

# Mill-Thread Solid Carbide



## 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.

**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

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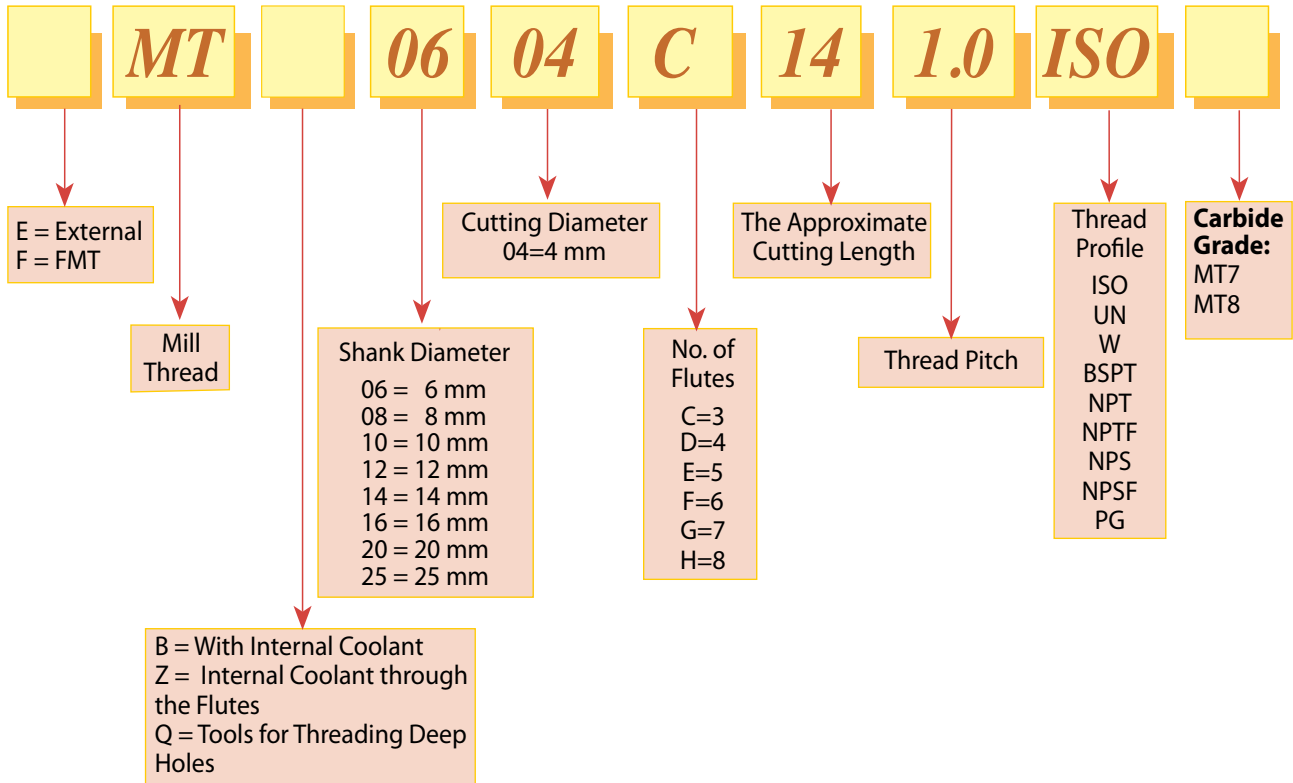
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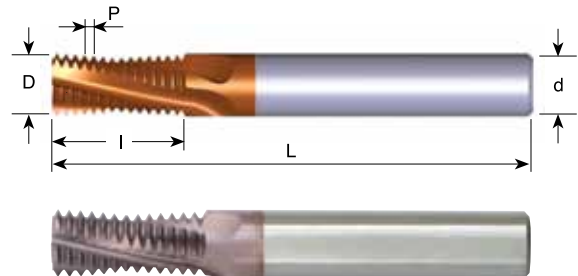
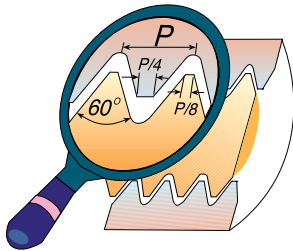
## Product Identification

### Mill-Thread Solid Carbide Ordering Codes



## ISO

### Tools for Internal thread



Pitch mm	M coarse	M fine	Ordering Code	d	D	No. of Flutes	I	L
0.5	M3	$\varnothing \geq 4$	<b>MT06022C5 0.5 ISO</b>	6	2.2	3	5.3	58
0.5		$\varnothing \geq 5$	<b>MT06038C10 0.5 ISO</b>	6	3.8	3	10.3	58
0.7	M4	$\varnothing \geq 5$	<b>MT06031C7 0.7 ISO</b>	6	3.1	3	7.4	58
0.75		$\varnothing \geq 6$	<b>MT06045C10 0.75 ISO</b>	6	4.5	3	10.1	58
0.8	M5	$\varnothing \geq 6$	<b>MT06036C9 0.8 ISO</b>	6	3.6	3	9.2	58
1.0	M6	$\varnothing \geq 7$	<b>MT0604C10 1.0 ISO</b>	6	4.0	3	10.5	58
1.0	M6	$\varnothing \geq 7$	<b>MT0604C14 1.0 ISO</b>	6	4.0	3	14.5	58
1.0		$\varnothing \geq 9$	<b>MT0606C12 1.0 ISO</b>	6	6.0	3	12.5	58
1.0		$\varnothing \geq 10$	<b>MT0808D16 1.0 ISO</b>	8	8.0	4	16.5	64
1.25	M8	$\varnothing \geq 10$	<b>MT0605C14 1.25 ISO</b>	6	5.0	3	14.4	58
1.25	M8	$\varnothing \geq 10$	<b>MT0605C19 1.25 ISO</b>	6	5.0	3	19.4	58
1.5	M10	$\varnothing \geq 12$	<b>MT0807C17 1.5 ISO</b>	8	7.0	3	17.3	64
1.5	M10	$\varnothing \geq 12$	<b>MT0807C24 1.5 ISO</b>	8	7.0	3	24.8	76
1.5		$\varnothing \geq 14$	<b>MT1010D21 1.5 ISO</b>	10	10.0	4	21.8	73
1.5		$\varnothing \geq 20$	<b>MT1616F33 1.5 ISO</b>	16	16.0	6	33.8	105
1.75	M12	$\varnothing \geq 14$	<b>MT0808C20 1.75 ISO</b>	8	8.0	3	20.1	64
1.75	M12	$\varnothing \geq 14$	<b>MT0808C28 1.75 ISO</b>	8	8.0	3	28.9	76
2.0	M16	$\varnothing \geq 17$	<b>MT1010C27 2.0 ISO</b>	10	10.0	3	27.0	73
2.0	M16	$\varnothing \geq 17$	<b>MT1010C39 2.0 ISO</b>	10	10.0	3	39.0	105
2.0		$\varnothing \geq 18$	<b>MT1212D27 2.0 ISO</b>	12	12.0	4	27.0	84
2.0		$\varnothing \geq 26$	<b>MT2020F41 2.0 ISO</b>	20	20.0	6	41.0	105
2.5	M20	$\varnothing \geq 22$	<b>MT1414D33 2.5 ISO</b>	14	14.0	4	33.8	84
2.5	M20	$\varnothing \geq 22$	<b>MT1414D48 2.5 ISO</b>	14	14.0	4	48.8	105
3.0	M24	$\varnothing \geq 25$	<b>MT1616C40 3.0 ISO</b>	16	16.0	3	40.5	105
3.0	M24	$\varnothing \geq 25$	<b>MT1616C58 3.0 ISO</b>	16	16.0	3	58.5	120
3.0	M27	$\varnothing \geq 28$	<b>MT2020D43 3.0 ISO</b>	20	20.0	4	43.5	105

Order example: MT 1212D27 2.0 ISO MT7

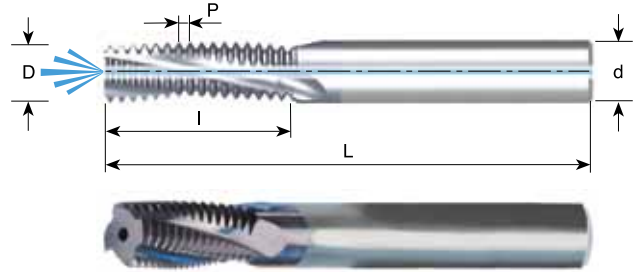
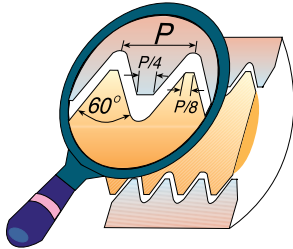
For thread mills with coolant bore see following pages

For small thread mills see pages 227-228, 235 & 245



## ISO With internal coolant bore

### Tools for Internal thread



Pitch mm	M coarse	M fine	Ordering Code	d	D	No. of Flutes	I	L
0.5		$\varnothing \geq 5$	<b>MTB06038C10 0.5 ISO</b>	6	3.8	3	10.3	58
0.7	M4	$\varnothing \geq 5$	<b>MTB06031C7 0.7 ISO</b>	6	3.1	3	7.4	58
0.75		$\varnothing \geq 6$	<b>MTB06045C10 0.75 ISO</b>	6	4.5	3	10.1	58
0.75		$\varnothing \geq 12$	<b>MTB1010D24 0.75 ISO</b>	10	10.0	4	24.4	73
0.8	M5	$\varnothing \geq 6$	<b>MTB06038C9 0.8 ISO</b>	6	3.8	3	9.2	58
1.0	M6	$\varnothing \geq 7$	<b>MTB06046C10 1.0 ISO</b>	6	4.6	3	10.5	58
1.0	M6	$\varnothing \geq 7$	<b>MTB06046C14 1.0 ISO</b>	6	4.6	3	14.5	58
1.0		$\varnothing \geq 9$	<b>MTB0606C12 1.0 ISO</b>	6	6.0	3	12.5	58
1.0		$\varnothing \geq 10$	<b>MTB0808D16 1.0 ISO</b>	8	8.0	4	16.5	64
1.0		$\varnothing \geq 12$	<b>MTB1010D24 1.0 ISO</b>	10	10.0	4	24.5	73
1.25	M8	$\varnothing \geq 10$	<b>MTB0606C14 1.25 ISO</b>	6	6.0	3	14.4	58
1.25	M8	$\varnothing \geq 10$	<b>MTB0606C19 1.25 ISO</b>	6	6.0	3	19.4	58
1.5	M10	$\varnothing \geq 12$	<b>MTB08078C17 1.5 ISO</b>	8	7.8	3	17.0	64
1.5	M10	$\varnothing \geq 12$	<b>MTB08078C24 1.5 ISO</b>	8	7.8	3	24.8	76
1.5		$\varnothing \geq 14$	<b>MTB1010D21 1.5 ISO</b>	10	10.0	4	21.8	73
1.5		$\varnothing \geq 16$	<b>MTB1212D26 1.5 ISO</b>	12	12.0	4	26.3	84
1.5		$\varnothing \geq 20$	<b>MTB1616F33 1.5 ISO</b>	16	16.0	6	33.8	105
1.75	M12	$\varnothing \geq 12$	<b>MTB1009C20 1.75 ISO</b>	10	9.0	3	20.1	73
1.75	M12	$\varnothing \geq 12$	<b>MTB1009C28 1.75 ISO</b>	10	9.0	3	28.9	73
2.0	M14	$\varnothing \geq 15$	<b>MTB1010C27 2.0 ISO</b>	10	10.0	3	27.0	73
2.0	M16	$\varnothing \geq 17$	<b>MTB12118D27 2.0 ISO</b>	12	11.8	4	27.0	84
2.0	M16	$\varnothing \geq 17$	<b>MTB12118D39 2.0 ISO</b>	12	11.8	4	39.0	105
2.0		$\varnothing \geq 26$	<b>MTB2020F41 2.0 ISO</b>	20	20.0	6	41.0	105
2.5	M20	$\varnothing \geq 22$	<b>MTB1615E33 2.5 ISO</b>	16	15.0	5	33.8	105
2.5	M20	$\varnothing \geq 22$	<b>MTB1615E48 2.5 ISO</b>	16	15.0	5	48.8	105
3.0	M24	$\varnothing \geq 25$	<b>MTB2018D40 3.0 ISO</b>	20	18.0	4	40.5	105
3.0	M24	$\varnothing \geq 25$	<b>MTB2018D58 3.0 ISO</b>	20	18.0	4	58.5	120
3.0	M27	$\varnothing \geq 27$	<b>MTB2020D43 3.0 ISO</b>	20	20.0	4	43.5	105

Order example: MTB 08078C17 1.5 ISO MT7

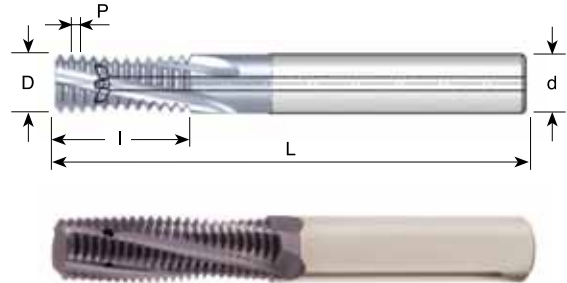
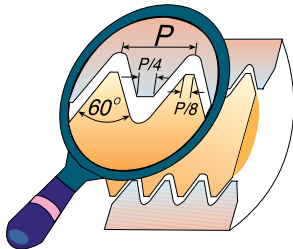
For thread mills with coolant through the flutes see next page

For small thread mills see pages 227-228, 235 & 245



## ISO With internal coolant through the flutes

### Tools for Internal Thread



Pitch mm	M coarse	M fine	Ordering Code	d	D	No. of Flutes	I	L
1.0	M6	$\varnothing \geq 7$	<b>MTZ06048C10 1.0 ISO</b>	6	4.8	3	10.5	58
1.0		$\varnothing \geq 9$	<b>MTZ0606C12 1.0 ISO</b>	6	6.0	3	12.5	58
1.0		$\varnothing \geq 10$	<b>MTZ0808D16 1.0 ISO</b>	8	8.0	4	16.5	64
1.25	M8	$\varnothing \geq 10$	<b>MTZ0606C14 1.25 ISO</b>	6	6.0	3	14.4	58
1.25	M8	$\varnothing \geq 10$	<b>MTZ0606C19 1.25 ISO</b>	6	6.0	3	19.4	58
1.5	M10	$\varnothing \geq 12$	<b>MTZ08078C17 1.5 ISO</b>	8	7.8	3	17.0	64
1.5		$\varnothing \geq 14$	<b>MTZ1010D21 1.5 ISO</b>	10	10.0	4	21.8	73
1.5		$\varnothing \geq 16$	<b>MTZ1212D26 1.5 ISO</b>	12	12.0	4	26.3	84
1.5		$\varnothing \geq 20$	<b>MTZ1616E33 1.5 ISO</b>	16	16.0	5	33.8	101
1.75	M12	$\varnothing \geq 12$	<b>MTZ1009C20 1.75 ISO</b>	10	9.0	3	20.1	73
1.75	M12	$\varnothing \geq 12$	<b>MTZ1009C28 1.75 ISO</b>	10	9.0	3	28.9	73
2.0	M14	$\varnothing \geq 15$	<b>MTZ1010C27 2.0 ISO</b>	10	10.0	3	27.0	73
2.0	M16	$\varnothing \geq 17$	<b>MTZ12118D27 2.0 ISO</b>	12	11.8	4	27.0	84
2.5	M20	$\varnothing \geq 22$	<b>MTZ1615E33 2.5 ISO</b>	16	15.0	5	33.8	101

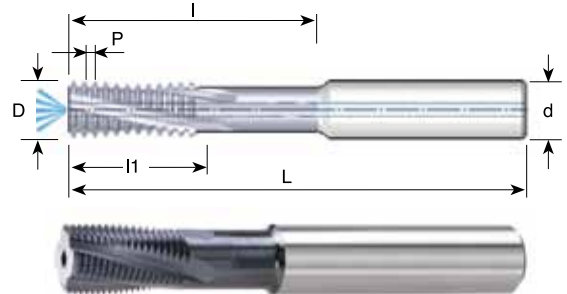
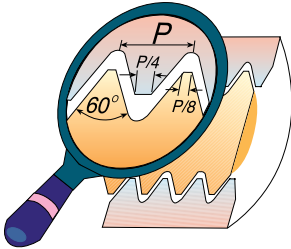
Order example: MTZ 08078C17 1.5 ISO MT7

For small thread mills see pages 227-228, 235 & 245



## ISO With relieved neck and internal coolant bore

### Tools for Internal Thread



Pitch TPI	M fine	Ordering Code	d	D	No. of Flutes	l1	l	L
1.0	$\emptyset \geq 12$	<b>MTQ1010D32 1.0 ISO</b>	10	10.0	4	18.0	32.0	73
1.0	$\emptyset \geq 14$	<b>MTQ1212D38 1.0 ISO</b>	12	12.0	4	21.0	38.0	84
1.0	$\emptyset \geq 18$	<b>MTQ1616F45 1.0 ISO</b>	16	16.0	6	26.0	45.0	105
1.5	$\emptyset \geq 13$	<b>MTQ1010D30 1.5 ISO</b>	10	10.0	4	18.0	30.0	73
1.5	$\emptyset \geq 15$	<b>MTQ1212D34 1.5 ISO</b>	12	12.0	4	19.5	34.5	84
1.5	$\emptyset \geq 19$	<b>MTQ1616F43 1.5 ISO</b>	16	16.0	6	25.5	43.5	105
1.5	$\emptyset \geq 23$	<b>MTQ2020F60 1.5 ISO</b>	20	20.0	6	36.0	60.0	105
2.0	$\emptyset \geq 16$	<b>MTQ1212D42 2.0 ISO</b>	12	12.0	4	24.0	42.0	84
2.0	$\emptyset \geq 20$	<b>MTQ1616E45 2.0 ISO</b>	16	16.0	5	26.0	45.0	105
2.0	$\emptyset \geq 24$	<b>MTQ2020F56 2.0 ISO</b>	20	20.0	6	34.0	56.0	105
3.0	$\emptyset \geq 22$	<b>MTQ1616D45 3.0 ISO</b>	16	16.0	4	30.0	45.0	105
3.0	$\emptyset \geq 26$	<b>MTQ2020E54 3.0 ISO</b>	20	20.0	5	33.0	54.0	105
3.5	$\emptyset \geq 26$	<b>MTQ2020D45 3.5 ISO</b>	20	20.0	4	28.0	45.5	105
4.0	$\emptyset \geq 31$	<b>MTQ2525D64 4.0 ISO</b>	25	25.0	4	40.0	64.0	160

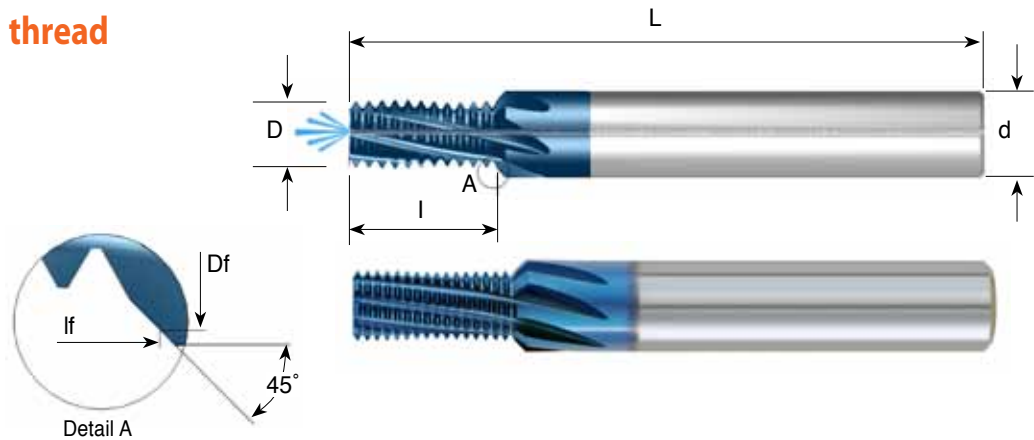
Order example: MTQ 1010D30 1.5 ISO MT7

For small thread mills see pages 227-228, 235 & 245



## ISO Fast MT With internal coolant bore

### Tools for Internal thread

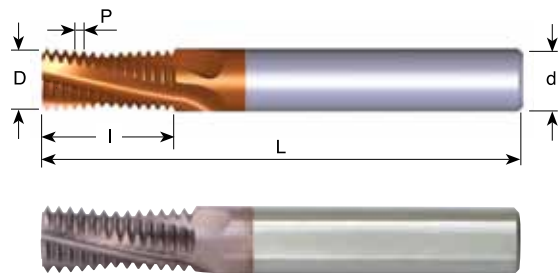
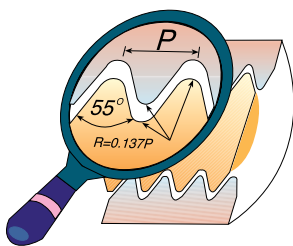


Pitch mm	M coarse	M fine	Ordering Code	d	D	Df	Flutes	I	lf	L
1.0	M6	$\varnothing \geq 7$	<b>FMT 08048 F10 1.0 ISO</b>	8	4.8	6.8	6	10.5	11.5	64
1.25	M8	$\varnothing \geq 10$	<b>FMT 10064 G14 1.25 ISO</b>	10	6.4	9.6	7	14.4	16.0	73
1.5	M10	$\varnothing \geq 12$	<b>FMT 1008 G17 1.5 ISO</b>	10	8.0	9.8	7	17.3	18.2	73
1.75	M12	$\varnothing \geq 12$	<b>FMT 12095 G20 1.75 ISO</b>	12	9.5	11.7	7	20.1	21.2	84

Order example: FMT 1008 G17 1.5 ISO MT8

## G (55°) BSF, BSP

### Same Tool for Internal and External Thread



Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	G1/16-G1/8	<b>MT0606C9 28 W</b>	6	6.0	3	9.5	58
19	G1/4-3/8	<b>MT0808C14 19 W</b>	8	8.0	3	14.0	64
14	G1/2-7/8	<b>MT1212D19 14 W</b>	12	12.0	4	19.0	84
14	G1/2-7/8	<b>MT1212D26 14 W</b>	12	12.0	4	26.3	84
11	$G \geq 1$	<b>MT1212C24 11 W</b>	12	12.0	3	24.2	84
11	$G \geq 1$	<b>MT1616D38 11 W</b>	16	16.0	4	38.1	105
11	$G \geq 1$	<b>MT2020E47 11 W</b>	20	20.0	5	47.3	105

Order example: MT 1212D19 14 W MT7

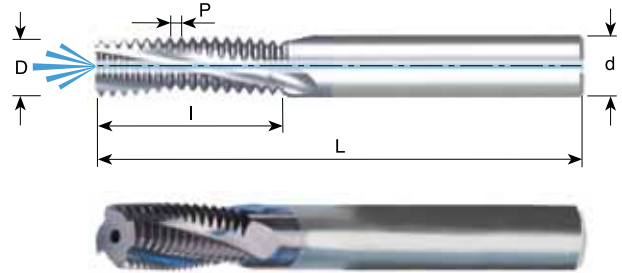
For small thread mills see pages 231, 234 & 247

For thread mills with coolant see next page



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

Same Tool for Internal and External Thread



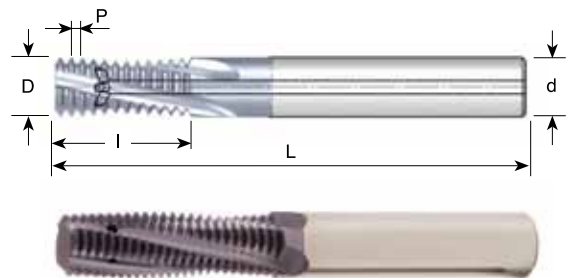
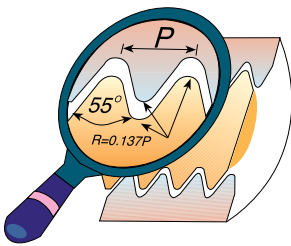
Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	G1/8	<b>MTB08078C14 28W</b>	8	7.8	3	14.1	64
19	G1/4-3/8	<b>MTB1010D16 19W</b>	10	10.0	4	16.7	73
14	G1/2-7/8	<b>MTB1616E26 14W</b>	16	16.0	5	26.3	105
11	G≥1	<b>MTB1616D38 11W</b>	16	16.0	4	38.1	105
11	G≥1	<b>MTB2020E47 11W</b>	20	20.0	5	47.3	105

Order example: MTB 1010D16 19 W MT7

For small thread mills see pages 231, 234 & 247

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

Same Tool for Internal and External Thread



Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	G1/8	<b>MTZ08078C14 28W</b>	8	7.8	3	14.1	64
19	G1/4-3/8	<b>MTZ1010D16 19W</b>	10	10.0	4	16.7	73
14	G1/2-7/8	<b>MTZ1616E26 14W</b>	16	16.0	5	26.3	101
11	G≥1	<b>MTZ1616D38 11W</b>	16	16.0	4	38.1	101

Order example: MTZ 08078C14 28 W MT7

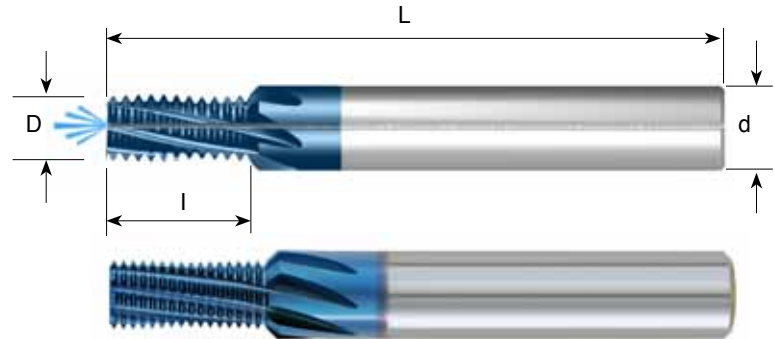
For small thread mills see pages 231, 234 & 247





## G 55° Fast MT With internal coolant bore

Same Tool for Internal and External Thread



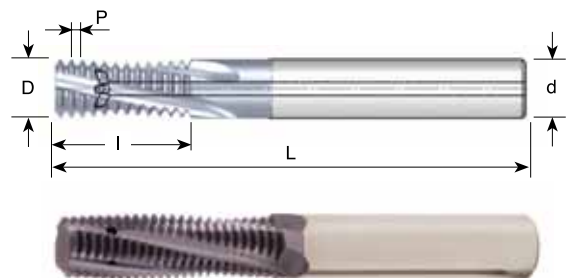
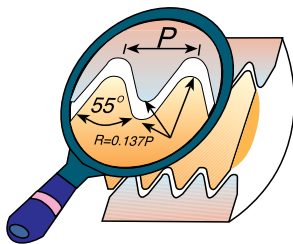
Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	G1/8	FMT08078H14 28W	8	7.8	8	14.1	64
19	G1/4-3/8	FMT1010G16 19W	10	10.0	7	16.7	73
14	G1/2-7/8	FMT1616H26 14W	14	14.0	8	26.3	84
11	G≥1	FMT1616H38 11W	16	16.0	8	38.1	105

Order example: FMT 1616 H38 11W MT8

\* Without cutting chamfer

## Whitworth BSW With internal coolant through the flutes

Same Tool for Internal and External Thread



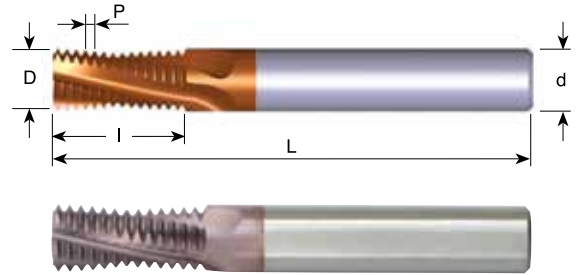
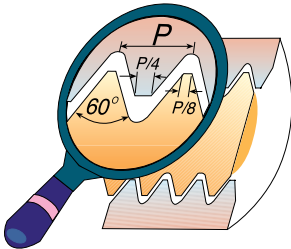
Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
* 20	1/4	MTZ06046C12 20W	6	4.6	3	12.1	58
18	5/16	MTZ06053C14 18W	6	5.3	3	14.8	58
16	3/8	MTZ08064C16 16W	8	6.8	3	16.7	64
16	1/2	MTZ10092D24 16W	10	9.2	4	24.6	73
14	7/16	MTZ08078D20 14W	8	7.8	4	20.9	64
12	1/2	MTZ10086D24 12W	10	8.6	4	24.4	73
11	5/8	MTZ12109D28 11W	12	10.9	4	28.9	84

Order example: MTZ 08064C16 16 W MT7

\* Cutter without coolant

## UN

### Tools for Internal Thread



Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	No. of Flutes	I	L
40	5			<b>MT06025C6 40UN</b>	6	2.5	3	6.0	58
32	8	10	12	<b>MT06032C6 32UN</b>	6	3.2	3	6.8	58
28		1/4		<b>MT0604C11 28UN</b>	6	4.0	3	11.3	58
28			7/16-1/2	<b>MT0606C14 28UN</b>	6	6.0	3	14.1	58
24		5/16		<b>MT0605C14 24UN</b>	6	5.0	3	14.3	58
24		3/8	9/16-5/8	<b>MT0807C21 24UN</b>	8	7.0	3	20.6	64
20	1/4			<b>MT06045C12 20UN</b>	6	4.5	3	12.1	58
20		7/16-1/2		<b>MT0807C21 20UN</b>	8	7.0	3	21.0	64
20			3/4-1	<b>MT1212E27 20UN</b>	12	12.0	5	27.3	84
18	5/16			<b>MT0605C14 18UN</b>	6	5.0	3	14.8	58
18		9/16-5/8	1 1/8-1 5/8	<b>MT1010D26 18UN</b>	10	10.0	4	26.1	73
16	3/8			<b>MT0606C16 16UN</b>	6	6.0	3	16.7	58
16		3/4		<b>MT1212D31 16UN</b>	12	12.0	4	31.0	84
14	7/16			<b>MT0807C20 14UN</b>	8	7.0	3	20.9	64
14		7/8		<b>MT1615E37 14UN</b>	16	15.0	5	37.2	105
13	1/2			<b>MT0808C22 13UN</b>	8	8.0	3	22.5	64
12	9/16			<b>MT1010C26 12UN</b>	10	10.0	3	26.5	73
12		1-1 1/2		<b>MT1616E41 12UN</b>	16	16.0	5	41.3	105
11	5/8			<b>MT1010C28 11UN</b>	10	10.0	3	28.9	73
10	3/4			<b>MT1212C34 10UN</b>	12	12.0	3	34.3	84
9	7/8			<b>MT1615C38 9UN</b>	16	15.0	3	38.1	105
8	1			<b>MT1616C42 8UN</b>	16	16.0	3	42.9	105
7	1 1/8-1 1/4			<b>MT2020D45 7UN</b>	20	20.0	4	45.3	105

Order example: MT 1615 E37 14 UN MT7

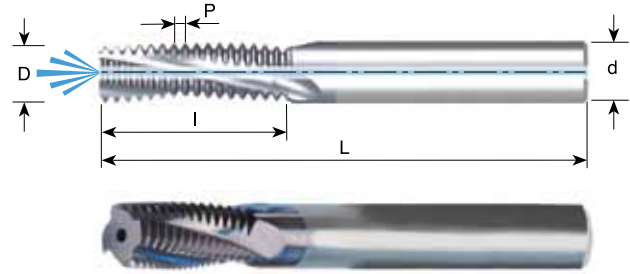
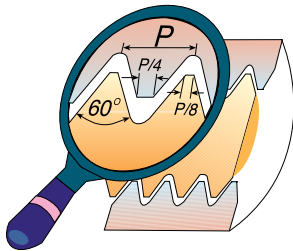
For thread mills with coolant bore see following pages

For small thread mills see pages 229-230, 235 & 246



## UN With internal coolant bore

### Tools for Internal Thread



Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	No. of Flutes	I	L
32	8	10	12	<b>MTB06032C6 32 UN</b>	6	3.2	3	6.8	58
32			5/16	<b>MTB0606C14 32 UN</b>	6	6.0	3	14.7	58
32			3/8	<b>MTB0808D18 32 UN</b>	8	8.0	4	18.7	64
28		1/4		<b>MTB0605C11 28 UN</b>	6	5.0	3	11.3	58
28			7/16-1/2	<b>MTB0606C14 28 UN</b>	6	6.0	3	14.1	58
24		5/16		<b>MTB08066C14 24 UN</b>	8	6.6	3	14.3	64
24		3/8	9/16-5/8	<b>MTB0808D21 24 UN</b>	8	8.0	4	20.6	64
20	1/4			<b>MTB06047C12 20 UN</b>	6	4.7	3	12.1	58
20		7/16		<b>MTB0808C21 20 UN</b>	8	8.0	3	21.0	64
20		1/2		<b>MTB1010D22 20 UN</b>	10	10.0	4	22.3	73
20			3/4-1	<b>MTB1212E27 20 UN</b>	12	12.0	5	27.3	84
18	5/16			<b>MTB06056C14 18 UN</b>	6	5.6	3	14.8	58
18		9/16-5/8	1 1/8-1 5/8	<b>MTB12113D26 18 UN</b>	12	11.3	4	26.1	84
16	3/8			<b>MTB08067C16 16 UN</b>	8	6.7	3	16.7	64
16		3/4		<b>MTB1212D31 16 UN</b>	12	12.0	4	31.0	84
14	7/16			<b>MTB08077C20 14 UN</b>	8	7.7	3	20.9	64
14		7/8		<b>MTB1616E37 14 UN</b>	16	16.0	5	37.2	105
13	1/2			<b>MTB10092C22 13 UN</b>	10	9.2	3	22.5	73
12	9/16			<b>MTB12105C26 12 UN</b>	12	10.5	3	26.5	84
12		1-1 1/2		<b>MTB1616E41 12 UN</b>	16	16.0	5	41.3	105
11	5/8			<b>MTB12114C28 11 UN</b>	12	11.4	3	28.9	84
10	3/4			<b>MTB16144D34 10 UN</b>	16	14.4	4	34.3	105
9	7/8			<b>MTB1616C38 9 UN</b>	16	16.0	3	38.1	105
8	1			<b>MTB20195D42 8 UN</b>	20	19.5	4	42.9	105
7	1 1/8-1 1/4			<b>MTB2020D45 7 UN</b>	20	20.0	4	45.3	105

Order example: MTB 1212D31 16 UN MT7

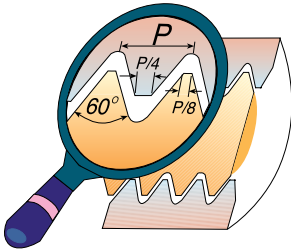
For thread mills with coolant through the flutes see next page

For small thread mills see pages 229-230, 235 & 246



## UN With internal coolant through the flutes

### Tools for Internal Thread



Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	No. of Flutes	l	L
28		1/4		<a href="#">MTZ0605C11 28 UN</a>	6	5.0	3	11.3	58
28			7/16-1/2	<a href="#">MTZ0606C14 28 UN</a>	6	6.0	3	14.1	58
24		5/16		<a href="#">MTZ08066C14 24 UN</a>	8	6.6	3	14.3	64
24		3/8	9/16-5/8	<a href="#">MTZ0808D21 24 UN</a>	8	8.0	4	20.6	64
20		7/16		<a href="#">MTZ0808C21 20 UN</a>	8	8.0	3	21.0	64
20		1/2		<a href="#">MTZ1010D22 20 UN</a>	10	10.0	4	22.3	73
20			3/4-1	<a href="#">MTZ1212E27 20 UN</a>	12	12.0	5	27.3	84
18	5/16			<a href="#">MTZ06056C14 18 UN</a>	6	5.6	3	14.8	58
18		9/16-5/8	1 <sup>1/8</sup> -1 <sup>5/8</sup>	<a href="#">MTZ12113D26 18 UN</a>	12	11.3	4	26.1	84
16	3/8			<a href="#">MTZ08067C16 16 UN</a>	8	6.7	3	16.7	64
16		3/4		<a href="#">MTZ1212D31 16 UN</a>	12	12.0	4	31.0	84
14	7/16			<a href="#">MTZ08077C20 14 UN</a>	8	7.7	3	20.9	64
14		7/8		<a href="#">MTZ1616E37 14 UN</a>	16	16.0	5	37.2	101
13	1/2			<a href="#">MTZ10092C22 13 UN</a>	10	9.2	3	22.5	73
12	9/16			<a href="#">MTZ12105C26 12 UN</a>	12	10.5	3	26.5	84
11	5/8			<a href="#">MTZ12114C28 11 UN</a>	12	11.4	3	28.9	84
10	3/4			<a href="#">MTZ16144D34 10 UN</a>	16	14.4	4	34.3	101

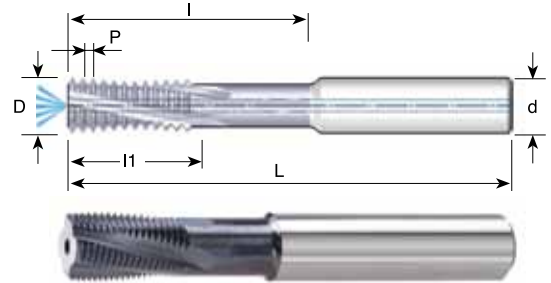
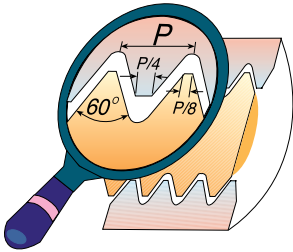
Order example: [MTZ 0808D21 24 UN MT7](#)

For small thread mills see pages 229-230, 235 & 246



## UN With relieved neck and internal coolant bore

### Tools for Internal Thread



Pitch TPI	Thread size	Ordering Code	d	D	No. of Flutes	l1	l	L
20	$\varnothing \geq 12$	<b>MTQ1010D30 20 UN</b>	10	10.0	4	17.8	30.5	73
20	$\varnothing \geq 14$	<b>MTQ1212E35 20 UN</b>	12	12.0	5	20.3	35.6	84
20	$\varnothing \geq 18$	<b>MTQ1616F43 20 UN</b>	16	16.0	6	25.4	43.2	105
18	$\varnothing \geq 15$	<b>MTQ1212D35 18 UN</b>	12	12.0	4	19.7	35.3	84
16	$\varnothing \geq 15$	<b>MTQ1212D35 16 UN</b>	12	12.0	4	20.7	35.0	84
16	$\varnothing \geq 19$	<b>MTQ1616E42 16 UN</b>	16	16.0	5	25.4	42.9	105
16	$\varnothing \geq 23$	<b>MTQ2020F58 16 UN</b>	20	20.0	6	36.5	58.8	105
14	$\varnothing \geq 20$	<b>MTQ1616E45 14 UN</b>	16	16.0	5	25.4	45.3	105
12	$\varnothing \geq 16$	<b>MTQ1212D42 12 UN</b>	12	12.0	4	25.4	42.3	84
12	$\varnothing \geq 24$	<b>MTQ2020E55 12 UN</b>	20	20.0	5	33.9	55.1	105

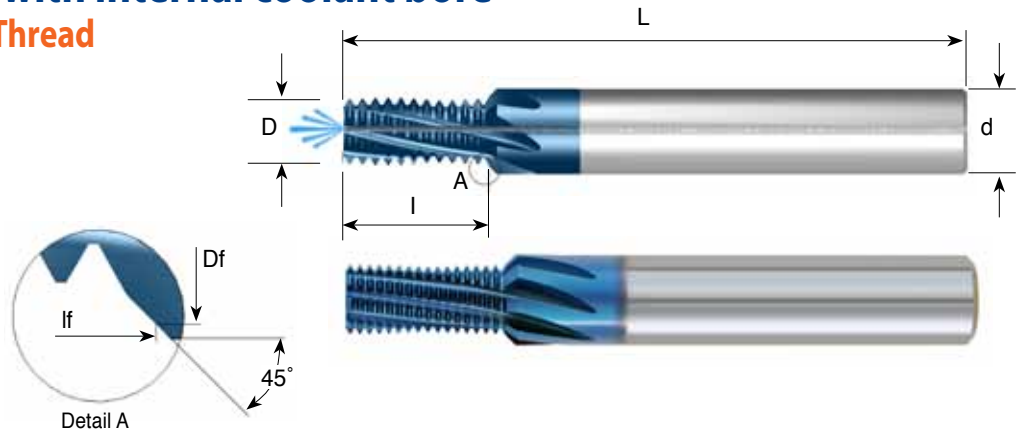
Order example: MTQ 1212D35 16 UN MT7

For small thread mills see pages 229-230, 235 & 246



## UN Fast MT with internal coolant bore

### Tools for Internal Thread



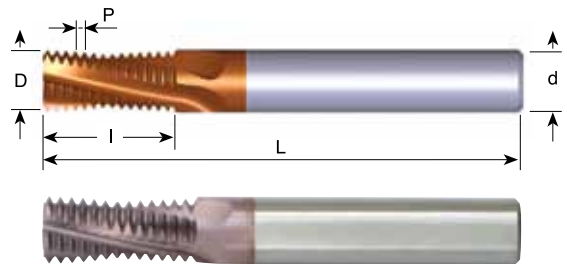
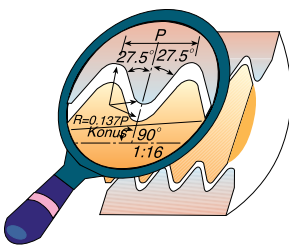
Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	Df	Flutes	I	lf	L
24		5/16, 3/8	9/16, 5/8, 11/16	<b>FMT 10066 G14 24 UN</b>	10	6.6	9.6	7	14.3	15.8	73
20	1/4			<b>* FMT 08048 E12 20 UN</b>	8	4.8	6.8	5	12.1	13.1	64
20		7/16, 1/2	3/4, 1	<b>FMT 12092 H21 20 UN</b>	12	9.2	11.4	8	21.0	22.1	84
18	5/16	9/16, 5/8	11/16	<b>FMT 1006 F14 18 UN</b>	10	6.0	8.4	6	14.8	16.0	73
16	3/8	3/4		<b>FMT 10074 F16 16 UN</b>	10	7.4	9.6	6	16.7	17.8	73
14	7/16	7/8		<b>FMT 12085 F20 14 UN</b>	12	8.5	10.7	6	20.9	22.0	84

Order example: FMT 08048 E12 20 UN MT8

\* without internal coolant

## BSPT

### Same Tool for Internal and External Thread



Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	RC1/16-1/8	<b>MT0606C9 28 BSPT</b>	6	6.0	3	9.5	58
19	RC1/4-3/8	<b>MT0808C14 19 BSPT</b>	8	8.0	3	14.0	64
14	RC1/2-7/8	<b>MT1212D19 14 BSPT</b>	12	12.0	4	19.1	84
11	RC1-2	<b>MT1616D28 11 BSPT</b>	16	16.0	4	28.9	105

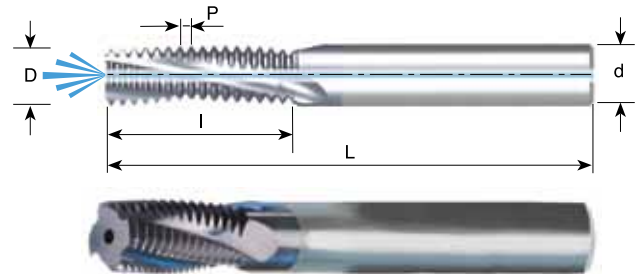
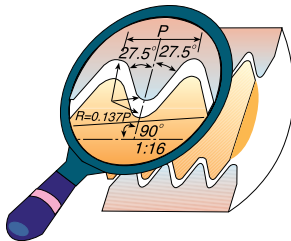
Order example: MT 1616D28 11 BSPT MT7

For thread mills with coolant through the flutes see next page

For conical preparation end mills see page 221

## BSPT With internal coolant bore

Same Tool for Internal and External Thread

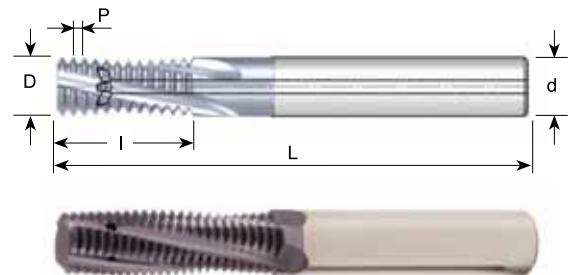
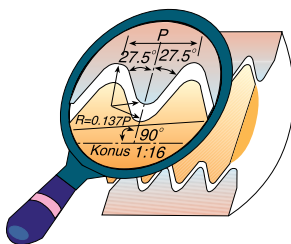


Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	RC1/8	<b>MTB08078C14 28 BSPT</b>	8	7.8	3	14.1	64
19	RC1/4-3/8	<b>MTB1010D16 19 BSPT</b>	10	10.0	4	16.7	73
14	RC1/2-7/8	<b>MTB1616E26 14 BSPT</b>	16	16.0	5	26.3	105
11	RC1-2	<b>MTB1616D28 11 BSPT</b>	16	16.0	4	28.9	105

Order example: MTB 08078C14 28 BSPT MT7

## BSPT With internal coolant through the flutes

Same Tool for Internal and External Thread



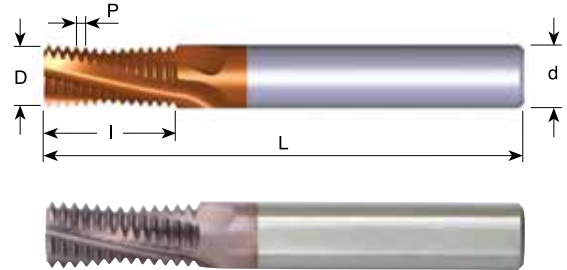
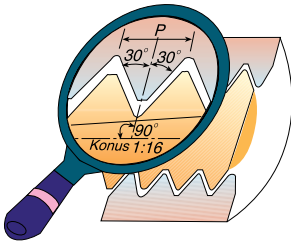
Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
28	RC1/8	<b>MTZ08078C14 28 BSPT</b>	8	7.8	3	14.1	64
19	RC1/4-3/8	<b>MTZ1010D16 19 BSPT</b>	10	10.0	4	16.7	73
14	RC1/2-7/8	<b>MTZ1616E26 14 BSPT</b>	16	16.0	5	26.3	101
11	RC1-2	<b>MTZ1616D28 11 BSPT</b>	16	16.0	4	28.9	101

Order example: MTZ 1010D16 19 BSPT MT7

For conical preparation end mills see page 221

## NPT

Same Tool for Internal and External Thread

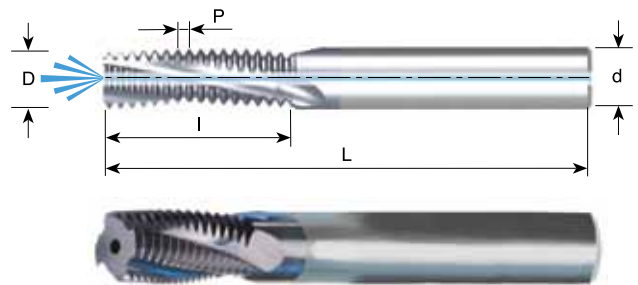


Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/16-1/8	MT0606C9 27 NPT	6	6.0	3	9.9	58
18	1/4-3/8	MT0808C14 18 NPT	8	8.0	3	14.8	64
14	1/2-3/4	MT1212D20 14 NPT	12	12.0	4	20.9	84
11.5	1-2	MT1616D27 11.5 NPT	16	16.0	4	27.6	105
8	≥2 1/2	MT2020D39 8 NPT	20	20.0	4	39.7	105

Order example: MT 0808C14 18 NPT MT7

## NPT With internal coolant

Same Tool for Internal and External Thread



Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/8	MTB08076C10 27 NPT	8	7.6	3	10.8	64
18	1/4-3/8	MTB1010D16 18 NPT	10	10.0	4	16.2	73
14	1/2-3/4	MTB16155D22 14 NPT	16	15.5	4	22.7	105
11.5	1-2	MTB2020D29 11.5 NPT	20	20.0	4	29.8	105
8	≥2 1/2	MTB2020D39 8 NPT	20	20.0	4	39.7	105

Order example: MTB 1010D16 18 NPT MT7

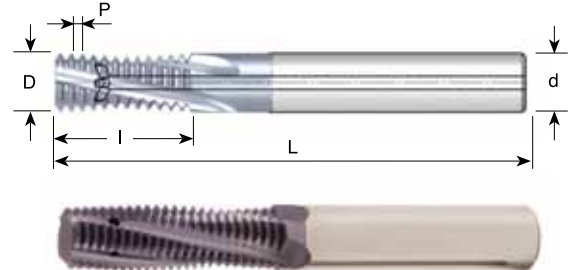
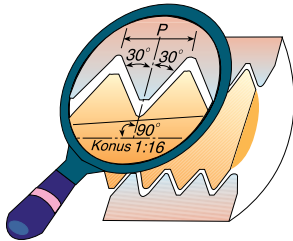
For thread mills with coolant through the flutes see next page

For conical preparation end mills see page 221



## NPT With internal coolant through the flutes

Same Tool for Internal and External Thread

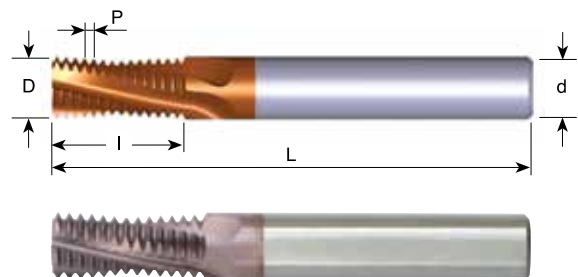
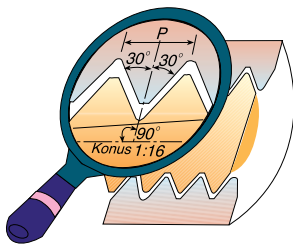


Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/8	MTZ08076C10 27NPT	8	7.6	3	10.8	64
18	1/4-3/8	MTZ1010D16 18NPT	10	10.0	4	16.2	73
14	1/2-3/4	MTZ16155D22 14NPT	16	15.5	4	22.7	101

Order example: MTZ 08076C10 27 NPT MT7

## NPTF

Same Tool for Internal and External Thread



Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/16-1/8	MT0606C9 27 NPTF	6	6.0	3	9.9	58
18	1/4-3/8	MT0808C14 18 NPTF	8	8.0	3	14.8	64
14	1/2-3/4	MT1212D20 14 NPTF	12	12.0	4	20.9	84
11.5	1-2	MT1616D27 11.5 NPTF	16	16.0	4	27.6	105
8	≥ 2 1/2	MT2020D39 8 NPTF	20	20.0	4	39.7	105

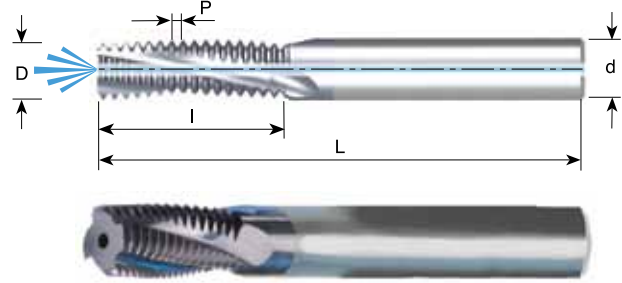
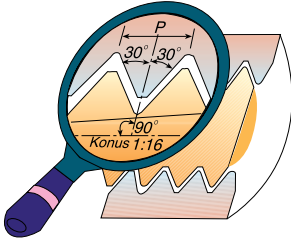
Order example: MT 1212D20 14 NPTF MT7

For thread mills with coolant bore see next page

For conical preparation end mills see page 221

## NPTF With internal coolant bore

Same Tool for Internal and External Thread

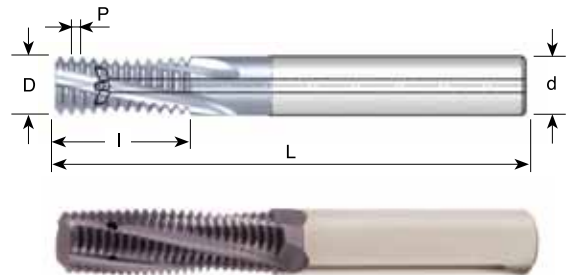
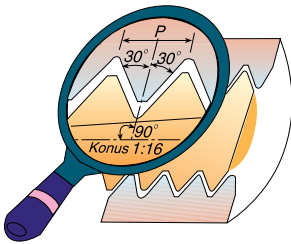


Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/8	MTB08076C10 27 NPTF	8	7.6	3	10.8	64
18	1/4-3/8	MTB1010D16 18 NPTF	10	10.0	4	16.2	73
14	1/2-3/4	MTB16155D22 14 NPTF	16	15.5	4	22.7	105
11.5	1-2	MTB2022D29 11.5 NPTF	20	20.0	4	29.8	105
8	≥ 2 1/2	MTB2020D39 8 NPTF	20	20.0	4	39.7	105

Order example: MTB 16155D22 14 NPTF MT7

## NPTF With internal coolant through the flutes

Same Tool for Internal and External Thread



Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/8	MTZ08076C10 27 NPTF	8	7.6	3	10.8	64
18	1/4-3/8	MTZ1010D16 18 NPTF	10	10.0	4	16.2	73
14	1/2-3/4	MTZ16155D22 14 NPTF	16	15.5	4	22.7	101

Order example: MTZ 1010D16 18 NPTF MT7

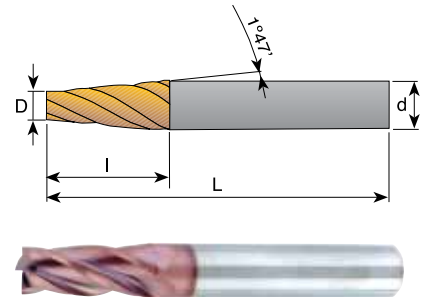
For conical preparation end mills see page 221

## Solid Carbide Tapered End Mills

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

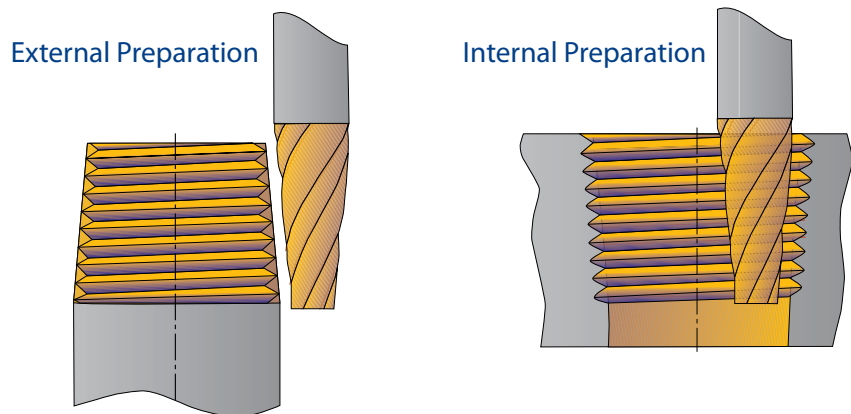
### Advantages:

- \* 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.



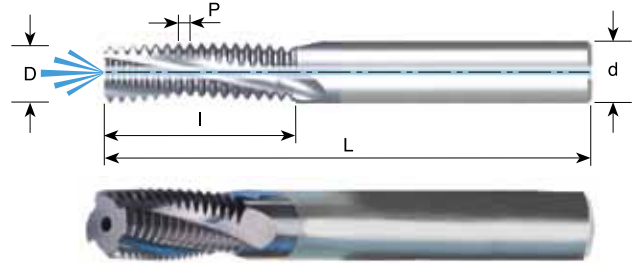
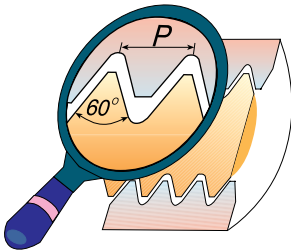
Ordering Code	d	D	l	L	No. of Flutes	Size
<b>SC0652D12</b>	6	5.2	12	58	4	NPT 1/16" - 1/8" NPTF 1/16" - 1/8" BSPT 1/16" - 1/8"
<b>SC1085D24</b>	10	8.5	24	73	4	NPT 1/8" - 1" NPTF 1/8" - 1" BSPT 1/8" - 1"
<b>SC1210D32</b>	12	10	32	84	4	NPT 1/4" - 3" NPTF 1/4" - 3" BSPT 1/4" - 3"

Order example: SC 1085D24 MT7  
Carbide grade: MT7



## NPS With internal coolant bore

Same Tool for Internal and External Thread - Inch Shank

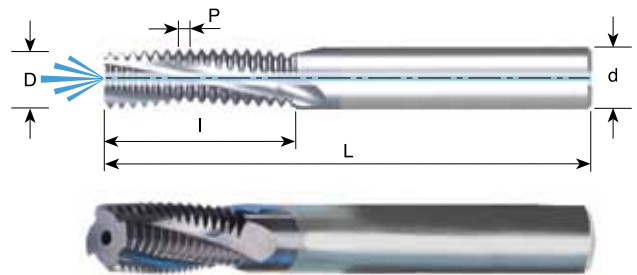
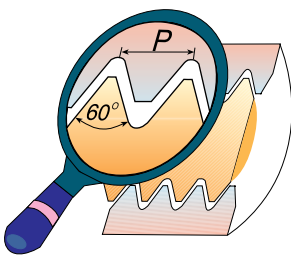


Pitch TPI	Standard	Ordering Code	d inch	D	No. of Flutes	I	L
27	1/8	<a href="#">MTB0312C04 27 NPS</a>	5/16	7.6	3	10.8	63
18	1/4-3/8	<a href="#">MTB0375D06 18 NPS</a>	3/8	9.5	4	16.2	76
14	1/2-3/4	<a href="#">MTB0625D08 14 NPS</a>	5/8	15.5	4	22.7	101
11.5	1-2	<a href="#">MTB0750D11 11.5 NPS</a>	3/4	19.0	4	29.8	101

Order example: MTB 0375D06 18 NPS MT7

## NPSF With internal coolant bore

Same Tool for Internal and External Thread - Inch Shank

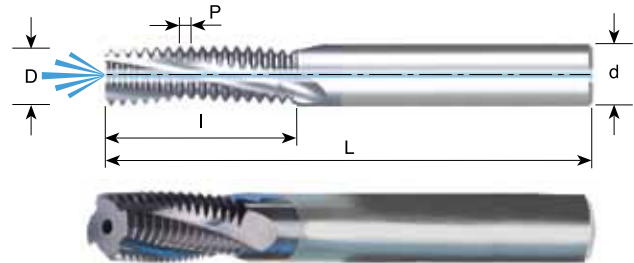
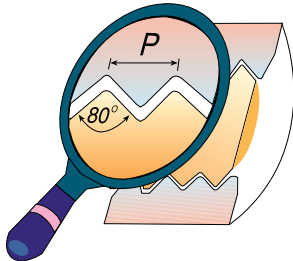


Pitch TPI	Standard	Ordering Code	d inch	D	No. of Flutes	I	L
27	1/8	<a href="#">MTB0312C04 27 NPSF</a>	5/16	7.6	3	10.8	63
18	1/4-3/8	<a href="#">MTB0375D06 18 NPSF</a>	3/8	9.5	4	16.2	76
14	1/2-3/4	<a href="#">MTB0625D08 14 NPSF</a>	5/8	15.5	4	22.7	101
11.5	1-2	<a href="#">MTB0750D11 11.5 NPSF</a>	3/4	19.0	4	29.8	101

Order example: MTB 0312C04 27 NPSF MT7

## PG DIN 40430 - With internal coolant bore

Same Tool for Internal and External Thread



Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
20	Pg 7	<b>MTB1010D19 20 PG</b>	10	10.0	4	19.7	73
18	Pg 9, 11, 13.5, 16	<b>MTB1212D20 18 PG</b>	12	12.0	4	20.5	84
16	Pg 21, 29, 36, 42, 48	<b>MTB1212D23 16 PG</b>	12	12.0	4	23.0	84

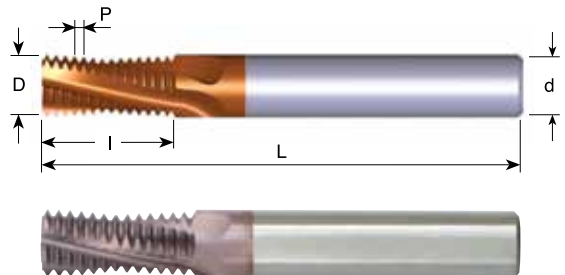
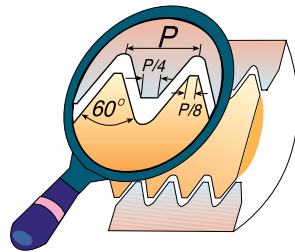
Order example: MTB 1212 D20 18 PG MT7

## 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

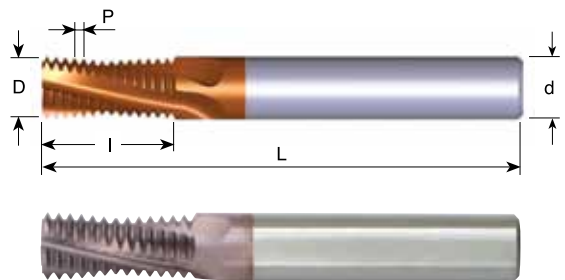
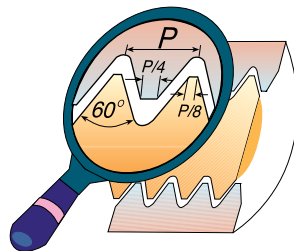
### ISO



Pitch mm	Ordering Code	d	D	No. of Flutes	I	L
1.0	<b>EMT1010D16 1.0 ISO</b>	10	10.0	4	16.5	73
1.0	<b>EMT1212E20 1.0 ISO</b>	12	12.0	5	20.5	84
1.25	<b>EMT1010D16 1.25 ISO</b>	10	10.0	4	16.9	73
1.5	<b>EMT1010D15 1.5 ISO</b>	10	10.0	4	15.8	73
1.5	<b>EMT1212D20 1.5 ISO</b>	12	12.0	4	20.3	84
1.75	<b>EMT1212D20 1.75 ISO</b>	12	12.0	4	20.1	84
2.0	<b>EMT1010C17 2.0 ISO</b>	10	10.0	3	17.0	73
2.0	<b>EMT1212D21 2.0 ISO</b>	12	12.0	4	21.0	84

Order example: EMT 1010D15 1.5 ISO MT7

### UN



Pitch TPI	Ordering Code	d	D	No. of Flutes	I	L
24	<b>EMT1010D16 24 UN</b>	10	10.0	4	16.4	73
20	<b>EMT1212E21 20 UN</b>	12	12.0	5	21.0	84
18	<b>EMT1212D20 18 UN</b>	12	12.0	4	20.5	84
16	<b>EMT1212D21 16 UN</b>	12	12.0	4	21.4	84
14	<b>EMT1212D20 14 UN</b>	12	12.0	4	20.9	84
12	<b>EMT1212D20 12 UN</b>	12	12.0	4	20.1	84

Order example: EMT 1212D20 18 UN MT7