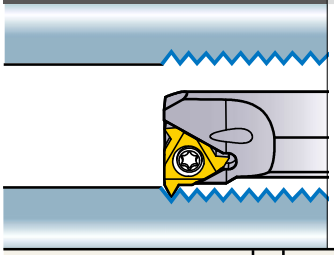
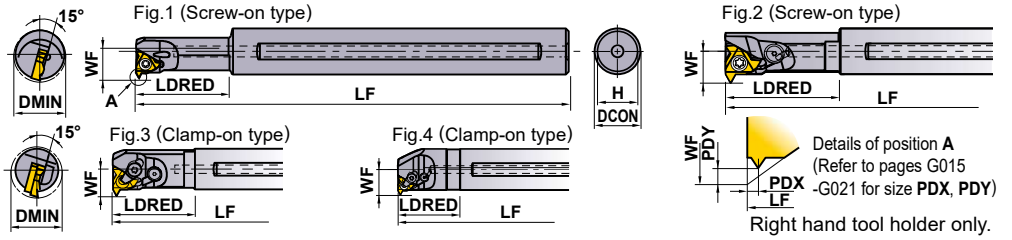
MMTI TYPE BORING BARS

- Minimum cutting diameter .500".
- Various insert types.
- Precision class insert for precise thread forms.
- Available with a pressed breaker for chip control.
- Able to change lead angle by replacing the shim.

MMTI

(Internal threading)





Details of position **A** (Refer to pages G015 -G021 for size **PDX**, **PDY**)

Right hand tool holder only.

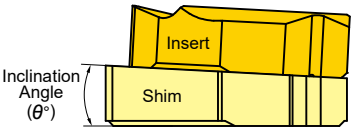
Order Number	Stock R	Insert Number	Lead Angle	Dimensions (inch) DCON	LF	LDRED	WF	H	DMIN	Clamp Bridge	Clamp Screw *2 ①	Stop Ring	Shim Screw *2 ②	Shim *1	Wrench ① ②	Fig.
MMTIR102-0.50-1.5-C	●	MMT11IR	1.5°	.625	5.000	1.000	.340	.586	**.500**	–	TS25	–	–	–	①TKY08F	1
MMTIR**102-0.50-2.5-C**	●		2.5°	.625	5.000	1.000	.340	.586	**.500**	–	TS25	–	–	–	①TKY08F	1
MMTIR**102-0.60-1.5-C**	●		1.5°	.625	6.000	1.250	.380	.586	**.600**	–	TS25	–	–	–	①TKY08F	1
MMTIR**102-0.60-2.5-C**	●		2.5°	.625	6.000	1.250	.380	.586	**.600**	–	TS25	–	–	–	①TKY08F	1
MMTIR103-0.75-1.5-C	●	MMT16IR	1.5°	.625	6.000	1.500	.480	.586	**.750**	–	CS350860T	–	–	–	①TKY15F	2
MMTIR**103-0.75-2.5-C**	●		2.5°	.625	6.000	1.500	.480	.586	**.750**	–	CS350860T	–	–	–	①TKY15F	2
MMTIR**123-0.90-1.5-C**	●		1.5°	.750	7.000	1.500	.510	.711	**.900**	SETK51	SETS51	CR4	HFC03006	CTI32TP15	①TKY15F ②HKY20R	3
MMTIR**163-1.15-1.5-C**	●		1.5°	1.000	10.000	2.500	.660	.937	**1.150**	SETK51	SETS51	CR4	HFC03006	CTI32TP15	①TKY15F ②HKY20R	3
MMTIR**203-1.45-1.5-C**	●		1.5°	1.250	10.000	2.000	.810	1.187	**1.450**	SETK51	SETS51	CR4	HFC03006	CTI32TP15	①TKY15F ②HKY20R	4
MMTIR124-0.95-1.5-C	●	MMT22IR	1.5°	.750	7.000	2.000	.610	.711	**.950**	–	TS43	–	–	–	①TKY15F	2
MMTIR**124-0.95-2.5-C**	●		2.5°	.750	7.000	2.000	.610	.711	**.950**	–	TS43	–	–	–	①TKY15F	2
MMTIR**164-1.20-1.5-C**	●		1.5°	1.000	8.000	1.500	.700	.937	**1.200**	SETK61	SETS61	CR5	HFC04008	CTI43TP15	①TKY20F ②HKY25R	4
MMTIR**204-1.50-1.5-C**	●		1.5°	1.250	10.000	2.000	.860	1.187	**1.500**	SETK61	SETS61	CR5	HFC04008	CTI43TP15	①TKY20F ②HKY25R	4
MMTIR**244-1.75-1.5-C**	●		1.5°	1.500	12.000	2.500	.980	1.437	**1.750**	SETK61	SETS61	CR5	HFC04008	CTI43TP15	①TKY20F ②HKY25R	4

*1 Select and use an alternate shim from list below (sold separately), dependant on the lead angle.
*2 Clamp Torgue (lbf-in) : TS25=8.9, CS350860T=31, SETS51=31, TS43=31, SETS61=44, HFC03006=13, HFC04008=19
Note 1) The screw-on type has no shim. The holder has an in-built lead angle. Please select a holder with the appropriate lead angle.
Note 2) The minimum cutting diameter (DMIN) indicates the prepared hole diameter, not the nominal thread diameter.

SHIM

Lead Angle (α°)	Order Number	Stock R	Inclination Angle (θ°)	Applicable Holder
–1.5°	**CTI32TN15**	●	–3°	MMTIR ○○3-○○○ -○○-C
–0.5°	CTI32T**N05**	●	–2°	
0.5°	CTI32T**P05**	●	–1°	
1.5°	CTI32T**P15**	●	0°	
2.5°	CTI32T**P25**	●	1°	
3.5°	CTI32T**P35**	●	2°	
4.5°	CTI32T**P45**	●	3°	

Lead Angle (α°)	Order Number	Stock R	Inclination Angle (θ°)	Applicable Holder
–1.5°	**CTI43TN15**	●	–3°	MMTIR ○○4-○○○ -○○-C
–0.5°	CTI43T**N05**	●	–2°	
0.5°	CTI43T**P05**	●	–1°	
1.5°	CTI43T**P15**	●	0°	
2.5°	CTI43T**P25**	●	1°	
3.5°	CTI43T**P35**	●	2°	
4.5°	CTI43T**P45**	●	3°	



Standard shim delivered with the holder.
* See page G025 and page G026 for shim selection guide lines.

IDENTIFICATION

MMT | **I** | **R** | **10** | **2** – **0.50** – **1.5** – **C**

Designation

Application
I	Internal

Hand of Tool
R	Right

Shank Diameter (inch)
10	.625
12	.750
16	1.000
20	1.250
24	1.500

Insert Size
2	MMT11
3	MMT16
4	MMT22

Min. Cutting Diameter (inch)
0.50	.500	**1.15**	1.150
0.60	.600	**1.20**	1.200
0.75	.750	**1.45**	1.450
0.90	.900	**1.50**	1.500
0.95	.950	**1.75**	1.750

Lead Angle
1.5	1.5°
2.5	2.5°

Coolant
C	With

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (SFM)
P	Mild Steel	≤180HB	VP10MF	490 (230–755)
			VP15TF	330 (195–460)
			VP20RT	260 (195–330)
	Carbon Steel Alloy Steel	180–280HB	VP10MF	460 (260–655)
			VP15TF	330 (195–460)
			VP20RT	260 (195–330)
M	Stainless Steel	≤200HB	VP10MF	425 (260–590)
			VP15TF	260 (130–395)
			VP20RT	195 (130–260)

	Work Material	Hardness	Grade	Cutting Speed (SFM)
K	Cast Iron	Tensile Strength ≤350MPa	VP10MF	460 (260–655)
			VP15TF	295 (195–395)
S	Heat-Resistant Alloy	–	VP10MF	150 (50–230)
			VP15TF	100 (65–130)
	Titanium Alloy	–	VP10MF	195 (130–260)
			VP15TF	150 (80–210)
H	Hardened Steel	45–55HRC	VP10MF	165 (100–230)
			VP15TF	130 (65–195)

THREADING