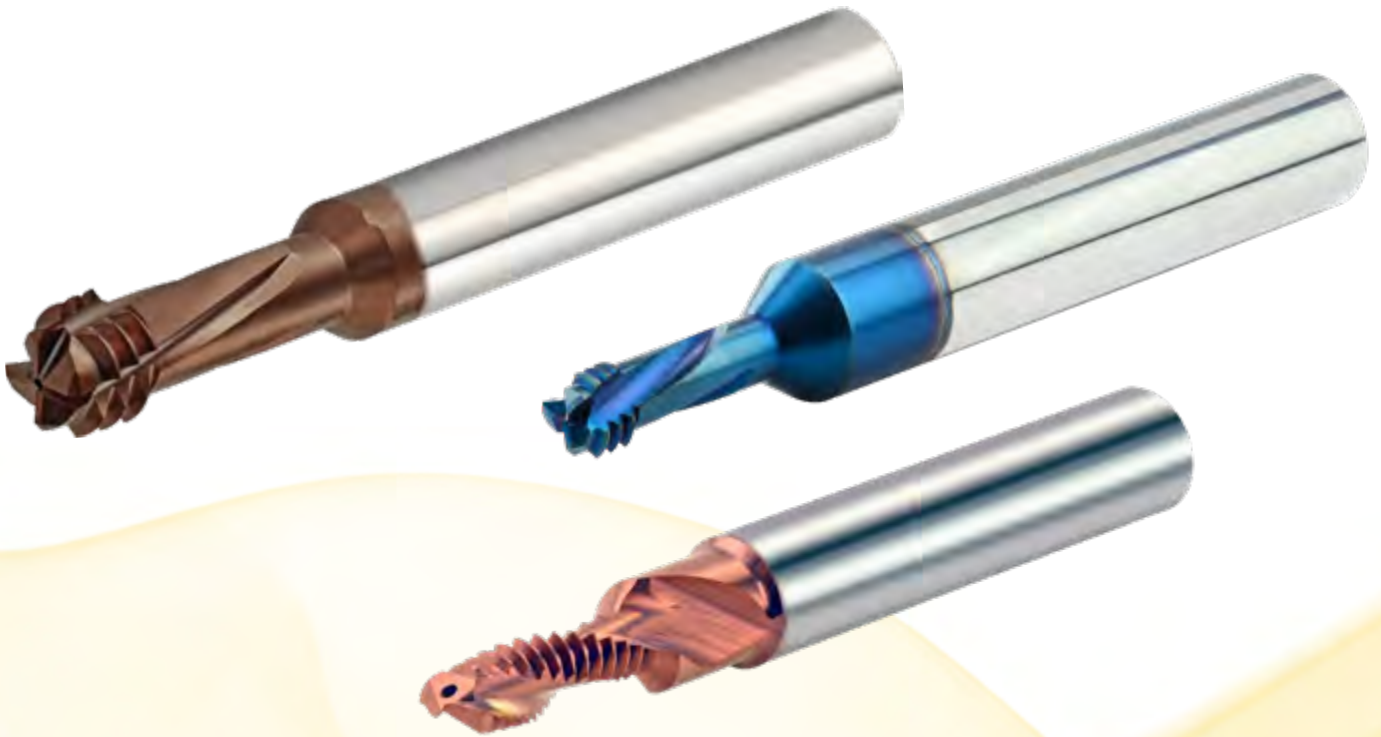


Multi - Function Thread Mills 3 in 1 Operations

B10



High Performance tools with internal coolant supply for the production of internal threads.

**Produces the thread hole, the thread and a chamfer
in one work process.**

| Contents: | Page: | Contents: | Page: |
|-------------------------------|--------------|------------------------|--------------|
| DMT, DMTH Introduction | 2 | DMTH | 6-7 |
| Advantages | 2 | ISO | 6 |
| Product Identification | 2 | UN | 6 |
| DMT | 3-5 | Case Studies | 7 |
| ISO | 3 | MT Drill - MTD | 8-9 |
| UN | 4 | Advantages | 8 |
| G (BSP) | 5 | Product Identification | 8 |
| NPT | 5 | ISO | 9 |
| | | UNC | 9 |
| | | UNF | 9 |

DMT and DMTH

DMT

High Performance tools with internal coolant supply for the production of internal threads. Circular movement produces the thread hole, the thread and a chamfer in one work process.

Carbide grade: MT7 Sub-micron grade with Titanium Aluminum Nitride multi-layer coating (ISO K10-K20).

DMTH

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

- Advance Carbide grade dedicated for hardened materials
- Triple blue coating for high wear and heat resistance

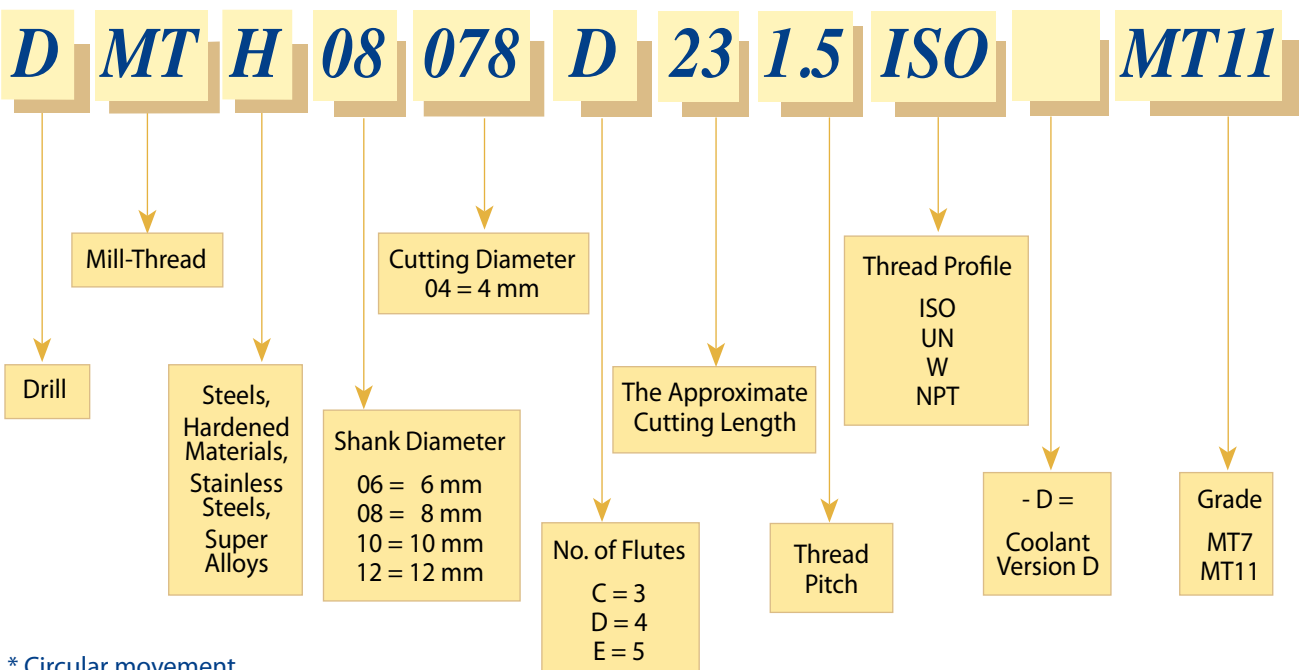
Carbide grade: MT11 Ultra-fine Sub-micron grade with advanced PVD triple Blue coating (for DMTH).

Advantages

- Cancels the need for drilling the hole.
- Short cycle time and high performance reduces machining costs.
- Suitable for blind and through holes.
- Full Profile thread.
- No time lost for tool change, since drilling, chamfering and thread milling are done with one tool.
- Same tool for right-hand or left-hand threads.
- Cuts a wide range of materials.

Product Identification

DMT 3 in 1 - *Drill, Thread, Chamfer Ordering Codes

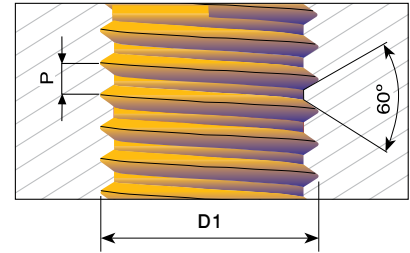
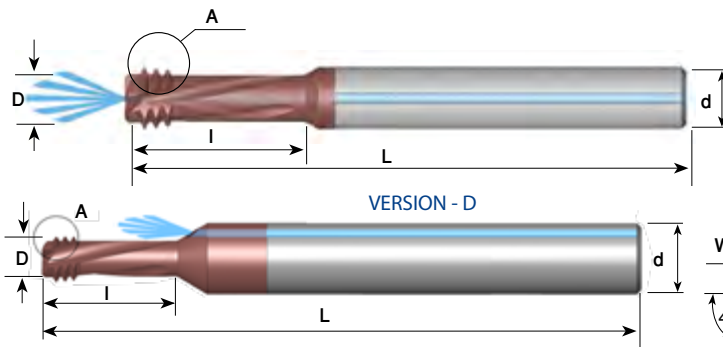


* Circular movement

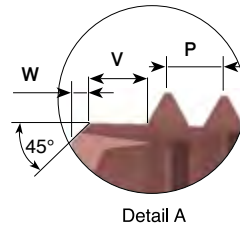
DMT



ISO With internal coolant bore Tools for Internal Thread



Left hand cutting
For CNC code use M04



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

| Pitch mm | M Coarse | M Fine | Ordering Code | d | D | No. of Flutes | I | W | V | L | Thread depth |
|----------|----------|----------|---------------------------------|----|-------|---------------|------|-----|------|----|--------------|
| 0.5 | M3 | M3.5, M4 | *DMT 06024 C7 0.5 ISO-D | 6 | 2.40 | 3 | 7.2 | 0.2 | 0.5 | 58 | 2xD1 |
| 0.7 | M4 | | *DMT 06032 C11 0.7 ISO-D | 6 | 3.15 | 3 | 11.6 | 0.2 | 0.7 | 58 | 2.5xD1 |
| 0.8 | M5 | | *DMT 0604 C14 0.8 ISO-D | 6 | 4.00 | 3 | 14.4 | 0.3 | 0.8 | 58 | 2.5xD1 |
| 1.0 | M6, M7 | M8, M9 | DMT 08047 C14 1.0 ISO | 8 | 4.70 | 3 | 14.0 | 0.4 | 1.0 | 64 | 2xD1 |
| 1.0 | M6, M7 | M8, M9 | DMT 08047 C20 1.0 ISO | 8 | 4.70 | 3 | 20.4 | 0.4 | 1.0 | 64 | 3xD1 |
| 1.25 | M8, M9 | M10, M12 | DMT 08061 D18 1.25 ISO | 8 | 6.10 | 4 | 18.0 | 0.5 | 1.25 | 64 | 2xD1 |
| 1.25 | M8, M9 | M10, M12 | DMT 08061 D27 1.25 ISO | 8 | 6.10 | 4 | 27.0 | 0.5 | 1.25 | 64 | 3xD1 |
| 1.5 | M10 | M13-M15 | DMT 08078 D23 1.5 ISO | 8 | 7.80 | 4 | 23.0 | 0.6 | 1.5 | 64 | 2xD1 |
| 1.75 | M12 | | DMT 1009 D26 1.75 ISO | 10 | 9.00 | 4 | 26.0 | 0.6 | 1.75 | 73 | 2xD1 |
| 2.0 | M16 | M17-M23 | DMT 12118 D35 2.0 ISO | 12 | 11.80 | 4 | 35.0 | 0.6 | 2.0 | 84 | 2xD1 |

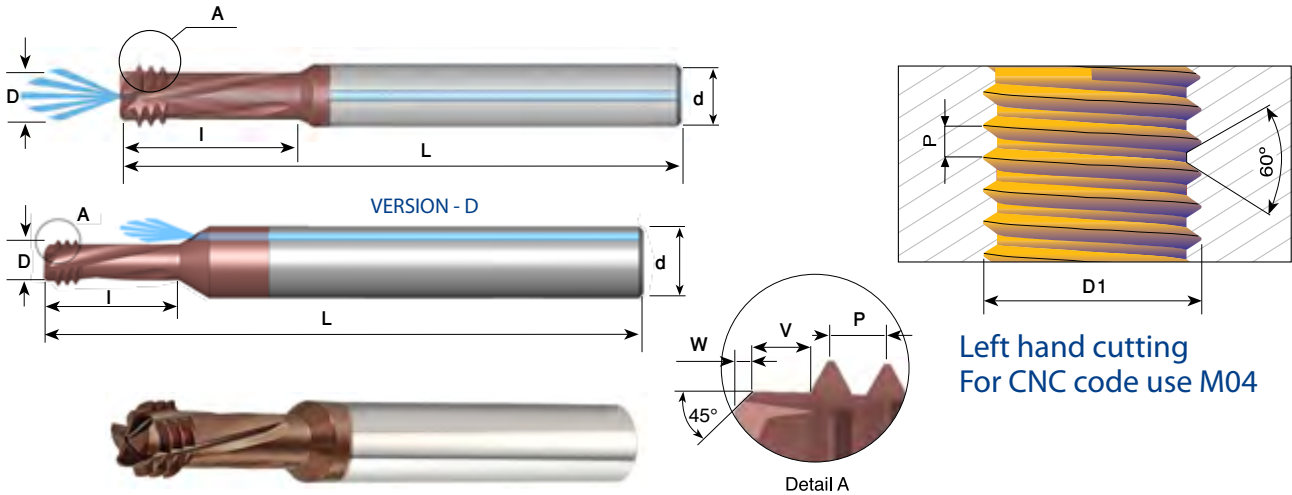
* Tools version-D

● First choice ○ Alternative

Order example: DMT 08047 C14 1.0 ISO MT7

UN With internal coolant bore

Tools for Internal Thread



For thread depth up to 2 x D1

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

| Pitch TPI | UN, UNEF, UNF UNC, UNS | Ordering Code | d | D | No. of Flutes | I | W | V | L | Thread length |
|-----------|------------------------|-------------------------------|----|-------|---------------|------|-----|------|----|---------------|
| 40 | 4, 5, 6 | *DMT 06021 C7 40 UN-D | 6 | 2.10 | 3 | 7.0 | 0.1 | 0.6 | 58 | 2xD1 |
| 36 | 8 | *DMT 06033 C12 36 UN-D | 6 | 3.30 | 3 | 12.0 | 0.2 | 0.7 | 58 | 2.5xD1 |
| 32 | 6 | *DMT 06026 C8 32 UN-D | 6 | 2.60 | 3 | 8.7 | 0.2 | 0.8 | 58 | 2xD1 |
| 32 | 8 | *DMT 06032 C12 32 UN-D | 6 | 3.20 | 3 | 12.3 | 0.3 | 0.8 | 58 | 2.5xD1 |
| 32 | 10 | *DMT 06038 C14 32 UN-D | 6 | 3.80 | 3 | 14.0 | 0.3 | 0.8 | 58 | 2.5xD1 |
| 28 | 1/4-3/8 | DMT 0805 C14 28 UN | 8 | 5.00 | 3 | 14.5 | 0.4 | 0.9 | 64 | 2xD1 |
| 24 | 10,12 | *DMT 06035 C12 24 UN-D | 6 | 3.50 | 3 | 12.1 | 0.3 | 1.05 | 58 | 2xD1 |
| 24 | 5/16-1/2 | DMT 08065 D17 24 UN | 8 | 6.50 | 4 | 17.0 | 0.5 | 1.05 | 64 | 2xD1 |
| 20 | 1/4-3/8 | DMT 08048 C14 20 UN | 8 | 4.80 | 3 | 14.0 | 0.4 | 1.25 | 64 | 2xD1 |
| 18 | 5/16-7/16 | DMT 0806 D17 18 UN | 8 | 6.00 | 4 | 17.0 | 0.5 | 1.4 | 64 | 2xD1 |
| 16 | 3/8-1/2 | DMT 08067 C22 16 UN | 8 | 6.70 | 3 | 22.0 | 0.5 | 1.6 | 64 | 2xD1 |
| 14 | 7/16 | DMT 0808 D26 14 UN | 8 | 8.00 | 4 | 26.5 | 0.6 | 1.8 | 64 | 2xD1 |
| 13 | 1/2 | DMT 1010 D29 13 UN | 10 | 10.00 | 4 | 29.8 | 0.6 | 2.0 | 73 | 2xD1 |

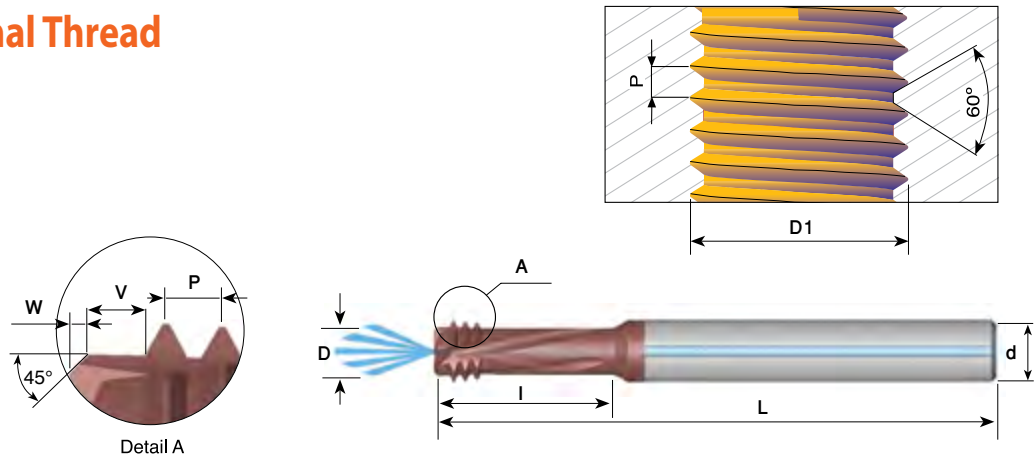
* Tools version-D

● First choice ○ Alternative

Order example: DMT 08067 C22 16 UN MT7

G (BSP) With internal coolant bore

Tools for Internal Thread



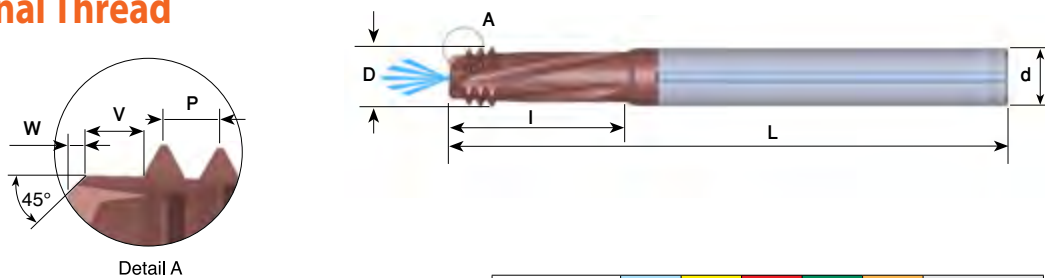
| Grade | P | M | K | N | S | H |
|-------|---|---|---|---|---|---|
| MT7 | ○ | ● | ● | ● | ○ | |

| Pitch TPI | Standard | Ordering Code | d | D | No. of Flutes | I | W | V | L | Thread length |
|-----------|----------|---------------------------|----|-------|---------------|------|-----|-----|----|---------------|
| 28 | G1/16 | DMT 0806 D17 28 W | 8 | 6.00 | 4 | 17.8 | 0.6 | 0.9 | 64 | 2xD1 |
| 28 | G1/8 | DMT 08078 D21 28 W | 8 | 7.80 | 4 | 21.8 | 0.6 | 0.9 | 64 | 2xD1 |
| 19 | G1/4 | DMT 12104 D29 19 W | 12 | 10.40 | 4 | 29.6 | 0.7 | 1.3 | 84 | 2xD1 |
| 19 | G3/8 | DMT 1414 D36 19 W | 14 | 14.00 | 4 | 36.7 | 0.8 | 1.3 | 83 | 2xD1 |

Order example: DMT 08078 D21 28 W MT7

NPT With internal coolant bore

Tools for Internal Thread



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

| Pitch TPI | Standard | Ordering Code | d | D | No. of Flutes | I | W | V | L |
|-----------|----------|-----------------------------|----|-------|---------------|------|-----|-----|----|
| 27 | 1/16 | DMT 08057 D11 27 NPT | 8 | 5.70 | 4 | 11.2 | 0.4 | 0.9 | 64 |
| 27 | 1/8 | DMT 08076 D12 27 NPT | 8 | 7.60 | 4 | 12.1 | 0.4 | 0.9 | 64 |
| 18 | 1/4 | DMT 1010 D18 18 NPT | 10 | 10.00 | 4 | 18.2 | 0.6 | 1.4 | 73 |
| 18 | 3/8 | DMT 1212 D19 18 NPT | 12 | 12.00 | 4 | 19.6 | 0.6 | 1.4 | 84 |
| 14 | 1/2 | DMT 1616 E26 14 NPT | 16 | 16.00 | 5 | 26.9 | 0.6 | 1.8 | 92 |

Order example: DMT 1010 D18 18 NPT MT7

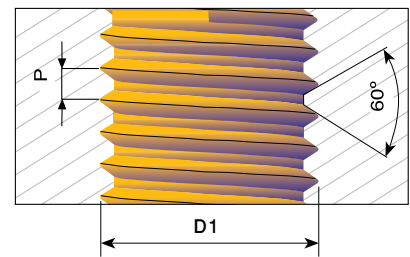
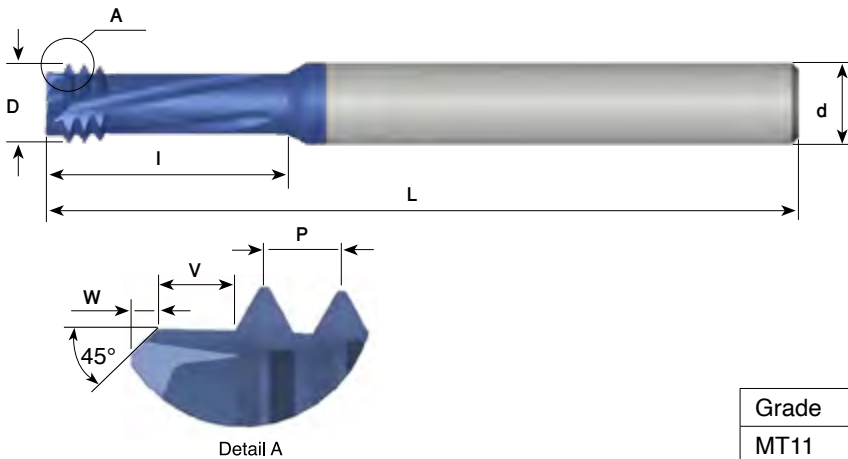
● First choice ○ Alternative

DMTH

For information see page B10-2

ISO

Tools for Internal Thread



Left hand cutting
For CNC code use M04

| Grade | P | M | K | N | S | H |
|-------|---|---|---|---|---|---------|
| MT11 | ● | ● | ○ | ○ | ● | ≤55 HRc |

| Pitch mm | M Coarse | M Fine | Ordering Code | d | D | No. of Flutes | I | W | V | L | Thread depth |
|----------|----------|---------|--------------------------------|----|-------|---------------|------|-----|------|----|--------------|
| 0.7 | M4 | | DMTH 06032 C11 0.7 ISO | 6 | 3.15 | 3 | 11.6 | 0.2 | 0.7 | 58 | 2.5xD1 |
| 0.8 | M5 | | DMTH 0604 C14 0.8 ISO | 6 | 4.00 | 3 | 14.4 | 0.3 | 0.8 | 58 | 2.5xD1 |
| 1.0 | M6,M7 | M8,M9 | DMTH 08047 C14 1.0 ISO | 8 | 4.70 | 3 | 14.4 | 0.4 | 1.0 | 64 | 2xD1 |
| 1.25 | M8,M9 | M10,M12 | DMTH 08061 D19 1.25 ISO | 8 | 6.10 | 4 | 19.0 | 0.5 | 1.25 | 64 | 2xD1 |
| 1.5 | M10 | M13-M15 | DMTH 08078 D23 1.5 ISO | 8 | 7.80 | 4 | 23.6 | 0.6 | 1.5 | 64 | 2xD1 |
| 1.75 | M12 | | DMTH 1009 D28 1.75 ISO | 10 | 9.00 | 4 | 28.1 | 0.6 | 1.75 | 73 | 2xD1 |
| 2.0 | M16 | M17-M23 | DMTH 12118 D36 2.0 ISO | 12 | 11.80 | 4 | 36.6 | 0.6 | 2.0 | 84 | 2xD1 |

Order example: DMTH 1009 D28 1.75 ISO MT11

UN

Tools for Internal Thread

| Grade | P | M | K | N | S | H |
|-------|---|---|---|---|---|---------|
| MT11 | ● | ● | ○ | ○ | ● | ≤55 HRc |

| Pitch TPI | UN, UNEF, UNF UNC, UNS | Ordering Code | d | D | No. of Flutes | I | W | V | L | Thread depth |
|-----------|------------------------|-----------------------------|----|-------|---------------|------|-----|------|----|--------------|
| 40 | 4, 5, 6 | DMTH 06021 C7 40 UN | 6 | 2.10 | 3 | 7.0 | 0.1 | 0.6 | 58 | 2xD1 |
| 32 | 6 | DMTH 06026 C8 32 UN | 6 | 2.60 | 3 | 8.7 | 0.1 | 0.8 | 58 | 2xD1 |
| 28 | 1/4-3/8 | DMTH 0805 C14 28 UN | 8 | 5.00 | 3 | 14.9 | 0.4 | 0.9 | 64 | 2xD1 |
| 24 | 5/16-1/2 | DMTH 08065 D18 24 UN | 8 | 6.50 | 4 | 18.5 | 0.5 | 1.05 | 64 | 2xD1 |
| 20 | 1/4-3/8 | DMTH 08048 C15 20 UN | 8 | 4.80 | 3 | 15.6 | 0.4 | 1.25 | 64 | 2xD1 |
| 18 | 5/16-7/16 | DMTH 0806 D19 18 UN | 8 | 6.00 | 4 | 19.2 | 0.5 | 1.4 | 64 | 2xD1 |
| 16 | 3/8-1/2 | DMTH 08067 C22 16 UN | 8 | 6.70 | 3 | 22.8 | 0.5 | 1.6 | 64 | 2xD1 |
| 13 | 1/2 | DMTH 10092 C30 13 UN | 10 | 9.20 | 3 | 30.0 | 0.6 | 2.0 | 73 | 2xD1 |
| 11 | 5/8 | DMTH 12114 C37 11 UN | 12 | 11.40 | 3 | 37.0 | 0.6 | 2.3 | 84 | 2xD1 |

Order example: DMTH 08048 C15 20 UN MT11

● First choice ○ Alternative

Case Studies

Case Study no. 1

| | |
|------------------|--------------------------------|
| Tool Description | DMTH 08047 C14 1.0 ISO MT11 |
| Internal Thread | M6x1.0 |
| Thread Length | 12 mm |
| Material | Steel 12-15 HRc SAE 4340 |
| Cutting Data | Vc= 90 m/min Fz= 0.03 mm/tooth |
| Cycle Time | 28 seconds |
| Tool Life | 776 |

Case Study no. 2

| | |
|------------------|--------------------------------|
| Tool Description | DMTH 08047 C14 1.0 ISO MT11 |
| Internal Thread | M6x1.0 |
| Thread Length | 12 mm |
| Material | Steel 44-45 HRc SAE 4340 |
| Cutting Data | Vc= 71 m/min Fz= 0.02 mm/tooth |
| Cycle Time | 53 seconds |
| Tool Life | 196 |

MT Drill - MTD

Designed to drill, chamfer and thread mill the hole in one operation.

Carbide grade: MT7: Sub-Micron carbide grade combines high hardness and toughness, with PVD triple coating for smooth cutting and high performance.

K20: Uncoated Sub-Micron carbide grade dedicated for machining Aluminum and Cast Iron.

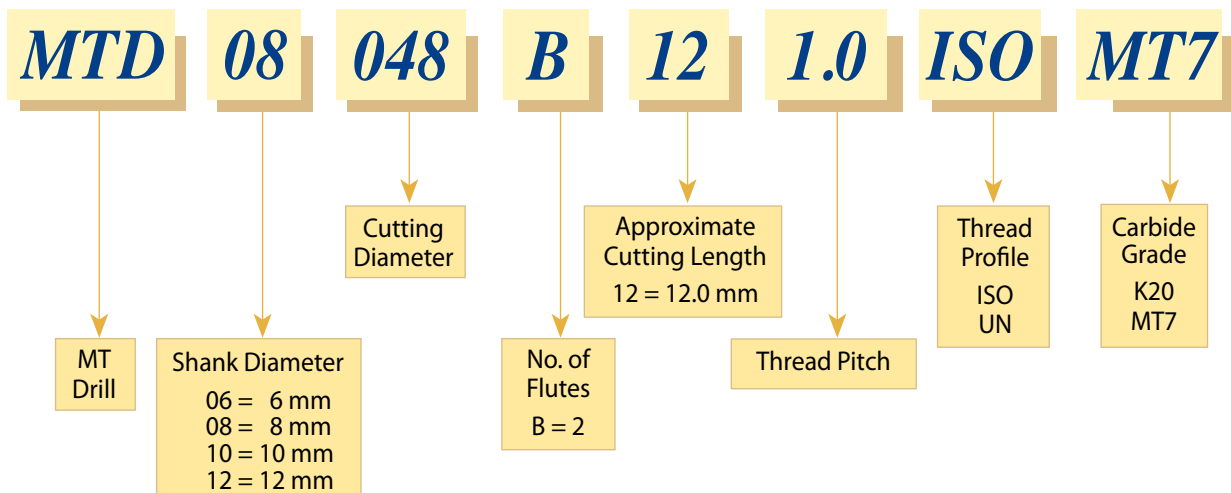
Advantages

- Two fluted drill/thread milling cutter, with 45° chamfering. Ideal for mass production applications.
- Reduces cycle times by combining operations and eliminating tool changes.
- For both right and left hand internal threads.
- Same tool for blind or through hole.
- High thread surface quality.
- Internal coolant.
- Optimized carbide grade for Aluminum and Cast Iron.



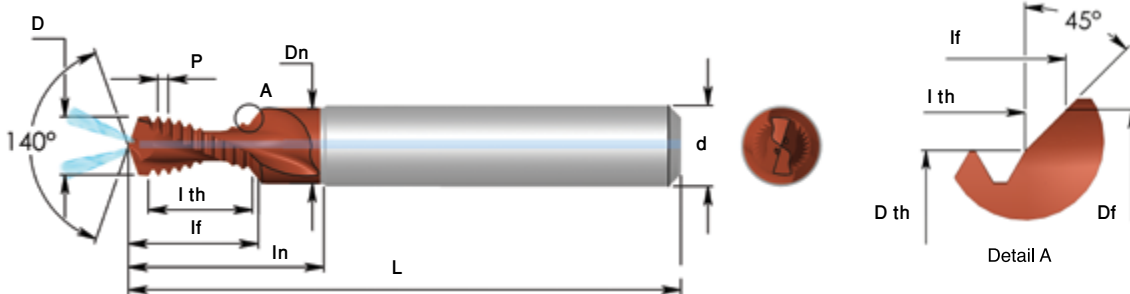
Product Identification

Mill-Thread Drill Ordering Codes



MT Drill - MTD

Tools for Internal thread



Thread length: 2xD

| Grade | P | M | K | N | S | H |
|-------|---|---|---|---|---|---|
| K20 | | | ● | ● | | |
| MT7 | | | ● | ● | | |

ISO

| Pitch mm | M Coarse | Ordering Code | d | D | Dth | Df | Dn | In | lth | lf | L |
|----------|----------|-------------------------------|----|------|------|------|------|----|------|------|----|
| 0.7 | M4 | MTD 06032 B7 0.7 ISO | 6 | 3.30 | 3.20 | 4.7 | 4.9 | 15 | 7.7 | 9.8 | 54 |
| 0.8 | M5 | MTD 0604 B9 0.8 ISO | 6 | 4.20 | 4.00 | 5.5 | 5.7 | 18 | 9.6 | 11.9 | 54 |
| 1.0 | M6 | MTD 08048 B12 1.0 ISO | 8 | 5.00 | 4.80 | 6.5 | 6.8 | 26 | 12.0 | 14.8 | 62 |
| 1.25 | M8 | MTD 10064 B15 1.25 ISO | 10 | 6.75 | 6.40 | 8.6 | 8.9 | 34 | 15.1 | 18.7 | 74 |
| 1.5 | M10 | MTD 1208 B19 1.5 ISO | 12 | 8.50 | 8.00 | 10.5 | 10.8 | 35 | 19.5 | 23.8 | 80 |

UNC

| Pitch TPI | UNC | Ordering Code | d | D | Dth | Df | Dn | In | lth | lf | L |
|-----------|------|----------------------------|----|------|------|------|------|----|------|------|----|
| 20 | 1/4 | MTD 08048 B12 20 UN | 8 | 5.20 | 4.80 | 6.7 | 6.9 | 26 | 12.7 | 15.9 | 62 |
| 18 | 5/16 | MTD 10061 B15 18 UN | 10 | 6.60 | 6.10 | 8.3 | 8.6 | 34 | 15.5 | 19.2 | 74 |
| 16 | 3/8 | MTD 12075 B19 16 UN | 12 | 8.00 | 7.50 | 10.0 | 10.3 | 35 | 19.1 | 23.4 | 80 |
| 14 | 7/16 | MTD 12088 B21 14 UN | 12 | 9.40 | 8.80 | 11.4 | 11.6 | 35 | 21.8 | 26.6 | 80 |

UNF

| Pitch TPI | UNF | Ordering Code | d | D | Dth | Df | Dn | In | lth | lf | L |
|-----------|------|----------------------------|----|------|------|------|------|----|------|------|----|
| 32 | 10 | MTD 06038 B9 32 UN | 6 | 4.10 | 3.80 | 5.4 | 5.6 | 18 | 9.5 | 11.8 | 54 |
| 28 | 1/4 | MTD 08052 B13 28 UN | 8 | 5.50 | 5.20 | 6.7 | 6.9 | 26 | 13.0 | 15.7 | 62 |
| 24 | 5/16 | MTD 10066 B15 24 UN | 10 | 6.90 | 6.60 | 8.4 | 8.7 | 34 | 15.9 | 19.1 | 74 |
| 24 | 3/8 | MTD 12082 B19 24 UN | 12 | 8.50 | 8.20 | 10.0 | 10.3 | 35 | 19.0 | 22.5 | 80 |

- Tools without coolant available upon request.
- Cylindrical shank DIN6535-HA (Weldon shank, available upon request).

Order example: MTD 08048 B12 20 UN MT7

● First choice ○ Alternative