTF</b>	20	20.0	4	29.8	105
8	≥ 2 1/2	<b>MTB 2020 D39 8 NPTF</b>	20	20.0	4	39.7	105

Order example: MTB 16155 D22 14 NPTF MT7

## NPTF With internal coolant through the flutes

Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	l	L
27	1/8	<b>MTZ 08076 C10 27 NPTF</b>	8	7.6	3	10.8	64
18	1/4-3/8	<b>MTZ 1010 D16 18 NPTF</b>	10	10.0	4	16.2	73
14	1/2-3/4	<b>MTZ 16155 D22 14 NPTF</b>	16	15.5	4	22.7	101

Order example: MTZ 1010 D16 18 NPTF MT7

For conical preparation end mills see page B08-23

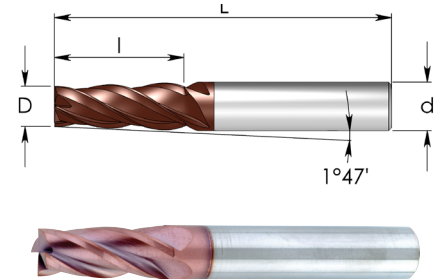
● First choice    ○ Alternative

## Solid Carbide Tapered End Mills

Solid carbide tapered end mills are used for milling preparation of conical threads before the thread milling operation.

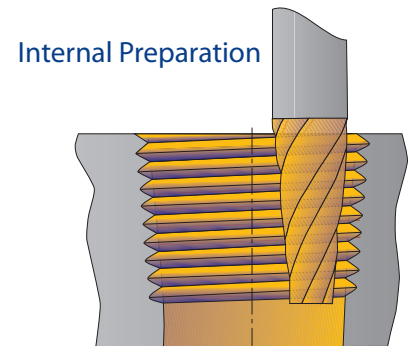
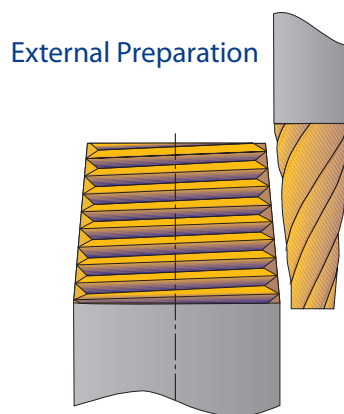
### Advantages:

- \* Increases the tool life of mill thread cutters and indexable inserts.
- \* Equal and uniform load along the cutting edge of the mill thread cutter.
- \* Shorter machining time during the mill thread operation, due to the tapered preparation.
- \* Same tool for internal and external preparation.



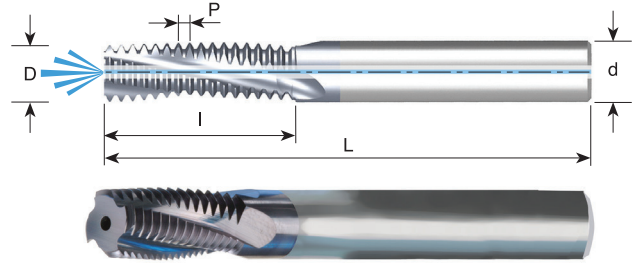
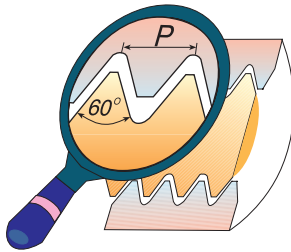
Ordering Code	d	D	l	L	No. of Flutes	Size
<b>SC0652D12</b>	6	5.2	12	58	4	NPT 1/16" - 1/8" NPTF 1/16" - 1/8" BSPT 1/16" - 1/8"
<b>SC1085D24</b>	10	8.5	24	73	4	NPT 1/4" - 1" NPTF 1/4" - 1" BSPT 1/4" - 1"
<b>SC1210D32</b>	12	10	32	84	4	NPT 1/4" - 3" NPTF 1/4" - 3" BSPT 1/4" - 3"

Order example: SC 1085 D24 MT7  
Carbide grade: MT7



## NPS With internal coolant bore

Same Tool for Internal and External Thread - Inch Shank



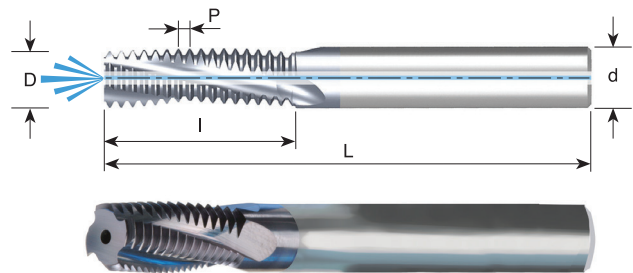
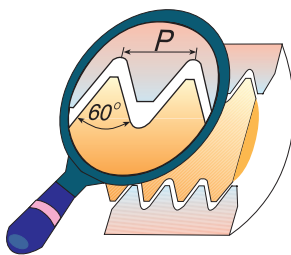
Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	Standard	Ordering Code	d inch	D	No. of Flutes	I	L
27	1/8	<b>MTB 0312 C04 27 NPS</b>	5/16	7.6	3	10.8	63
18	1/4-3/8	<b>MTB 0375 D06 18 NPS</b>	3/8	9.5	4	16.2	76
14	1/2-3/4	<b>MTB 0625 D08 14 NPS</b>	5/8	15.5	4	22.7	101
11.5	1-2	<b>MTB 0750 D11 11.5 NPS</b>	3/4	19.0	4	29.8	101

Order example: MTB 0375 D06 18 NPS MT7

## NPSF With internal coolant bore

Same Tool for Internal and External Thread - Inch Shank



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	Standard	Ordering Code	d inch	D	No. of Flutes	I	L
27	1/8	<b>MTB 0312 C04 27 NPSF</b>	5/16	7.6	3	10.8	63
18	1/4-3/8	<b>MTB 0375 D06 18 NPSF</b>	3/8	9.5	4	16.2	76
14	1/2-3/4	<b>MTB 0625 D08 14 NPSF</b>	5/8	15.5	4	22.7	101
11.5	1-2	<b>MTB 0750 D11 11.5 NPSF</b>	3/4	19.0	4	29.8	101

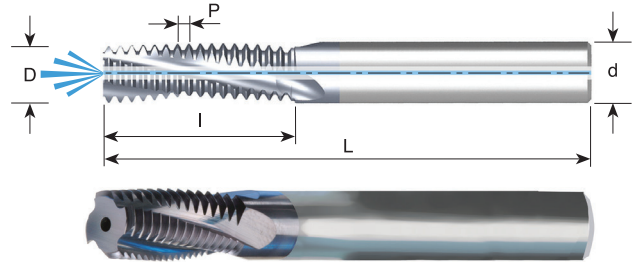
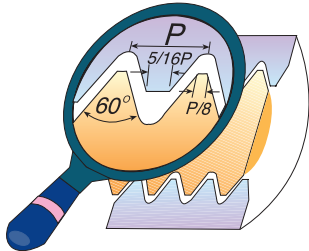
Order example: MTB 0312 C04 27 NPSF MT7

● First choice    ○ Alternative



## MJ With internal coolant bore

Tools for internal thread



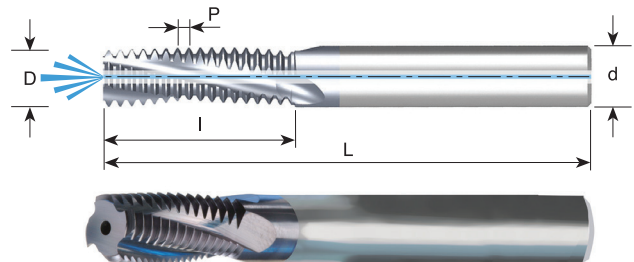
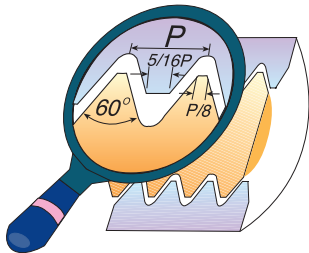
Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch mm	Thread	Ordering Code	d	D	No. of Flutes	I	L
0.7	MJ4	<b>MTB 06032 C8 0.7 MJ</b>	6	3.2	3	8.1	58
0.8	MJ5	<b>MTB 0604 C10 0.8 MJ</b>	6	4.0	3	10.0	58
1.0	MJ6	<b>MTB 06048 D12 1.0 MJ</b>	6	4.8	4	12.5	58
1.25	MJ8	<b>MTB 08064 D15 1.25 MJ</b>	8	6.4	4	15.6	64
1.5	MJ10	<b>MTB 0808 D20 1.5 MJ</b>	8	8.0	4	20.3	64
1.75	MJ12	<b>MTB 10095 D23 1.75 MJ</b>	10	9.5	4	23.6	73

Order example: MTB 06048 D12 1.0 MJ MT7

## UNJ With internal coolant bore

Tools for internal thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

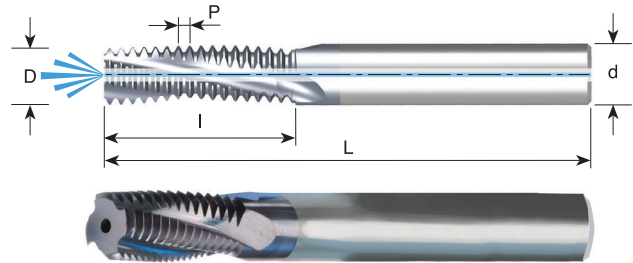
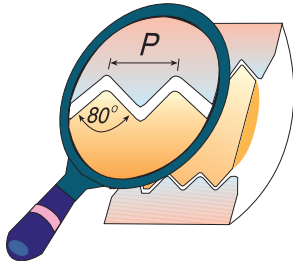
Pitch TPI	UNJC	UNJF	Ordering Code	d	D	No. of Flutes	I	L
28		1/4	<b>MTB 06052 D13 28 UNJ</b>	6	5.2	4	13.2	58
24		5/16	<b>MTB 08066 D16 24 UNJ</b>	8	6.6	4	16.4	64
24		3/8	<b>MTB 10082 D19 24 UNJ</b>	10	8.2	4	19.6	73
20	1/4		<b>MTB 06048 C13 20 UNJ</b>	6	4.8	3	13.3	58
20		7/16-1/2	<b>MTB 10092 D22 20 UNJ</b>	10	9.2	4	22.2	73
18	5/16		<b>MTB 0606 C16 18 UNJ</b>	6	6.0	3	16.2	58
16	3/8		<b>MTB 08074 D19 16 UNJ</b>	8	7.4	4	19.9	64
14	7/16		<b>MTB 10085 D22 14 UNJ</b>	10	8.5	4	22.7	73
13	1/2		<b>MTB 10098 D26 13 UNJ</b>	10	9.8	4	26.4	73
12	9/16		<b>MTB 12116 D28 12 UNJ</b>	12	11.6	4	28.6	84

Order example: MTB 0606 C16 18 UNJ MT7

● First choice    ○ Alternative

## PG DIN 40430 - With internal coolant bore

Same Tool for Internal and External Thread



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
20	Pg 7	<b>MTB 1010 D19 20 PG</b>	10	10.0	4	19.7	73
18	Pg 9, 11, 13.5, 16	<b>MTB 1212 D20 18 PG</b>	12	12.0	4	20.5	84
16	Pg 21, 29, 36, 42, 48	<b>MTB 1212 D23 16 PG</b>	12	12.0	4	23.0	84

Order example: MTB 1212 D20 18 PG MT7

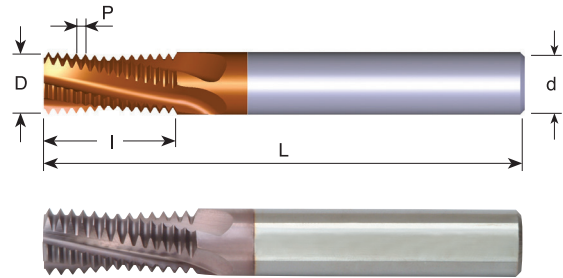
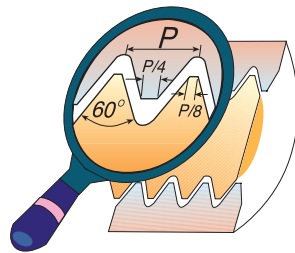
● First choice    ○ Alternative

## Mill - Thread Solid Carbide for External Threads

### Advantages:

- Excellent surface finish thanks to the spiral flutes
- Short machining time due to multi 3 to 5 flutes

### ISO

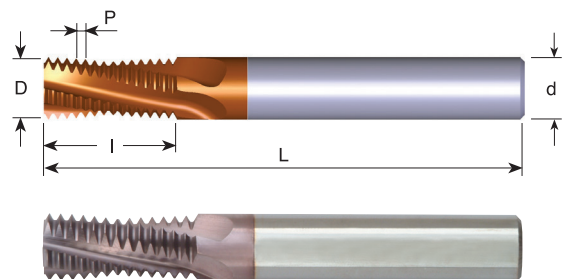
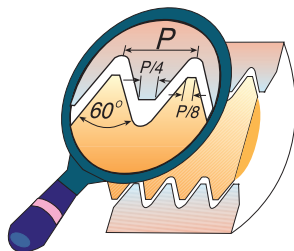


Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch mm	Ordering Code	d	D	No. of Flutes	I	L
1.0	<b>EMT 1010 D16 1.0 ISO</b>	10	10.0	4	16.5	73
1.0	<b>EMT 1212 E20 1.0 ISO</b>	12	12.0	5	20.5	84
1.25	<b>EMT 1010 D16 1.25 ISO</b>	10	10.0	4	16.9	73
1.5	<b>EMT 1010 D15 1.5 ISO</b>	10	10.0	4	15.8	73
1.5	<b>EMT 1212 D20 1.5 ISO</b>	12	12.0	4	20.3	84
1.75	<b>EMT 1212 D20 1.75 ISO</b>	12	12.0	4	20.1	84
2.0	<b>EMT 1010 C17 2.0 ISO</b>	10	10.0	3	17.0	73
2.0	<b>EMT 1212 D21 2.0 ISO</b>	12	12.0	4	21.0	84

Order example: EMT 1010 D15 1.5 ISO MT7

### UN



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

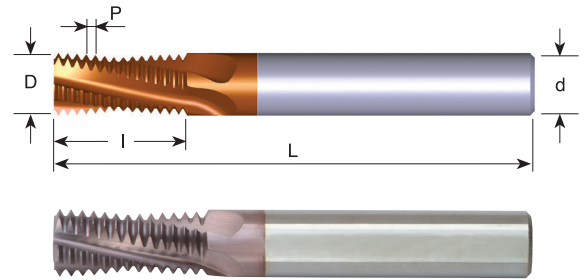
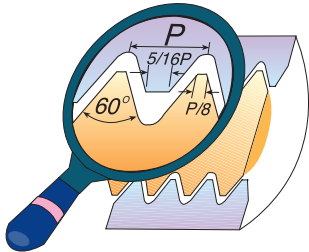
Pitch TPI	Ordering Code	d	D	No. of Flutes	I	L
24	<b>EMT 1010 D16 24 UN</b>	10	10.0	4	16.4	73
20	<b>EMT 1212 E21 20 UN</b>	12	12.0	5	21.0	84
18	<b>EMT 1212 D20 18 UN</b>	12	12.0	4	20.5	84
16	<b>EMT 1212 D21 16 UN</b>	12	12.0	4	21.4	84
14	<b>EMT 1212 D20 14 UN</b>	12	12.0	4	20.9	84
12	<b>EMT 1212 D20 12 UN</b>	12	12.0	4	20.1	84

Order example: EMT 1212 D20 18 UN MT7

● First choice

○ Alternative

## MJ

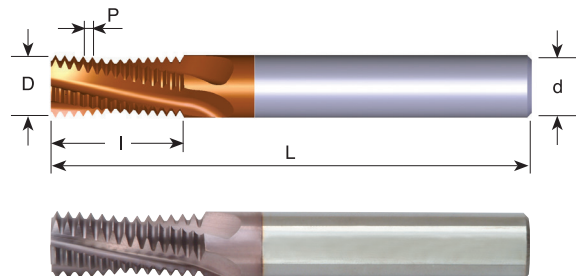
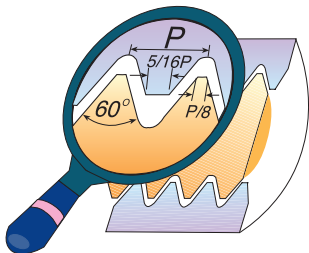


Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch mm	Ordering Code	d	D	No. of Flutes	I	L
1.0	<b>EMT 1010 D20 1.0 MJ</b>	10	10.0	4	20.5	72
1.0	<b>EMT 1212 E24 1.0 MJ</b>	12	12.0	5	24.5	83
1.25	<b>EMT 1010 D19 1.25 MJ</b>	10	10.0	4	19.4	72
1.5	<b>EMT 1010 D21 1.5 MJ</b>	10	10.0	4	21.8	72
1.5	<b>EMT 1212 D26 1.5 MJ</b>	12	12.0	4	26.3	83
1.75	<b>EMT 1212 D27 1.75 MJ</b>	12	12.0	4	27.1	83
2.0	<b>EMT 1010 C21 2.0 MJ</b>	10	10.0	3	21.0	72
2.0	<b>EMT 1212 D27 2.0 MJ</b>	12	12.0	4	27.0	83

Order example: EMT 1010 C21 2.0 MJ MT7

## UNJ UNJC, UNJF, UNJEF, UNJS



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤47 HRc

Pitch TPI	Ordering Code	d	D	No. of Flutes	I	L
32	<b>EMT 0606 C13 32 UNJ</b>	6	6.0	3	13.9	57
28	<b>EMT 0808 D17 28 UNJ</b>	8	8.0	4	17.7	63
24	<b>EMT 1010 D20 24 UNJ</b>	10	10.0	4	20.6	72
20	<b>EMT 1212 E27 20 UNJ</b>	12	12.0	5	27.3	83
18	<b>EMT 1212 D26 18 UNJ</b>	12	12.0	4	26.1	83
16	<b>EMT 1212 D26 16 UNJ</b>	12	12.0	4	26.2	83
14	<b>EMT 1212 D26 14 UNJ</b>	12	12.0	4	26.3	83
12	<b>EMT 1212 D26 12 UNJ</b>	12	12.0	4	26.5	83

Order example: EMT 0808 D17 28 UNJ MT7

For cutting data information see page B12-12

● First choice    ○ Alternative