

New Threading Tools

MMT series

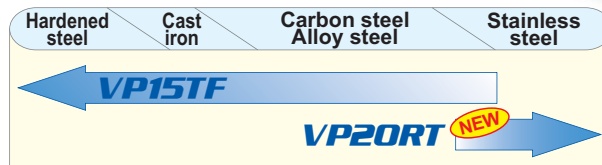
Expanded Insert

MMT series for precise and efficient threading



Fracture resistant grade VP20RT included in the range of inserts for ISO metric threads.

MIRACLE coated VP15TF has a good balance of wear and fracture resistance. MIRACLE coated VP20RT exhibits excellent performance for stainless steel machining. These grades are suitable for a variety of workpiece materials.



● External threading tools

External Threading Inserts

Type	Order Number	Coated		Pitch mm	Dimensions (mm)				Total depth of cut (mm)	Geometry
		VP15TF	VP20RT ^{NEW}		D1	S1	Z1	Z2		
		ISO Metric	MMT16ER100ISO-S		●	●	1.0	9.525		
	16ER125ISO-S	●	●	1.25	9.525	3.44	0.8	0.9	0.77	
	16ER150ISO-S	●	●	1.5	9.525	3.44	0.8	1.0	0.92	
	16ER175ISO-S	●	●	1.75	9.525	3.44	0.9	1.2	1.07	
	16ER200ISO-S	●	●	2.0	9.525	3.44	1.0	1.3	1.23	
	16ER250ISO-S	●	●	2.5	9.525	3.44	1.1	1.5	1.53	
	16ER300ISO-S	●	●	3.0	9.525	3.44	1.2	1.6	1.84	

Note) For other types of inserts, refer to the general catalogue or TOOLS NEWS B053G.

Holders

MMTE External threading

Details of position A
(Refer to the above table for size Z1, Z2)

Right hand tool holder only.

Order Number	Stock R	Insert Number	Dimensions (mm)							Clamp Bridge	Clamp Screw	Stop Ring	Shim Screw	Shim	Wrench
			H1	B	L1	L2	H2	F1							
MMTER1212H16-C	●	MMT16ER 	12	12	100	25	12	16	SETK51	SETS51	CR4	HFC03008	CTE32TP15	①TKY15F ②HKY20R	
1616H16-C	●		16	16	100	25	16	20	SETK51	SETS51	CR4	HFC03008	CTE32TP15	①TKY15F ②HKY20R	
2020K16-C	●		20	20	125	26	20	25	SETK51	SETS51	CR4	HFC03008	CTE32TP15	①TKY15F ②HKY20R	
2525M16-C	●		25	25	150	28	25	32	SETK51	SETS51	CR4	HFC03008	CTE32TP15	①TKY15F ②HKY20R	
3232P16-C	●		32	32	170	32	32	40	SETK51	SETS51	CR4	HFC03008	CTE32TP15	①TKY15F ②HKY20R	

Note) Select and use a shim as shown below (sold separately), dependant on the lead angle. For details, refer to the general catalogue or TOOLS NEWS B053G.

● : Inventory maintained.

New Threading Tools

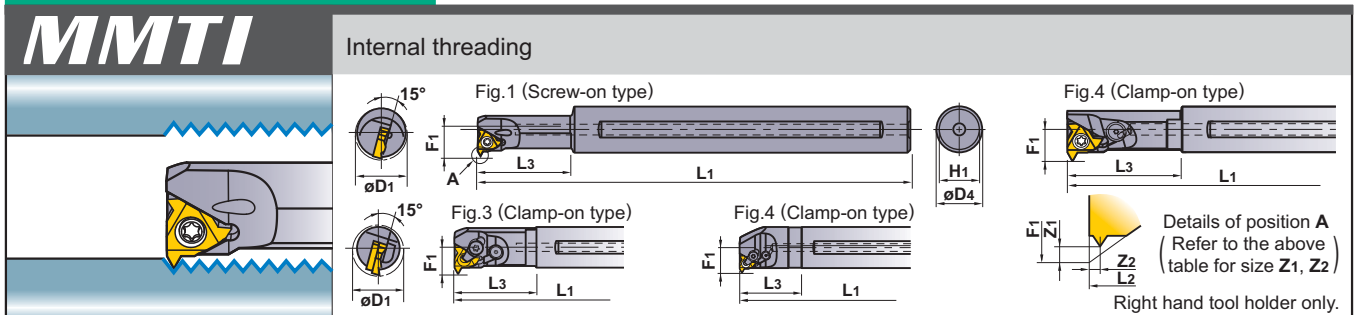
Internal threading tools

Internal Threading Inserts

Type	Order Number	Coated		Pitch mm	Dimensions (mm)				Total depth of cut (mm)	Geometry
		VP15TF	VP20RT		D1	S1	Z1	Z2		
ISO Metric	MMT16IR100ISO-S	●	●	1.0	9.525	3.44	0.6	0.7	0.58	Full form
	16IR125ISO-S	●	●	1.25	9.525	3.44	0.8	0.9	0.72	
	16IR150ISO-S	●	●	1.5	9.525	3.44	0.8	1.0	0.87	
	16IR175ISO-S	●	●	1.75	9.525	3.44	0.9	1.2	1.01	
	16IR200ISO-S	●	●	2.0	9.525	3.44	1.0	1.3	1.15	
	16IR250ISO-S	●	●	2.5	9.525	3.44	1.1	1.5	1.44	
	16IR300ISO-S	●	●	3.0	9.525	3.44	1.1	1.5	1.73	

Note) For other types of inserts, refer to the general catalogue or TOOLS NEWS B053G.

Holders



Order Number	Stock R	Insert Number	Lead Angle	Dimensions (mm)					Min. Cutting Diameter (mm) D1	Tools						Fig.
				D4	L1	L3	F1	H1		Clamp Bridge	Clamp Screw	Stop Ring	Shim Screw	Shim	Wrench	
MMTIR1916AM16-SP15	●	MMT16IR	1.5°	16	150	40	12.2	15	19	—	CS350860T	—	—	—	①TKY15F	2
1916AM16-SP25	●		2.5°	16	150	40	12.2	15	19	—	CS350860T	—	—	—	①TKY15F	2
1916AM16-SP35	●		3.5°	16	150	40	12.2	15	19	—	CS350860T	—	—	—	①TKY15F	2
2420AQ16-C	●		1.5°	20	180	40	14.2	19	24	SETK51	SETS51	CR4	HFC03006	CTI32TP15	①TKY15F ②HKY20R	3
2925AS16-C	●		1.5°	25	250	60	16.7	23.4	29	SETK51	SETS51	CR4	HFC03006	CTI32TP15	①TKY15F ②HKY20R	3
3732AS16-C	●	1.5°	32	250	48	20.5	30.4	37	SETK51	SETS51	CR4	HFC03006	CTI32TP15	①TKY15F ②HKY20R	4	

Note) Select and use a shim as shown below (sold separately), dependant on the lead angle. For details, refer to the general catalogue or TOOLS NEWS B053G.
The screw-on type has no shim. The holder has an in-built lead angle. Please select a holder with the appropriate lead angle.
The minimum cutting diameter indicates the prepared hole diameter, not the nominal thread diameter.

● : Inventory maintained.

Recommended Cutting Conditions

Work Material	Hardness	Grade	Cutting Speed (m/min)
P Mild Steel	≤ 180HB	VP10MF	150 (70—230)
		VP15TF	100 (60—140)
		VP20RT	60 (80—40)
		VP10MF	140 (80—200)
Carbon Steel Alloy Steel	180—280HB	VP15TF	100 (60—140)
		VP20RT	80 (60—100)
		VP10MF	130 (80—180)
M Stainless Steel	≤ 200HB	VP15TF	80 (40—120)
		VP20RT	60 (80—40)

Work Material	Hardness	Grade	Cutting Speed (m/min)
K Cast Iron	Tensile Strength ≤ 350MPa	VP10MF	140 (80—200)
		VP15TF	90 (60—120)
S Heat-Resistant Alloy	—	VP10MF	45 (15—70)
		VP15TF	30 (20—40)
Titanium Alloy	—	VP10MF	60 (40—80)
		VP15TF	45 (25—65)
H Heat-Treated Alloy	45—55HRC	VP10MF	50 (30—70)
		VP15TF	40 (20—60)

For Your Safety

●Don't handle inserts and chips without gloves. ●Please machine within the recommended application range and exchange expired tools with new ones in advance of breakage. ●Please use safety covers and wear safety glasses. ●When using compounded cutting oils, please take fire precautions. ●When attaching inserts or spare parts, please use only the correct wrench or spanner.

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(Tools specifications subject to change without notice.)