

NPA 51

METRIC

AVAILABLE NOW

VARDEX

Since 1960
vargus
NEUMO Ehrenberg Group

VARDEX NPA 51 METRIC | 12/2020 | Page 1/4

TMSD

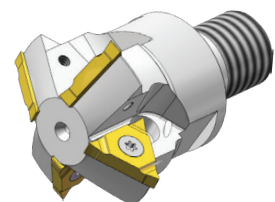
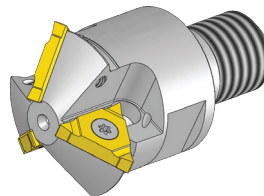
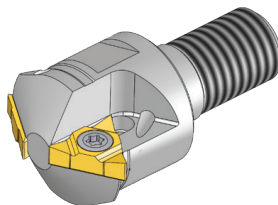
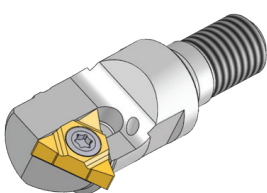
NEW

Modular Toolholder Heads



Features and Benefits:

- One modular toolholder head fits an assortment of shank lengths
- Compatible with the most common steel and carbide shanks in the market
- Tools include high pressure coolant thru for extended tool life
- Multi-flute tools for fast machining
- Suitable for TMSD U Style inserts
- Specially suited for deep holes
- Reduced load on cutting edges due to single point insert design



The NEW **TMSD Modular Toolholder Heads** are included in the **VARGUS GENius™**, the most advanced Tool Selector and CNC Program Generator in the metal cutting tools industry.



Please contact me directly with specific questions and requests.
For additional updates and news visit the VARGUS website: www.vargus.com

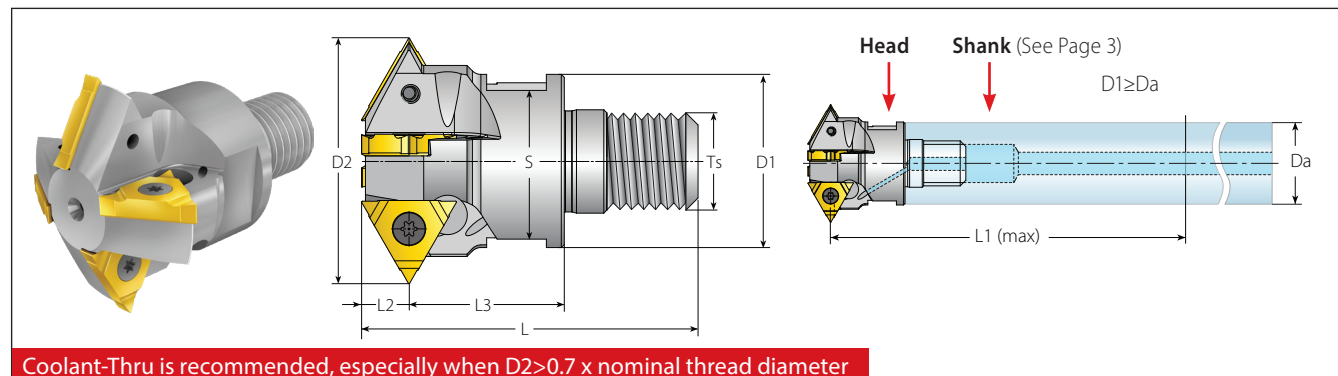
Ami Yacar
Vardex Product Manager

Scroll down for complete details



TMSD Modular Toolholder Heads

NEW



TMSD Modular Toolholder Heads for U Style Inserts

TMSD Modular Toolholder Heads for U Style Inserts												Spare Parts		
Insert Size	Ordering Code	Dimensions mm										No. of Flutes		
IC		D1	D2	L	L1 (max) for Steel Shank	L1 (max) for Carbide Shank	L2	L3	Ts	S	Z	Insert Screw	Torx Key	
1/4"U	TM1SC-D15-M06-2U	10.6	14.75	33	48	57.5	5.4	15.0	M06	9.0	1	SN2T	HK2T	
	TM1SC-D17-M08-2U	13.0	16.75	37	60	72		17.0	M08	11.0	1			
	TM2SC-D21-M08-2U	14.1	20.65	34	72	86		14.0	M08	12.0	2			
	TM2SC-D23-M10-2U	18.0	22.65	38	86	103		14.0	M10	16.0	2			
	TM3SC-D26-M12-2U	21.0	26.60	48	105	125		20.0	M12	18.0	3			
	TM4SC-D31-M12-2U	25.0	31.0	51	115	138		23.0	M12	22.0	4			
3/8"U	TM3SC-D36-M16-3U	29.0	36.5	55	125	150	8.0	25.0	M16	25.0	3	SA3T	HK3T	
	TM4SC-D42-M16-3U	29.0	42.0	55	144	172		26.0	M16	25.0	4			

TMSD Modular Head (U Style) Applications

Thread Applications for Partial Profile Inserts

Toolholder		Min. Thread Dia.						
	D2	ISO Coarse	ISO Fine	UNC	UN/UNF/UNEF/UNS	BSP (G)	Partial 55°	Trapez
TM1SC-D15-M06-2U	14.75	M18x2.5; M24x3.0	M16x0.5; M16x0.75; M16x1.0; M17x1.25; M17x1.5; M17x2.0	3/4-10; 7/8-9; 1-8	5/8-32UN; 5/8-28UN; 5/8-27UNS; 1 1/16-24UN; 1 1/16-20UN; 1 1/16-16UN; 3/4-14UNS; 3/4-12UN	3/8-19; 1/2-14; 1-11	1 1/16-14; 3/4-12; 7/8-11; 3/4-10; 7/8-9; 1-8; 1 1/8-7	TR22x3; TR24x3
TM1SC-D17-M08-2U	16.75	M20x2.5	M18x0.5; M18x0.75; M18x1.0; M19x1.25; M19x1.5; M19x2.0	-	3/4-32UN; 3/4-28UN; 7/8-27UN; 3/4-24UN; 3/4-20UN; 3/4-16UNF; 3/4-14UNS; 1 1/16-12UN; 7/8-10UN	1/2-14; 1-11	1 1/16-12; 7/8-11; 1-10; 7/8-9	-
TM2SC-D21-M08-2U	20.65	M24x3.0; M30x3.5; M36x4.0	M22x0.5; M22x0.75; M22x1.0; M23x1.25; M23x1.5; M23x2.0	1-8; 1 1/8-7; 1 3/8-6	7/8-32UN; 7/8-28UN; 7/8-27UNS; 7/8-24UNS; 7/8-20UNEF; 1-18UNS; 1 1/16-16UN; 1-14UNS; 1 1/16-12UN; 1-10UNS	3/4-14; 1-11	1-26; 1-20; 1-16; 1-12; 1-10; 1 1/8-9; 1-8; 1 1/8-7	(TR26-TR60)x3; TR28x4; (TR60-TR110)x4; TR28x5
TM2SC-D23-M10-2U	22.65	M27x3.0; M30x3.5; M36x4.0	M24x0.5; M24x0.75; M25x1.0; M25x1.25; M26x1.5; M26x2.0; M27x2.5	1 1/8-7	1-32UN; 1-28UN; 1-27UNS; 1-24UNS; 1-20UNEF; 1-18UNS; 1-16UN; 1-14UNS; 1-12UNF; 1 1/8-10UNS; 1 1/8-8UN	3/4-14; 1-11	1-26; 1-20; 1-16; 1 1/16-12; 1 1/8-9; 1 1/8-7	-
TM3SC-D26-M12-2U	26.60	M33x3.5; M36x4.0	M28x0.5; M28x0.75; M28x1.0; M28x1.25; M29x1.5; M29x2.0; M30x2.5; M33x3.0	1 1/4-7; 1 3/8-6	1 1/8-28UN; 1 1/8-24UNS; 1 1/8-20UN; 1 1/8-18UNEF; 1 1/8-16UN; 1 1/4-14UNS; 1 1/16-12UN; 1 1/4-10UNS; 1 1/16-8UN	7/8-14; 1-11	1 1/8-26; 1 1/8-20; 1 3/8-16; 1 3/8-12; 1 3/8-8; 1 1/4-7	-
TM4SC-D31-M12-2U	31.0	M36x4.0	M32x0.5; M32x0.75; M33x1.0; M33x1.25; M33x1.5; M34x2.0; M34x2.5; M35x3.0; M36x3.5	1 1/2-6	1 1/16-28UN; 1 3/8-24UNS; 1 1/16-20UN; 1 1/16-18UNEF; 1 1/16-16UN; 1 1/8-14UNS; 1 3/8-12UNF; 1 3/8-10UNS; 1 3/8-8UN	1 1/8-11	1 3/8-26; 1 3/8-20; 1 3/8-16; 1 3/8-12; 1 7/8-8	-
TM3SC-D36-M16-3U	36.5	M42x4.5; M48x5.0; M56x5.5	M39x1.5; M39x2.0; M40x2.5; M41x3.0; M42x3.5; M42x4.0	1 3/4-5; 2-4.5	1 1/16-16UN; 1 1/8-14UNS; 1 1/16-12UN; 1 1/8-10UNS; 1 5/8-8UN; 1 5/8-6UN	1 1/4-11	1 5/8-16; 1 5/8-12; 1 5/8-8; 1 5/8-6	-
TM4SC-D42-M16-3U	42.0	M48x5.0; M56x5.5; M64x6.0	M45x1.5; M45x2.0; M46x2.5; M48x3.0; M48x3.5; M48x4.0	2-4.5; 2 1/2-4	1 3/4-16UN; 1 3/4-14UNS; 1 13/16-12UN; 1 13/16-8UN; 1 15/16-6UN	1 1/2-11	1 7/8-16; 1 7/8-12; 1 7/8-8; 2 1/4-6; 2-4.5	-

TMSD Modular Head (U Style) Applications

Thread Application for Full Profile Inserts (ISO, UN, NPT & API Round)

Toolholder	Toolholder Cutting Diameter D2 (mm)	Pitch	Min. Thread Dia.		Cylindrical or Conical Pre-Drilled hole	Cylindrical Pre-Drilled hole	API Round, Cylindrical or Conical Pre-Drilled Hole (for cylindrical 2 radial passes 50%/50%; for conical one radial pass	API Round, Conical Pre-Drilled Hole only (one pass)
	* Adjusted D2	mm	TPI	ISO Coarse	UN/UNF/ UNEF/UNS	NPT Threading by 1 Radial Pass	** NPT Threading by 2 Radial Passes (50%/50%)	Thread Dia.
TM1SC-D15-M06-2U	13.80	1.5		M16x1.5	-	-	-	-
	13.60	2.0		M16x2.0	-	-	-	-
	13.70	-	14	-	5/8-14UNS	-	-	-
	13.60	-	12	-	11/16-12UN	-	-	-
	14.59	-	14	-		1/2-14NPT; 3/4-14NPT	-	-
TM1SC-D17-M08-2U	15.79	1.5		M18x1.5	-	-	-	-
	15.60	2.0		M18x2.0	-	-	-	-
	15.69	-	14	-	3/4-14UNS	-	-	-
	15.60	-	12	-	3/4-12UN	-	-	-
	15.60	-	14	-	-	3/4-14NPT	-	-
TM2SC-D21-M08-2U	19.69	1.5		M22x1.5	-	-	-	-
	19.50	2.0		M22x2.0	-	-	-	-
	19.60	-	14	-	7/8-14UNF	-	-	-
	19.50	-	12	-	7/8-12UN	-	-	-
	20.50	-	14	-	-	3/4-14NPT	-	-
	20.28	-	11.5	-	-	1-11.5NPT; 1 1/4-11.5NPT; 1 1/2-11.5NPT; 2-11NPT	-	-
TM2SC-D23-M10-2U	21.65	1.5		M24x1.5	-	-	-	-
	21.50	2.0		M24x2.0	-	-	-	-
	21.49	-	14	-	1-14UNS	-	-	-
	21.50	-	12	-	1-12UNF	-	-	-
	22.63	-	11.5	-	-	1-11.5NPT; 1 1/4-11.5NPT; 1 1/2-11.5NPT; 2-11NPT	-	-
	21.44	-	10	-	-	-	-	1.05x10APIRD (for UP TBG; UP TBG Long); 1.315...2.375x10APIRD (for TBG; UP TBG; UP TBG Long; Integral-Joint TBG)
TM3SC-D26-M12-2U	25.64	1.5		M28x1.5	-	-	-	-
	25.45	2.0		M30x2.0	-	-	-	-
	25.54		14		1 1/8-14UNS	-	-	-
	25.45		12		1 1/8-12UNF	-	-	-
	26.23	-	11.5	-	-	1-11.5NPT; 1 1/4-11.5NPT; 1 1/2-11.5NPT; 2-11NPT	-	-
	24.94	-	10	-	-	-	-	1.315...2.375x10APIRD (for TBG; UP TBG; UP TBG Long; Integral-Joint TBG)
TM4SC-D31-M12-2U	30.00	1.5		M33x1.5	-	-	-	-
	29.85	2.0		M34x2.0	-	-	-	-
	29.94		14		1 3/8-14UNS	-	-	-
	29.85		12		1 5/16-12UN	-	-	-
	30.63		11.5	-	-	1 1/4-11.5NPT; 1 1/2-11.5NPT; 2-11NPT	-	-
	29.44		10	-	-	-	-	1.66...3.5x10APIRD (for TBG; UP TBG; UP TBG Long; Integral-Joint TBG)

* Correct the toolholder cutting diameter D2 according to adjustment, as indicated in the above table.

** When the pre-drilled hole for 8NPT is conical, the thread can be machined in one pass.

Scroll down for complete details

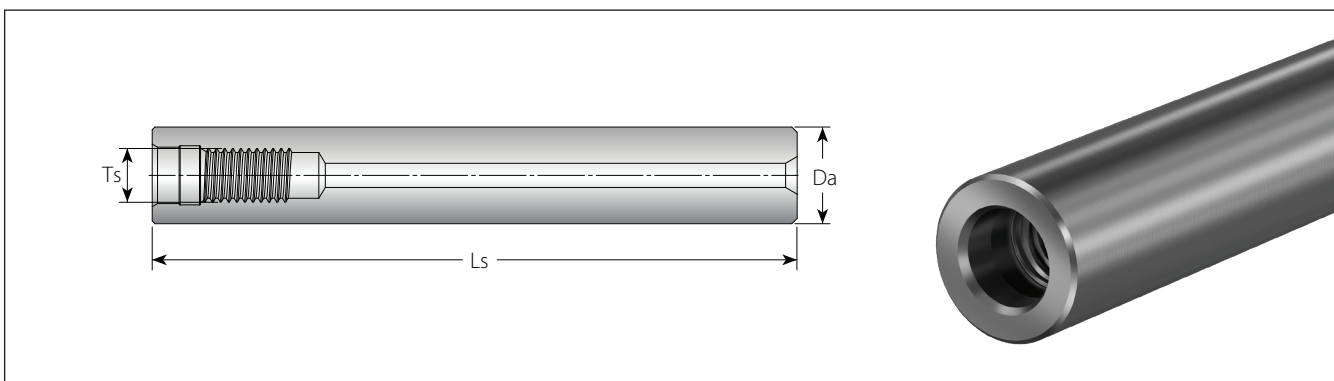
Thread Application for Full Profile Inserts (ISO, UN, NPT & API Round) - con't

Toolholder	Toolholder Cutting Diameter D2 (mm)	Pitch		Min. Thread Dia.		Cylindrical or Conical Pre-Drilled hole	Cylindrical Pre-Drilled hole	API Round, Cylindrical or Conical Pre-Drilled Hole (for cylindrical 2 radial passes 50%/50%; for conical one radial pass)	API Round, Conical Pre-Drilled Hole only (one pass)
	* Adjusted D2	mm	TPI	ISO Coarse	UN/UNF/ UNEF/UNS	NPT Threading by 1 Radial Pass	** NPT Threading by 2 Radial Passes (50%/50%)	Thread Dia.	
TM3SC-D36-M16-3U	35.65	-	11.5	-	-	1 1/4-11.5NPT; 1 1/2-11.5NPT; 2-11.5NPT	-	-	-
	35.65	-	8	-	-	-	2 1/2..10-8NPT	-	-
	34.70	-	8	-	-	-	-	2.375...13.375x8APIRD (for CSG; TBG; UP TBG; UP TBG Long); 4.5...5.5x8APIRD (for LCSG)	8.625...20x8APIRD (for LCSG)
TM4SC-D42-M16-3U	41.15	-	11.5	-	-	1 1/2-11.5NPT; 2-11.5NPT	-	-	-
	41.15	-	8	-	-	-	2 1/2..10-8NPT	-	-
	40.20	-	8	-	-	-	-	2.875...20x8APIRD (for CSG; TGB; UP TBG; UP TBG Long); 4.5...7.625x8APIRD (for LCSG)	8.625x8APIRD (for LCSG)

* Correct the toolholder cutting diameter D2 according to adjustment, as indicated in the above table.

** When the pre-drilled hole for 8NPT is conical, the thread can be machined in one pass.

Steel Shank for TMSD Modular Toolholder Heads



Ordering Code	Da	Ls	Ts	Shank
STMC-C10.6L075M06	10.6	75	M06	C
STMC-C13.0L085M08	13	85	M08	
STMC-C14.1L105M08	14.1	105	M08	
STMC-C18.0L120M10	18	120	M10	
STMC-C21.0L135M12	21	135	M12	
STMC-C25.0L140M12	25	140	M12	
STMC-C29.0L180M16	29	180	M16	

TMSD Modular Toolholder Heads can be used with most common steel and carbide shanks available in the market.