

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

Contents:

Page:

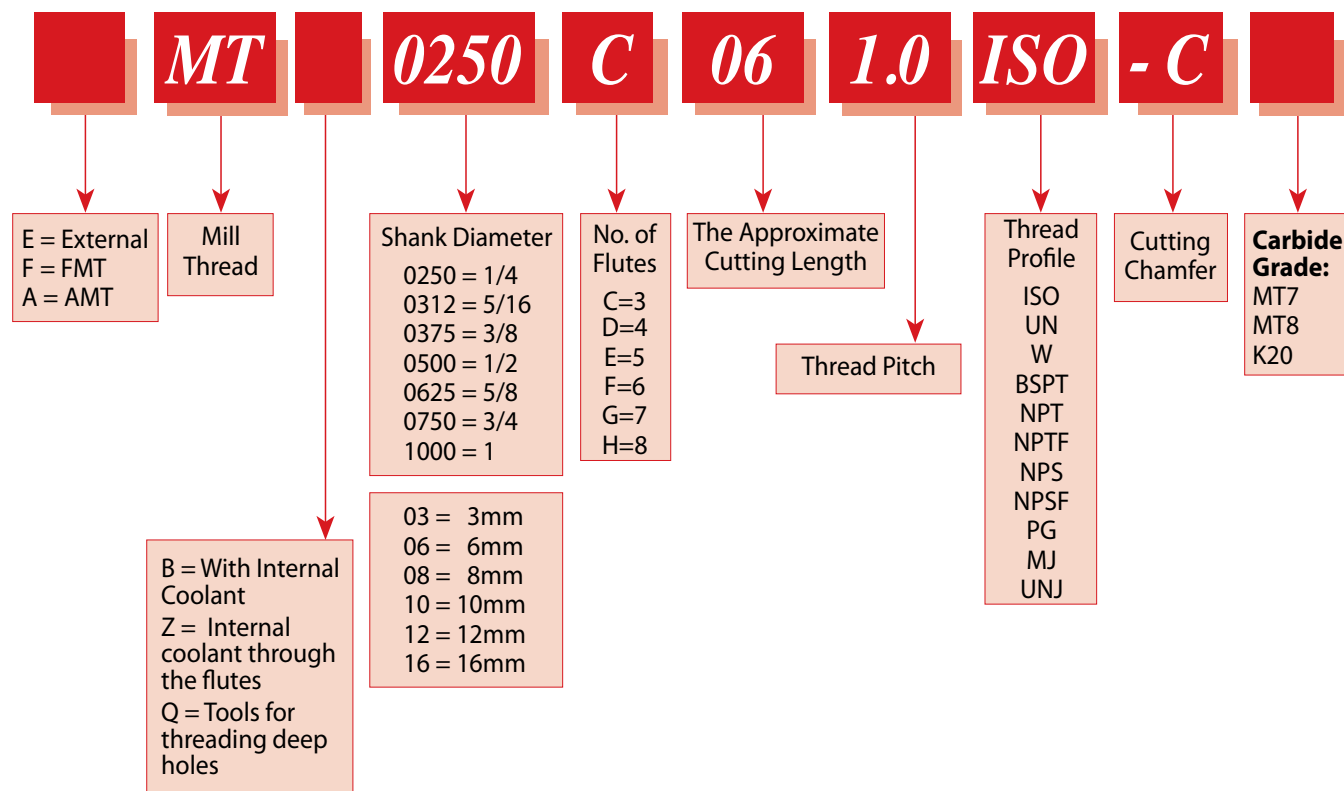
Contents:

Page:

Product Identification	236	NPT - with internal Coolant Bore - MTB	250
ISO	237	NPT - with internal Coolant through the Flutes - MTZ	251
ISO - with internal Coolant Bore - MTB	238	NPTF	251
ISO - with internal Coolant through the Flutes - MTZ	239	NPTF - with internal Coolant Bore - MTB	252
ISO - with internal Coolant Bore - MTQ	240	NPTF - with internal Coolant through the Flutes - MTZ	252
ISO - with internal Coolant Bore - FMT	241	Solid Carbide Tapered End Mills	253
G (55°)	241	NPS - with internal Coolant Bore - MTB	254
G (55°) - with internal Coolant Bore - MTB	242	NPSF - with internal Coolant Bore - MTB	254
G (55°) - with internal Coolant through the Flutes - MTZ	242	PG DIN 40430 - with internal Coolant Bore MTB	255
G (55°) - with internal Coolant through the Flutes - FMT	243	Mill - Thread Solid Carbide for External Threads	256
Whitworth - with internal Coolant through the Flutes - MTZ	243	ISO	256
UN	244	UN	256
UN - with internal Coolant Bore - MTB	245	MJ	257
UN - with internal Coolant through the Flutes - MTZ	246	UNJ	257
UN - with internal Coolant Bore - MTQ	247	AMT - Solid Carbide Thread Mills for Aluminum	258
UN - with internal Coolant Bore - FMT	248	ISO - with internal Coolant Bore	259
BSPT	248	ISO - With internal coolant bore and cutting Chamfer	259
BSPT - with internal Coolant Bore - MTB	249	UN - With internal coolant bore	260
BSPT - with internal Coolant through the Flutes - MTZ	249	UN - With internal coolant bore and cutting Chamfer	260
NPT	250		

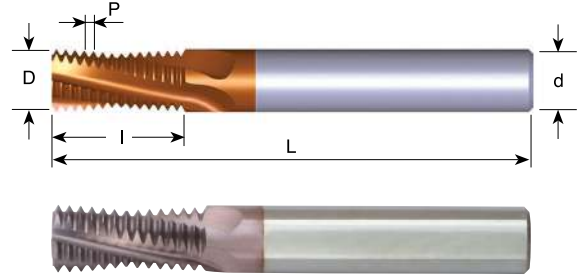
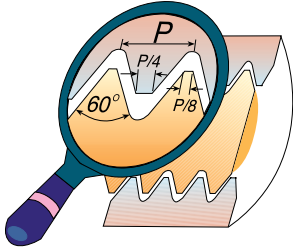
Product Identification

Mill-Thread Solid Carbide Ordering Codes



ISO

Tools for Internal thread



Pitch mm	M coarse	M fine mm	Ordering Code	d	D	No. of Flutes	I	L
0.5	M3	$\emptyset \geq 4$	MT0250C02 0.5 ISO	1/4	.087	3	.21	2.5
0.5		$\emptyset \geq 5$	MT0250C04 0.5 ISO	1/4	.150	3	.41	2.5
0.7	M4	$\emptyset \geq 5$	MT0250C03 0.7 ISO	1/4	.122	3	.29	2.5
0.75		$\emptyset \geq 6$	MT0250C04 0.75 ISO	1/4	.177	3	.40	2.5
0.8	M5	$\emptyset \geq 6$	MT0250C04 0.8 ISO	1/4	.142	3	.36	2.5
1.0	M6	$\emptyset \geq 7$	MT0250C04 1.0 ISO	1/4	.157	3	.41	2.5
1.0	M6	$\emptyset \geq 7$	MT0250C06 1.0 ISO	1/4	.157	3	.57	2.5
1.0		$\emptyset \geq 9$	MT0250C05 1.0 ISO	1/4	.236	3	.49	2.5
1.0		$\emptyset \geq 10$	MT0312D07 1.0 ISO	5/16	.313	4	.65	2.5
1.25	M8	$\emptyset \geq 10$	MT0250C06 1.25 ISO	1/4	.197	3	.57	2.5
1.25	M8	$\emptyset \geq 10$	MT0250C07 1.25 ISO	1/4	.197	3	.76	2.5
1.5	M10	$\emptyset \geq 12$	MT0312C07 1.5 ISO	5/16	.276	3	.68	2.5
1.5	M10	$\emptyset \geq 12$	MT0312C09 1.5 ISO	5/16	.276	3	.98	2.5
1.5		$\emptyset \geq 14$	MT0375D09 1.5 ISO	3/8	.375	4	.86	3.0
1.5		$\emptyset \geq 20$	MT0625F13 1.5 ISO	5/8	.625	6	1.33	4.0
1.75	M12	$\emptyset \geq 14$	MT0312C08 1.75 ISO	5/16	.313	3	.79	2.5
1.75	M12	$\emptyset \geq 14$	MT0312C11 1.75 ISO	5/16	.313	3	1.14	2.5
2.0	M16	$\emptyset \geq 17$	MT0375C11 2.0 ISO	3/8	.375	3	1.06	3.0
2.0	M16	$\emptyset \geq 17$	MT0375C15 2.0 ISO	3/8	.375	3	1.54	4.0
2.0		$\emptyset \geq 18$	MT0500D11 2.0 ISO	1/2	.472	4	1.06	3.5
2.0		$\emptyset \geq 26$	MT0750F16 2.0 ISO	3/4	.750	6	1.61	4.0
2.5	M20	$\emptyset \geq 22$	MT0625D13 2.5 ISO	5/8	.551	4	1.33	4.0
2.5	M20	$\emptyset \geq 22$	MT0625D19 2.5 ISO	5/8	.551	4	1.92	4.0
3.0	M24	$\emptyset \geq 25$	MT0625C16 3.0 ISO	5/8	.625	3	1.59	4.0
3.0	M24	$\emptyset \geq 25$	MT0625C23 3.0 ISO	5/8	.625	3	2.31	4.5
3.0	M27	$\emptyset \geq 28$	MT0750D17 3.0 ISO	3/4	.750	4	1.71	4.0

Order example: MT 0500D11 2.0 ISO MT7

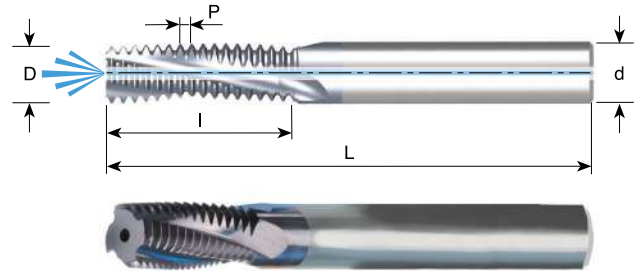
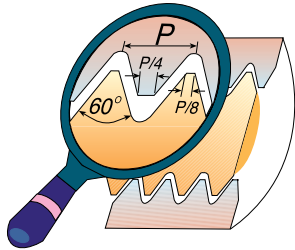
For thread mills with coolant bore see following pages

For small thread mills see pages 263-264, 270, 274 & 285.



ISO With internal coolant bore

Tools for Internal thread



Pitch mm	M coarse	M fine mm	Ordering Code	d	D	No. of Flutes	I	L
0.5		$\varnothing \geq 5$	MTB0250C04 0.5 ISO	1/4	.150	3	.41	2.5
0.7	M4	$\varnothing \geq 5$	MTB0250C02 0.7 ISO	1/4	.122	3	.29	2.5
0.75		$\varnothing \geq 6$	MTB0250C04 0.75 ISO	1/4	.177	3	.40	2.5
0.8	M5	$\varnothing \geq 6$	MTB0250C03 0.8 ISO	1/4	.150	3	.36	2.5
1.0	M6	$\varnothing \geq 7$	MTB0250C04 1.0 ISO	1/4	.181	3	.41	2.5
1.0	M6	$\varnothing \geq 7$	MTB0250C06 1.0 ISO	1/4	.181	3	.57	2.5
1.0		$\varnothing \geq 9$	MTB0250C05 1.0 ISO	1/4	.250	3	.50	2.5
1.0		$\varnothing \geq 10$	MTB0312D06 1.0 ISO	5/16	.312	4	.65	2.5
1.0		$\varnothing \geq 12$	MTB0375D09 1.0 ISO	3/8	.375	4	.96	3.0
1.25	M8	$\varnothing \geq 10$	MTB0250C05 1.25 ISO	1/4	.249	3	.57	2.5
1.25	M8	$\varnothing \geq 10$	MTB0250C07 1.25 ISO	1/4	.249	3	.76	2.5
1.5	M10	$\varnothing \geq 12$	MTB0312C06 1.5 ISO	5/16	.306	3	.67	2.5
1.5	M10	$\varnothing \geq 12$	MTB0312C09 1.5 ISO	5/16	.306	3	.98	2.5
1.5		$\varnothing \geq 14$	MTB0375D08 1.5 ISO	3/8	.375	4	.86	3.0
1.5		$\varnothing \geq 16$	MTB0500D10 1.5 ISO	1/2	.500	4	1.04	4.0
1.5		$\varnothing \geq 20$	MTB0625F13 1.5 ISO	5/8	.625	6	1.33	4.0
1.75	M12	$\varnothing \geq 12$	MTB0375C07 1.75 ISO	3/8	.354	3	.79	3.0
1.75	M12	$\varnothing \geq 12$	MTB0375C11 1.75 ISO	3/8	.354	3	1.14	3.0
2.0	M14	$\varnothing \geq 15$	MTB0375C10 2.0 ISO	3/8	.375	3	1.06	3.0
2.0	M16	$\varnothing \geq 17$	MTB0500D10 2.0 ISO	1/2	.465	4	1.06	4.0
2.0	M16	$\varnothing \geq 17$	MTB0500D15 2.0 ISO	1/2	.465	4	1.54	4.0
2.0		$\varnothing \geq 26$	MTB0750F16 2.0 ISO	3/4	.750	6	1.61	4.0
2.5	M20	$\varnothing \geq 22$	MTB0625E13 2.5 ISO	5/8	.591	5	1.33	4.0
2.5	M20	$\varnothing \geq 22$	MTB0625E19 2.5 ISO	5/8	.591	5	1.92	4.0
3.0	M24	$\varnothing \geq 25$	MTB0750D15 3.0 ISO	3/4	.709	4	1.59	4.0
3.0	M27	$\varnothing \geq 27$	MTB0750D17 3.0 ISO	3/4	.750	4	1.71	4.0

Order example: MTB 0312C06 1.5 ISO MT7

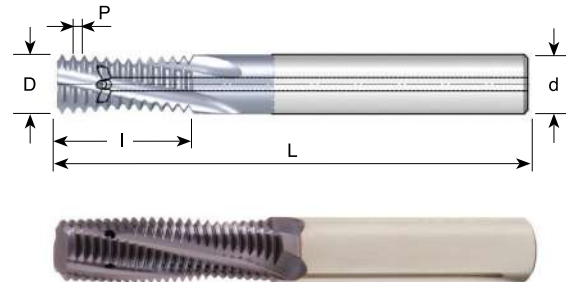
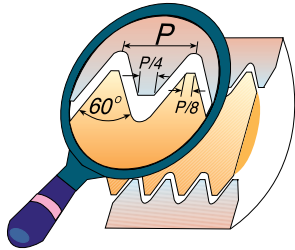
For thread mills with coolant through the flutes see next page

For small thread mills see pages 263-264, 270, 274 & 285.



ISO With internal coolant through the flutes

Tools for Internal Thread - Metric Shanks



Pitch mm	M coarse	M fine mm	Ordering Code	d mm	D	No. of Flutes	I	L
1.0	M6	$\emptyset \geq 7$	MTZ06048C10 1.0 ISO	6	.189	3	.41	2.3
1.0		$\emptyset \geq 9$	MTZ0606C12 1.0 ISO	6	.236	3	.49	2.3
1.0		$\emptyset \geq 10$	MTZ0808D16 1.0 ISO	8	.315	4	.65	2.5
1.25	M8	$\emptyset \geq 10$	MTZ0606C14 1.25 ISO	6	.236	3	.57	2.3
1.25	M8	$\emptyset \geq 10$	MTZ0606C19 1.25 ISO	6	.236	3	.76	2.3
1.5	M10	$\emptyset \geq 12$	MTZ08078C17 1.5 ISO	8	.307	3	.67	2.5
1.5		$\emptyset \geq 14$	MTZ1010D21 1.5 ISO	10	.394	4	.86	2.9
1.5		$\emptyset \geq 16$	MTZ1212D26 1.5 ISO	12	.472	4	1.03	3.3
1.5		$\emptyset \geq 20$	MTZ1616E33 1.5 ISO	16	.630	5	1.33	4.0
1.75	M12	$\emptyset \geq 12$	MTZ1009C20 1.75 ISO	10	.354	3	.79	2.9
1.75	M12	$\emptyset \geq 12$	MTZ1009C28 1.75 ISO	10	.354	3	1.14	2.9
2.0	M14	$\emptyset \geq 15$	MTZ1010C27 2.0 ISO	10	.394	3	1.06	2.9
2.0	M16	$\emptyset \geq 17$	MTZ12118D27 2.0 ISO	12	.465	4	1.06	3.3
2.5	M20	$\emptyset \geq 22$	MTZ1615E33 2.5 ISO	16	.591	5	1.33	4.0

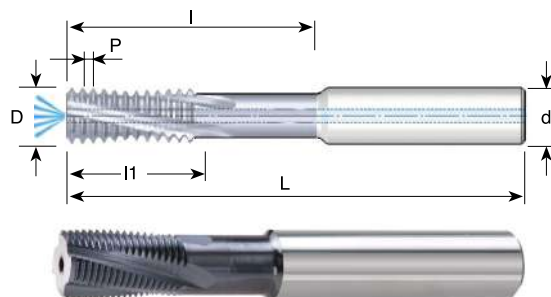
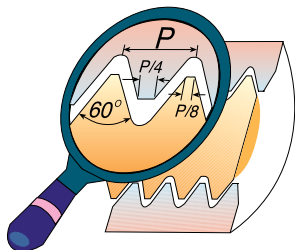
Order example: MTZ 08078C17 1.5 ISO MT7

For small thread mills see pages 263-264, 270, 274 & 285.



ISO With relieved neck and internal coolant bore

Tools for Internal Thread - Metric Shank



Pitch mm	M fine mm	Ordering Code	d mm	D	No. of Flutes	l1	I	L
1.0	$\emptyset \geq 12$	MTQ1010D32 1.0 ISO	10	.394	4	.71	1.26	2.9
1.0	$\emptyset \geq 14$	MTQ1212D38 1.0 ISO	12	.472	4	.83	1.50	3.3
1.0	$\emptyset \geq 18$	MTQ1616F45 1.0 ISO	16	.630	6	1.02	1.77	4.1
1.5	$\emptyset \geq 13$	MTQ1010D30 1.5 ISO	10	.394	4	.71	1.18	2.9
1.5	$\emptyset \geq 15$	MTQ1212D34 1.5 ISO	12	.472	4	.77	1.36	3.3
1.5	$\emptyset \geq 19$	MTQ1616F43 1.5 ISO	16	.630	6	1.00	1.71	4.1
1.5	$\emptyset \geq 23$	MTQ2020F60 1.5 ISO	20	.787	6	1.42	2.36	4.1
2.0	$\emptyset \geq 16$	MTQ1212D42 2.0 ISO	12	.472	4	.94	1.65	3.3
2.0	$\emptyset \geq 20$	MTQ1616E45 2.0 ISO	16	.630	5	1.02	1.77	4.1
2.0	$\emptyset \geq 24$	MTQ2020F56 2.0 ISO	20	.787	6	1.34	2.20	4.1
3.0	$\emptyset \geq 22$	MTQ1616D45 3.0 ISO	16	.630	4	1.18	1.77	4.1
3.0	$\emptyset \geq 26$	MTQ2020E54 3.0 ISO	20	.787	5	1.30	2.13	4.1
3.5	$\emptyset \geq 26$	MTQ2020D45 3.5 ISO	20	.787	4	1.10	1.79	4.1
4.0	$\emptyset \geq 31$	MTQ2525D64 4.0 ISO	25	.984	4	1.58	2.52	6.3

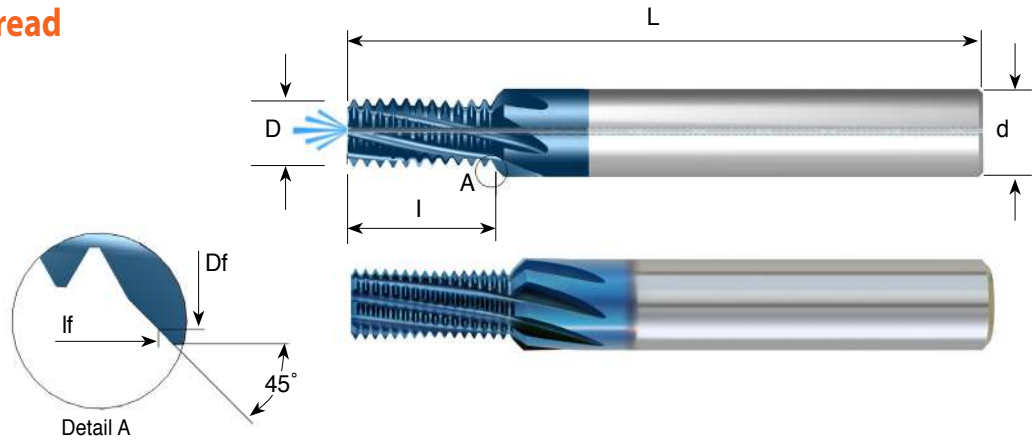
Order example: MTQ 1010D30 1.5 ISO MT7

For small thread mills see pages 263-264, 270, 274 & 285.



ISO Fast MT With internal coolant bore

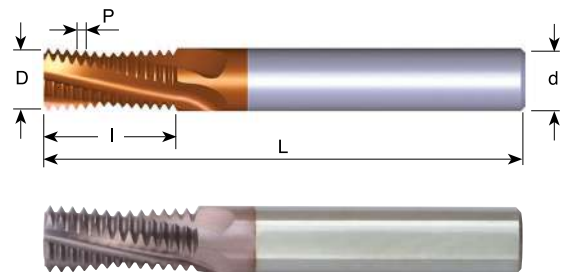
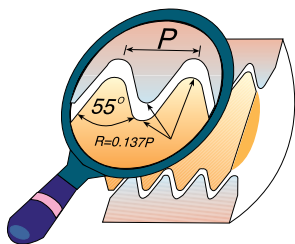
Tools for Internal thread



Pitch mm	M coarse	M fine	Ordering Code	d mm	D	Df	Flutes	I	If	L
0.7	M4		FMT 06032 E7 0.7 ISO	6	.126	.189	5	.29	.32	2.3
0.8	M5		FMT 0604 E9 0.8 ISO	7	.157	.224	5	.36	.40	2.3
1.0	M6	M8	FMT 08048 F10 1.0 ISO	8	.189	.268	6	.41	.45	2.5
1.25	M8	M10	FMT 10064 G14 1.25 ISO	10	.252	.378	7	.57	.63	2.9
1.5	M10	M14	FMT 1008 G17 1.5 ISO	10	.315	.386	7	.68	.72	2.9
1.75	M12		FMT 12095 G20 1.75 ISO	12	.374	.461	7	.79	.83	3.3

G (55°) BSF, BSP

Same Tool for Internal and External Thread - Metric shanks

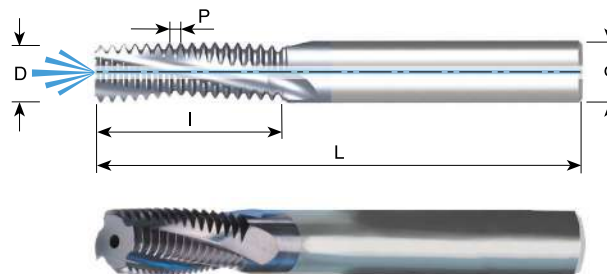


Pitch TPI	Standard	Ordering Code	d mm	D	No. of Flutes	I	L
28	G1/16-G1/8	MT0606C9 28 W	6	.236	3	.38	2.3
19	G1/4-3/8	MT0808C14 19 W	8	.315	3	.55	2.5
14	G1/2-7/8	MT1212D19 14 W	12	.472	4	.75	3.3
14	G1/2-7/8	MT1212D26 14 W	12	.472	4	1.04	3.3
11	G1-1 1/2	MT1212C24 11 W	12	.472	3	.95	3.3
11	G ≥ 1	MT1616D38 11 W	16	.630	4	1.50	4.1
11	G ≥ 1	MT2020E47 11 W	20	.787	5	1.86	4.1

Order example: MT 1212D19 14 W MT7

G 55° BSF, BSP With internal coolant bore

Same Tool for Internal and External Thread - Metric shanks



Pitch TPI	Standard	Ordering Code	d mm	D	No. of Flutes	I	L
28	G1/8	MTB08078C14 28W	8	.307	3	.56	2.5
19	G1/4-3/8	MTB1010D16 19W	10	.394	4	.66	2.9
14	G1/2-7/8	MTB1616E26 14W	16	.630	5	1.04	4.1
11	G ≥ 1	MTB1616D38 11W	16	.630	4	1.50	4.1
11	G ≥ 1	MTB2020E47 11W	20	.787	5	1.86	4.1

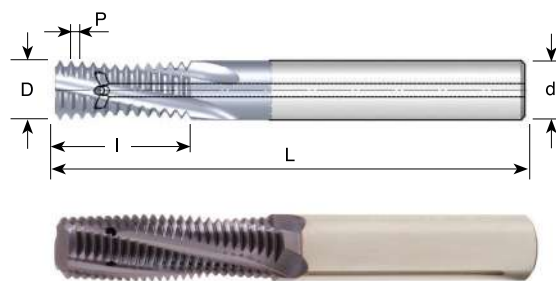
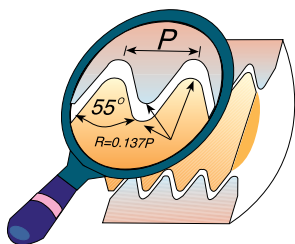
Order example: MTB 1010D16 19 W MT7

For thread mills with coolant bore through the flutes see next section

For small thread mills see page 267 & 287

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

Same Tool for Internal and External Thread - Metric shanks



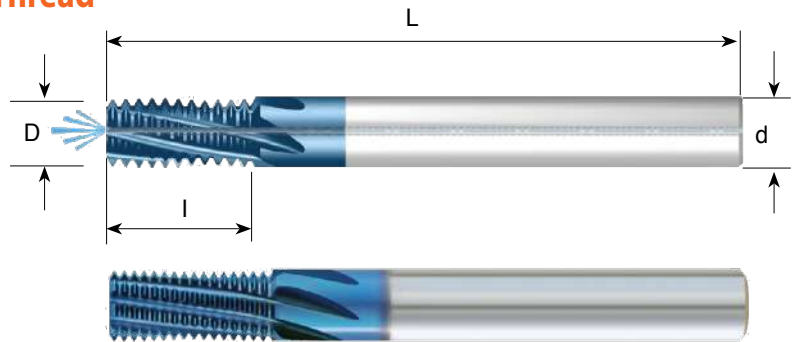
Pitch TPI	Standard	Ordering Code	d mm	D	No. of Flutes	I	L
28	G1/8	MTZ08078C14 28W	8	.307	3	.56	2.5
19	G1/4-3/8	MTZ1010D16 19W	10	.394	4	.66	2.9
14	G1/2-7/8	MTZ1616E26 14W	16	.630	5	1.04	4.0
11	G ≥ 1	MTZ1616D38 11W	16	.630	4	1.50	4.0

Order example: MTZ 08078C14 28 W MT7

For small thread mills see page 267 & 287

G 55° Fast MT With internal coolant bore

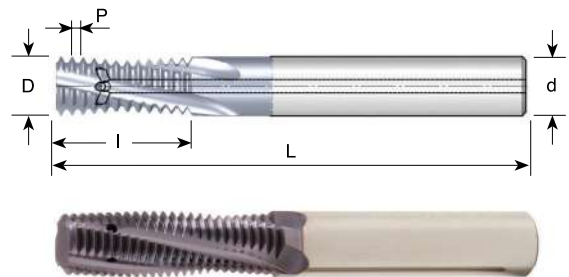
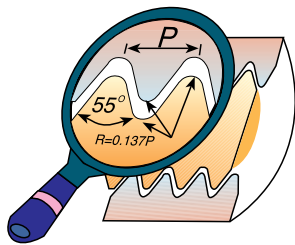
Same Tool for Internal and External Thread



Pitch TPI	Standard	Ordering Code	d mm	D	Flutes	I	L
28	G1/8	FMT 08078 H14 28W	8	.307	8	.56	2.5
19	G1/4-3/8	FMT 1010 G16 19W	10	.394	7	.66	2.9
14	G1/2-7/8	FMT 1414 H26 14W	14	.551	8	1.04	3.3
11	G ≥ 1	FMT 1616 H38 11W	16	.630	8	1.50	4.1

Whitworth BSW With internal coolant through the flutes

Same Tool for Internal and External Thread - Metric Shanks



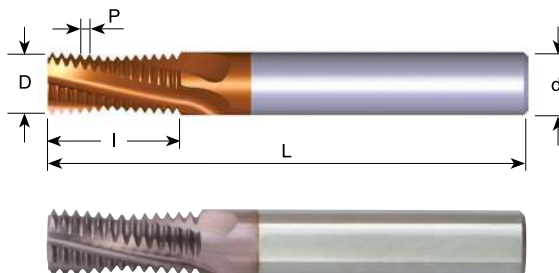
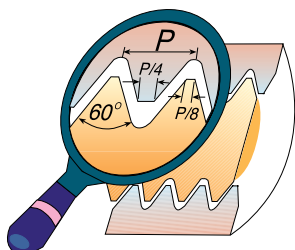
Pitch TPI	Standard	Ordering Code	d mm	D	No. of Flutes	I	L
* 20	1/4	MTZ06046C12 20W	6	.181	3	.48	2.3
18	5/16	MTZ06053C14 18W	6	.209	3	.58	2.3
16	3/8	MTZ08068C16 16W	8	.268	3	.66	2.5
16	1/2	MTZ10092D24 16W	10	.362	4	.97	2.9
14	7/16	MTZ08078D20 14W	8	.307	4	.82	2.5
12	1/2	MTZ10086D24 12W	10	.339	4	.96	2.9
11	5/8	MTZ12109D28 11W	12	.429	4	1.14	3.3

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			MT0250C02 40UN	1/4	.098	3	.24	2.5
32	8	10	12	MT0250C02 32UN	1/4	.126	3	.27	2.5
28		1/4		MT0250C04 28UN	1/4	.157	3	.45	2.5
28			7/16-1/2	MT0250C05 28UN	1/4	.236	3	.57	2.5
24		5/16		MT0250C06 24UN	1/4	.197	3	.56	2.5
24		3/8	9/16-5/8	MT0312C08 24UN	5/16	.276	3	.81	2.5
20	1/4			MT0250C05 20UN	1/4	.177	3	.48	2.5
20		7/16-1/2		MT0312C08 20UN	5/16	.276	3	.83	2.5
20			3/4-1	MT0500E11 20UN	1/2	.472	5	1.08	3.5
18	5/16			MT0250C06 18UN	1/4	.197	3	.58	2.5
18		9/16-5/8	1 1/8-1 5/8	MT0375D10 18UN	3/8	.375	4	1.03	3.0
16	3/8			MT0250C07 16UN	1/4	.236	3	.66	2.5
16		3/4		MT0500D12 16UN	1/2	.472	4	1.22	3.5
14	7/16			MT0312C08 14UN	5/16	.276	3	.82	2.5
14		7/8		MT0625E15 14UN	5/8	.591	5	1.46	4.0
13	1/2			MT0312C09 13UN	5/16	.313	3	.88	2.5
12	9/16			MT0375C10 12UN	3/8	.375	3	1.04	3.0
12		1-1 1/2		MT0625E16 12UN	5/8	.625	5	1.63	4.0
11	5/8			MT0375C11 11UN	3/8	.375	3	1.14	3.0
10	3/4			MT0500C14 10UN	1/2	.472	3	1.35	3.5
9	7/8			MT0625C15 9UN	5/8	.591	3	1.50	4.0
8	1			MT0625C17 8UN	5/8	.625	3	1.69	4.0
7	1 1/8-1 1/4			MT0750D17 7UN	3/4	.750	4	1.78	4.0

Order example: MT 0625E15 14 UN MT7

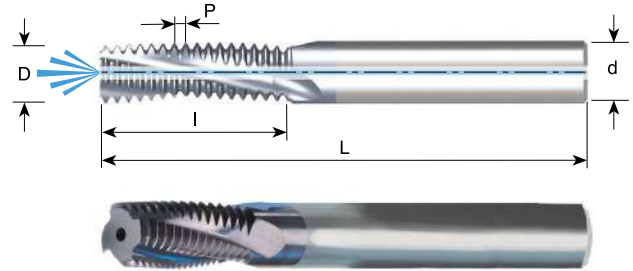
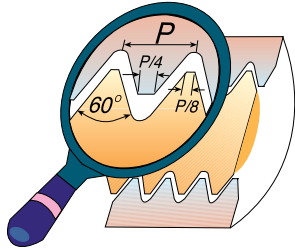
For thread mills with coolant bore see following pages

For small thread mills see pages 265-266, 271, 274 & 286.



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	MTB0250C02 32 UN	1/4	.126	3	.27	2.5
32			5/16	MTB0250C05 32 UN	1/4	.250	3	.58	2.5
32			3/8	MTB0312D07 32 UN	5/16	.312	4	.74	2.5
28		1/4		MTB0250C04 28 UN	1/4	.197	3	.44	2.5
28			7/16-1/2	MTB0250C05 28 UN	1/4	.250	3	.56	2.5
24		5/16		MTB0312C05 24 UN	5/16	.260	3	.56	2.5
24		3/8	9/16-5/8	MTB0312D08 24 UN	5/16	.312	4	.81	2.5
20	1/4			MTB0250C04 20 UN	1/4	.185	3	.48	2.5
20		7/16		MTB0312C08 20 UN	5/16	.312	3	.83	2.5
20		1/2		MTB0375D08 20 UN	3/8	.375	4	.88	3.0
20			3/4-1	MTB0500E10 20 UN	1/2	.500	5	1.07	4.0
18	5/16			MTB0250C05 18 UN	1/4	.220	3	.58	2.5
18		9/16-5/8	1 1/8-1 5/8	MTB0500D10 18 UN	1/2	.445	4	1.03	4.0
16	3/8			MTB0312C06 16 UN	5/16	.264	3	.66	2.5
16		3/4		MTB0500D12 16 UN	1/2	.500	4	1.22	4.0
14	7/16			MTB0312C08 14 UN	5/16	.303	3	.82	2.5
14		7/8		MTB0625E14 14 UN	5/8	.625	5	1.46	4.0
13	1/2			MTB0375C08 13 UN	3/8	.362	3	.89	3.0
12	9/16			MTB0500C10 12 UN	1/2	.413	3	1.04	4.0
12		1-1 1/2		MTB0625E16 12 UN	5/8	.625	5	1.63	4.0
11	5/8			MTB0500C11 11 UN	1/2	.449	3	1.14	4.0
10	3/4			MTB0625D13 10 UN	5/8	.567	4	1.35	4.0
9	7/8			MTB0625C15 9 UN	5/8	.625	3	1.50	4.0
8	1			MTB0750D16 8 UN	3/4	.750	4	1.69	4.0
7	1 1/8-1 1/4			MTB0750D17 7 UN	3/4	.750	4	1.78	4.0

Order example: MTB 0625E14 14 UN MT7

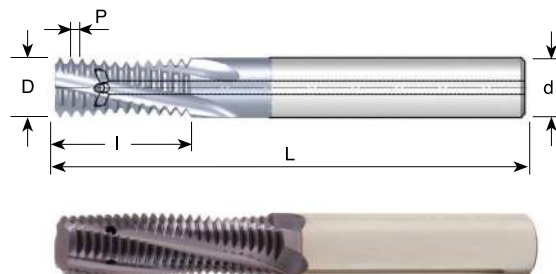
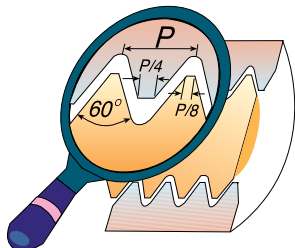
For thread mills with coolant through the flutes see next page

For small thread mills see pages 265-266, 271, 274 & 286.



UN With internal coolant through the flutes

Tools for Internal Thread - Metric Shank



Pitch TPI	UNC	UNF	UNEF	Ordering Code	d mm	D	No. of Flutes	I	L
28		1/4		MTZ0605C11 28 UN	6	.197	3	.44	2.3
28			7/16-1/2	MTZ0606C14 28 UN	6	.236	3	.56	2.3
24		5/16		MTZ08066C14 24 UN	8	.260	3	.56	2.5
24		3/8	9/16-5/8	MTZ0808D21 24 UN	8	.315	4	.81	2.5
20		7/16		MTZ0808C21 20 UN	8	.315	3	.83	2.5
20		1/2		MTZ1010D22 20 UN	10	.394	4	.88	2.9
20			3/4-1	MTZ1212E27 20 UN	12	.472	5	1.07	3.3
18	5/16			MTZ06056C14 18 UN	6	.220	3	.58	2.3
18		9/16-5/8	1 1/8-1 5/8	MTZ12113D26 18 UN	12	.445	4	1.03	3.3
16	3/8			MTZ08067C16 16 UN	8	.264	3	.66	2.5
16		3/4		MTZ1212D31 16 UN	12	.472	4	1.22	3.3
14	7/16			MTZ08077C20 14 UN	8	.303	3	.82	2.5
14		7/8		MTZ1616E37 14 UN	16	.630	5	1.46	4.0
13	1/2			MTZ10092C22 13 UN	10	.362	3	.89	2.9
12	9/16			MTZ12105C26 12 UN	12	.413	3	1.04	3.3
11	5/8			MTZ12114C28 11 UN	12	.449	3	1.14	3.3
10	3/4			MTZ16144D34 10 UN	16	.567	4	1.35	4.0

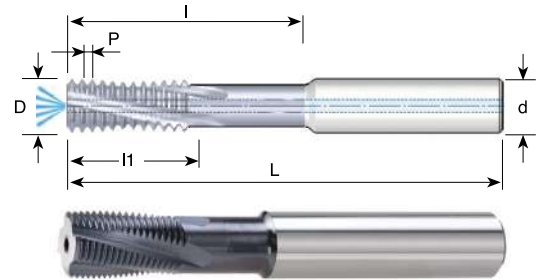
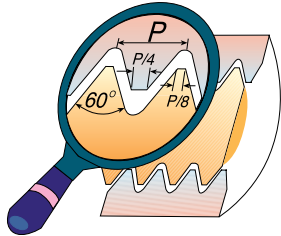
Order example: MTZ 0808D21 24 UN MT7

For small thread mills see pages 265-266, 271, 274 & 286.



UN With relieved neck and internal coolant bore

Tools for Internal Thread - Metric Shank



Pitch TPI	Thread size	Ordering Code	d mm	D	No. of Flutes	l1	I	L
20	$\varnothing \geq .47$	MTQ1010D30 20 UN	10	.394	4	.70	1.20	2.9
20	$\varnothing \geq .55$	MTQ1212E35 20 UN	12	.472	5	.80	1.40	3.3
20	$\varnothing \geq .71$	MTQ1616F43 20 UN	16	.630	6	1.00	1.70	4.1
18	$\varnothing \geq .59$	MTQ1212D35 18 UN	12	.472	4	.78	1.39	3.3
16	$\varnothing \geq .59$	MTQ1212D35 16 UN	12	.472	4	.81	1.38	3.3
16	$\varnothing \geq .75$	MTQ1616E42 16 UN	16	.630	5	1.00	1.69	4.1
16	$\varnothing \geq .91$	MTQ2020F58 16 UN	20	.787	6	1.44	2.31	4.1
14	$\varnothing \geq .79$	MTQ1616E45 14 UN	16	.630	5	1.00	1.78	4.1
12	$\varnothing \geq .63$	MTQ1212D42 12 UN	12	.472	4	1.00	1.67	3.3
12	$\varnothing \geq .95$	MTQ2020E55 12 UN	20	.787	5	1.33	2.17	4.1

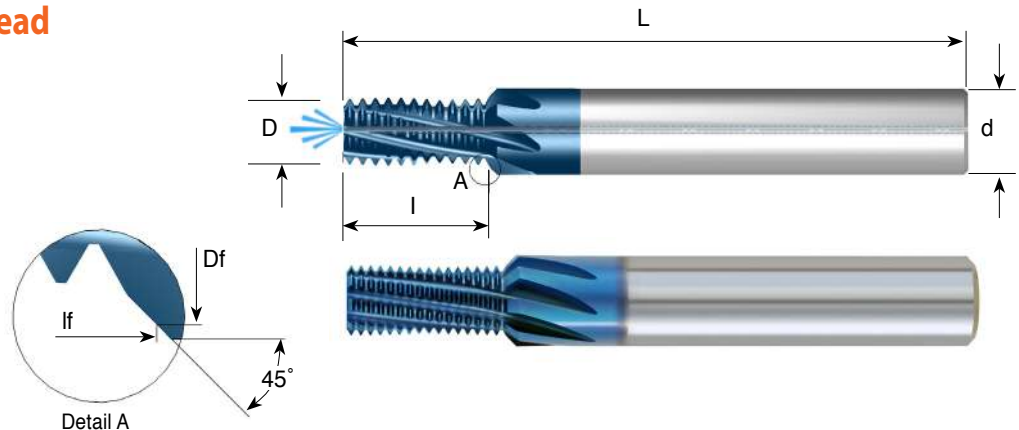
Order example: MTQ 1212D35 16 UN MT7

For small thread mills see pages 265-266, 271, 274 & 286.



UN Fast MT with internal coolant bore

Tools for Internal Thread

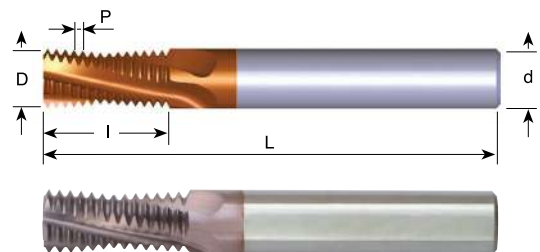
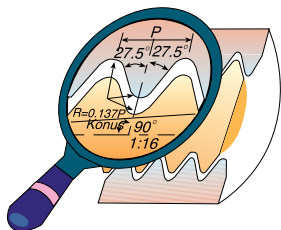


Pitch TPI	UNC	UNF	UNEF	Ordering Code	d mm	D	Df	Flutes	I	If	L
28		1/4		FMT 08052 F11 28 UN	8	.205	.283	6	.44	.48	2.5
28			7/16, 1/2	FMT 12098 H19 28 UN	12	.386	.465	8	.77	.81	3.3
24		5/16		FMT 10066 G14 24 UN	10	.260	.378	7	.56	.62	2.9
24		3/8	9/16, 5/8, 11/16	FMT 12082 G17 24 UN	12	.323	.417	7	.69	.74	3.3
20	1/4			* FMT 08048 E12 20 UN	8	.189	.268	5	.48	.52	2.5
20		7/16		FMT 12092 H21 20 UN	12	.362	.449	8	.83	.87	3.3
20		1/2	3/4, 7/8, 1	FMT 14111 H22 20 UN	14	.437	.531	8	.87	.92	3.3
18	3/8			FMT 1006 F14 18 UN	10	.236	.331	6	.58	.63	2.9
18		9/16, 5/8	1 1/16, 1 1/8	FMT 16125 H26 18 UN	16	.492	.591	8	1.03	1.08	4.1
16	3/8			FMT 10074 F16 16 UN	10	.291	.378	6	.66	.70	2.9
16		3/4		FMT 20167 H34 16 UN	20	.657	.760	8	1.34	1.39	4.1
14	7/16	7/8		FMT 12085 F20 14 UN	12	.335	.421	6	.82	.87	3.3
13	1/2			FMT 12098 F24 13 UN	12	.386	.465	6	.96	1.00	3.3
12	9/16	1		FMT 16116 F26 12 UN	16	.457	.598	6	1.04	1.11	4.1

* Without internal coolant

BSPT

Same Tool for Internal and External Thread
Metric Shank

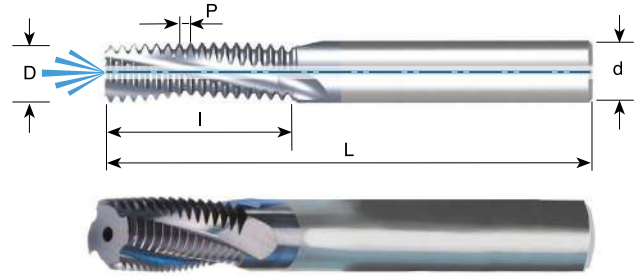
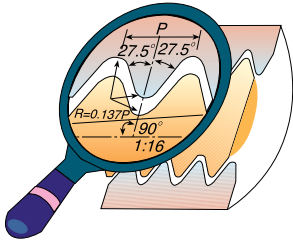


Pitch TPI	Standard	Ordering Code	d mm	D	No. of Flutes	I	L
28	RC1/8	MT0606C9 28 BSPT	6	.236	3	.38	2.3
19	RC1/4-3/8	MT0808C14 19 BSPT	8	.315	3	.55	2.5
14	RC1/2	MT1212D19 14 BSPT	12	.472	4	.75	3.3
11	RC1-2	MT1616D28 11 BSPT	16	.630	4	1.14	4.1

Order example: MT 1616D28 11 BSPT MT7

For thread mills with coolant through the flutes see next page

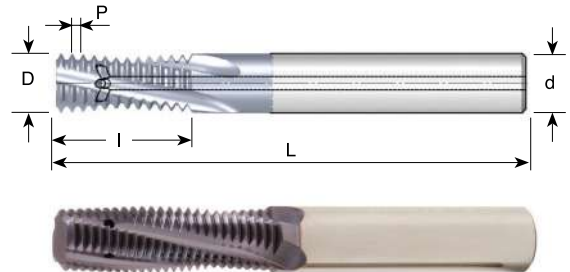
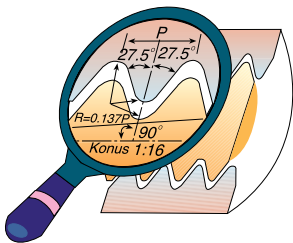
BSPT With internal coolant bore Same Tool for Internal and External Thread - Metric Shank



Pitch TPI	Standard	Ordering Code	d mm	D	No. of Flutes	I	L
28	RC1/8	MTB08078C14 28 BSPT	8	.307	3	.56	2.5
19	RC1/4-3/8	MTB1010D16 19 BSPT	10	.394	4	.66	2.9
14	RC1/2	MTB1616E26 14 BSPT	16	.630	5	1.04	4.1
11	RC1-2	MTB1616D28 11 BSPT	16	.630	4	1.14	4.1

Order example: MTB 08078C14 28 BSPT MT7

BSPT With internal coolant through the flutes Same Tool for Internal and External Thread - Metric Shank



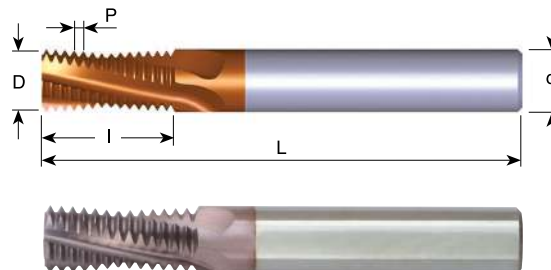
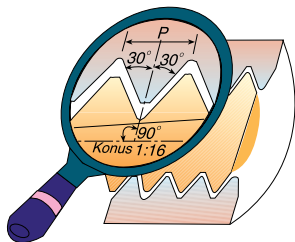
Pitch TPI	Standard	Ordering Code	d mm	D	No. of Flutes	I	L
28	RC1/8	MTZ08078C14 28 BSPT	8	.307	3	.56	2.5
19	RC1/4-3/8	MTZ1010D16 19 BSPT	10	.394	4	.66	2.9
14	RC1/2	MTZ1616E26 14 BSPT	16	.630	5	1.04	4.0
11	RC1-2	MTZ1616D28 11 BSPT	16	.630	4	1.14	4.0

Order example: MTZ 1010D16 19 BSPT MT7

For conical preparation end mills see page 253

NPT

Same Tool for Internal and External Thread

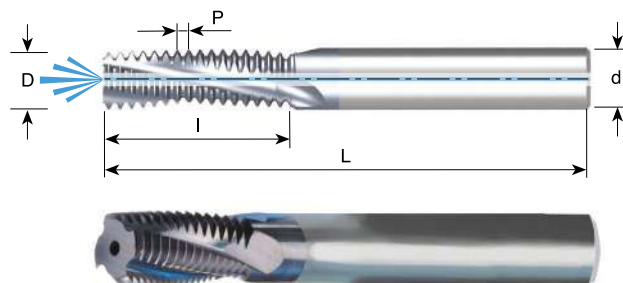


Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/16	MT0250C03 27 NPT	1/4	.230	3	.39	2.5
27	1/8	MT0250C04 27 NPT	1/4	.250	3	.39	2.5
18	1/4-3/8	MT0312C06 18 NPT	5/16	.312	3	.58	2.5
14	1/2-3/4	MT0500D08 14 NPT	1/2	.500	4	.82	3.5
11.5	1-2	MT0625D11 11.5 NPT	5/8	.625	4	1.09	4.0
8	≥ 2 1/2	MT0750D16 8 NPT	3/4	.750	4	1.56	4.0

Order example: MT 0312C06 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	MTB0312C04 27 NPT	5/16	.299	3	.43	2.5
18	1/4-3/8	MTB0375D06 18 NPT	3/8	.375	4	.64	3.0
14	1/2-3/4	MTB0625D08 14 NPT	5/8	.610	4	.89	4.0
11.5	1-2	MTB0750D11 11.5 NPT	3/4	.750	4	1.17	4.0
8	≥ 2 1/2	MTB0750D15 8 NPT	3/4	.750	4	1.56	4.0

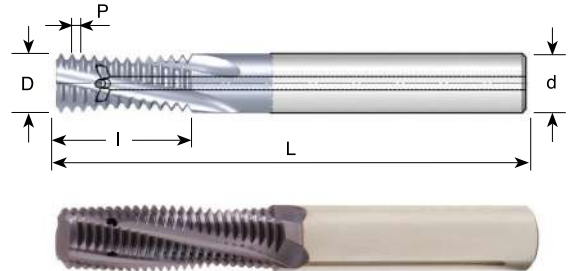
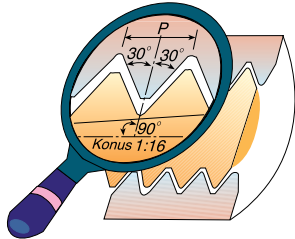
Order example: MTB 0312C04 27 NPT MT7

For thread mills with coolant through the flutes see next page

For conical preparation end mills see page 253

NPT With internal coolant through the flutes

Same Tool for Internal and External Thread - Metric Shank

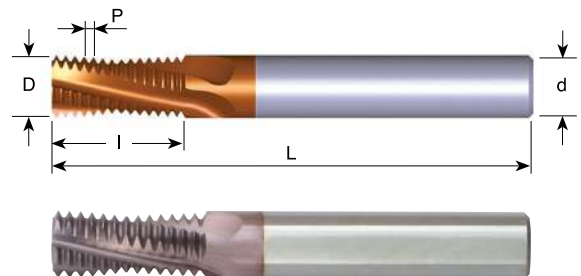
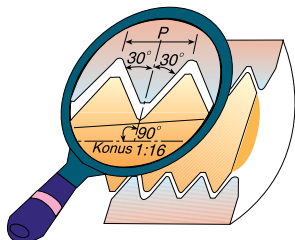


Pitch TPI	Standard	Ordering Code	d mm	D	No. of Flutes	I	L
27	1/8	MTZ08076C10 27 NPT	8	.299	3	.43	2.5
18	1/4-3/8	MTZ1010D16 18 NPT	10	.394	4	.64	2.9
14	1/2-3/4	MTZ16155D22 14 NPT	16	.610	4	.89	4.0

Order example: MTZ 08076C10 27 NPT MT7

NPTF

Same Tool for Internal and External Thread



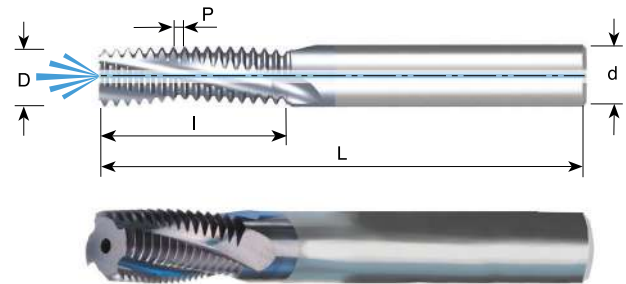
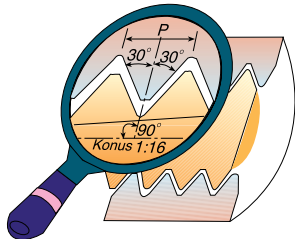
Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/16	MT0250C03 27 NPTF	1/4	.230	3	.39	2.5
27	1/8	MT0250C04 27 NPTF	1/4	.250	3	.39	2.5
18	1/4-3/8	MT0312C06 18 NPTF	5/16	.312	3	.58	2.5
14	1/2-3/4	MT0500D08 14 NPTF	1/2	.500	4	.82	3.5
11.5	1-2	MT0625D11 11.5 NPTF	5/8	.625	4	1.09	4.0
8	≥ 2 1/2	MT0750D16 8 NPTF	3/4	.750	4	1.56	4.0

Order example: MT 0500D08 14 NPTF MT7

For thread mills with coolant bore see next page
For conical preparation end mills see page 253

NPTF With internal coolant bore

Same Tool for Internal and External Thread

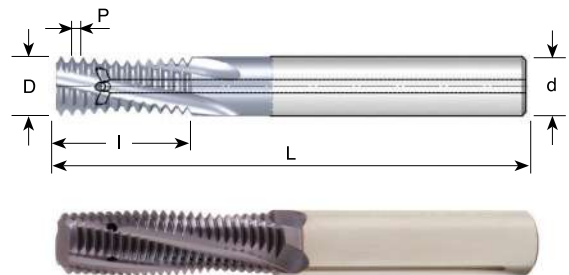
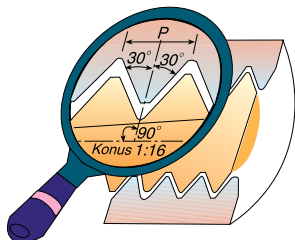


Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/8	MTB0312C04 27 NPTF	5/16	.299	3	.43	2.5
18	1/4-3/8	MTB0375D06 18 NPTF	3/8	.375	4	.64	3.0
14	1/2-3/4	MTB0625D08 14 NPTF	5/8	.610	4	.89	4.0
11.5	1-2	MTB0750D11 11.5 NPTF	3/4	.750	4	1.17	4.0
8	≥ 2 1/2	MTB0750D15 8 NPTF	3/4	.750	4	1.57	4.0

Order example: MTB 0312C04 27 NPTF MT7

NPTF With internal coolant through the flutes

Same Tool for Internal and External Thread - Metric Shank



Pitch TPI	Standard	Ordering Code	d mm	D	No. of Flutes	I	L
27	1/8	MTZ08076C10 27 NPTF	8	.299	3	.43	2.5
18	1/4-3/8	MTZ1010D16 18 NPTF	10	.394	4	.64	2.9
14	1/2-3/4	MTZ16155D22 14 NPTF	16	.610	4	.89	4.0

Order example: MTZ 1010D16 18 NPTF MT7

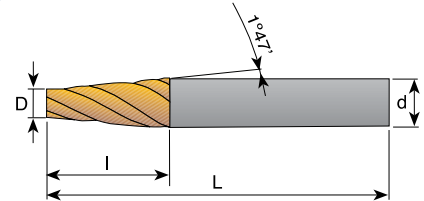
For conical preparation end mills see page 253

Solid Carbide Tapered End Mills

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

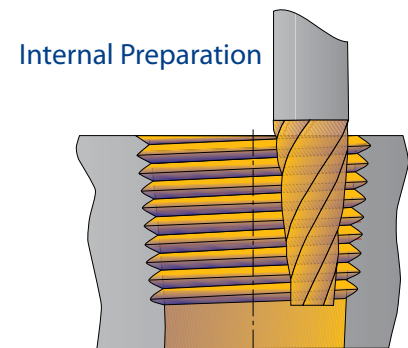
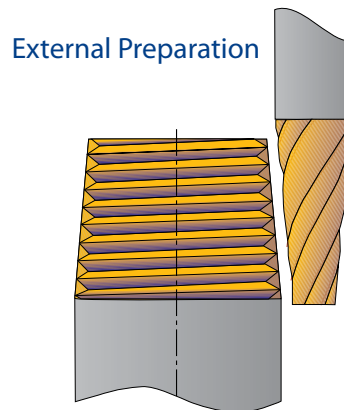
Advantages:

- 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.



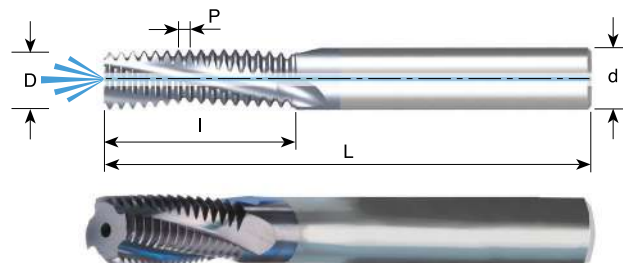
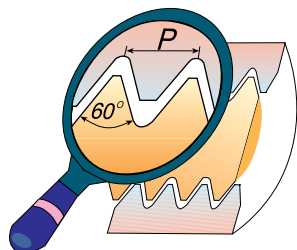
Ordering Code	d	D	I	L	No. of Flutes	Size
SC0652D12	6 mm	.20	.47	2.3	4	NPT 1/16" - 1/8" NPTF 1/16" - 1/8" BSPT 1/16" - 1/8"
SC0375D09	3/8	.32	.95	3	4	NPT 1/8" - 1" NPTF 1/8" - 1" BSPT 1/8" - 1"
SC0500D12	1/2	.42	1.26	3.5	4	NPT 1/4" - 3" NPTF 1/4" - 3" BSPT 1/4" - 3"

Order example: SC 0500D12 MT7
Carbide grade: MT7



NPS With internal coolant bore

Same Tool for Internal and External Thread

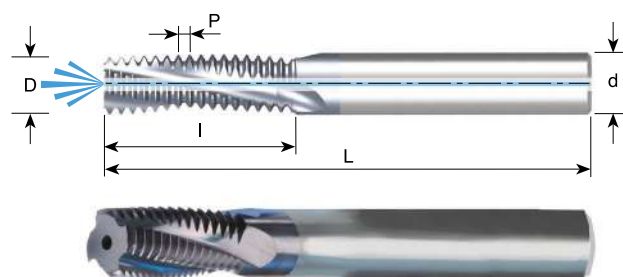
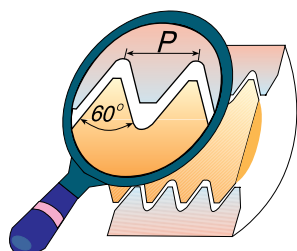


Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/8	MTB0312C04 27 NPS	5/16	.299	3	.43	2.5
18	1/4-3/8	MTB0375D06 18 NPS	3/8	.375	4	.64	3.0
14	1/2-3/4	MTB0625D08 14 NPS	5/8	.610	4	.89	4.0
11.5	1-2	MTB0750D11 11.5 NPS	3/4	.750	4	1.17	4.0

Order example: MTB 0375D06 18 NPS MT7

NPSF With internal coolant bore

Same Tool for Internal and External Thread

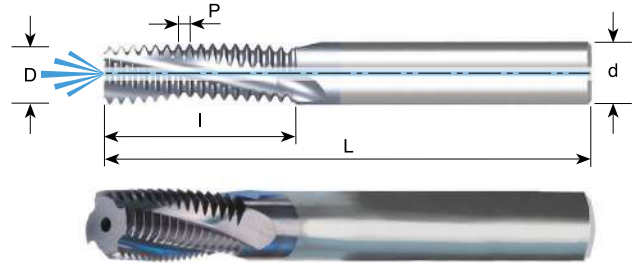
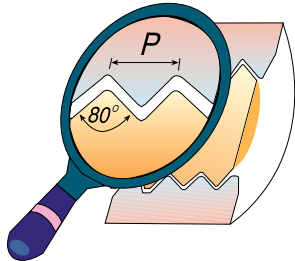


Pitch TPI	Standard	Ordering Code	d	D	No. of Flutes	I	L
27	1/8	MTB0312C04 27 NPSF	5/16	.299	3	.43	2.5
18	1/4-3/8	MTB0375D06 18 NPSF	3/8	.375	4	.64	3.0
14	1/2-3/4	MTB0625D08 14 NPSF	5/8	.610	4	.89	4.0
11.5	1-2	MTB0750D11 11.5 NPSF	3/4	.750	4	1.17	4.0

Order example: MTB 0312C04 27 NPSF MT7

PG DIN 40430 - With internal coolant bore

Same Tool for Internal and External Thread - Metric Shank



Pitch TPI	Standard	Ordering Code	d mm	D	No. of Flutes	I	L
20	Pg 7	MTB1010D19 20 PG	10	.394	4	.78	2.9
18	Pg 9, 11, 13.5, 16	MTB1212D20 18 PG	12	.472	4	.81	3.3
16	Pg 21, 29, 36, 42, 48	MTB1212D23 16 PG	12	.472	4	.91	3.3

Order example: MTB 1212 D20 18 PG MT7

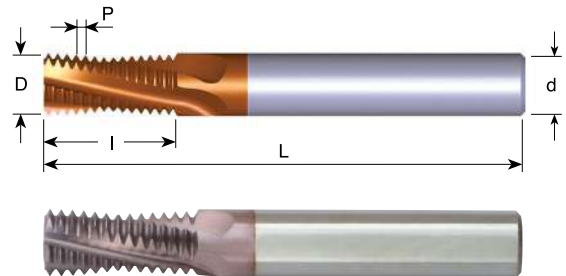
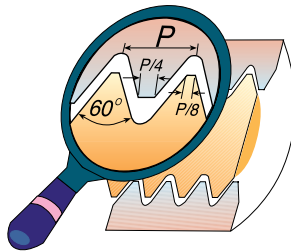
Mill - Thread Solid Carbide for External Threads

Advantages:

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

ISO

Metric Shank

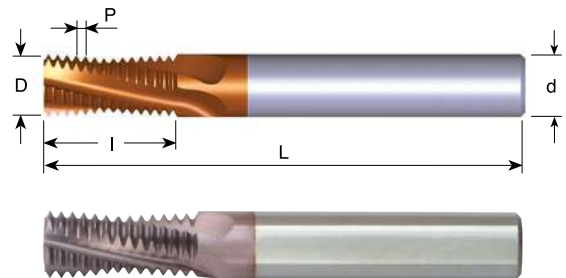
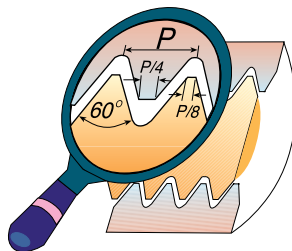


Pitch mm	Ordering Code	d mm	D	No. of Flutes	I	L
1.0	EMT1010D16 1.0 ISO	10	.394	4	.65	2.9
1.0	EMT1212E20 1.0 ISO	12	.472	5	.81	3.3
1.25	EMT1010D16 1.25 ISO	10	.394	4	.67	2.9
1.5	EMT1010D15 1.5 ISO	10	.394	4	.62	2.9
1.5	EMT1212D20 1.5 ISO	12	.472	4	.80	3.3
1.75	EMT1212D20 1.75 ISO	12	.472	4	.79	3.3
2.0	EMT1010C17 2.0 ISO	10	.394	3	.67	2.9
2.0	EMT1212D21 2.0 ISO	12	.472	4	.83	3.3

Order example: EMT 1010D15 1.5 ISO MT7

UN

Metric Shank

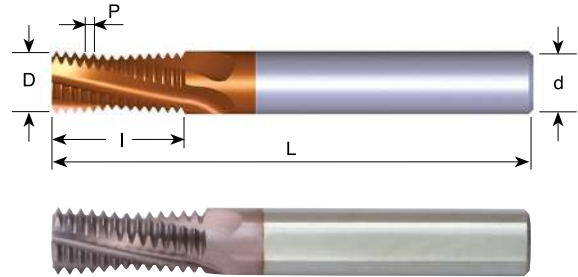
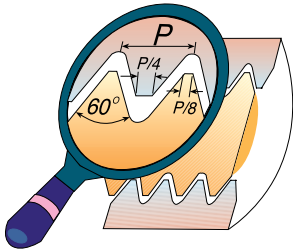


Pitch TPI	Ordering Code	d mm	D	No. of Flutes	I	L
24	EMT1010D16 24 UN	10	.394	4	.65	2.9
20	EMT1212E21 20 UN	12	.472	5	.83	3.3
18	EMT1212D20 18 UN	12	.472	4	.81	3.3
16	EMT1212D21 16 UN	12	.472	4	.84	3.3
14	EMT1212D20 14 UN	12	.472	4	.82	3.3
12	EMT1212D20 12 UN	12	.472	4	.79	3.3

Order example: EMT 1212D20 18 UN MT7

MJ - ISO 5855

Metric Shank



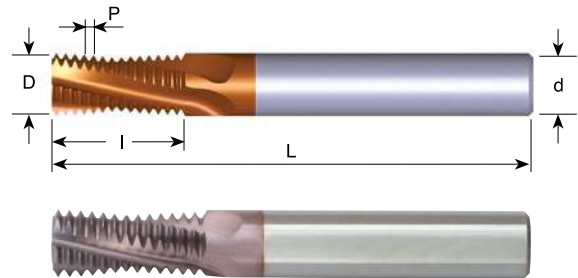
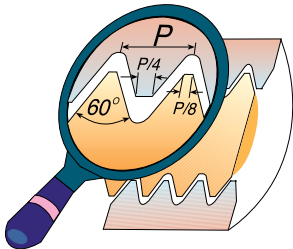
Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤ 50 HRc

Pitch mm	Ordering Code	d mm	D	No. of Flutes	I	L
1.0	EMT1010D20 1.0 MJ	10	.394	4	.81	2.8
1.0	EMT1212E24 1.0 MJ	12	.472	5	.96	3.3
1.5	EMT1010D21 1.5 MJ	10	.394	4	.86	2.8
1.5	EMT1212D26 1.5 MJ	12	.472	4	1.04	3.3
2.0	EMT1010C21 2.0 MJ	10	.394	3	.83	2.8
2.0	EMT1212D27 2.0 MJ	12	.472	4	1.06	3.3

Order example: EMT 1010D15 1.5 ISO MT7

UNJ UNJC, UNJF, UNJEF, UNJS

Metric Shank



Grade	P	M	K	N	S	H
MT7	●	●	●	○	●	≤ 50 HRc

Pitch mm	Ordering Code	d mm	D	No. of Flutes	I	L
32	EMT0606C13 32 UNJ	6	.236	3	.55	2.2
28	EMT0808D17 28 UNJ	8	.315	4	.70	2.5
24	EMT1010D20 24 UNJ	10	.394	4	.81	2.8
20	EMT1212E27 20 UNJ	12	.472	5	1.07	3.3
18	EMT1212D26 18 UNJ	12	.472	4	1.03	3.3
16	EMT1212D26 16 UNJ	12	.472	4	1.03	3.3
14	EMT1212D26 14 UNJ	12	.472	4	1.04	3.3
12	EMT1212D26 12 UNJ	12	.472	4	1.04	3.3

Order example: EMT 1010D15 1.5 ISO MT7

● First choice ○ Alternative

AMT Solid Carbide Thread Mills for Aluminum Machining

Carmex introduces a new line of solid carbide thread mills for High-speed Aluminum machining.

High-speed aluminum machining requires tools that minimize the tendency of Aluminum to stick to the tool cutting edges, provides high surface finish, ensure efficient chip evacuation and sufficient strength of the cutting edge to absorb the cutting forces.

Features

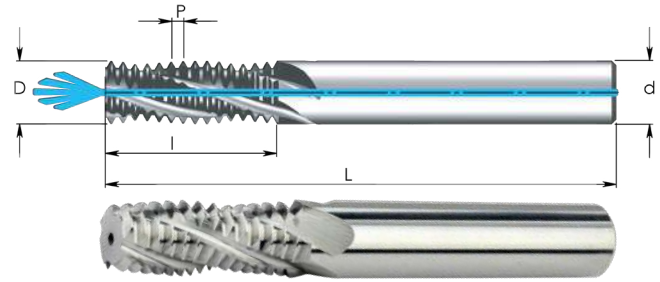
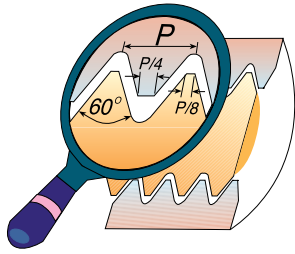
- Optimized carbide grade for Aluminum, cast iron and stainless steels
- Cylindrical shank (Weldon shank available - upon request)
- With internal coolant bore
- Uncoated, smooth cutting edge
- High thread surface quality
- Same tool for right hand or left hand internal threads
- Additional items with cutting chamfer

Carbide grade: K20 (K10 - K30)

Uncoated carbide grade for non ferrous metals, aluminum and cast iron.

ISO With internal coolant bore

Tools for Internal thread - Metric Shanks



Thread length: 2xD

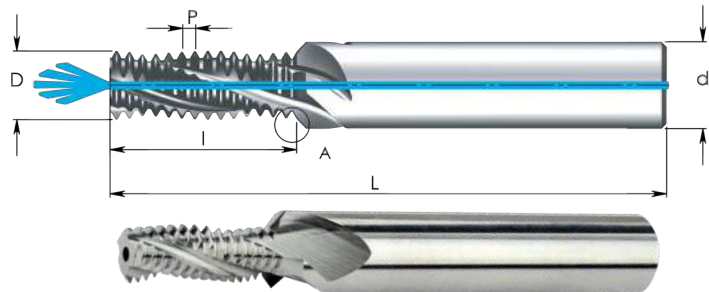
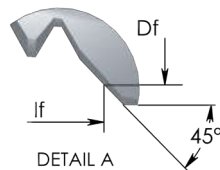
Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

Pitch mm	M coarse	M fine	Ordering Code	d mm	D	No. of Flutes	I	L
0.5	M3	M4	* AMT 03024C6 0.5 ISO	3	.094	3	.268	1.5
0.5		M5	AMT 06043C10 0.5 ISO	6	.169	3	.425	2.3
0.7	M4		AMT 06031C8 0.7 ISO	6	.122	3	.346	2.3
0.75		M6	AMT 0605C13 0.75 ISO	6	.197	3	.516	2.3
0.8	M5		AMT 0604C10 0.8 ISO	6	.157	3	.425	2.3
1.0	M6		AMT 06048C13 1.0 ISO	6	.189	3	.531	2.3
1.0		M10	AMT 0808D21 1.0 ISO	8	.315	4	.846	2.5
1.25	M8	M10	AMT 08064C16 1.25 ISO	8	.252	3	.665	2.5
1.5	M10		AMT 0808C21 1.5 ISO	8	.315	3	.858	2.5
1.5		M14	AMT 12112D29 1.5 ISO	12	.441	4	1.154	3.3
1.75	M12		AMT 10095D25 1.75 ISO	10	.374	4	1.000	2.9
2.0	M16	M17	AMT14126D35 2.0 ISO	14	.496	4	1.378	3.3

* Without internal coolant

ISO With internal coolant bore and cutting Chamfer

Tools for Internal thread - Metric Shanks



Thread length: 2xD

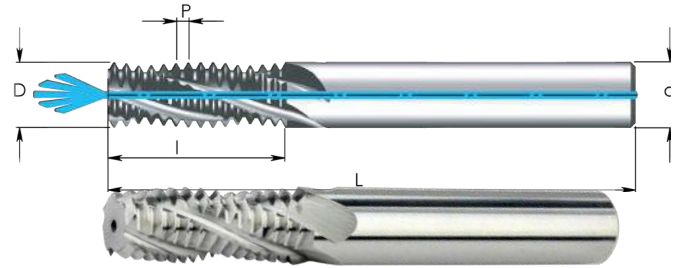
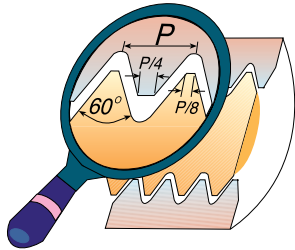
Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

Pitch mm	M coarse	M fine	Ordering Code	d mm	D	Df	No. of Flutes	I	lf	L
0.8	M5		AMT 0604C10 0.8 ISO-C	6	.157	.209	3	.425	.453	2.3
1.0	M6		AMT 08048C13 1.0 ISO-C	8	.189	.252	3	.531	.563	2.5
1.25	M8	M10	AMT 10064C16 1.25ISO-C	10	.252	.327	3	.665	.705	2.9
1.5	M10		AMT 1208C21 1.5 ISO-C	12	.315	.409	3	.858	.906	3.3

● First choice ○ Alternative

UN With internal coolant bore

Tools for Internal thread - Metric Shanks



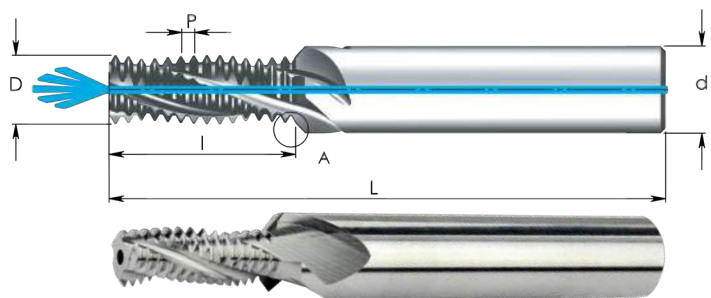
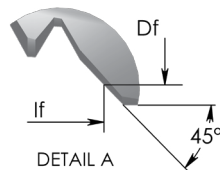
Thread length: 2xD

Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

Pitch TPI	UNC	UNF	UNEF	Ordering Code	d mm	D	No. of Flutes	I	L
32	8	10	12	AMT 06032C9 32 UN	6	.126	3	.358	2.3
28		1/4		AMT 06052C14 28 UN	6	.205	3	.551	2.3
24		3/8	9/16-5/8	AMT 0808D20 24 UN	8	.315	4	.811	2.5
20	1/4			AMT 06048C14 20 UN	6	.189	3	.575	2.3
20		7/16		AMT 10092C23 20 UN	10	.362	3	.925	2.9
18	5/16			AMT 0606C17 18 UN	6	.236	3	.693	2.3
18		9/16-5/8	1 1/8 - 1 5/8	AMT 1212D30 18 UN	12	.472	4	1.193	3.3
16	3/8			AMT 08074C21 16 UN	8	.291	3	.843	2.5
16		3/4		AMT 1616E38 16 UN	16	.630	5	1.531	4.1

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 mm	D	Df	No. of Flutes	I	If	L
20	1/4			AMT 08048C14 20 UN-C	8	.189	.268	3	.575	.614	2.5
18	5/16			AMT 1006C17 18 UN-C	10	.236	.331	3	.693	.740	2.9
16	3/8			AMT 12074C21 16 UN-C	12	.291	.394	3	.843	.894	3.3

● First choice ○ Alternative