



## 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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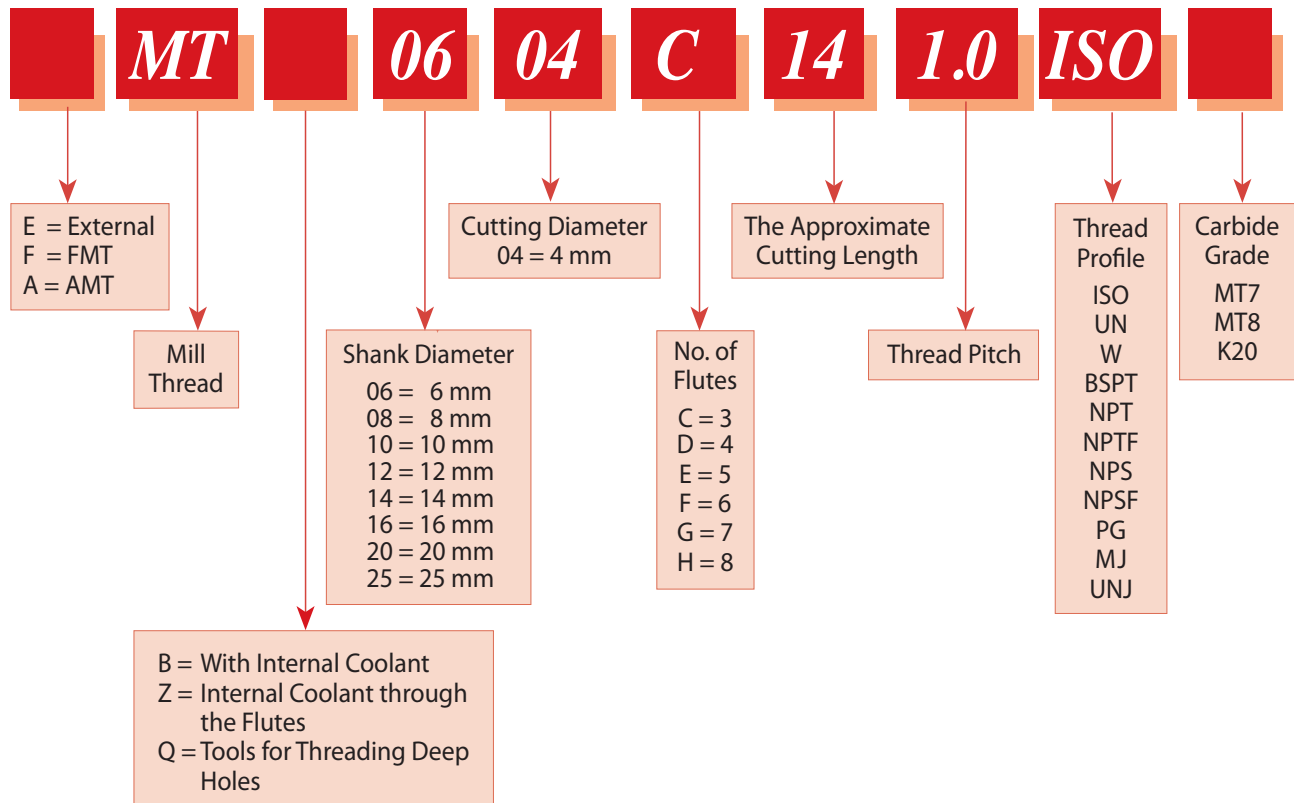
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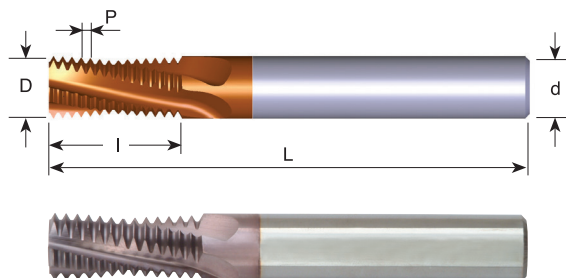
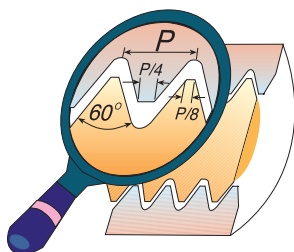
## Product Identification

### 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       | MT 06022 C5 0.5 ISO   | 6  | 2.2  | 3             | 5.3  | 58  |
| 0.5      |          | M5       | MT 06038 C10 0.5 ISO  | 6  | 3.8  | 3             | 10.3 | 58  |
| 0.5      |          | M6, M8   | MT 06053 D10 0.5 ISO  | 6  | 5.3  | 4             | 10.3 | 58  |
| 0.7      | M4       |          | MT 06031 C7 0.7 ISO   | 6  | 3.1  | 3             | 7.4  | 58  |
| 0.75     |          | M6, M8   | MT 06045 C10 0.75 ISO | 6  | 4.5  | 3             | 10.1 | 58  |
| 0.75     |          | M6, M8   | MT 0605 C13 0.75 ISO  | 6  | 5.0  | 3             | 13.1 | 58  |
| 0.8      | M5       |          | MT 06036 C9 0.8 ISO   | 6  | 3.6  | 3             | 9.2  | 58  |
| 0.8      | M5       |          | MT 0604 C13 0.8 ISO   | 6  | 4.0  | 3             | 13.2 | 58  |
| 1.0      | M6       | M8       | MT 0604 C10 1.0 ISO   | 6  | 4.0  | 3             | 10.5 | 58  |
| 1.0      | M6       | M8       | MT 0604 C14 1.0 ISO   | 6  | 4.0  | 3             | 14.5 | 58  |
| 1.0      |          | M9       | MT 0606 C12 1.0 ISO   | 6  | 6.0  | 3             | 12.5 | 58  |
| 1.0      |          | M10      | MT 0808 D16 1.0 ISO   | 8  | 8.0  | 4             | 16.5 | 64  |
| 1.25     | M8       | M10      | MT 0605 C14 1.25 ISO  | 6  | 5.0  | 3             | 14.4 | 58  |
| 1.25     | M8       | M10      | MT 0605 C19 1.25 ISO  | 6  | 5.0  | 3             | 19.4 | 58  |
| 1.5      | M10      | M12      | MT 0807 C17 1.5 ISO   | 8  | 7.0  | 3             | 17.3 | 64  |
| 1.5      | M10      | M12      | MT 0807 C24 1.5 ISO   | 8  | 7.0  | 3             | 24.8 | 76  |
| 1.5      |          | M14      | MT 1010 D21 1.5 ISO   | 10 | 10.0 | 4             | 21.8 | 73  |
| 1.5      |          | M14      | MT 1212 D29 1.5 ISO   | 12 | 12.0 | 4             | 29.3 | 84  |
| 1.5      |          | M16, M18 | MT 1414 D32 1.5 ISO   | 14 | 14.0 | 4             | 32.3 | 84  |
| 1.5      |          | M20      | MT 1616 F33 1.5 ISO   | 16 | 16.0 | 6             | 33.8 | 105 |
| 1.75     | M12      |          | MT 0808 C20 1.75 ISO  | 8  | 8.0  | 3             | 20.1 | 64  |
| 1.75     | M12      |          | MT 0808 C28 1.75 ISO  | 8  | 8.0  | 3             | 28.9 | 76  |
| 2.0      | M14      | M17      | MT 1010 C27 2.0 ISO   | 10 | 10.0 | 3             | 27.0 | 73  |
| 2.0      | M14      | M17      | MT 1010 C39 2.0 ISO   | 10 | 10.0 | 3             | 39.0 | 105 |
| 2.0      | M16      | M18, M20 | MT 1212 D27 2.0 ISO   | 12 | 12.0 | 4             | 27.0 | 84  |
| 2.0      | M16      | M18, M20 | MT 14128 D39 2.0 ISO  | 14 | 12.8 | 4             | 39.0 | 105 |
| 2.0      |          | M26      | MT 2020 F41 2.0 ISO   | 20 | 20.0 | 6             | 41.0 | 105 |
| 2.5      | M18, M20 |          | MT 1414 D33 2.5 ISO   | 14 | 14.0 | 4             | 33.8 | 84  |
| 2.5      | M18, M20 |          | MT 1414 D48 2.5 ISO   | 14 | 14.0 | 4             | 48.8 | 105 |
| 3.0      | M24      | M28      | MT 1616 C40 3.0 ISO   | 16 | 16.0 | 3             | 40.5 | 105 |
| 3.0      | M24      | M28      | MT 1616 C58 3.0 ISO   | 16 | 16.0 | 3             | 58.5 | 120 |
| 3.0      | M27      | M28, M30 | MT 2020 D43 3.0 ISO   | 20 | 20.0 | 4             | 43.5 | 105 |

Order example: MT 1212 D27 2.0 ISO MT7

● First choice ○ Alternative

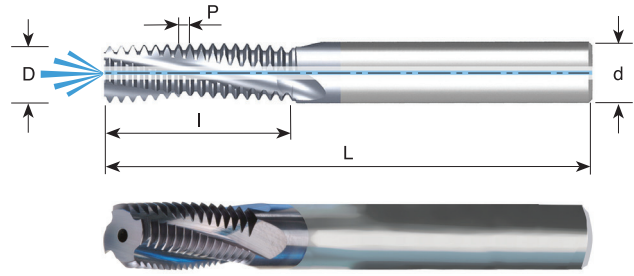
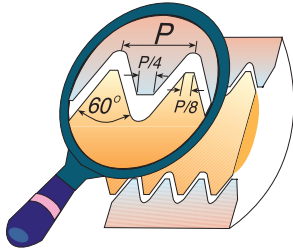
For thread mills with coolant bore see following pages

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       | MTB 06038 C10 0.5 ISO  | 6  | 3.8  | 3             | 10.3 | 58  |
| 0.7      | M4       |          | MTB 06031 C7 0.7 ISO   | 6  | 3.1  | 3             | 7.4  | 58  |
| 0.75     |          | M6, M8   | MTB 06045 C10 0.75 ISO | 6  | 4.5  | 3             | 10.1 | 58  |
| 0.75     |          | M12, M14 | MTB 1010 D24 0.75 ISO  | 10 | 10.0 | 4             | 24.4 | 73  |
| 0.8      | M5       |          | MTB 06038 C9 0.8 ISO   | 6  | 3.8  | 3             | 9.2  | 58  |
| 0.8      | M5       |          | MTB 0604 C13 0.8 ISO   | 6  | 4.0  | 3             | 13.2 | 58  |
| 1.0      | M6       |          | MTB 06046 C10 1.0 ISO  | 6  | 4.6  | 3             | 10.5 | 58  |
| 1.0      | M6       |          | MTB 06046 C14 1.0 ISO  | 6  | 4.6  | 3             | 14.5 | 58  |
| 1.0      |          | M8       | MTB 0606 C12 1.0 ISO   | 6  | 6.0  | 3             | 12.5 | 58  |
| 1.0      |          | M10      | MTB 0808 D16 1.0 ISO   | 8  | 8.0  | 4             | 16.5 | 64  |
| 1.0      |          | M12      | MTB 1010 D24 1.0 ISO   | 10 | 10.0 | 4             | 24.5 | 73  |
| 1.25     | M8       | M10      | MTB 0606 C14 1.25 ISO  | 6  | 6.0  | 3             | 14.4 | 58  |
| 1.25     | M8       | M10      | MTB 0606 C19 1.25 ISO  | 6  | 6.0  | 3             | 19.4 | 58  |
| 1.5      | M10      | M12      | MTB 08078 C17 1.5 ISO  | 8  | 7.8  | 3             | 17.0 | 64  |
| 1.5      | M10      | M12      | MTB 08078 C24 1.5 ISO  | 8  | 7.8  | 3             | 24.8 | 76  |
| 1.5      |          | M14      | MTB 1010 D21 1.5 ISO   | 10 | 10.0 | 4             | 21.8 | 73  |
| 1.5      |          | M14-M18  | MTB 1212 D26 1.5 ISO   | 12 | 12.0 | 4             | 26.3 | 84  |
| 1.5      |          | M20      | MTB 1616 F33 1.5 ISO   | 16 | 16.0 | 6             | 33.8 | 105 |
| 1.75     | M12      |          | MTB 1009 C20 1.75 ISO  | 10 | 9.0  | 3             | 20.1 | 73  |
| 1.75     | M12      |          | MTB 1009 C28 1.75 ISO  | 10 | 9.0  | 3             | 28.9 | 73  |
| 2.0      | M14      | M17      | MTB 1010 C27 2.0 ISO   | 10 | 10.0 | 3             | 27.0 | 73  |
| 2.0      | M14      | M17      | MTB 1211 D39 2.0 ISO   | 12 | 11.0 | 4             | 39.0 | 105 |
| 2.0      | M16      | M18, M20 | MTB 12118 D27 2.0 ISO  | 12 | 11.8 | 4             | 27.0 | 84  |
| 2.0      | M16      | M18, M20 | MTB 12118 D39 2.0 ISO  | 12 | 11.8 | 4             | 39.0 | 105 |
| 2.0      |          | M26      | MTB 2020 F41 2.0 ISO   | 20 | 20.0 | 6             | 41.0 | 105 |
| 2.5      | M20      |          | MTB 1615 E33 2.5 ISO   | 16 | 15.0 | 5             | 33.8 | 105 |
| 2.5      | M20      |          | MTB 1615 E48 2.5 ISO   | 16 | 15.0 | 5             | 48.8 | 105 |
| 3.0      | M24      | M28      | MTB 2018 D40 3.0 ISO   | 20 | 18.0 | 4             | 40.5 | 105 |
| 3.0      | M24      | M28      | MTB 2018 D58 3.0 ISO   | 20 | 18.0 | 4             | 58.5 | 120 |
| 3.0      | M27      | M28, M30 | MTB 2020 D43 3.0 ISO   | 20 | 20.0 | 4             | 43.5 | 105 |

Order example: MTB 08078 C17 1.5 ISO MT7

● First choice

○ Alternative

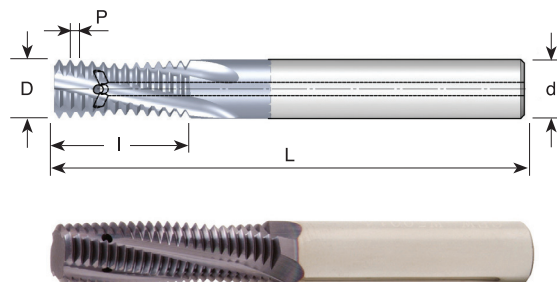
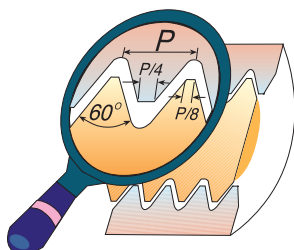
For thread mills with coolant through the flutes see next page

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       | MTZ 06048 C10 1.0 ISO | 6  | 4.8  | 3             | 10.5 | 58  |
| 1.0      |          | M8, M9   | MTZ 0606 C12 1.0 ISO  | 6  | 6.0  | 3             | 12.5 | 58  |
| 1.0      |          | M10      | MTZ 0808 D16 1.0 ISO  | 8  | 8.0  | 4             | 16.5 | 64  |
| 1.25     | M8       | M10      | MTZ 0606 C14 1.25 ISO | 6  | 6.0  | 3             | 14.4 | 58  |
| 1.25     | M8       | M10      | MTZ 0606 C19 1.25 ISO | 6  | 6.0  | 3             | 19.4 | 58  |
| 1.5      | M10      | M12      | MTZ 08078 C17 1.5 ISO | 8  | 7.8  | 3             | 17.0 | 64  |
| 1.5      | M10      | M12      | MTZ 0808 C23 1.5 ISO  | 8  | 8.0  | 3             | 23.3 | 64  |
| 1.5      |          | M14      | MTZ 1010 D21 1.5 ISO  | 10 | 10.0 | 4             | 21.8 | 73  |
| 1.5      |          | M14, M16 | MTZ 1212 D26 1.5 ISO  | 12 | 12.0 | 4             | 26.3 | 84  |
| 1.5      |          | M16, M18 | MTZ 1414 D32 1.5 ISO  | 14 | 14.0 | 4             | 32.3 | 101 |
| 1.5      |          | M20      | MTZ 1616 E33 1.5 ISO  | 16 | 16.0 | 5             | 33.8 | 101 |
| 1.75     | M12      |          | MTZ 1009 C20 1.75 ISO | 10 | 9.0  | 3             | 20.1 | 73  |
| 1.75     | M12      |          | MTZ 1009 C28 1.75 ISO | 10 | 9.0  | 3             | 28.9 | 73  |
| 2.0      | M14      | M17      | MTZ 1010 C27 2.0 ISO  | 10 | 10.0 | 3             | 27.0 | 73  |
| 2.0      | M16      | M18, M20 | MTZ 12118 D27 2.0 ISO | 12 | 11.8 | 4             | 27.0 | 84  |
| 2.5      | M20      |          | MTZ 1615 E33 2.5 ISO  | 16 | 15.0 | 5             | 33.8 | 101 |

Order example: MTZ 08078 C17 1.5 ISO MT7

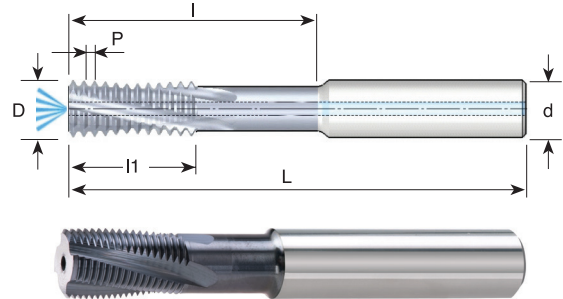
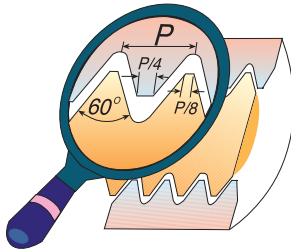
● First choice ○ Alternative

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      | $\emptyset \geq 12$ | <b>MTQ 1010 D32 1.0 ISO</b> | 10 | 10.0 | 4             | 18.0 | 32.0 | 73  |
| 1.0      | $\emptyset \geq 14$ | <b>MTQ 1212 D38 1.0 ISO</b> | 12 | 12.0 | 4             | 21.0 | 38.0 | 84  |
| 1.0      | $\emptyset \geq 18$ | <b>MTQ 1616 F45 1.0 ISO</b> | 16 | 16.0 | 6             | 26.0 | 45.0 | 105 |
| 1.5      | $\emptyset \geq 13$ | <b>MTQ 1010 D30 1.5 ISO</b> | 10 | 10.0 | 4             | 18.0 | 30.0 | 73  |
| 1.5      | $\emptyset \geq 15$ | <b>MTQ 1212 D34 1.5 ISO</b> | 12 | 12.0 | 4             | 19.5 | 34.5 | 84  |
| 1.5      | $\emptyset \geq 19$ | <b>MTQ 1616 F43 1.5 ISO</b> | 16 | 16.0 | 6             | 25.5 | 43.5 | 105 |
| 1.5      | $\emptyset \geq 23$ | <b>MTQ 2020 F60 1.5 ISO</b> | 20 | 20.0 | 6             | 36.0 | 60.0 | 105 |
| 2.0      | $\emptyset \geq 16$ | <b>MTQ 1212 D42 2.0 ISO</b> | 12 | 12.0 | 4             | 24.0 | 42.0 | 84  |
| 2.0      | $\emptyset \geq 20$ | <b>MTQ 1616 E45 2.0 ISO</b> | 16 | 16.0 | 5             | 26.0 | 45.0 | 105 |
| 2.0      | $\emptyset \geq 24$ | <b>MTQ 2020 F56 2.0 ISO</b> | 20 | 20.0 | 6             | 34.0 | 56.0 | 105 |
| 3.0      | $\emptyset \geq 22$ | <b>MTQ 1616 D45 3.0 ISO</b> | 16 | 16.0 | 4             | 30.0 | 45.0 | 105 |
| 3.0      | $\emptyset \geq 26$ | <b>MTQ 2020 E54 3.0 ISO</b> | 20 | 20.0 | 5             | 33.0 | 54.0 | 105 |
| 3.5      | $\emptyset \geq 26$ | <b>MTQ 2020 D45 3.5 ISO</b> | 20 | 20.0 | 4             | 28.0 | 45.5 | 105 |
| 4.0      | $\emptyset \geq 31$ | <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

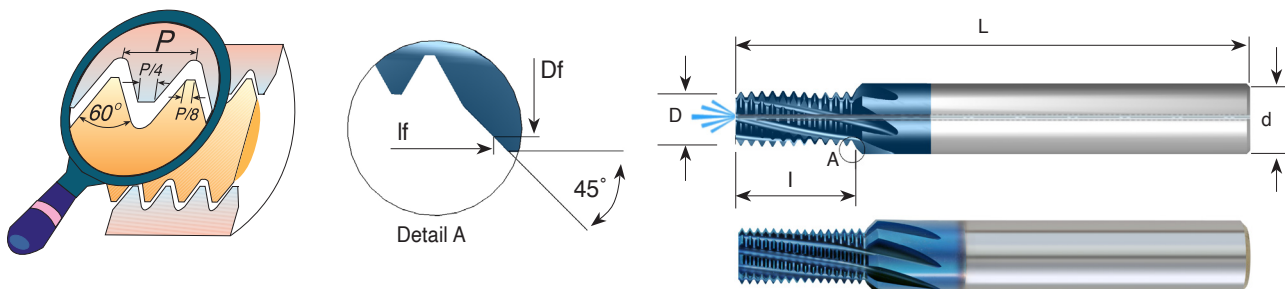
### Tools for Internal Thread

- 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    | If   | 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

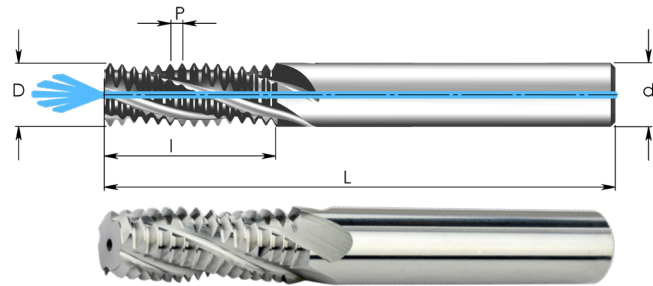
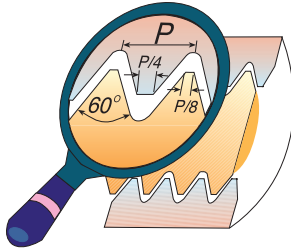
\* Without internal coolant

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   | ○ | ○ | ● | ● | ● |   |

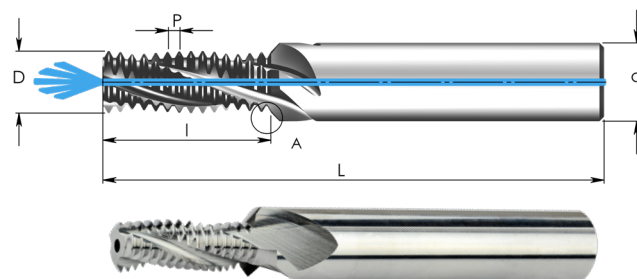
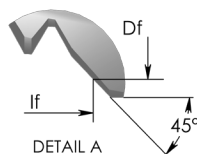
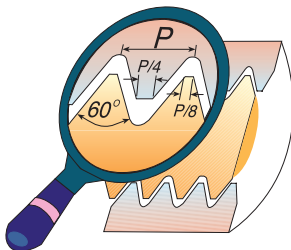
| Pitch mm | M coarse | M fine | Ordering Code          | d  | D    | No. of Flutes | I    | L  |
|----------|----------|--------|------------------------|----|------|---------------|------|----|
| 0.5      | M3       | M4     | * AMT 03024 C6 0.5 ISO | 3  | 2.4  | 3             | 6.8  | 39 |
| 0.5      |          | 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    | If   | 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

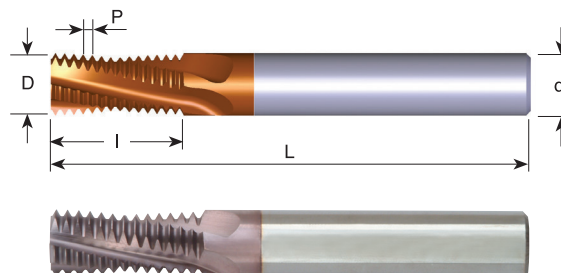
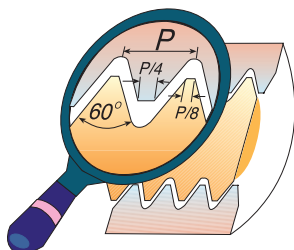
● First choice

○ Alternative



## UN

### Tools for Internal Thread



| Grade | P | M | K | N | S | H |
|-------|---|---|---|---|---|---|
| MT7   | ● | ○ | ● | ○ | ○ |   |

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

Order example: MT 1615 E37 14 UN MT7

● First choice ○ Alternative

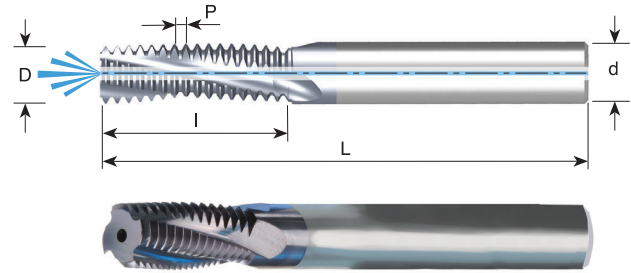
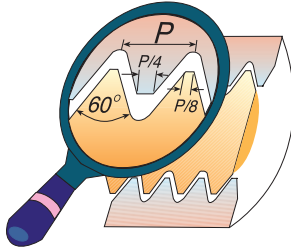
For thread mills with coolant bore see following pages

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

Order example: MTB 1212 D31 16 UN MT7

● First choice

○ Alternative

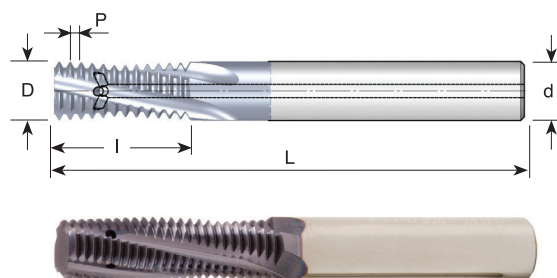
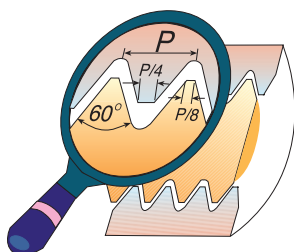
For thread mills with coolant through the flutes see next page

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<br>TPI | UNC  | UNF      | UNEF        | Ordering Code              | d  | D    | No. of<br>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

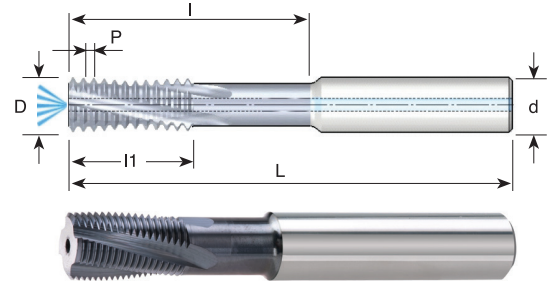
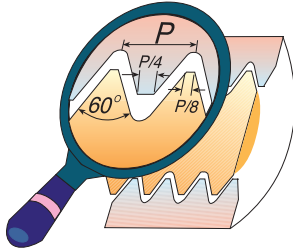
● First choice

○ Alternative



## UN With relieved neck and internal coolant bore

### Tools for Internal Thread



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

| Pitch<br>TPI | Thread<br>size        | Ordering Code             | d  | D    | No. of<br>Flutes | I1   | I    | 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 |

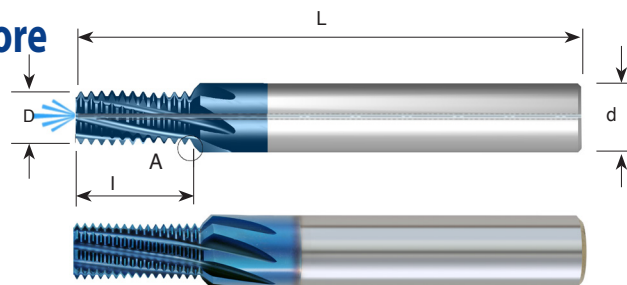
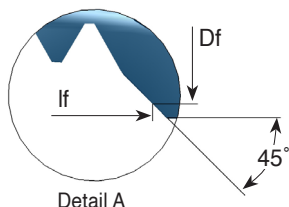
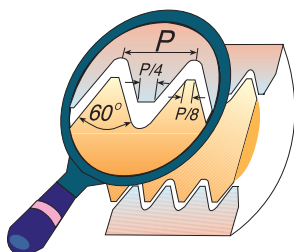
Order example: MTQ 1212 D35 16 UN MT7

● 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       |                  | FMT 08052 F11 28 UN  | 8  | 5.2  | 7.0  | 6             | 11.3 | 12.3 | 64  |
| 28        |      |           | 7/16-1/2         | FMT 12098 H19 28 UN  | 12 | 9.8  | 11.8 | 8             | 19.5 | 20.5 | 84  |
| 24        |      | 5/16      |                  | FMT 10066 G14 24 UN  | 10 | 6.6  | 9.6  | 7             | 14.3 | 15.8 | 73  |
| 24        |      | 3/8       | 9/16, 5/8, 11/16 | FMT 12082 G17 24 UN  | 12 | 8.2  | 10.6 | 7             | 17.5 | 18.7 | 84  |
| 20        | 1/4  |           |                  | *FMT 08048 E12 20 UN | 8  | 4.8  | 6.8  | 5             | 12.1 | 13.1 | 64  |
| 20        |      | 7/16      |                  | FMT 12092 H21 20 UN  | 12 | 9.2  | 11.4 | 8             | 21.0 | 22.1 | 84  |
| 20        |      | 1/2       | 3/4, 7/8, 1      | FMT 14111 H22 20 UN  | 14 | 11.1 | 13.5 | 8             | 22.2 | 23.4 | 84  |
| 18        | 5/16 |           |                  | FMT 1006 F14 18 UN   | 10 | 6.0  | 8.4  | 6             | 14.8 | 16.0 | 73  |
| 18        |      | 9/16, 5/8 | 1 1/16, 1 1/8    | FMT 16125 H26 18 UN  | 16 | 12.5 | 15.0 | 8             | 26.1 | 27.4 | 105 |
| 16        | 3/8  |           |                  | FMT 10074 F16 16 UN  | 10 | 7.4  | 9.6  | 6             | 16.7 | 17.8 | 73  |
| 16        |      | 3/4       |                  | FMT 20167 H34 16 UN  | 20 | 16.7 | 19.3 | 8             | 34.1 | 35.4 | 105 |
| 14        | 7/16 | 7/8       |                  | FMT 12085 F20 14 UN  | 12 | 8.5  | 10.7 | 6             | 20.9 | 22.0 | 84  |
| 13        | 1/2  |           |                  | FMT 12098 F24 13 UN  | 12 | 9.8  | 11.8 | 6             | 24.4 | 25.4 | 84  |
| 12        | 9/16 | 1         |                  | FMT 16116 F26 12 UN  | 16 | 11.6 | 15.2 | 6             | 26.5 | 28.3 | 105 |
| 11        | 5/8  |           |                  | FMT 1612 F33 11 UN   | 16 | 12.0 | 15.4 | 6             | 33.4 | 35.1 | 105 |

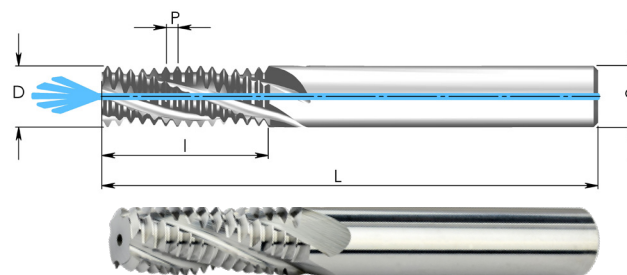
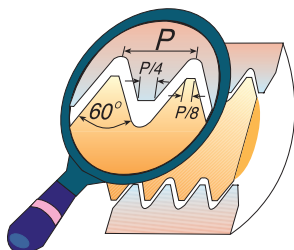
Order example: FMT 12092 H21 20 UN

\* 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            | AMT 06032 C9 32 UN  | 6  | 3.2  | 3             | 9.1  | 58  |
| 28        |      | 1/4      |               | AMT 06052 C14 28 UN | 6  | 5.2  | 3             | 14.0 | 58  |
| 24        |      | 3/8      | 9/16-5/8      | AMT 0808 D20 24 UN  | 8  | 8.0  | 4             | 20.6 | 64  |
| 20        | 1/4  |          |               | AMT 06048 C14 20 UN | 6  | 4.8  | 3             | 14.6 | 58  |
| 20        |      | 7/16     |               | AMT 10092 C23 20 UN | 10 | 9.2  | 3             | 23.5 | 73  |
| 18        | 5/16 |          |               | AMT 0606 C17 18 UN  | 6  | 6.0  | 3             | 17.6 | 58  |
| 18        |      | 9/16-5/8 | 1 1/8 - 1 5/8 | AMT 1212 D30 18 UN  | 12 | 12.0 | 4             | 30.3 | 84  |
| 16        | 3/8  |          |               | AMT 08074 C21 16 UN | 8  | 7.4  | 3             | 21.4 | 64  |
| 16        |      | 3/4      |               | AMT 1616 E38 16 UN  | 16 | 16.0 | 5             | 38.9 | 105 |

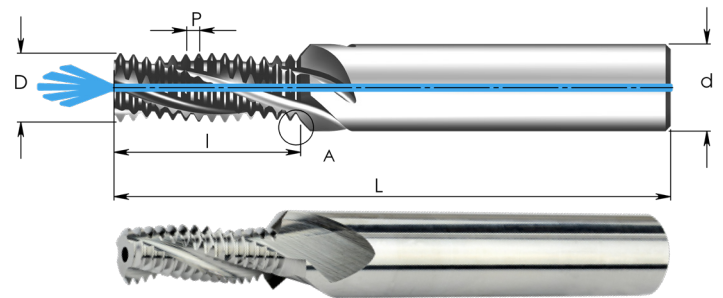
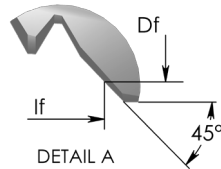
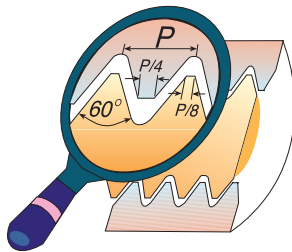
For information about AMT Thread Mills and cutting data see page B12-16

● 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   | ○ | ○ | ● | ● | ● |   |

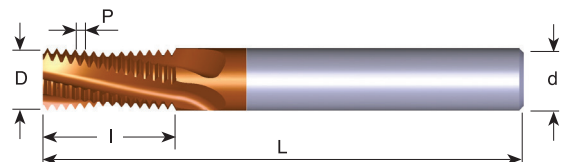
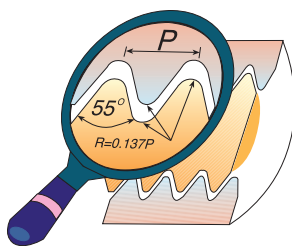
| Pitch TPI | UNC  | UNF | UNEF | Ordering Code        | d  | D   | Df   | No. of Flutes | I    | lf   | L  |
|-----------|------|-----|------|----------------------|----|-----|------|---------------|------|------|----|
| 20        | 1/4  |     |      | AMT 08048 C14 20UN-C | 8  | 4.8 | 6.8  | 3             | 14.6 | 15.6 | 64 |
| 18        | 5/16 |     |      | AMT 1006 C17 18UN-C  | 10 | 6.0 | 8.4  | 3             | 17.6 | 18.8 | 73 |
| 16        | 3/8  |     |      | AMT 12074 C21 16UN-C | 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 | MT 0606 C9 28 W  | 6  | 6.0  | 3             | 9.5  | 58  |
| 19        | G1/4-3/8   | MT 0808 C14 19 W | 8  | 8.0  | 3             | 14.0 | 64  |
| 14        | G1/2-7/8   | MT 1212 D19 14 W | 12 | 12.0 | 4             | 19.0 | 84  |
| 14        | G1/2-7/8   | MT 1212 D26 14 W | 12 | 12.0 | 4             | 26.3 | 84  |
| 11        | G≥1        | MT 1212 C24 11 W | 12 | 12.0 | 3             | 24.2 | 84  |
| 11        | G≥1        | MT 1616 D38 11 W | 16 | 16.0 | 4             | 38.1 | 105 |
| 11        | G≥1        | MT 2020 E47 11 W | 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



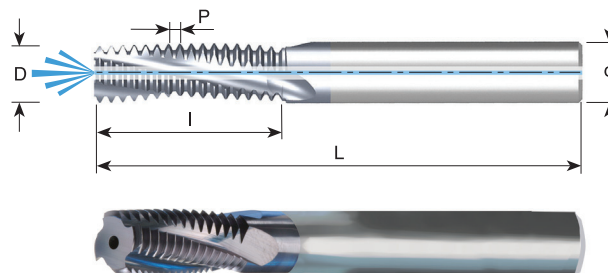
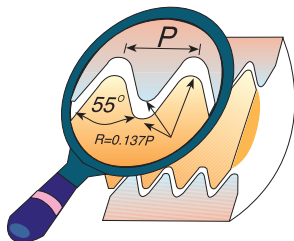
● First choice

○ 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 |

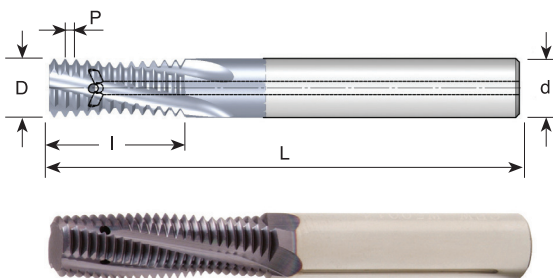
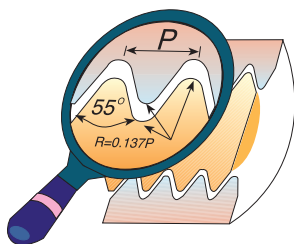
| Pitch<br>TPI | Standard | Ordering Code      | d  | D    | No. of<br>Flutes | I    | L   |
|--------------|----------|--------------------|----|------|------------------|------|-----|
| 28           | G1/8     | MTB 08078 C14 28 W | 8  | 7.8  | 3                | 14.1 | 64  |
| 28           | G1/8     | MTB 0808 C20 28 W  | 8  | 8.0  | 3                | 20.4 | 64  |
| 19           | G1/4     | MTB 1010 D16 19 W  | 10 | 10.0 | 4                | 16.7 | 73  |
| 19           | G1/4     | MTB 1211 D27 19 W  | 12 | 11.0 | 4                | 27.4 | 84  |
| 19           | G3/8     | MTB 1414 D26 19 W  | 14 | 14.0 | 4                | 26.1 | 83  |
| 19           | G3/8     | MTB 1414 D34 19 W  | 14 | 14.0 | 4                | 34.1 | 83  |
| 14           | G1/2-7/8 | MTB 1616 E26 14 W  | 16 | 16.0 | 5                | 26.3 | 105 |
| 11           | G≥1      | MTB 1616 D38 11 W  | 16 | 16.0 | 4                | 38.1 | 105 |
| 11           | G≥1      | MTB 2020 E47 11 W  | 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<br>TPI | Standard | Ordering Code      | d  | D    | No. of<br>Flutes | I    | L   |
|--------------|----------|--------------------|----|------|------------------|------|-----|
| 28           | G1/8     | MTZ 08078 C14 28 W | 8  | 7.8  | 3                | 14.1 | 64  |
| 19           | G1/4-3/8 | MTZ 1010 D16 19 W  | 10 | 10.0 | 4                | 16.7 | 73  |
| 14           | G1/2-7/8 | MTZ 1616 E26 14 W  | 16 | 16.0 | 5                | 26.3 | 101 |
| 11           | G≥1      | MTZ 1616 D38 11 W  | 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

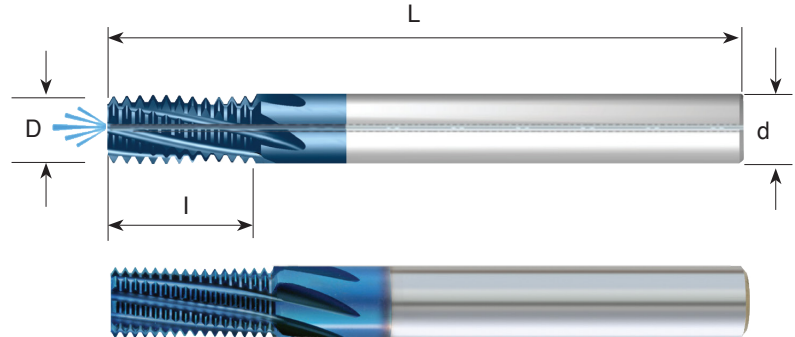
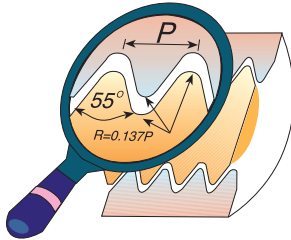


● First choice

○ 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<br>TPI | Standard | Ordering Code             | d  | D    | No. of<br>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 |

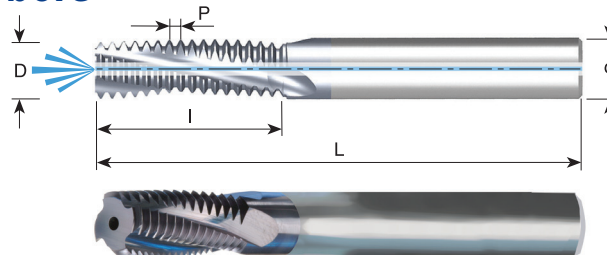
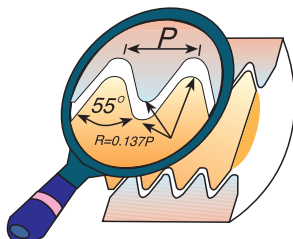
Order example: FMT 1616 H38 11W MT8

● First choice

○ Alternative

## Whitworth with internal coolant bore

Same Tool for Internal and External Thread



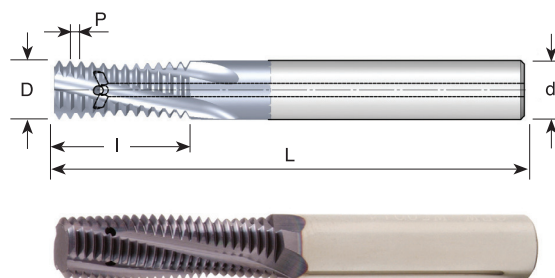
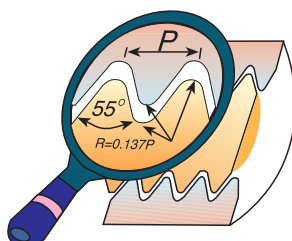
| Grade | P | M | K | N | S | H       |
|-------|---|---|---|---|---|---------|
| MT7   | ● | ● | ● | ○ | ● | ≤47 HRc |

| Pitch TPI | BSW      | BSF       | Ordering Code      | d  | D    | No. of Flutes | I    | L   |
|-----------|----------|-----------|--------------------|----|------|---------------|------|-----|
| 20        | 1/4      |           | MTB 06046 C13 20 W | 6  | 4.6  | 3             | 13.3 | 58  |
| 20        |          | 3/8       | MTB 08076 D19 20 W | 8  | 7.6  | 4             | 19.7 | 64  |
| 18        | 5/16     |           | MTB 06056 C16 18 W | 6  | 5.6  | 3             | 16.2 | 58  |
| 18        |          | 7/16      | MTB 10088 D23 18 W | 10 | 8.8  | 4             | 23.3 | 73  |
| 16        | 3/8      |           | MTB 0807 D19 16 W  | 8  | 7.0  | 4             | 19.8 | 64  |
| 16        |          | 1/2-9/16  | MTB 1010 E26 16 W  | 10 | 10.0 | 5             | 26.1 | 73  |
| 14        | 7/16     |           | MTB 0808 D22 14 W  | 8  | 8.0  | 4             | 22.7 | 64  |
| 14        |          | 5/8-11/16 | MTB 14128 E31 14 W | 14 | 12.8 | 5             | 31.8 | 83  |
| 12        | 1/2-9/16 | 3/4-13/16 | MTB 1009 D26 12 W  | 10 | 9.0  | 4             | 26.5 | 73  |
| 11        | 5/8      | 7/8       | MTB 12118 E33 11 W | 12 | 11.8 | 5             | 33.5 | 84  |
| 10        | 3/4      | 1         | MTB 1414 E39 10 W  | 14 | 14.0 | 5             | 39.4 | 105 |
| 9         | 7/8      | 1 1/8     | MTB 1616 E43 9 W   | 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       | * MTZ 06046 C12 20 W | 6  | 4.6  | 3             | 12.1 | 58 |
| 18        | 5/16 | 7/16      | MTZ 06053 C14 18 W   | 6  | 5.3  | 3             | 14.8 | 58 |
| 16        | 3/8  |           | MTZ 08068 C16 16 W   | 8  | 6.8  | 3             | 16.7 | 64 |
| 16        |      | 1/2-9/16  | MTZ 10092 D24 16 W   | 10 | 9.2  | 4             | 24.6 | 73 |
| 14        | 7/16 | 5/8-11/16 | MTZ 08078 D20 14 W   | 8  | 7.8  | 4             | 20.9 | 64 |
| 12        | 1/2  | 3/4-13/16 | MTZ 10086 D24 12 W   | 10 | 8.6  | 4             | 24.4 | 73 |
| 11        | 5/8  | 7/8       | MTZ 12109 D28 11 W   | 12 | 10.9 | 4             | 28.9 | 84 |

Order example: MTZ 08068 C16 16 W MT7

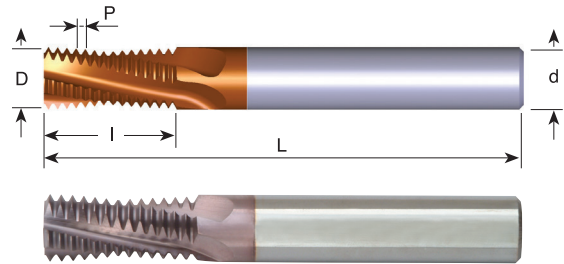
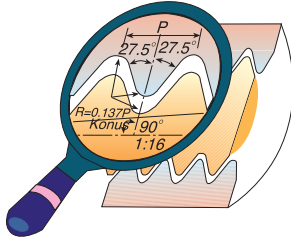
\* Cutter without coolant

● First choice

○ Alternative

## BSPT

Same Tool for Internal and External Thread



| Grade | P | M | K | N | S | H |
|-------|---|---|---|---|---|---|
| MT7   | ● | ○ | ● | ○ | ○ |   |

| Pitch<br>TPI | Standard   | Ordering Code              | d  | D    | No. of<br>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 |

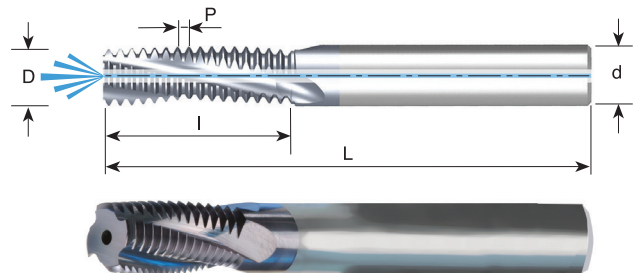
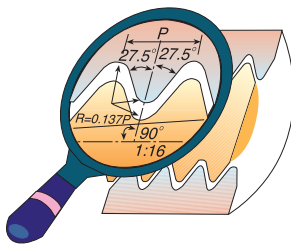
Order example: MT 1616 D28 11 BSPT MT7

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 |

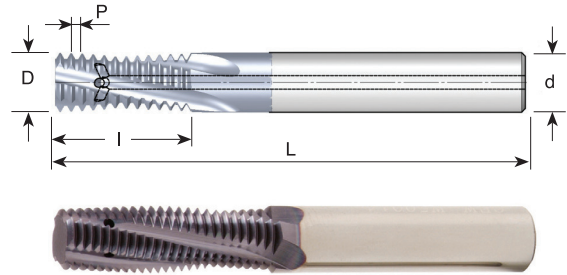
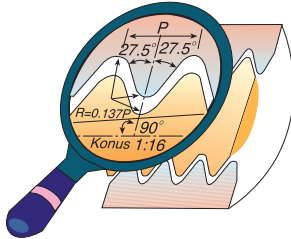
| Pitch<br>TPI | Standard  | Ordering Code                | d  | D    | No. of<br>Flutes | I    | L   |
|--------------|-----------|------------------------------|----|------|------------------|------|-----|
| 28           | RC1/8     | <b>MTB 08078 C14 28 BSPT</b> | 8  | 7.8  | 3                | 14.1 | 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<br>TPI | Standard  | Ordering Code                | d  | D    | No. of<br>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 |

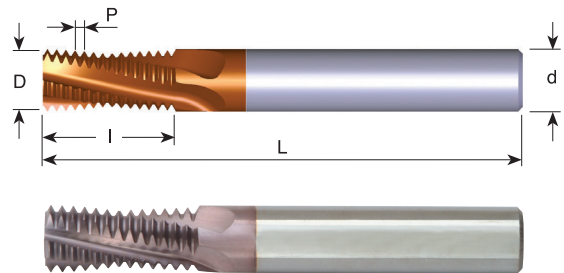
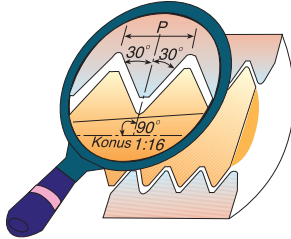
Order example: MTZ 1010 D16 19 BSPT MT7

● First choice    ○ Alternative

For conical preparation end mills see page B08-23

## NPT

Same Tool for Internal and External Thread



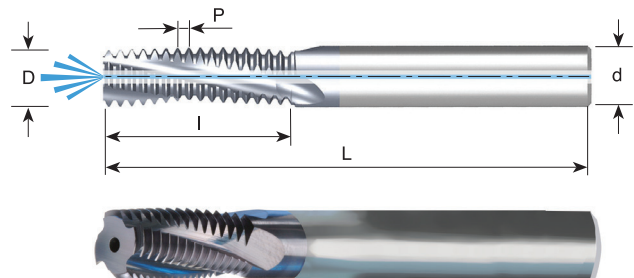
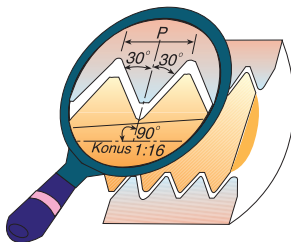
| Grade | P | M | K | N | S | H |
|-------|---|---|---|---|---|---|
| MT7   | ● | ○ | ● | ○ | ○ |   |

| Pitch<br>TPI | Standard | Ordering Code        | d  | D    | No. of<br>Flutes | I    | L   |
|--------------|----------|----------------------|----|------|------------------|------|-----|
| 27           | 1/16-1/8 | MT 0606 C9 27 NPT    | 6  | 6.0  | 3                | 9.9  | 58  |
| 18           | 1/4-3/8  | MT 0808 C14 18 NPT   | 8  | 8.0  | 3                | 14.8 | 64  |
| 14           | 1/2-3/4  | MT 1212 D20 14 NPT   | 12 | 12.0 | 4                | 20.9 | 84  |
| 11.5         | 1-2      | MT 1616 D27 11.5 NPT | 16 | 16.0 | 4                | 27.6 | 105 |
| 8            | ≥2 1/2   | MT 2020 D39 8 NPT    | 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<br>TPI | Standard | Ordering Code         | d  | D    | No. of<br>Flutes | I    | L   |
|--------------|----------|-----------------------|----|------|------------------|------|-----|
| 27           | 1/8      | MTB 08076 C10 27 NPT  | 8  | 7.6  | 3                | 10.8 | 64  |
| 18           | 1/4-3/8  | MTB 1010 D16 18 NPT   | 10 | 10.0 | 4                | 16.2 | 73  |
| 14           | 1/2-3/4  | MTB 16155 D22 14 NPT  | 16 | 15.5 | 4                | 22.7 | 105 |
| 11.5         | 1-2      | MTB 2020 D29 11.5 NPT | 20 | 20.0 | 4                | 29.8 | 105 |
| 8            | ≥2 1/2   | MTB 2020 D39 8 NPT    | 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

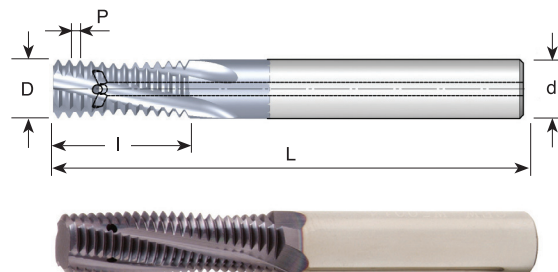
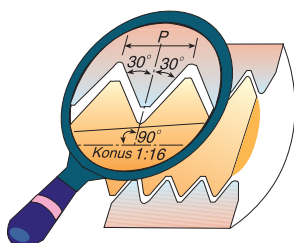
For conical preparation end mills see page B08-23

● First choice ○ Alternative



## NPT With internal coolant through the flutes

Same Tool for Internal and External Thread



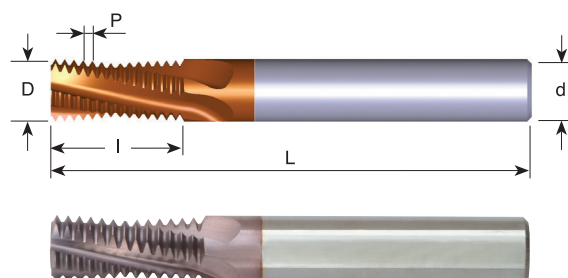
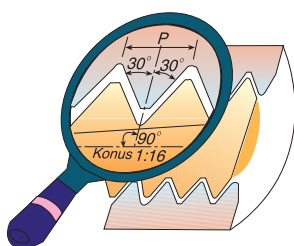
| Grade | P | M | K | N | S | H       |
|-------|---|---|---|---|---|---------|
| MT7   | ● | ● | ● | ○ | ● | ≤47 HRc |

| Pitch<br>TPI | Standard | Ordering Code        | d  | D    | No. of<br>Flutes | I    | L   |
|--------------|----------|----------------------|----|------|------------------|------|-----|
| 27           | 1/8      | MTZ 08076 C10 27 NPT | 8  | 7.6  | 3                | 10.8 | 64  |
| 18           | 1/4-3/8  | MTZ 1010 D16 18 NPT  | 10 | 10.0 | 4                | 16.2 | 73  |
| 14           | 1/2-3/4  | MTZ 16155 D22 14 NPT | 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<br>TPI | Standard | Ordering Code         | d  | D    | No. of<br>Flutes | I    | L   |
|--------------|----------|-----------------------|----|------|------------------|------|-----|
| 27           | 1/16-1/8 | MT 0606 C9 27 NPTF    | 6  | 6.0  | 3                | 9.9  | 58  |
| 18           | 1/4-3/8  | MT 0808 C14 18 NPTF   | 8  | 8.0  | 3                | 14.8 | 64  |
| 14           | 1/2-3/4  | MT 1212 D20 14 NPTF   | 12 | 12.0 | 4                | 20.9 | 84  |
| 11.5         | 1-2      | MT 1616 D27 11.5 NPTF | 16 | 16.0 | 4                | 27.6 | 105 |
| 8            | ≥2 1/2   | MT 2020 D39 8 NPTF    | 20 | 20.0 | 4                | 39.7 | 105 |

Order example: MT 1212 D20 14 NPTF MT7

For thread mills with coolant bore see next page

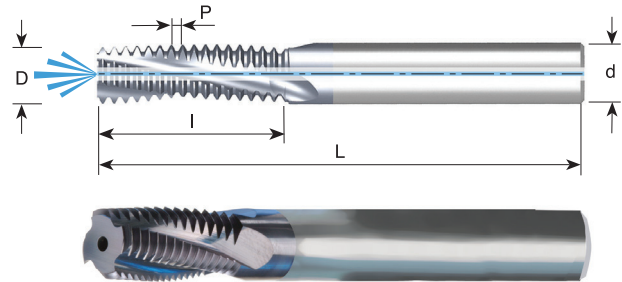
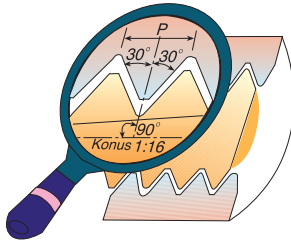
For conical preparation end mills see page B08-23

● First choice

○ Alternative

## NPTF With internal coolant bore

Same Tool for Internal and External Thread



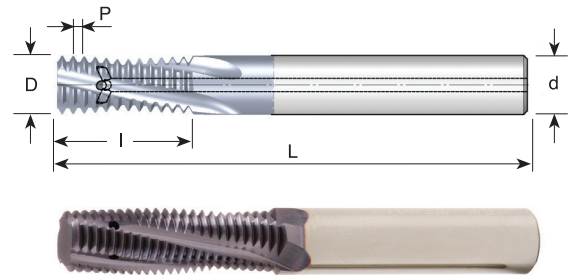
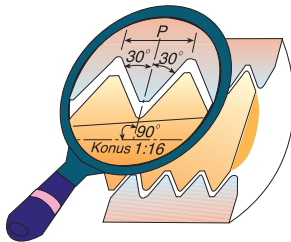
| Grade | P | M | K | N | S | H       |
|-------|---|---|---|---|---|---------|
| MT7   | ● | ● | ● | ○ | ● | ≤47 HRc |

| Pitch<br>TPI | Standard | Ordering Code          | d  | D    | No. of<br>Flutes | I    | L   |
|--------------|----------|------------------------|----|------|------------------|------|-----|
| 27           | 1/8      | MTB 08076 C10 27 NPTF  | 8  | 7.6  | 3                | 10.8 | 64  |
| 18           | 1/4-3/8  | MTB 1010 D16 18 NPTF   | 10 | 10.0 | 4                | 16.2 | 73  |
| 14           | 1/2-3/4  | MTB 16155 D22 14 NPTF  | 16 | 15.5 | 4                | 22.7 | 105 |
| 11.5         | 1-2      | MTB 2020 D29 11.5 NPTF | 20 | 20.0 | 4                | 29.8 | 105 |
| 8            | ≥ 2 1/2  | MTB 2020 D39 8 NPTF    | 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<br>TPI | Standard | Ordering Code         | d  | D    | No. of<br>Flutes | I    | L   |
|--------------|----------|-----------------------|----|------|------------------|------|-----|
| 27           | 1/8      | MTZ 08076 C10 27 NPTF | 8  | 7.6  | 3                | 10.8 | 64  |
| 18           | 1/4-3/8  | MTZ 1010 D16 18 NPTF  | 10 | 10.0 | 4                | 16.2 | 73  |
| 14           | 1/2-3/4  | MTZ 16155 D22 14 NPTF | 16 | 15.5 | 4                | 22.7 | 101 |

Order example: MTZ 1010 D16 18 NPTF MT7

For conical preparation end mills see page B08-23

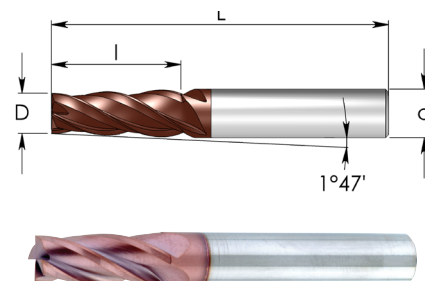
● First choice ○ Alternative

## Solid Carbide Tapered End Mills

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

### Advantages:

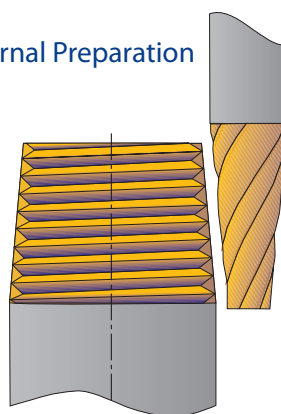
- \* Increases the tool life of mill thread cutters and indexable inserts.
- \* Equal and uniform load along the cutting edge of the mill thread cutter.
- \* Shorter machining time during the mill thread operation, due to the tapered preparation.
- \* Same tool for internal and external preparation.



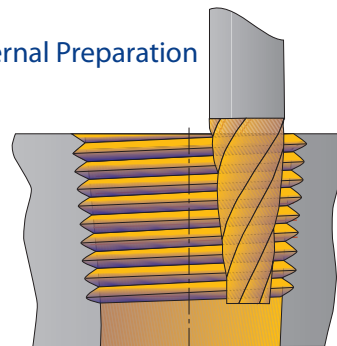
| Ordering Code    | d  | D   | I  | L  | No. of Flutes | Size                                                       |
|------------------|----|-----|----|----|---------------|------------------------------------------------------------|
| <b>SC0652D12</b> | 6  | 5.2 | 12 | 58 | 4             | NPT 1/16"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

Order example: SC 1085 D24 MT7  
Carbide grade: MT7

External Preparation

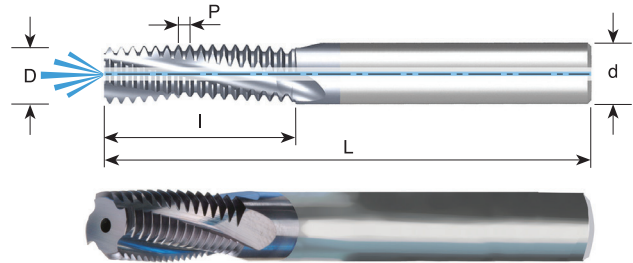
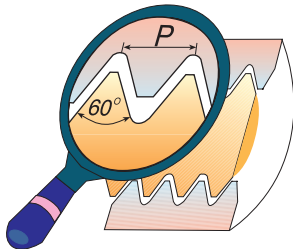


Internal Preparation



## NPS With internal coolant bore

Same Tool for Internal and External Thread - Inch Shank



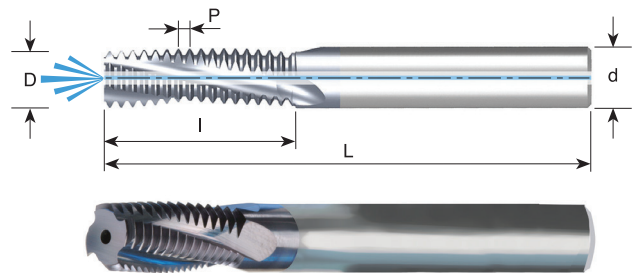
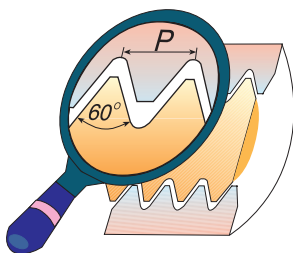
| Grade | P | M | K | N | S | H       |
|-------|---|---|---|---|---|---------|
| MT7   | ● | ● | ● | ○ | ● | ≤47 HRc |

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



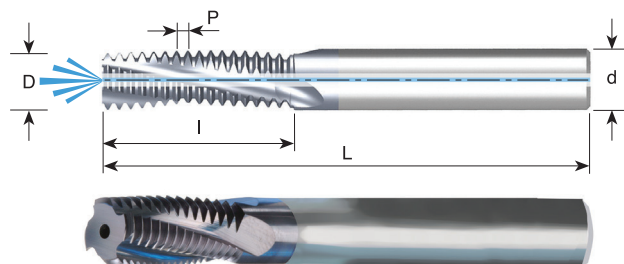
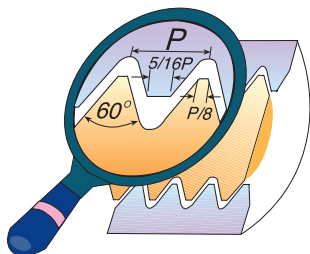
| Grade | P | M | K | N | S | H       |
|-------|---|---|---|---|---|---------|
| MT7   | ● | ● | ● | ○ | ● | ≤47 HRc |

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

Order example: MTB 0312 C04 27 NPSF MT7

## MJ With internal coolant bore

### Tools for internal thread



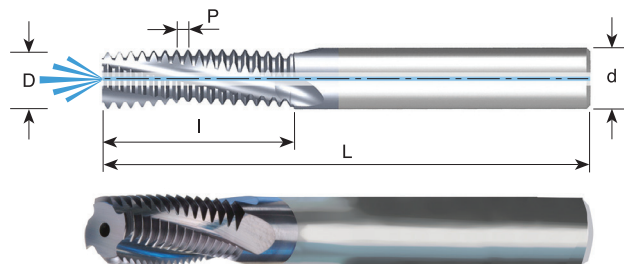
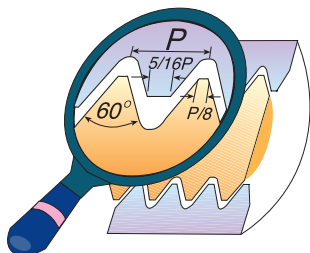
| Grade | P | M | K | N | S | H       |
|-------|---|---|---|---|---|---------|
| MT7   | ● | ● | ● | ○ | ● | ≤47 HRc |

| Pitch mm | Thread | Ordering Code         | d  | D   | No. of Flutes | I    | L  |
|----------|--------|-----------------------|----|-----|---------------|------|----|
| 0.7      | MJ4    | MTB 06032 C8 0.7 MJ   | 6  | 3.2 | 3             | 8.1  | 58 |
| 0.8      | MJ5    | MTB 0604 C10 0.8 MJ   | 6  | 4.0 | 3             | 10.0 | 58 |
| 1.0      | MJ6    | MTB 06048 D12 1.0 MJ  | 6  | 4.8 | 4             | 12.5 | 58 |
| 1.25     | MJ8    | MTB 08064 D15 1.25 MJ | 8  | 6.4 | 4             | 15.6 | 64 |
| 1.5      | MJ10   | MTB 0808 D20 1.5 MJ   | 8  | 8.0 | 4             | 20.3 | 64 |
| 1.75     | MJ12   | MTB 10095 D23 1.75 MJ | 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      | MTB 06052 D13 28 UNJ | 6  | 5.2  | 4             | 13.2 | 58 |
| 24        |      | 5/16     | MTB 08066 D16 24 UNJ | 8  | 6.6  | 4             | 16.4 | 64 |
| 24        |      | 3/8      | MTB 10082 D19 24 UNJ | 10 | 8.2  | 4             | 19.6 | 73 |
| 20        | 1/4  |          | MTB 06048 C13 20 UNJ | 6  | 4.8  | 3             | 13.3 | 58 |
| 20        |      | 7/16-1/2 | MTB 10092 D22 20 UNJ | 10 | 9.2  | 4             | 22.2 | 73 |
| 18        | 5/16 |          | MTB 0606 C16 18 UNJ  | 6  | 6.0  | 3             | 16.2 | 58 |
| 16        | 3/8  |          | MTB 08074 D19 16 UNJ | 8  | 7.4  | 4             | 19.9 | 64 |
| 14        | 7/16 |          | MTB 10085 D22 14 UNJ | 10 | 8.5  | 4             | 22.7 | 73 |
| 13        | 1/2  |          | MTB 10098 D26 13 UNJ | 10 | 9.8  | 4             | 26.4 | 73 |
| 12        | 9/16 |          | MTB 12116 D28 12 UNJ | 12 | 11.6 | 4             | 28.6 | 84 |

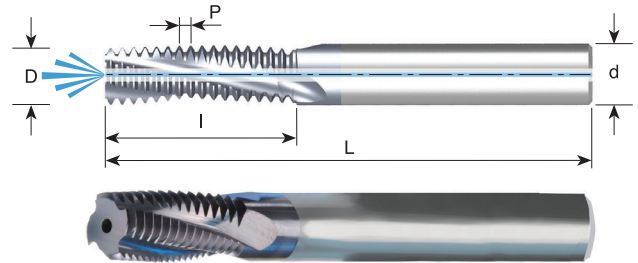
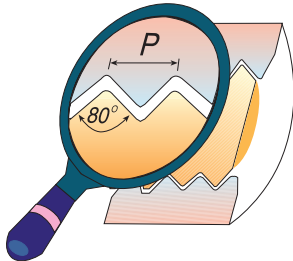
Order example: MTB 0606 C16 18 UNJ MT7

● 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<br>TPI | Standard              | Ordering Code             | d  | D    | No. of<br>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

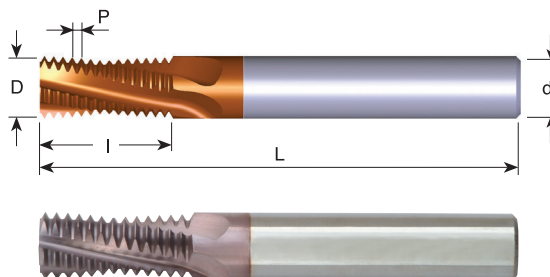
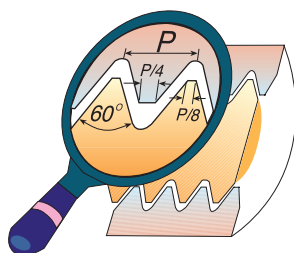


## Mill - Thread Solid Carbide for External Threads

### Advantages:

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

### ISO

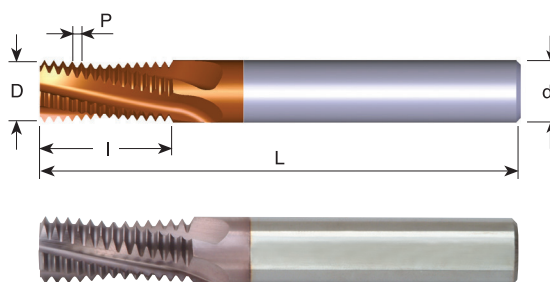
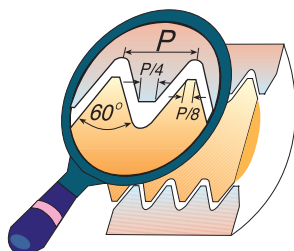


| Grade | P | M | K | N | S | H       |
|-------|---|---|---|---|---|---------|
| MT7   | ● | ● | ● | ○ | ● | ≤47 HRc |

| 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 |

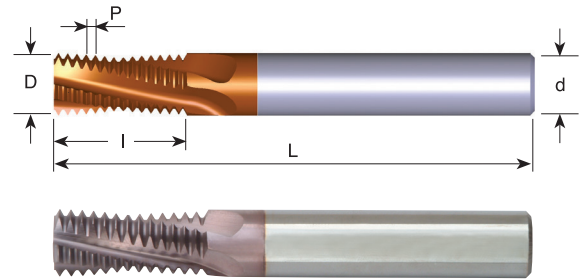
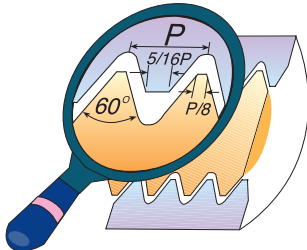
| Pitch TPI | Ordering Code             | d  | D    | No. of Flutes | I    | L  |
|-----------|---------------------------|----|------|---------------|------|----|
| 24        | <b>EMT 1010 D16 24 UN</b> | 10 | 10.0 | 4             | 16.4 | 73 |
| 20        | <b>EMT 1212 E21 20 UN</b> | 12 | 12.0 | 5             | 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

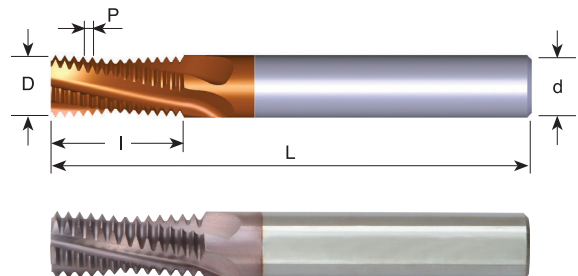
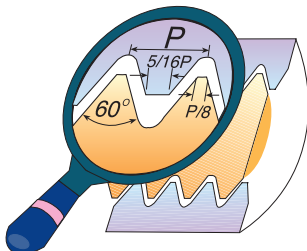


| Grade | P | M | K | N | S | H       |
|-------|---|---|---|---|---|---------|
| MT7   | ● | ● | ● | ○ | ● | ≤47 HRc |

| 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