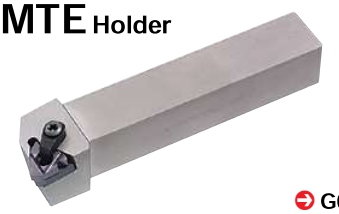
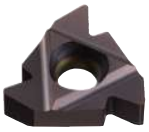
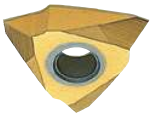
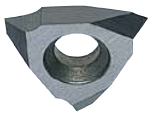
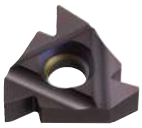
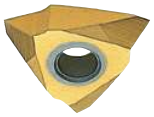
CLASSIFICATION (EXTERNAL THREADING)

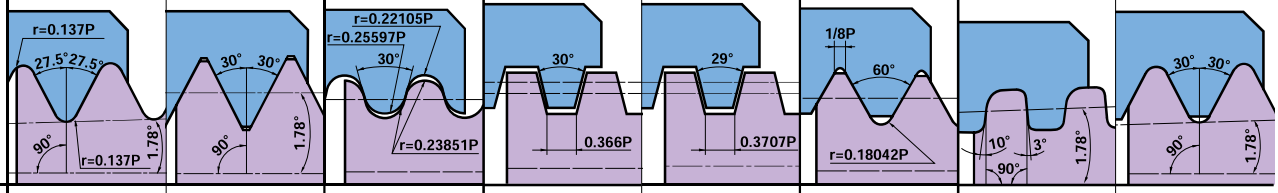
Name of Tool Holder	Insert Shape	Features	Shank Size (H x W x L) (mm)
MMTE Holder  G019		●Various insert types. ●M-class 3-D breaker inserts and G-class ground inserts available. ●Available with a wiper cutting edge to provide a precise thread geometry. ●Able to change lead angle by replacing shim.	12 x 12 x 100 16 x 16 x 100 20 x 20 x 125 25 x 25 x 150 32 x 32 x 170
MT Holder  G024		●Clamp-on type. ●Precision class insert. ●Positive insert suffers from negligible chattering and thus produces good finished surface.	16 x 16 x 100 20 x 20 x 125 25 x 25 x 150 32 x 32 x 170
SMG Holder  G026		●Screw-on type. ●Precision class insert. ●Positive insert suffers from negligible chattering and thus produces good finished surface. ●Holder is capable of performing both threading and grooving.	10 x 10 x 70 12 x 12 x 80 16 x 16 x 100 20 x 20 x 125 25 x 25 x 150
SMALL TOOLS **TTAH**  D024		●Tools to be equipped on Gang type tool posts. ●Small Shank: 8mm—16mm ●High rigidity due to designing of vertical insert. ●The screw designed for common use on front and back enables back clamping. ●Most suitable for threading diameters of 2 mm or smaller. ●Screw-on type.	8 x 10 x 120 10 x 10 x 120 12 x 12 x 120 16 x 16 x 120
CSVH  D027		●Tools to be equipped on Cam type tool posts. ●Small Shank: 7mm—12mm ●Single holder for front turning, back turning, grooving, threading and cutting off operations. ●The most suitable for machining of small parts with work diameter ϕ5mm or less. ●Screw-on type.	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x 10 x 140 12 x 12 x 140

CLASSIFICATION (INTERNAL THREADING)

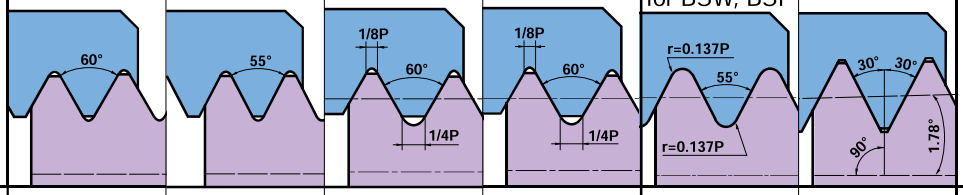
Name of Tool Holder	Insert Shape	Features	Shank Size (Dia. x L x Min. Cutting Dia.) (mm)
MMTI  ➔ G028		●Minimum cutting diameter 13mm. ●Various insert types. ●M-class 3-D breaker inserts and G-class ground inserts available. ●Available with a wiper cutting edge to provide a precise thread geometry. ●Able to change lead angle by replacing shim.	16 x 125 x 13 16 x 150 x 15 20 x 170 x 24 25 x 200 x 29 32 x 250 x 37 40 x 300 x 46
FSL5  ➔ G036		●Minimum cutting diameter 10mm. ●Screw-on type. ●Precision class insert. ●Applicable for threading, grooving and boring. ●Available with a carbide shank to prevent vibration when machining deep holes.	8 x 125 x 10 10 x 150 x 12 12 x 180 x 14 14 x 180 x 16 16 x 200 x 20
DPT2  ➔ G038		●Minimum cutting diameter 40mm. ●Pin lock type. ●Precision class insert. ●Exchangeable head type.	32 x 300 x 40 40 x 360 x 50
MICRO-MINI TWIN Boring Bars  ➔ G033	–	●Minimum cutting diameter 3mm. ●Solid carbide type. ●Economical two cutting edge type.	3 x 50 x 3 4 x 60 x 4.5 5 x 70 x 6 6 x 75 x 7
MICRO-MINI Boring Bars  ➔ E022	–	●Minimum cutting diameter 3.2mm. ●Solid carbide type. ●Insert can be ground to suit the application.	3 x 80 x 3.2 4 x 80 x 4.2 5 x 100 x 5.2

CROSS REFERENCE OF THREAD PITCHS (EXTERNAL)

Application		General machining				Pipe fittings and couplings for gas and water		
Type		Partial Profile 60°	Partial Profile 55°	ISO Metric	American UN	Parallel Pipe Thread Whitworth for BSW, BSP	American NPT	
Symbol		M UNC UNF	W	M	UNC UNF	G(PF) Rp(PS) W	NPT	
Holder \ Pitch		mm (thread/inch)	thread/inch	mm	thread/inch	thread/inch	thread/inch	
MMT Holder  G019	Full form	—	—	0.5—5.0	32—5	28—5	27, 18, 14 11.5, 8	
	Partial form	0.5—5.0 (48—5)	48—5	0.5—5.0	48—5	—	—	
MT Holder  G024	Partial form	0.25—4.5 (64—6)	20—9	0.25—4.5	64—6	—	—	
SMG Holder  G026	Partial form	0.25—2.0 (48—13)	—	0.25—2.0	48—13	—	—	

	Steam, gas and water line pipes		Pipe couplings for food and fire fighting industries	Motion transmissions		Aircraft and aerospace	Oil and gas	
	Taper Pipe Thread BSPT	American NPTF	Round DIN 405	ISO Trapezoidal 30°	American ACME	UNJ	API Buttress Casing	API Round Casing&Tubing
							
	R(PT) Rc(PT) Rp	NPTF	Rd	Tr (TM)	ACME (Tw)	UNJ	BCSG	CSG LCSG
	thread/inch	thread/inch	thread/inch	mm	thread/inch	thread/inch	thread/inch	thread/inch
	28, 19 14, 11	27, 18, 14 11.5, 8	10, 8 6, 4	1.5, 2 3, 4, 5	12, 10 8, 6, 5	32–8	5	10, 8
	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–

CROSS REFERENCE OF THREAD PITCHS (INTERNAL)

Application		General machining				Pipe fittings and couplings for gas and water		
Type		Partial Profile 60°	Partial Profile 55°	ISO Metric	American UN	Parallel Pipe Thread Whitworth for BSW, BSP	American NPT	
								
Symbol		M UNC UNF	W	M	UNC UNF	G(PF) Rp(PS) W	NPT	
Holder	Pitch	mm (thread/inch)	thread/inch	mm	thread/inch	thread/inch	thread/inch	
MMT **Boring Bars**  G028	Full form	—	—	0.5—5.0	32—5	28—5	27, 18, 14 11.5, 8	
	Partial form	0.5—5.0 (48—5)	48—5	0.5—5.0	48—5	—	—	
FSL5 **Boring Bars**  G036	Partial form	1.5—3.5 (16—8)	—	1.5—3.5	16—8	—	—	
DPT2 **Boring Head**  G038	Partial form	1.0—3.5	—	1.0—3.5	—	—	—	
MICRO-MINI TWIN  G033	Partial form	0.5—1.75 (36—16)	—	0.5—1.75	36—16	—	—	