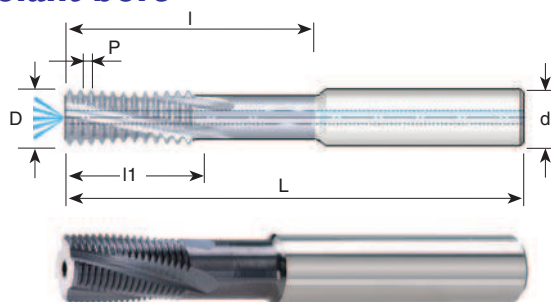
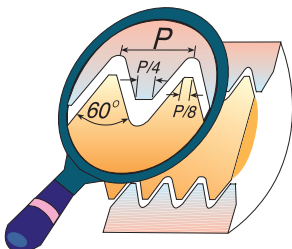


UN With relieved neck and internal coolant bore

Tools for Internal Thread



Pitch TPI	Thread Size	Ordering Code	d	D	No. of Flutes	I1	I	L
20	$\varnothing \geq 12$	MTQ1010D30 20 UN	10	10.0	4	17.8	30.5	73
20	$\varnothing \geq 14$	MTQ1212E35 20 UN	12	12.0	5	20.3	35.6	84
20	$\varnothing \geq 18$	MTQ1616F43 20 UN	16	16.0	6	25.4	43.2	105
18	$\varnothing \geq 15$	MTQ1212D35 18 UN	12	12.0	4	19.7	35.3	84
16	$\varnothing \geq 15$	MTQ1212D35 16 UN	12	12.0	4	20.7	35.0	84
16	$\varnothing \geq 19$	MTQ1616E42 16 UN	16	16.0	5	25.4	42.9	105
16	$\varnothing \geq 23$	MTQ2020F58 16 UN	20	20.0	6	36.5	58.8	105
14	$\varnothing \geq 20$	MTQ1616E45 14 UN	16	16.0	5	25.4	45.3	105
12	$\varnothing \geq 16$	MTQ1212D42 12 UN	12	12.0	4	25.4	42.3	84
12	$\varnothing \geq 24$	MTQ2020E55 12 UN	20	20.0	6	33.9	55.1	105

Order example: MTQ 1212D35 16 UN MT7

Thread mills with relieved neck and internal coolant for milling medium and large threads on relatively deep work pieces.

Carbide grade: MT7

- To perform medium and large threads on relatively deep work pieces.
- To use overhang according to the application.
- To perform deep threads at the bottom of the application.

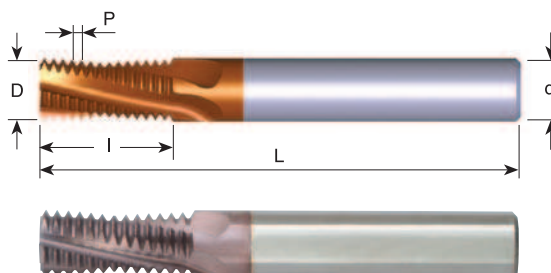
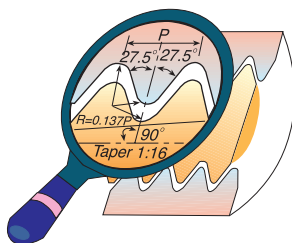
Advantages

- Provides high rigidity and stability (anti-vibrations).
- Accomplishes deep threads in one pass.
- Relatively low cutting forces due to short cutting length which enables reduction of the radial in feed required.
- Threads length up to 3D.

For small thread mills see pages 106-107, 114

BSPT

Same Tool for Internal and External Thread



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

Order example: MT 1616D28 11 BSPT MT7

For thread mills with coolant bore see next page

Mill-Thread Solid Carbide Grades, Speed and Feed Selection

MT, MTB, MTZ, EMT types

MT7 Sub-Micron Grade with Titanium Aluminum Nitride multi-layer coating (ISO K10 - K20). This is a general purpose grade, which can be used with all materials; it should be run at medium to high cutting speeds.

ISO Standard	Material	Cutting Speed m/min	Feed mm/tooth										
			Ø2	Ø3	Ø4	Ø6	Ø8	Ø10	Ø12	Ø14	Ø16	Ø20	Ø25
P	Low and Medium Carbon Steels <0.55%C	100-250	0.03	0.04	0.04	0.06	0.07	0.08	0.09	0.11	0.12	0.15	0.18
	High Carbon Steels ≥0.55%C	110-180	0.02	0.03	0.03	0.05	0.06	0.07	0.08	0.09	0.10	0.12	0.15
	Alloy Steels, Treated Steels	90-160	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.10
M	Stainless Steels - Free Cutting	60-160	0.02	0.03	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.11
	Stainless Steels - Austenitic	60-120	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.10
	Cast Steels	130-170	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.10
K	Cast Iron	70-150	0.03	0.04	0.04	0.06	0.07	0.08	0.09	0.11	0.12	0.15	0.18
N	Aluminium ≤10%Si, Copper	150-350	0.03	0.04	0.04	0.06	0.07	0.08	0.09	0.11	0.12	0.15	0.18
	Aluminium ≥10% Si	100-250	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.10
	Synthetics, Duroplastics, Thermoplastics	100-400	0.05	0.06	0.07	0.08	0.10	0.11	0.12	0.14	0.15	0.18	0.22
S	Nickel Alloys, Titanium Alloys	20- 80	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05

For cutters with long cutting length reduce feed rate by 40%