



High Performance Cutting Tools



THREAD MILLS

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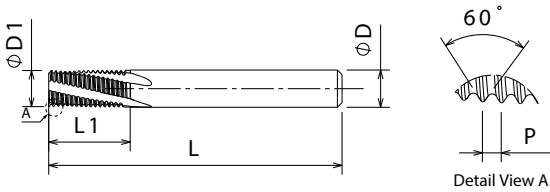
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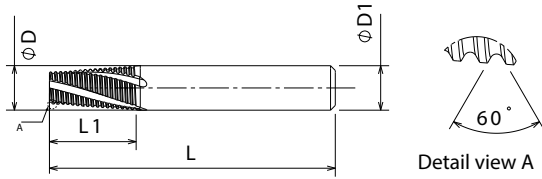
High Performance Cutting Tools

SOLID THREAD MILLING TOOLS

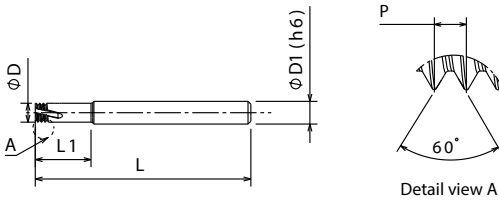
RHS: REGULAR HELICAL FLUTE SOLID



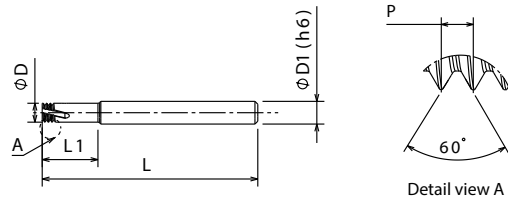
RHTS: REGULAR HELICAL FLUTE TAPER SOLID



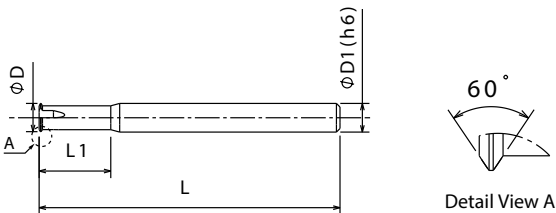
MTH2D: MULTI TOOTH 2D FOR HARD PART
MTH3D: MULTI TOOTH 3D FOR HARD PART



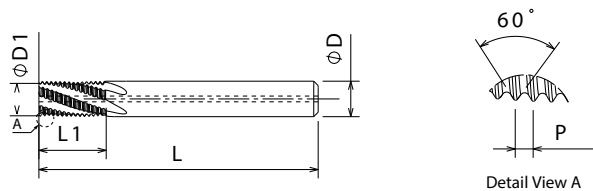
MT2D: MULTI TOOTH 2D
MT3D: MULTI TOOTH 3D
MT4D: MULTI TOOTH 4D



ST P60: SINGLE TOOTH PARTIAL PROFILE



RHC: REGULAR HELICAL FLUTE COOLANT





High Performance Cutting Tools

SOLID THREAD MILLING TOOLS

RSS: REGULAR STRAIGHT FLUTE SOLID

RSTS: REGULAR STRAIGHT FLUTE TAPER SOLID

RHTC: REGULAR HELICAL FLUTE TAPER COOLANT

with coolant hole

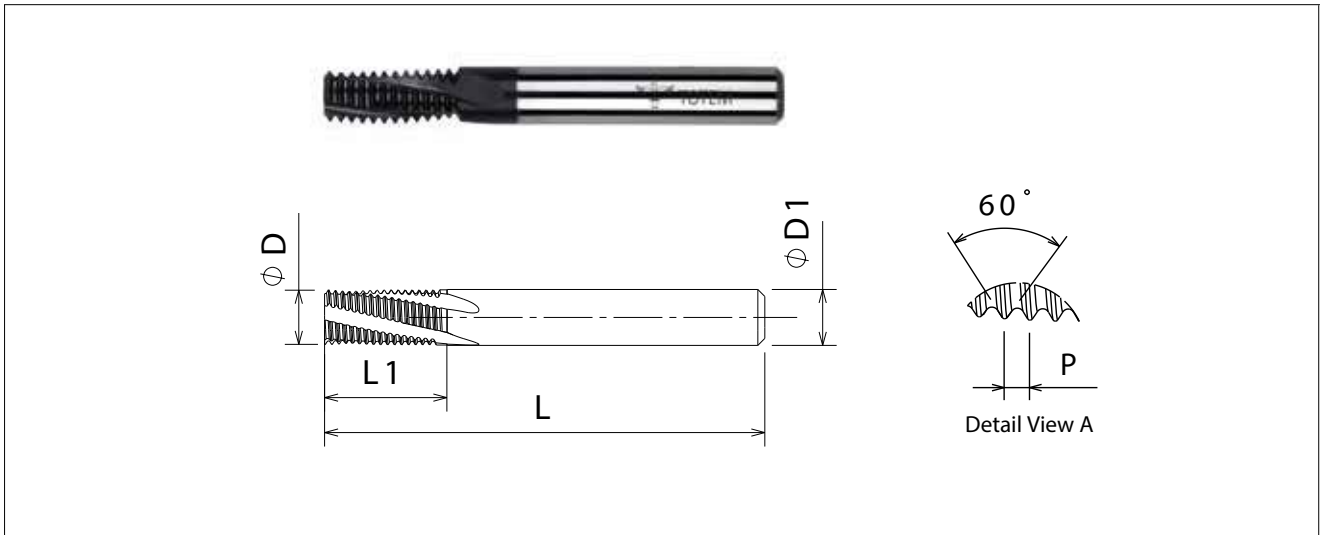
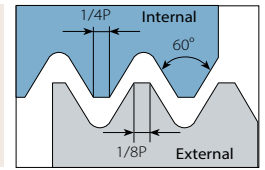
A90S: ANGLE 90 SHORT TOOL

A90L: ANGLE 90 LONG TOOL

CONIC PREPERATION TAPER END MILL

Multi Flute

ISO metric thread
Internal threading

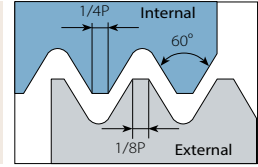


THREAD MILL

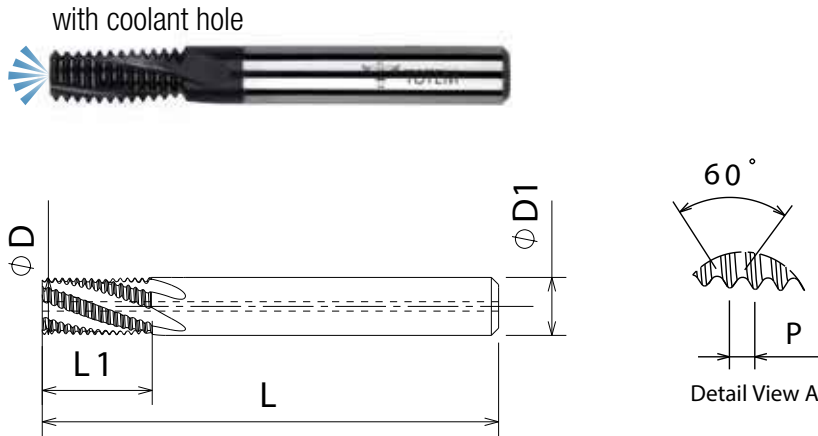
Thread Size		Pitch mm	Description	D mm	L1 mm	L mm	D1 mm	No. of Flutes	EDP No
Coarse	Fine								
	M5	0.5	TMRHS-0.5ISO-3.8MMX10.3X57 SH6 3FL TA	3.8	10.3	57	6	3	FBV0503000
	M7	0.5	TMRHS-0.5ISO-5.9MMX10.2X57 SH6 3FL TA	5.9	10.2	57	6	3	FBV0503001
M4.5	M5	0.75	TMRHS-0.75ISO-3.6MMX10.1X57 SH6 3FL TA	3.6	10.1	57	6	3	FBV0503002
	M8	0.75	TMRHS-0.75ISO-5.9MMX10.8X57 SH6 3FL TA	5.9	10.8	57	6	3	FBV0503003
	M10	0.75	TMRHS-0.75ISO-7.9MMX15.3X63 SH8 4FL TA	7.9	15.3	63	8	4	FBV0503004
M5		0.8	TMRHS-0.8ISO-3.9MMX10X57 SH6 3FL TA	3.9	10	57	6	3	FBV0503005
M6	M7	1	TMRHS-1.0ISO-4.8MMX11.5X57 SH6 3FL TA	4.8	11.5	57	6	3	FBV0503006
M6	M7	1	TMRHS-1.0ISO-4.8MMX14.5X57 SH6 3FL TA	4.8	14.5	57	6	3	FBV0503007
	M8	1	TMRHS-1.0ISO-5.9MMX12.5X57 SH6 3FL TA	5.9	12.5	57	6	3	FBV0503008
	M10	1	TMRHS-1.0ISO-7.9MMX17.5X63 SH8 4FL TA	7.9	17.5	63	8	4	FBV0503009
	M12	1	TMRHS-1.0ISO-9.9MMX20.5X73 SH10 4FL TA	9.9	20.5	73	10	4	FBV0503010
M8	M9	1.25	TMRHS-1.25ISO-5.9MMX14.4X57 SH6 3FL TA	5.9	14.4	57	6	3	FBV0503011
M8	M9	1.25	TMRHS-1.25ISO-5.9MMX19.5X57 SH6 3FL TA	5.9	19.5	57	6	3	FBV0503012
M10	M11	1.5	TMRHS-1.5ISO-7.9MMX18.5X63 SH8 3FL TA	7.9	18.5	63	8	3	FBV0503013
	M13	1.5	TMRHS-1.5ISO-9.9MMX21.8X73 SH10 4FL TA	9.9	21.8	73	10	4	FBV0503014
	M15	1.5	TMRHS-1.5ISO-11.9MMX26.3X84 SH12 4FL TA	11.9	26.3	84	12	4	FBV0503015
	M20	1.5	TMRHS-1.5ISO-15.9MMX35.2X105 SH16 6FL TA	15.9	35.2	105	16	6	FBV0503016
M12		1.75	TMRHS-1.75ISO-9.2MMX21.8X73 SH10 3FL TA	9.2	21.8	73	10	3	FBV0503017
M14		2	TMRHS-2.0ISO-9.9MMX25X73 SH10 3FL TA	9.9	25	73	10	3	FBV0503018
M16		2	TMRHS-2.0ISO-11.9MMX27X84 SH12 4FL TA	11.9	27	84	12	4	FBV0503019
	M20	2	TMRHS-2.0ISO-15.9MMX37X105 SH16 5FL TA	15.9	37	105	16	5	FBV0503020
M20		2.5	TMRHS-2.5ISO-15.9MMX36.3X105 SH16 5FL TA	15.9	36.3	105	16	5	FBV0503021
M24	M27	3	TMRHS-3.0ISO-15.9MMX40.5X105 SH16 3FL TA	15.9	40.5	105	16	3	FBV0503022
M27		3	TMRHS-3.0ISO-19.9MMX43X105 SH20 4FL TA	19.9	43	105	20	4	FBV0503023

Multi Flute

ISO metric thread
Internal threading



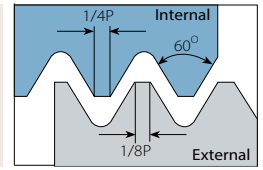
THREAD MILL



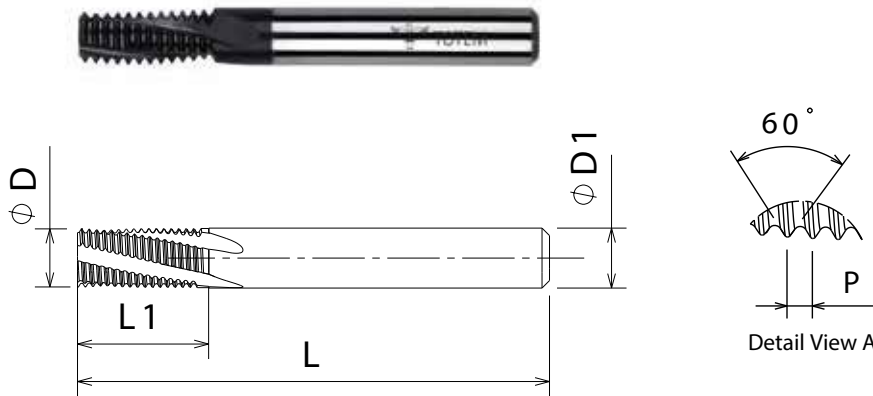
Thread Size		Pitch mm	Description	D mm	L1 mm	L mm	D1 mm	No. of Flutes	EDP No
Coarse	Fine								
	M5	0.5	TMRHC-0.5ISO-3.8MMX10.3X57 SH6 3FL TA	3.8	10.3	57	6	3	FBV0503024
	M7	0.5	TMRHC-0.5ISO-5.9MMX10.2X57 SH6 3FL TA	5.9	10.2	57	6	3	FBV0503025
M4.5	M5	0.75	TMRHC-0.75ISO-3.6MMX10.1X57 SH6 3FL TA	3.6	10.1	57	6	3	FBV0503026
	M8	0.75	TMRHC-0.75ISO-5.9MMX10.8X57 SH6 3FL TA	5.9	10.8	57	6	3	FBV0503027
	M10	0.75	TMRHC-0.75ISO-7.9MMX15.3X63 SH8 4FL TA	7.9	15.3	63	8	4	FBV0503028
M5		0.8	TMRHC-0.8ISO-3.9MMX10X57 SH6 3FL TA	3.9	10	57	6	3	FBV0503029
M6	M7	1	TMRHC-1.0ISO-4.8MMX11.5X57 SH6 3FL TA	4.8	11.5	57	6	3	FBV0503030
M6	M7	1	TMRHC-1.0ISO-4.8MMX14.5X57 SH6 3FL TA	4.8	14.5	57	6	3	FBV0503031
	M8	1	TMRHC-1.0ISO-5.9MMX12.5X57 SH6 3FL TA	5.9	12.5	57	6	3	FBV0503032
	M10	1	TMRHC-1.0ISO-7.9MMX17.5X63 SH8 4FL TA	7.9	17.5	63	8	4	FBV0503033
	M12	1	TMRHC-1.0ISO-9.9MMX20.5X73 SH10 4FL TA	9.9	20.5	73	10	4	FBV0503034
M8	M9	1.25	TMRHC-1.25ISO-5.9MMX14.4X57 SH6 3FL TA	5.9	14.4	57	6	3	FBV0503035
M8	M9	1.25	TMRHC-1.25ISO-5.9MMX19.5X57 SH6 3FL TA	5.9	19.5	57	6	3	FBV0503036
M10	M11	1.5	TMRHC-1.5ISO-7.9MMX18.5X63 SH8 3FL TA	7.9	18.5	63	8	3	FBV0503037
	M13	1.5	TMRHC-1.5ISO-9.9MMX21.8X73 SH10 4FL TA	9.9	21.8	73	10	4	FBV0503038
	M15	1.5	TMRHC-1.5ISO-11.9MMX26.3X84 SH12 4FL TA	11.9	26.3	84	12	4	FBV0503039
	M20	1.5	TMRHC-1.5ISO-15.9MMX35.2X105 SH16 6FL TA	15.9	35.2	105	16	6	FBV0503040
M12		1.75	TMRHC-1.75ISO-9.2MMX21.8X73 SH10 3FL TA	9.2	21.8	73	10	3	FBV0503041
M14		2	TMRHC-2.0ISO-9.9MMX25X73 SH10 3FL TA	9.9	25	73	10	3	FBV0503042
M16		2	TMRHC-2.0ISO-11.9MMX27X84 SH12 4FL TA	11.9	27	84	12	4	FBV0503043
	M20	2	TMRHC-2.0ISO-15.9MMX37X105 SH16 5FL TA	15.9	37	105	16	5	FBV0503044
M20		2.5	TMRHC-2.5ISO-15.9MMX36.3X105 SH16 5FL TA	15.9	36.3	105	16	5	FBV0503045
M24	M27	3	TMRHC-3.0ISO-15.9MMX40.5X105 SH16 3FL TA	15.9	40.5	105	16	3	FBV0503046
M27		3	TMRHC-3.0ISO-19.9MMX43X105 SH20 4FL TA	19.9	43	105	20	4	FBV0503047

Multi Flute

(UNC, UNF, UNEF) unified thread
Internal threading



TM
RHS
○
UNC
UNF
UNEF
IT
UNIFIED
TiAlN

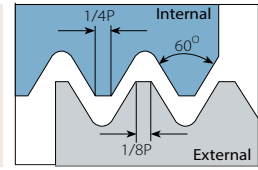


THREAD MILL

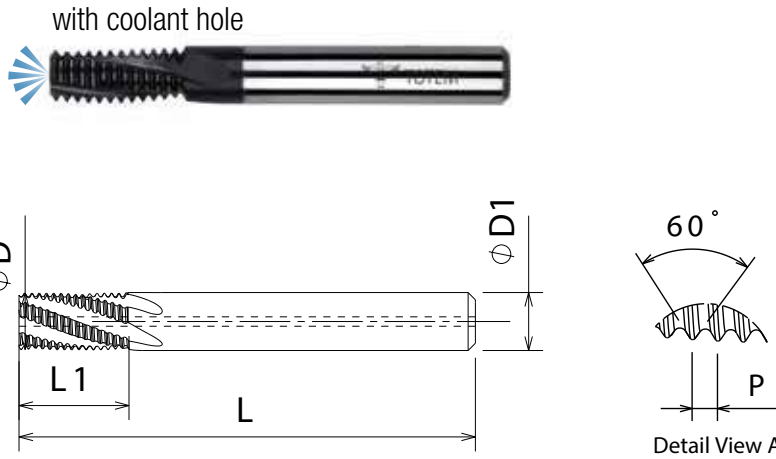
Thread Size			Pitch mm	Description	D	L1	L	D1	No. of Flutes	EDP No
Coarse UNC	Fine UNF	Extra Fine UNEF			mm	mm	mm	mm		
		5/16"	32	TMRHS-32UN-5.9MMX14X57 SH6 3FL TA	5.9	14	57	6	3	FBV0503048
		3/8"	32	TMRHS-32UN-7.9MMX18X63 SH8 3FL TA	7.9	18	63	8	3	FBV0503049
	1/4"		28	TMRHS-28UN-5.1MMX12.2X57 SH6 3FL TA	5.1	12.2	57	6	3	FBV0503050
		7/16"-1/2"	28	TMRHS-28UN-7.9MMX15.8X63 SH8 4FL TA	7.9	15.8	63	8	4	FBV0503051
	5/16"		24	TMRHS-24UN-5.9MMX10.8X57 SH6 3FL TA	5.9	10.8	57	6	3	FBV0503052
	3/8"		24	TMRHS-24UN-7.9MMX15.3X63 SH8 4FL TA	7.9	15.3	63	8	4	FBV0503053
	9/16", 5/8"		24	TMRHS-24UN-11.9MMX22.7X84 SH12 4FL TA	11.9	22.7	84	12	4	FBV0503054
1/4"			20	TMRHS-20UN-4.8MMX12X57 SH6 3FL TA	4.8	12	57	6	3	FBV0503055
	7/16"		20	TMRHS-20UN-7.9MMX19.7X63 SH8 3FL TA	7.9	19.7	63	8	3	FBV0503056
	1/2"		20	TMRHS-20UN-9.9MMX22.5X73 SH10 4FL TA	9.9	22.5	73	10	4	FBV0503057
		3/4"-1"	20	TMRHS-20UN-11.9MMX26X84 SH12 4FL TA	11.9	26	84	12	4	FBV0503058
5/16"			18	TMRHS-18UN-5.7MMX16X57 SH6 3FL TA	5.7	16	57	6	3	FBV0503059
	9/16", 5/8"		18	TMRHS-18UN-9.9MMX23.5X73 SH10 4FL TA	9.9	23.5	73	10	4	FBV0503060
3/8"			16	TMRHS-16UN-6.8MMX18.2X63 SH8 3FL TA	6.8	18.2	63	8	3	FBV0503061
	3/4"		16	TMRHS-16UN-11.9MMX26.2X84 SH12 4FL TA	11.9	26.2	84	12	4	FBV0503062
7/16"			14	TMRHS-14UN-7.8MMX20.8X63 SH8 3FL TA	7.8	20.8	63	8	3	FBV0503063
	7/8"		14	TMRHS-14UN-11.9MMX24.5X84 SH12 4FL TA	11.9	24.5	84	12	4	FBV0503064
1/2"			13	TMRHS-13UN-9.3MMX24.4X73 SH10 3FL TA	9.3	24.4	73	10	3	FBV0503065
9/16"			12	TMRHS-12UN-10.6MMX26.4X84 SH12 4FL TA	10.6	26.4	84	12	4	FBV0503066
	1"		12	TMRHS-12UN-15.9MMX39.1X105 SH16 5FL TA	15.9	39.1	105	16	5	FBV0503067
5/8"			11	TMRHS-11UN-11.5MMX31.1X84 SH12 3FL TA	11.5	31.1	84	12	3	FBV0503068
3/4"			10	TMRHS-10UN-14.3MMX36.8X105 SH16 4FL TA	14.3	36.8	105	16	4	FBV0503069
7/8"			9	TMRHS-9UN-15.9MMX40.9X105 SH16 4FL TA	15.9	40.9	105	16	4	FBV0503070
1"			8	TMRHS-8UN-19.7MMX42.8X105 SH20 4FL TA	19.7	42.8	105	20	4	FBV0503071

Multi Flute

(UNC, UNF, UNEF) unified thread
Internal threading



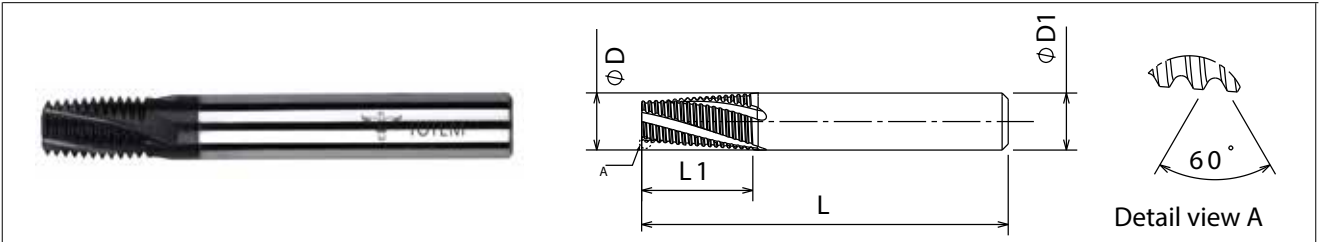
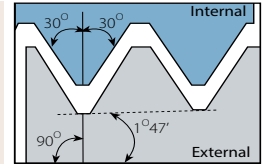
THREAD MILL



Thread Size			Pitch mm	Description	D mm	L1 mm	L mm	D1 mm	No. of Flutes	EDP No
Coarse UNC	Fine UNF	Extra Fine UNEF								
		5/16"	32	TMRHC-32UN-5.9MMX14X57 SH6 3FL TA	5.9	14	57	6	3	FBV0503072
		3/8"	32	TMRHC-32UN-7.9MMX18X63 SH8 3FL TA	7.9	18	63	8	3	FBV0503073
	1/4"		28	TMRHC-28UN-5.1MMX12.2X57 SH6 3FL TA	5.1	12.2	57	6	3	FBV0503074
		7/16"-1/2"	28	TMRHC-28UN-7.9MMX15.8X63 SH8 4FL TA	7.9	15.8	63	8	4	FBV0503075
	5/16"		24	TMRHC-24UN-5.9MMX10.8X57 SH6 3FL TA	5.9	10.8	57	6	3	FBV0503076
	3/8"		24	TMRHC-24UN-7.9MMX15.3X63 SH8 4FL TA	7.9	15.3	63	8	4	FBV0503077
	9/16", 5/8"		24	TMRHC-24UN-11.9MMX22.7X84 SH12 4FL TA	11.9	22.7	84	12	4	FBV0503078
1/4"			20	TMRHC-20UN-4.8MMX12X57 SH6 3FL TA	4.8	12	57	6	3	FBV0503079
	7/16"		20	TMRHC-20UN-7.9MMX19.7X63 SH8 3FL TA	7.9	19.7	63	8	3	FBV0503080
	1/2"		20	TMRHC-20UN-9.9MMX22.5X73 SH10 4FL TA	9.9	22.5	73	10	4	FBV0503081
		3/4"-1"	20	TMRHC-20UN-11.9MMX26X84 SH12 4FL TA	11.9	26	84	12	4	FBV0503082
5/16"			18	TMRHC-18UN-5.7MMX16X57 SH6 3FL TA	5.7	16	57	6	3	FBV0503083
	9/16", 5/8"		18	TMRHC-18UN-9.9MMX23.5X73 SH10 4FL TA	9.9	23.5	73	10	4	FBV0503084
3/8"			16	TMRHC-16UN-6.8MMX18.2X63 SH8 3FL TA	6.8	18.2	63	8	3	FBV0503085
	3/4"		16	TMRHC-16UN-11.9MMX26.2X84 SH12 4FL TA	11.9	26.2	84	12	4	FBV0503086
7/16"			14	TMRHC-14UN-7.8MMX20.8X63 SH8 3FL TA	7.8	20.8	63	8	3	FBV0503087
	7/8"		14	TMRHC-14UN-11.9MMX24.5X84 SH12 4FL TA	11.9	24.5	84	12	4	FBV0503088
1/2"			13	TMRHC-13UN-9.3MMX24.4X73 SH10 3FL TA	9.3	24.4	73	10	3	FBV0503089
9/16"			12	TMRHC-12UN-10.6MMX26.4X84 SH12 4FL TA	10.6	26.4	84	12	4	FBV0503090
	1"		12	TMRHC-12UN-15.9MMX39.1X105 SH16 5FL TA	15.9	39.1	105	16	5	FBV0503091
5/8"			11	TMRHC-11UN-11.5MMX31.1X84 SH12 3FL TA	11.5	31.1	84	12	3	FBV0503092
3/4"			10	TMRHC-10UN-14.3MMX36.8X105 SH16 4FL TA	14.3	36.8	105	16	4	FBV0503093
7/8"			9	TMRHC-9UN-15.9MMX40.9X105 SH16 4FL TA	15.9	40.9	105	16	4	FBV0503094
1"			8	TMRHC-8UN-19.7MMX42.8X105 SH20 4FL TA	19.7	42.8	105	20	4	FBV0503095

Multi Flute

NPT
Internal/external threading

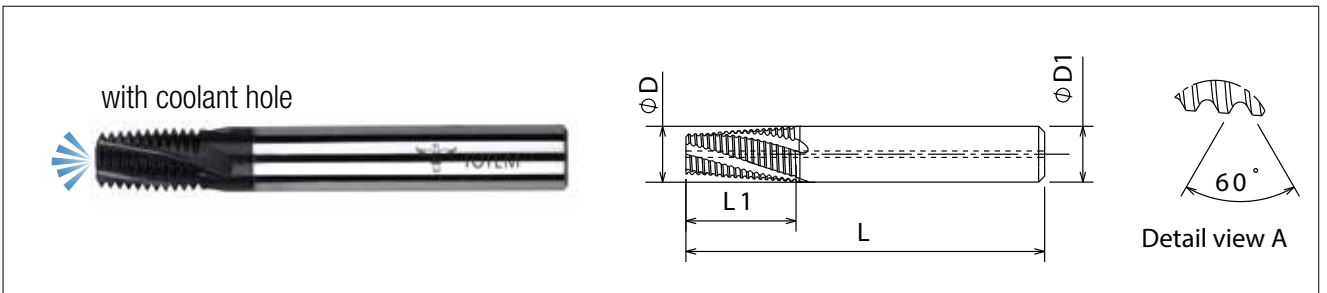
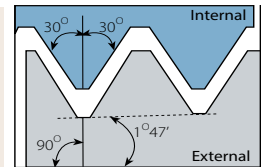


THREAD MILL

Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"	27	TMRHTS-27NPT-5.9MMX9.8X57 SH6 3FL TA	5.9	9.8	57	6	3	FBV0503096
1/8"	27	TMRHTS-27NPT-7.7MMX10.9X63 SH8 3FL TA	7.7	10.9	63	8	3	FBV0503097
1/4"-3/8"	18	TMRHTS-18NPT-9.9MMX16.4X73 SH10 4FL TA	9.9	16.4	73	10	4	FBV0503098
1/2"	14	TMRHTS-14NPT-11.9MMX20.8X84 SH12 4FL TA	11.9	20.8	84	12	4	FBV0503099
1/2"	14	TMRHTS-14NPT-15.9MMX20.8X93 SH16 4FL TA	15.9	20.8	93	16	4	FBV0503100
1"-2"	11.5	TMRHTS-11.5NPT-19.9X29.7X105 SH20 4F TA	19.9	29.7	105	20	4	FBV0503101
2 1/2"-6"	8	TMRHTS-8NPT-19.9MMX38.1X105 SH20 4FL TA	19.9	38.1	105	20	4	FBV0503102

Multi Flute

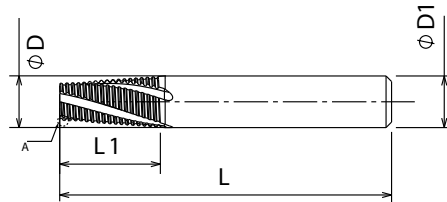
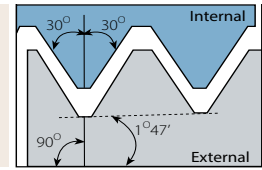
NPT
Internal/external threading



Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"	27	TMRHTC-27NPT-5.9MMX9.8X57 SH6 3FL TA	5.9	9.8	57	6	3	FBV0503103
1/8"	27	TMRHTC-27NPT-7.7MMX10.9X63 SH8 3FL TA	7.7	10.9	63	8	3	FBV0503104
1/4"-3/8"	18	TMRHTC-18NPT-9.9MMX16.4X73 SH10 4FL TA	9.9	16.4	73	10	4	FBV0503105
1/2"	14	TMRHTC-14NPT-11.9MMX20.8X84 SH12 4FL TA	11.9	20.8	84	12	4	FBV0503106
1/2"	14	TMRHTC-14NPT-15.9MMX20.8X93 SH16 4FL TA	15.9	20.8	93	16	4	FBV0503107
1"-2"	11.5	TMRHTC-11.5NPT-19.9X29.7X105 SH20 4F TA	19.9	29.7	105	20	4	FBV0503108
2 1/2"-6"	8	TMRHTC-8NPT-19.9MMX38.1X105 SH20 4FL TA	19.9	38.1	105	20	4	FBV0503109

Multi Flute

NPTF
Internal/external threading

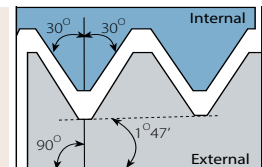


Detail view A

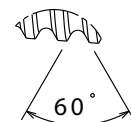
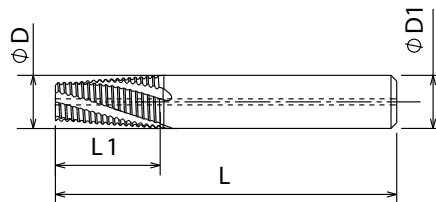
Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"	27	TMRHTS-27NPTF-5.9MMX9.9X57 SH6 3FL TA	5.9	9.9	57	6	3	FBV0503110
1/8"	27	TMRHTS-27NPTF-7.7MMX10.8X63 SH8 3FL TA	7.7	10.8	63	8	3	FBV0503111
1/4"-3/8"	18	TMRHTS-18NPTF-9.9MMX16.2X73 SH10 4FL TA	9.9	16.2	73	10	4	FBV0503112
1/2"	14	TMRHTS-14NPTF-11.9MMX20.8X84 SH12 4F TA	11.9	20.8	84	12	4	FBV0503113
1"-2"	11.5	TMRHTS-11.5NPTF-19.9MMX29.7X105SH204FTA	19.9	29.7	105	20	4	FBV0503114
2 1/2"-6"	8	TMRHTS-8NPTF-19.9MMX38.1X105 SH20 4F TA	19.9	38.1	105	20	4	FBV0503115

Multi Flute

NPTF
Internal/External Threading



with coolant hole

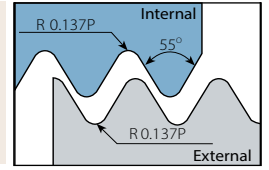


Detail view A

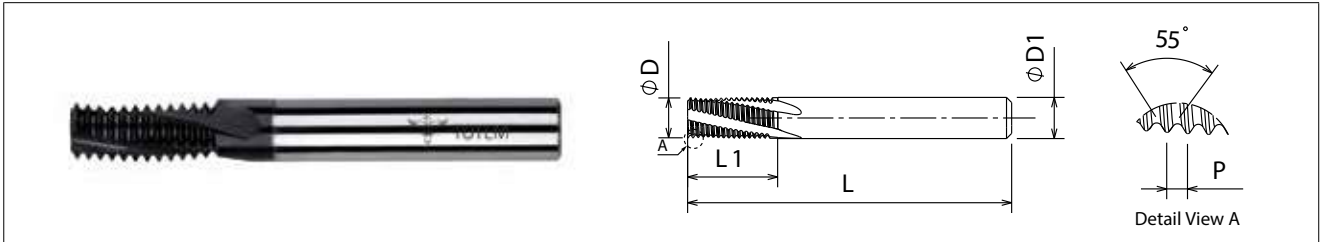
Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"	27	TMRHTC-27NPTF-5.9MMX9.9X57 SH6 3FL TA	5.9	9.9	57	6	3	FBV0503116
1/8"	27	TMRHTC-27NPTF-7.7MMX10.8X63 SH8 3FL TA	7.7	10.8	63	8	3	FBV0503117
1/4"-3/8"	18	TMRHTC-18NPTF-9.9MMX16.2X73 SH10 4FL TA	9.9	16.2	73	10	4	FBV0503118
1/2"	14	TMRHTC-14NPTF-11.9MMX20.8X84 SH12 4F TA	11.9	20.8	84	12	4	FBV0503119
1"-2"	11.5	TMRHTC-11.5NPTF-19.9MMX29.7X105SH204FTA	19.9	29.7	105	20	4	FBV0503120
2 1/2"-6"	8	TMRHTC-8NPTF-19.9MMX38.1X105 SH20 4F TA	19.9	38.1	105	20	4	FBV0503121

Multi Flute

BSP (G)
Internal/external threading



TM
RHS
○
BSP
IT
ET
BS
TiAIN

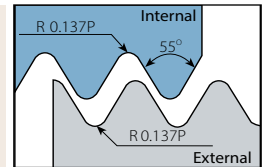


THREAD MILL

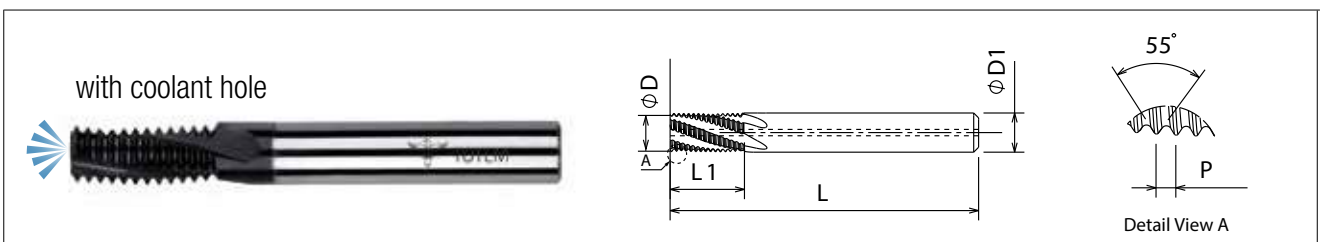
Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"	28	TMRHS-28BSP-5.9MMX11.3X57 SH6 3FL TA	5.9	11.3	57	6	3	FBV0503122
1/8"	28	TMRHS-28BSP-7.9MMX14X63 SH8 3FL TA	7.9	14.0	63	8	3	FBV0503123
1/4"-3/8"	19	TMRHS-19BSP-9.9MMX16.6X73 SH10 4FL TA	9.9	16.6	73	10	4	FBV0503124
1/2"-7/8"	14	TMRHS-14BSP-11.9MMX22.7X84 SH12 4FL TA	11.9	22.7	84	12	4	FBV0503125
1"-2"	11	TMRHS-11BSP-15.9MMX32.1X105 SH16 4F TA	15.9	32.1	105	16	4	FBV0503126
1"-6"	11	TMRHS-11BSP-19.9MMX40.4X105 SH20 5F TA	19.9	40.4	105	20	5	FBV0503127

Multi Flute

BSP (G)
Internal/external threading



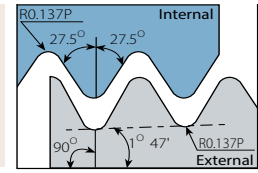
TM
RHC
○
BSP
IT
ET
BS
TiAIN



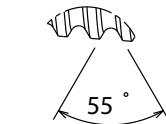
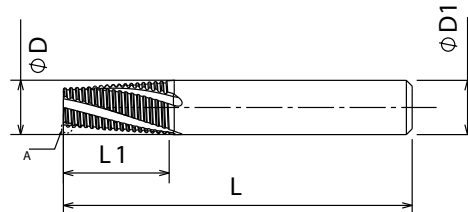
Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"	28	TMRHC-28BSP-5.9MMX11.3X57 SH6 3FL TA	5.9	11.3	57	6	3	FBV0503128
1/8"	28	TMRHC-28BSP-7.9MMX14X63 SH8 3FL TA	7.9	14.0	63	8	3	FBV0503129
1/4"-3/8"	19	TMRHC-19BSP-9.9MMX16.6X73 SH10 4FL TA	9.9	16.6	73	10	4	FBV0503130
1/2"-7/8"	14	TMRHC-14BSP-11.9MMX22.7X84 SH12 4FL TA	11.9	22.7	84	12	4	FBV0503131
1"-2"	11	TMRHC-11BSP-15.9MMX32.1X105 SH16 4F TA	15.9	32.1	105	16	4	FBV0503132
1"-6"	11	TMRHC-11BSP-19.9MMX40.4X105 SH20 5F TA	19.9	40.4	105	20	5	FBV0503133

Multi Flute

BSPT (Rc)
Internal/external threading



THREAD MILL

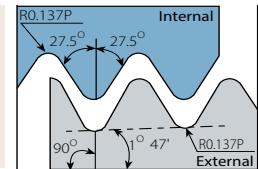


Detail view A

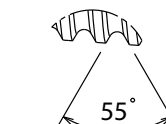
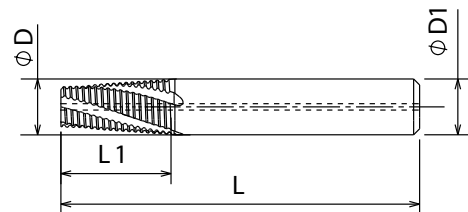
Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"	28	TMRHTS-28BSPT-5.9MMX11.3X57 SH6 3FL TA	5.9	11.3	57	6	3	FBV0503134
1/8"	28	TMRHTS-28BSPT-7.9MMX14X63 SH8 3FL TA	7.9	14.0	63	8	3	FBV0503135
1/4"-3/8"	19	TMRHTS-19BSPT-9.9MMX16.6X73 SH10 4FL TA	9.9	16.6	73	10	4	FBV0503136
1/2"-7/8"	14	TMRHTS-14BSPT-11.9MMX22.7X84SH12 4FL TA	11.9	22.7	84	12	4	FBV0503137
1"-2"	11	TMRHTS-11BSPT-15.9MMX32.1X105SH16 4F TA	15.9	32.1	105	16	4	FBV0503138
1"-6"	11	TMRHTS-11BSPT-19.9MMX40.4X105SH20 5F TA	19.9	40.4	105	20	5	FBV0503139

Multi Flute

BSPT (Rc)
Internal/external threading



with coolant hole

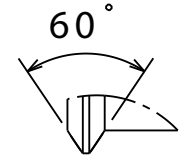
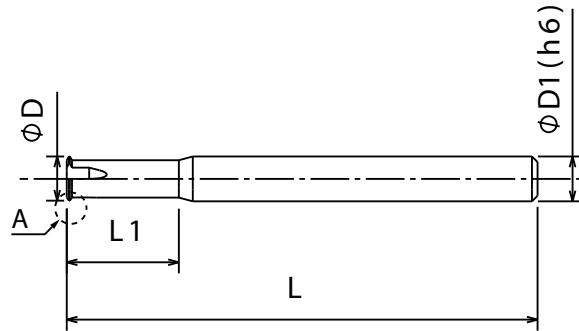
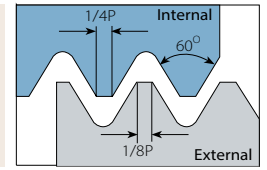


Detail view A

Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"	28	TMRHTC-28BSPT-5.9MMX11.3X57 SH6 3FL TA	5.9	11.3	57	6	3	FBV0503140
1/8"	28	TMRHTC-28BSPT-7.9MMX14X63 SH8 3FL TA	7.9	14.0	63	8	3	FBV0503141
1/4"-3/8"	19	TMRHTC-19BSPT-9.9MMX16.6X73 SH10 4FL TA	9.9	16.6	73	10	4	FBV0503142
1/2"-7/8"	14	TMRHTC-14BSPT-11.9MMX22.7X84SH12 4FL TA	11.9	22.7	84	12	4	FBV0503143
1"-2"	11	TMRHTC-11BSPT-15.9MMX32.1X105SH16 4F TA	15.9	32.1	105	16	4	FBV0503144
1"-6"	11	TMRHTC-11BSPT-19.9MMX40.4X105SH20 5F TA	19.9	40.4	105	20	5	FBV0503145

Multi Flute

Partial profile 60°
Internal/external threading



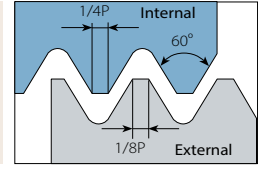
Detail View A

Pitch Range		Description	D	L1	L	D1	No. of Flutes	Minimum Hole Dia	EDP No
mm	TPI		mm	mm	mm	mm			
0.35-0.6	72-40	TMST-P60 1.95MMX6X39 SH3 3FL TA	1.95	6	39	3	3	2.0	FBV0503146
0.5-0.8	48-32	TMST-P60 2.45MMX7.7X39 SH3 3FL TA	2.45	7.7	39	3	3	2.6	FBV0503147
0.5-0.8	48-32	TMST-P60 3.15MMX10X51 SH4 3FL TA	3.15	10	51	4	3	3.3	FBV0503148
0.5-1.0	48-24	TMST-P60 4.00MMX12X51 SH4 3FL TA	4.0	12	51	4	3	4.2	FBV0503149
0.5-1.25	48-20	TMST-P60 4.70MMX15X57 SH6 3FL TA	4.7	15	57	6	3	4.9	FBV0503150
0.5-1.25	48-20	TMST-P60 6.00MMX18X57 SH6 3FL TA	6.0	18	57	6	3	6.3	FBV0503151
0.75-1.5	32-16	TMST-P60 8.00MMX24X63 SH8 3FL TA	8.0	24	63	8	3	8.3	FBV0503152
1.0-2.5	24-10	TMST-P60 10.00MMX30X73 SH10 4FL TA	10.0	30	73	10	4	10.4	FBV0503153
1.0-2.5	24-10	TMST-P60 12.00MMX36X84 SH12 4FL TA	12.0	36	84	12	4	12.5	FBV0503154

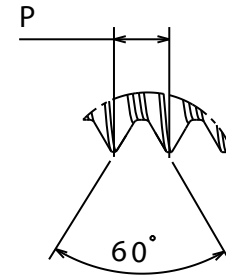
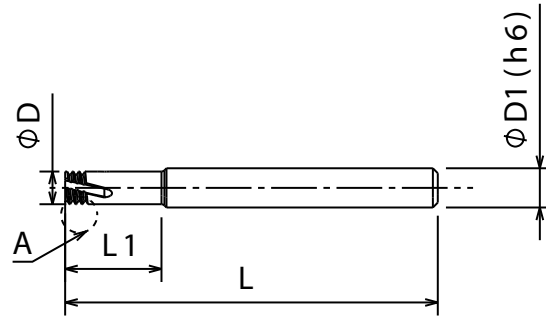
THREAD MILL

Multi Flute

ISO metric thread
Internal threading upto 2D



THREAD MILL

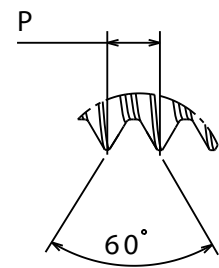
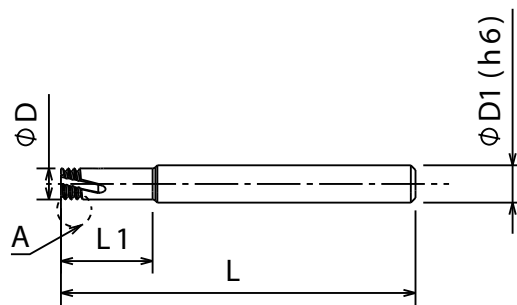
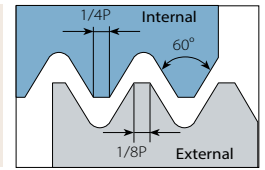


Detail view A

Thread Size	Pitch mm	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
M1.6	0.35	TMMT2D-0.35-ISO-1.2MMX3.3X39 SH3 3FL TA	1.2	3.3	39	3	3	FBV0503155
M1.6	0.35	TMMT2D-0.35-ISO-1.2MMX3.3X57 SH6 3FL TA	1.2	3.3	57	6	3	FBV0503156
M2	0.4	TMMT2D-0.4-ISO-1.54MMX4.4X39 SH3 3FL TA	1.54	4.4	39	3	3	FBV0503157
M2	0.4	TMMT2D-0.4-ISO-1.54MMX4.4X57 SH6 3FL TA	1.54	4.4	57	6	3	FBV0503158
M2.2	0.45	TMMT2D-0.45-ISO-1.63MMX4.8X39 SH3 3FL TA	1.63	4.8	39	3	3	FBV0503159
M2.5	0.45	TMMT2D-0.45-ISO-1.96MMX5.3X57 SH6 3FL TA	1.96	5.3	57	6	3	FBV0503160
M3	0.5	TMMT2D-0.5-ISO-2.4MMX6.4X57 SH6 3FL TA	2.4	6.4	57	6	3	FBV0503161
M3.5	0.6	TMMT2D-0.6-ISO-2.75MMX7.4X57 SH6 3FL TA	2.75	7.4	57	6	3	FBV0503162
M4	0.7	TMMT2D-0.7-ISO-3.15MMX8.6X57 SH6 3FL TA	3.15	8.6	57	6	3	FBV0503163
M5	0.8	TMMT2D-0.8-ISO-4MMX12D57 SH6 3FL TA	4	12	57	6	3	FBV0503164
M6	1	TMMT2D-1.0-ISO-4.75MMX13X57 SH6 3FL TA	4.75	13	57	6	3	FBV0503165
M8	1.25	TMMT2D-1.25-ISO-5.95MMX17.3X57 SH6 3FL TA	5.95	17.3	57	6	3	FBV0503166
M10	1.5	TMMT2D-1.5-ISO-7.90MMX22D63 SH8 3FL TA	7.9	22	63	8	3	FBV0503167
M12	1.75	TMMT2D-1.75-ISO-9.40MMX25.5X73 SH10 3FTA	9.4	25.5	73	10	3	FBV0503168
M14	2	TMMT2D-2.0-ISO-9.95MMX29X73 SH10 3FL TA	9.95	29	73	10	3	FBV0503169
M16	2	TMMT2D-2.0-ISO-11.95MMX33X84 SH12 4FL TA	11.95	33	84	12	4	FBV0503170
M20	2.5	TMMT2D-2.5-ISO-15.90MMX42D105 SH16 5F TA	15.9	42	105	16	5	FBV0503171

Multi Flute

ISO metric thread Internal threading upto 3D/4D



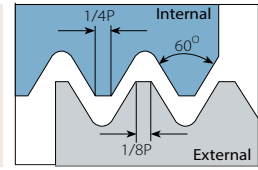
Detail view A

Thread Size	Pitch mm	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
M0.8	0.20	TMMT3D-0.2-ISO-0.6MMX1.8X39 SH3 3FL TA	0.6	1.8	39	3	3	FBV0503172
M1	0.25	TMMT3D-0.25-ISO-0.72MMX2.9X39 SH3 3FL TA	0.72	2.9	39	3	3	FBV0503173
M1.2	0.25	TMMT3D-0.25-ISO-0.9MMX3X39 SH3 3FL TA	0.9	3	39	3	3	FBV0503174
M1.4	0.30	TMMT3D-0.3-ISO-1.06MMX3.9X39 SH3 3FL TA	1.06	3.9	39	3	3	FBV0503175
M1.6	0.35	TMMT3D-0.35-ISO-1.2MMX5.1X39 SH3 3FL TA	1.2	5.1	39	3	3	FBV0503176
M1.6	0.35	TMMT3D-0.35-ISO-1.2MMX5.1X57 SH6 3FL TA	1.2	5.1	57	6	3	FBV0503177
M2	0.40	TMMT3D-0.4-ISO-1.54MMX6.1X39 SH3 3FL TA	1.54	6.1	39	3	3	FBV0503178
M2	0.40	TMMT3D-0.4-ISO-1.54MMX10X39 SH3 3FL TA	1.54	10	39	3	3	FBV0503179
M2	0.40	TMMT3D-0.4-ISO-1.54MMX6.1X57 SH6 3FL TA	1.54	6.1	57	6	3	FBV0503180
M2	0.40	TMMT4D-0.4-ISO-1.54MMX6.1X100 SH6 3FL TA	1.54	6.1	100	6	3	FBV0503181
M2.5	0.45	TMMT3D-0.45-ISO-1.96MMX7.6X39 SH6 3FL TA	1.96	7.6	39	6	3	FBV0503182
M2.5	0.45	TMMT3D-0.45-ISO-1.96MMX7.6X100 SH6 3F TA	1.96	7.6	100	6	3	FBV0503183
M3	0.50	TMMT3D-0.5-ISO-2.4MMX9.3X57 SH6 3FL TA	2.4	9.3	57	6	3	FBV0503184
M3	0.50	TMMT4D-0.5-ISO-2.4MMX9.3X100 SH6 3FL TA	2.4	9.3	100	6	3	FBV0503185
M3.5	0.60	TMMT3D-0.6-ISO-2.75MMX10.6X57 SH6 3FL TA	2.75	10.6	57	6	3	FBV0503186
M4	0.70	TMMT3D-0.7-ISO-3.15MMX12.4X57 SH6 3FL TA	3.15	12.4	57	6	3	FBV0503187
M4	0.70	TMMT3D-0.7-ISO-3.15MMX16X57 SH6 3FL TA	3.15	16	57	6	3	FBV0503188
M4	0.70	TMMT4D-0.7-ISO-3.15MMX12.4X100 SH6 3F TA	3.15	12.4	100	6	3	FBV0503189
M5	0.80	TMMT3D-0.8-ISO-4MMX15.6X57 SH6 3FL TA	4	15.6	57	6	3	FBV0503190
M5	0.80	TMMT3D-0.8-ISO-4MMX21X57 SH6 3FL TA	4	21	57	6	3	FBV0503191
M5	0.80	TMMT4D-0.8-ISO-4MMX15.6X100 SH6 3FL TA	4	15.6	100	6	3	FBV0503192
M6	1.00	TMMT3D-1.0-ISO-4.75MMX19X57 SH6 3FL TA	4.75	19	57	6	3	FBV0503193
M6	1.00	TMMT4D-1.0-ISO-4.75MMX19X100 SH6 3FL TA	4.75	19	100	6	3	FBV0503194
M6	1.00	TMMT3D-1.0-ISO-4.75MMX24D57 SH6 3FL TA	4.75	24	57	6	3	FBV0503195
M8	1.25	TMMT3D-1.25-ISO-5.95MMX24.3X57 SH6 3F TA	5.95	24.3	57	6	3	FBV0503196
M8	1.25	TMMT4D-1.25-ISO-5.95MMX24.3X100 SH6 3FTA	5.95	24.3	100	6	3	FBV0503197
M10	1.50	TMMT3D-1.5-ISO-7.9MMX31X63 SH8 3FL TA	7.9	31	63	8	3	FBV0503198
M10	1.50	TMMT4D-1.5-ISO-7.9MMX31X100 SH8 3FL TA	7.9	31	100	8	3	FBV0503199
M12	1.75	TMMT3D-1.75-ISO-9.4MMX36X73 SH10 3FL TA	9.4	36	73	10	3	FBV0503200
M16	2.00	TMMT4D-2.0-ISO-11.95MMX48X100 SH12 4F TA	11.95	48	100	12	4	FBV0503201

THREAD MILL

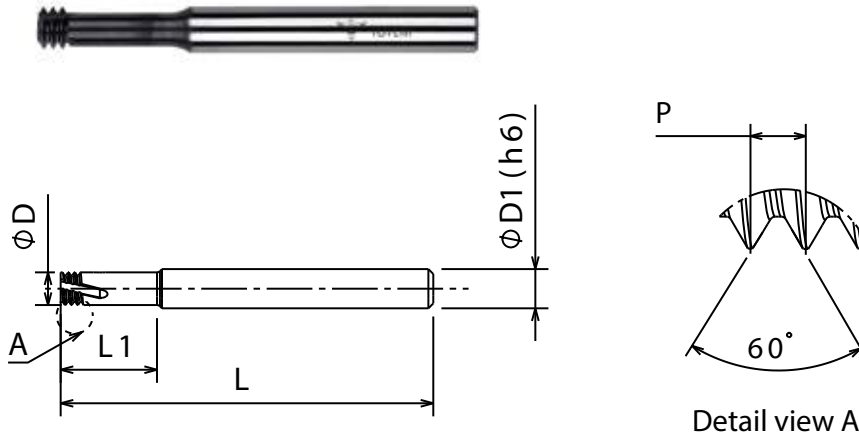
Multi Flute

(UNC, UNF) unified thread
Internal threading upto 2D



TM
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THREAD MILL

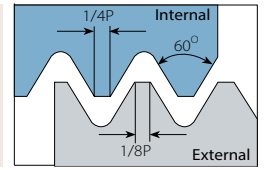


Detail view A

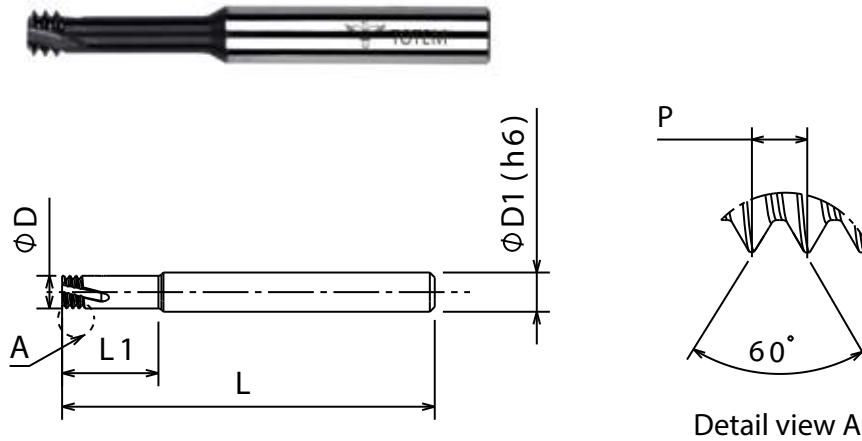
Thread Size		Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
Coarse	Fine			mm	mm	mm	mm		
	1	72	TMMT2D-72-UN-1.44MMX3.8X39 SH3 3FL TA	1.44	3.8	39	3	3	FBV0503202
1	2	64	TMMT2D-64-UN-1.4MMX3.9X39 SH3 3FL TA	1.40	3.9	39	3	3	FBV0503203
2	3	56	TMMT2D-56-UN-1.66MMX4.6X39 SH3 3FL TA	1.66	4.6	39	3	3	FBV0503204
2	3	56	TMMT2D-56-UN-1.66MMX4.6X57 SH6 3FL TA	1.66	4.6	57	6	3	FBV0503205
3	4	48	TMMT2D-48-UN-1.88MMX5.4X57 SH6 3FL TA	1.88	5.4	57	6	3	FBV0503206
4		40	TMMT2D-40-UN-2.12MMX6.2X57 SH6 3FL TA	2.12	6.2	57	6	3	FBV0503207
5	6	40	TMMT2D-40-UN-2.46MMX7.1X57 SH6 3FL TA	2.46	7.1	57	6	3	FBV0503208
	8	36	TMMT2D-36-UN-3.31MMX8.8X57 SH6 3FL TA	3.31	8.8	57	6	3	FBV0503209
6		32	TMMT2D-32-UN-2.57MMX7.3X57 SH6 3FL TA	2.57	7.3	57	6	3	FBV0503210
8		32	TMMT2D-32-UN-3.22MMX10.1X57 SH6 3FL TA	3.22	10.1	57	6	3	FBV0503211
	10	32	TMMT2D-32-UN-3.7MMX10.5X57 SH6 3FL TA	3.70	10.5	57	6	3	FBV0503212
	12	28	TMMT2D-28-UN-4.2MMX10.9X57 SH6 3FL TA	4.20	10.9	57	6	3	FBV0503213
	1/4"	28	TMMT2D-28-UN-5.2MMX14X57 SH6 3FL TA	5.20	14.0	57	6	3	FBV0503214
10		24	TMMT2D-24-UN-3.55MMX10.4X57 SH6 3FL TA	3.55	10.4	57	6	3	FBV0503215
	5/16"	24	TMMT2D-24-UN-6.65MMX16.7X63 SH8 3FL TA	6.65	16.7	63	8	3	FBV0503216
1/4"	7/16"	20	TMMT2D-20-UN-4.85MMX13.7X57 SH6 3FL TA	4.85	13.7	57	6	3	FBV0503217
	7/16"	20	TMMT2D-20-UN-7.95MMX24X63 SH8 3FL TA	7.95	24.0	63	8	3	FBV0503218
5/16"		18	TMMT2D-18-UN-5.95MMX16.5X57 SH6 3FL TA	5.95	16.5	57	6	3	FBV0503219
	5/8"	18	TMMT2D-18-UN-11.9MMX34X84 SH12 4FL TA	11.90	34.0	84	12	4	FBV0503220
3/8"		16	TMMT2D-16-UN-6.9MMX21X63 SH8 3FL TA	6.90	21.0	63	8	3	FBV0503221
7/16"		14	TMMT2D-14-UN-7.95MMX23.5X63 SH8 3FL TA	7.95	23.5	63	8	3	FBV0503222
1/2"		13	TMMT2D-13-UN-9.3MMX27X73 SH10 3FL TA	9.30	27.0	73	10	3	FBV0503223
9/16"		12	TMMT2D-12-UN-9.95MMX29X63 SH10 3FL TA	9.95	29.0	63	10	3	FBV0503224
5/8"		11	TMMT2D-11-UN-11.5MMX33X84 SH12 3FL TA	11.50	33.0	84	12	3	FBV0503225

3 Flute

(UNC, UNF) unified thread
Internal threading upto 3D/4D



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MT 4D
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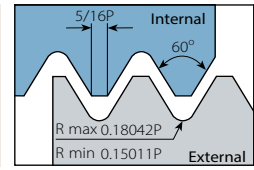
THREAD MILL

Thread Size		Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
Coarse	Fine			mm	mm	mm	mm		
	0	80	TMMT3D-80-UN-1.18MMX3.9X39 SH3 3FL TA	1.18	3.9	39	3	3	FBV0503226
	1	72	TMMT3D-72-UN-1.44MMX5.8X39 SH3 3FL TA	1.44	5.8	39	3	3	FBV0503227
	1	72	TMMT3D-72-UN-1.44MMX5.8X57 SH6 3FL TA	1.44	5.8	57	6	3	FBV0503228
2	3	56	TMMT3D-56-UN-1.66MMX6.8X39 SH3 3FL TA	1.66	6.8	39	3	3	FBV0503229
2	3	56	TMMT4D-56-UN-1.66MMX6.8X57 SH6 3FL TA	1.66	6.8	57	6	3	FBV0503230
2	3	56	TMMT3D-56-UN-1.66MMX6.8X100 SH6 3FL TA	1.66	6.8	100	6	3	FBV0503231
4		40	TMMT4D-40-UN-2.12MMX8.1X57 SH6 3FL TA	2.12	8.1	57	6	3	FBV0503232
4		40	TMMT3D-40-UN-2.12MMX8.1X100 SH6 3FL TA	2.12	8.1	100	6	3	FBV0503233
5		40	TMMT3D-40-UN-2.46MMX9.8X57 SH6 3FL TA	2.46	9.8	57	6	3	FBV0503234
6	6	32	TMMT3D-32-UN-2.57MMX10.7X57 SH6 3FL TA	2.57	10.7	57	6	3	FBV0503235
6		32	TMMT4D-32-UN-2.57MMX10.7X100 SH6 3FL TA	2.57	10.7	100	6	3	FBV0503236
8		32	TMMT3D-32-UN-3.22MMX12.7X57 SH6 3FL TA	3.22	12.7	57	6	3	FBV0503237
	10	32	TMMT3D-32-UN-3.7MMX15.5X57 SH6 3FL TA	3.70	15.5	57	6	3	FBV0503238
	10	32	TMMT4D-32-UN-3.7MMX15.5X100 SH6 3FL TA	3.70	15.5	100	6	3	FBV0503239
	12	28	TMMT3D-28-UN-4.2MMX16X57 SH6 3FL TA	4.20	16.0	57	6	3	FBV0503240
	1/4"	28	TMMT3D-28-UN-5.2MMX19.3X57 SH6 3FL TA	5.20	19.3	57	6	3	FBV0503241
	1/4"	28	TMMT4D-28-UN-5.2MMX19.3X100 SH6 3FL TA	5.20	19.3	100	6	3	FBV0503242
	5/16"	24	TMMT3D-24-UN-6.65MMX24.2X63 SH8 3FL TA	6.65	24.2	63	8	3	FBV0503243
1/4"	7/16"	20	TMMT3D-20-UN-4.85MMX19.4X57 SH6 3FL TA	4.85	19.4	57	6	3	FBV0503244
1/4"	7/16"	20	TMMT4D-20-UN-4.85MMX19.4X100 SH6 3FL TA	4.85	19.4	100	6	3	FBV0503245
5/16"		18	TMMT3D-18-UN-5.9MMX23X57 SH6 3FL TA	5.90	23.0	57	6	3	FBV0503246
3/8"		16	TMMT3D-16-UN-6.9MMX28.5X63 SH8 3FL TA	6.90	28.5	63	8	3	FBV0503247

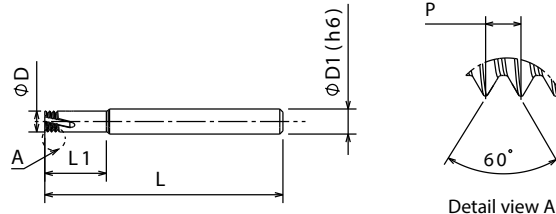
3 Flute

(UNJ) unified thread

Internal threading upto 3D



TM MT 3D ● ✈ UNJ UNJF IT UNIFIED TiAIN

THREAD MILL


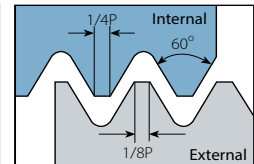
Thread Size		Pitch mm	Description	D	L1	L	D1	No. of Flutes	EDP No
Coarse	Fine			mm	mm	mm	mm		
4	6	40	TMMT3D-40-UNJ-2.1MMX8X57 SH6 3FL TA	2.1	8	57	6	3	FBV0503248
8	10	32	TMMT3D-32-UNJ-3.3MMX13X57 SH6 3FL TA	3.3	12	57	6	3	FBV0503249
	1/4"	28	TMMT3D-28-UNJ-5.4MMX19X57 SH6 3FL TA	5.4	19	57	6	3	FBV0503250
	5/16", 3/8"	24	TMMT3D-24-UNJ-6.7MMX24X63 SH8 3FL TA	6.7	24	63	8	3	FBV0503251
1/4"		20	TMMT3D-20-UNJ-5MMX19X63 SH6 3FL TA	5	19	63	6	3	FBV0503252
	7/16"	20	TMMT3D-20-UNJ-7.9MMX28X63 SH8 3FL TA	7.9	28	63	8	3	FBV0503253
5/16"		18	TMMT3D-18-UNJ-6.4MMX24X63 SH8 3FL TA	6.4	24	63	8	3	FBV0503254
3/8"		16	TMMT3D-16-UNJ-6.9MMX24X63 SH8 3FL TA	6.9	24	63	8	3	FBV0503255
7/16"		14	TMMT3D-14-UNJ-7.9MMX26X63 SH8 3FL TA	7.9	26	63	8	3	FBV0503256
1/2"		13	TMMT3D-13-UNJ-9.9MMX28X73 SH10 3FL TA	9.9	28	73	10	3	FBV0503257

Defined by: ISO 5855 | Tolerance class: 4h/6h-4H/5H

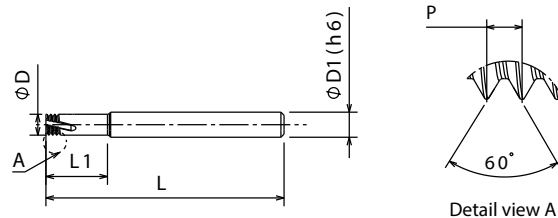
Multi Flute

(MJ) ISO Thread

Internal Threading upto 3D



TM MT 3D ● ✈ MJ IT MJ TiAIN

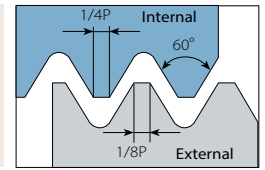


Thread Size	Pitch mm	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
MJ4.0	0.70	TMMT3D-0.7-MJ-3.2MMX13X57 SH6 3FL TA	3.2	12	57	6	3	FBV0503258
MJ5.0	0.80	TMMT3D-0.8-MJ-4MMX15X57 SH6 3FL TA	4	15	57	6	3	FBV0503259
MJ6.0	1.00	TMMT3D-1.0-MJ-4.8MMX18X57 SH6 3FL TA	4.8	18	57	6	3	FBV0503260
MJ8.0	1.25	TMMT3D-1.25-MJ-6.5MMX24X63 SH8 3FL TA	6.5	24	63	8	3	FBV0503261
MJ10.0	1.50	TMMT3D-1.5-MJ-7.9MMX31X63 SH8 3FL TA	7.9	31	63	8	3	FBV0503262
MJ12.0	1.75	TMMT3D-1.75-MJ-9.4MMX31X73 SH10 3FL TA	9.4	31	73	10	3	FBV0503263
MJ14.0, MJ16.0	2.00	TMMT3D-2.0-MJ-9.9MMX36X73 SH10 3FL TA	9.9	36	73	10	3	FBV0503264

3 Flute

ISO metric thread

Internal threading for hard materials upto 2D



TM

MTH
2D

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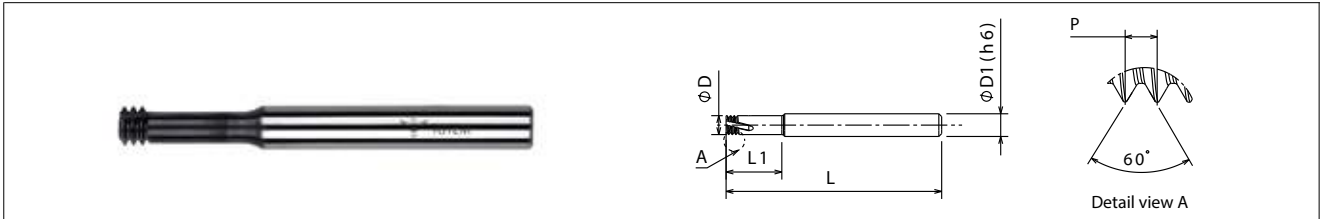
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ISO

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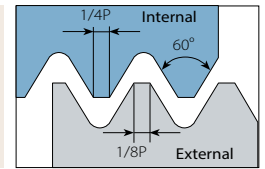


Thread Size	Pitch mm	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
M1.6	0.35	TMMTH2D-0.35-ISO-1.2MMX3.3X57 SH6 3FL TA	1.2	3.3	57	6	3	FBV0503265
M2	0.40	TMMTH2D-0.4-ISO-1.54MMX4.4X57 SH6 3FL TA	1.54	4.4	57	6	3	FBV0503266
M2.2	0.45	TMMTH2D-0.45-ISO-1.63MMX4.8X57 SH6 3FL TA	1.63	4.8	57	6	3	FBV0503267
M2.5	0.45	TMMTH2D-0.45-ISO-1.96MMX5.3X57 SH6 3FL TA	1.96	5.3	57	6	3	FBV0503268
M3	0.50	TMMTH2D-0.5-ISO-2.4MMX6.4X57 SH6 3FL TA	2.4	6.4	57	6	3	FBV0503269
M3.5	0.60	TMMTH2D-0.6-ISO-2.75MMX7.4X57 SH6 3FL TA	2.75	7.4	57	6	3	FBV0503270
M4	0.70	TMMTH2D-0.7-ISO-3.15MMX8.6X57 SH6 3FL TA	3.15	8.6	57	6	3	FBV0503271
M5	0.80	TMMTH2D-0.8-ISO-4MMX12X57 SH6 3FL TA	4	12	57	6	3	FBV0503272
M6	1.00	TMMTH2D-1-ISO-4.75MMX13X57 SH6 3FL TA	4.75	13	57	6	3	FBV0503273
M8	1.25	TMMTH2D-1.25-ISO-5.95MMX17.3X57 SH6 3FL TA	5.95	17.3	57	6	3	FBV0503274
M10	1.50	TMMTH2D-1.5-ISO-7.9MMX22X63 SH8 3FL TA	7.9	22	63	8	3	FBV0503275

Multi Flute

ISO metric thread

Internal threading for hard materials upto 3D



TM

MTH
3D

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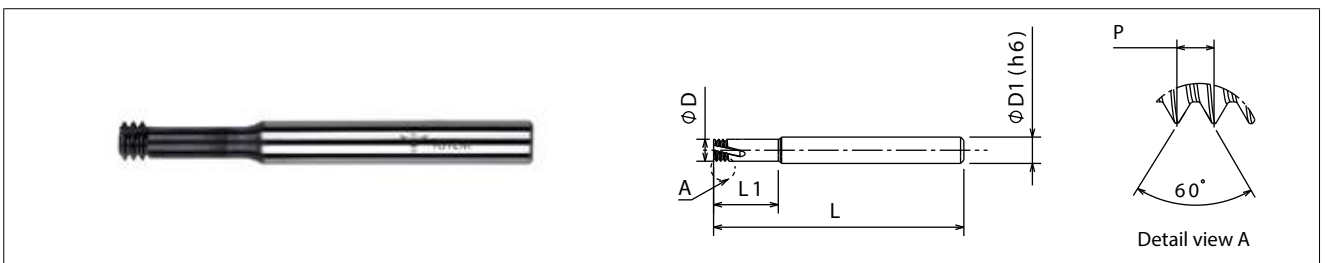
62
HRc

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ISO

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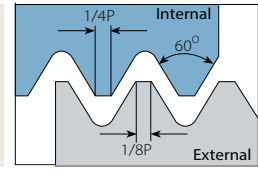


Thread Size	Pitch mm	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
M1.6	0.35	TMMTH3D-0.35-ISO-1.2MMX5.1X57 SH6 3FL TA	1.2	5.1	57	6	3	FBV0503276
M2	0.4	TMMTH3D-0.4-ISO-1.54MMX6.1X57 SH6 3FL TA	1.54	6.1	57	6	3	FBV0503277
M2.2	0.45	TMMTH3D-0.45-ISO-1.96MMX7.6X57 SH6 3FL TA	1.96	7.6	57	6	3	FBV0503278
M3	0.5	TMMTH3D-0.5-ISO-2.4MMX9.3X57 SH6 3FL TA	2.4	9.3	57	6	3	FBV0503279
M4	0.7	TMMTH3D-0.7-ISO-3.15MMX12.4X57 SH6 3FL TA	3.15	12.4	57	6	3	FBV0503280
M5	0.8	TMMTH3D-0.8-ISO-4MMX15.6X57 SH6 3FL TA	4	15.6	57	6	3	FBV0503281
M6	1	TMMTH3D-1-ISO-4.75MMX19X57 SH6 3FL TA	4.75	19	57	6	3	FBV0503282
M8	1.25	TMMTH3D-1.25-ISO-5.95MMX24.3X57 SH6 3FL TA	5.95	24.3	57	6	3	FBV0503283

3 Flute

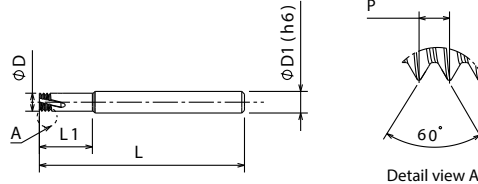
(UN, UNF) unified thread

Internal threading for hard materials upto 2D



TM
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UNIFIED
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THREAD MILL

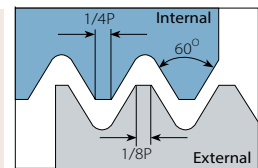


Thread Size		Pitch mm	Description	D mm	L1 mm	L mm	D1 mm	No. of Flutes	EDP No
Coarse	Fine								
1	1	72	TMMTH2D-72-UN-1.44MMX3.8X57 SH6 3FL TA	1.44	3.8	57	6	3	FBV0503284
1	2	64	TMMTH2D-64-UN-1.4MMX3.9X57 SH6 3FL TA	1.4	3.9	57	6	3	FBV0503285
2	3	56	TMMTH2D-56-UN-1.66MMX4.6X57 SH6 3FL TA	1.66	4.6	57	6	3	FBV0503286
3	4	48	TMMTH2D-48-UN-1.88MMX5.4X57 SH6 3FL TA	1.88	5.4	57	6	3	FBV0503287
4		40	TMMTH2D-40-UN-2.12MMX6.2X57 SH6 3FL TA	2.12	6.2	57	6	3	FBV0503288
5	6	40	TMMTH2D-40-UN-2.46MMX7.1X57 SH6 3FL TA	2.46	7.1	57	6	3	FBV0503289
	8	36	TMMTH2D-36-UN-3.31MMX8.8X57 SH6 3FL TA	3.31	8.8	57	6	3	FBV0503290
6		32	TMMTH2D-32-UN-2.57MMX7.8X57 SH6 3FL TA	2.57	7.8	57	6	3	FBV0503291
8	10	32	TMMTH2D-32-UN-3.22MMX10.3X57 SH6 3FL TA	3.22	10.3	57	6	3	FBV0503292
	1/4"	28	TMMTH2D-28-UN-5.2MMX14X57 SH6 3FL TA	5.2	14	57	6	3	FBV0503293
10		24	TMMTH2D-24-UN-3.55MMX10.4X57 SH6 3FL TA	3.55	10.4	57	6	3	FBV0503294
	5/16"	24	TMMTH2D-24-UN-6.65MMX16.7X64 SH8 3FL TA	6.65	16.7	64	8	3	FBV0503295
1/4"	7/16"	20	TMMTH2D-20-UN-4.85MMX13.7X57 SH6 3FL TA	4.85	13.7	57	6	3	FBV0503296
	7/16"	20	TMMTH2D-20-UN-7.95MMX24X64 SH8 3FL TA	7.95	24	64	8	3	FBV0503297
5/16"		18	TMMTH2D-18-UN-5.95MMX16.5X57 SH6 3FL TA	5.95	16.5	57	6	3	FBV0503298
3/8"		16	TMMTH2D-16-UN-6.9MMX20X63 SH8 3FL TA	6.9	20	63	8	3	FBV0503299
7/16"		14	TMMTH2D-14-UN-7.95MMX23.5X63 SH8 3FL TA	7.95	23.5	63	8	3	FBV0503300

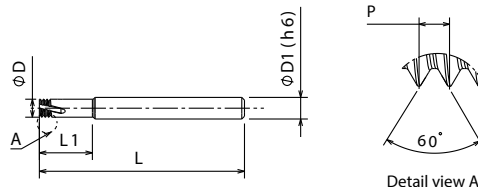
3 Flute

(UN, UNF) Unified Thread

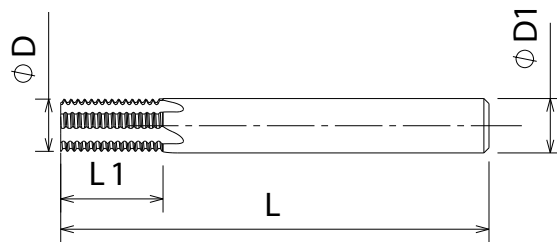
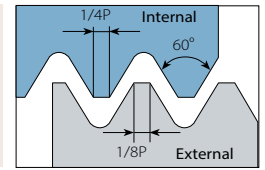
Internal Threading For Hard Materials upto 3D



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MTH 3D
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Thread Size		Pitch mm	Description	D mm	L1 mm	L mm	D1 mm	No. of Flutes	EDP No
Coarse	Fine								
5	1	72	TMMTH3D-72-UN-1.44MMX5.8X57 SH6 3FL TA	1.44	5.8	57	6	3	FBV0503301
5	6	40	TMMTH3D-40-UN-2.46MMX9.8X57 SH6 3FL TA	2.46	9.8	57	6	3	FBV0503302
8	10	32	TMMTH3D-32-UN-3.22MMX12.7X57 SH6 3FL TA	3.22	12.7	57	6	3	FBV0503303
	1/4"	28	TMMTH3D-28-UN-5.2MMX19.3X57 SH6 3FL TA	5.2	19.3	57	6	3	FBV0503304
	5/16"	24	TMMTH3D-24-UN-6.65MMX24.2X63 SH8 3FL TA	6.65	24.2	63	8	3	FBV0503305
1/4"	7/16"	20	TMMTH3D-20-UN-4.85MMX19.4X57 SH6 3FL TA	4.85	19.4	57	6	3	FBV0503306

Multi Flute
ISO metric thread
 Internal threading


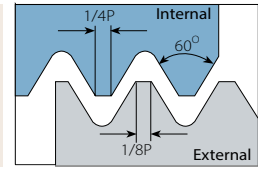
Thread Size		Pitch mm	Description	D mm	L1 mm	L mm	D1 mm	No. of Flutes	EDP No
Coarse	Fine								
	M8	0.75	TMRSS-0.75-ISO-5.9MMX10.8X57 SH6 3FL TA	5.9	10.8	57	6	3	FBV0503307
M5		0.80	TMRSS-0.8-ISO-3.9MMX10X57 SH6 3FL TA	3.9	10	57	6	3	FBV0503308
M6	M7	1.00	TMRSS-1-ISO-4.8MMX11.5X57 SH6 3FL TA	4.8	11.5	57	6	3	FBV0503309
	M10	1.00	TMRSS-1-ISO-7.9MMX17.5X63 SH8 4FL TA	7.9	17.5	63	8	4	FBV0503310
	M12	1.00	TMRSS-1-ISO-9.9MMX20.5X73 SH10 4FL TA	9.9	20.5	73	10	4	FBV0503311
M8	M9	1.25	TMRSS-1.25-ISO-5.9MMX14.4X57 SH6 3FL TA	5.9	14.4	57	6	3	FBV0503312
M10	M11	1.50	TMRSS-1.5-ISO-7.9MMX18.5X63 SH8 3FL TA	7.9	18.5	63	8	3	FBV0503313
	M13	1.50	TMRSS-1.5-ISO-9.9MMX21.8X73 SH10 4FL TA	9.9	21.8	73	10	4	FBV0503314
	M15	1.50	TMRSS-1.5-ISO-11.9MMX26.3X84 SH12 4FL TA	11.9	26.3	84	12	4	FBV0503315
M12		1.75	TMRSS-1.75-ISO-7.9MMX18X64 SH8 3FL TA	7.9	18	64	8	3	FBV0503316
M14		2.00	TMRSS-2-ISO-9.9MMX25X73 SH10 3FL TA	9.9	25	73	10	3	FBV0503317
M16		2.00	TMRSS-2-ISO-11.9MMX27X84 SH12 4FL TA	11.9	27	84	12	4	FBV0503318
M20		2.50	TMRSS-2.5-ISO-11.9MMX30X84 SH12 4FL TA	11.9	30	84	12	4	FBV0503319
M24	M27	3.00	TMRSS-3-ISO-11.5MMX40.5X105 SH16 4FL TA	11.5	40.5	105	16	4	FBV0503320

THREAD MILL

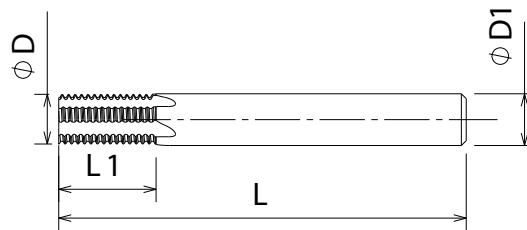


Multi Flute

(UNC, UNF, UNEF) unified thread
Internal threading



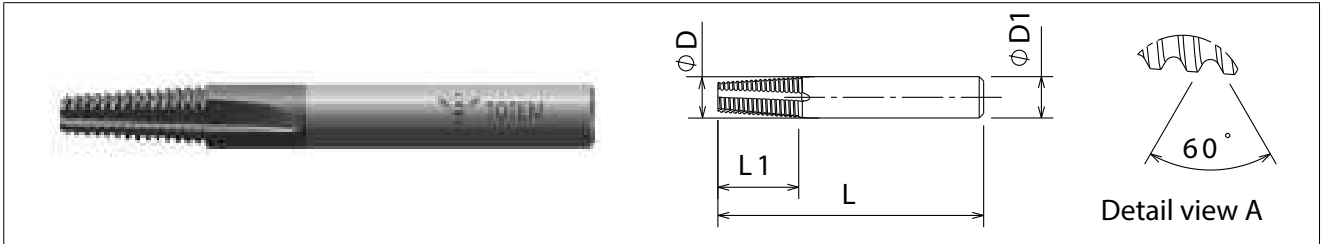
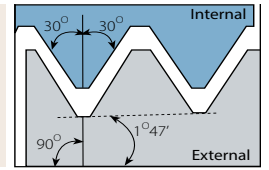
THREAD MILL



Thread Size			Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
Coarse UNC	Fine UNF	Extra Fine UNEF			mm	mm	mm	mm		
		5/16"	32	TMRSS-32-UN-5.9MMX14X57 SH6 3FL TA	5.9	14	57	6	3	FBV0503321
	1/4"		28	TMRSS-28-UN-5.1MMX12.2X57 SH6 3FL TA	5.1	12.2	57	6	3	FBV0503322
		7/16"-1/2"	28	TMRSS-28-UN-7.9MMX15.8X63 SH8 4FL TA	7.9	15.8	63	8	4	FBV0503323
	5/16"		24	TMRSS-24-UN-5.9MMX10.8X57 SH6 3FL TA	5.9	10.8	57	6	3	FBV0503324
1/4"			20	TMRSS-20-UN-4.8MMX12X57 SH6 3FL TA	4.8	12	57	6	3	FBV0503325
	7/16"		20	TMRSS-20-UN-7.9MMX19.7X63 SH8 3FL TA	7.9	19.7	63	8	3	FBV0503326
	1/2"		20	TMRSS-20-UN-9.9MMX17.5X73 SH10 4FL TA	9.9	17.5	73	10	4	FBV0503327
5/16"			18	TMRSS-18-UN-5.7MMX16X57 SH6 3FL TA	5.7	16	57	6	3	FBV0503328
	9/16"-5/8"		18	TMRSS-18-UN-7.9MMX18.5X63 SH8 3FL TA	7.9	18.5	63	8	3	FBV0503329
3/8"			16	TMRSS-16-UN-6.8MMX18.2X63 SH8 3FL TA	6.8	18.2	63	8	3	FBV0503330
	3/4"		16	TMRSS-16-UN-11.9MMX26.2X84 SH12 4FL TA	11.9	26.2	84	12	4	FBV0503331
7/16"			14	TMRSS-14-UN-7.8MMX20.8X63 SH8 3FL TA	7.8	20.8	63	8	3	FBV0503332
	7/8"		14	TMRSS-14-UN-11.9MMX24.5X84 SH12 4FL TA	11.9	24.5	84	12	4	FBV0503333
1/2"			13	TMRSS-13-UN-9.3MMX24.4X73 SH10 3FL TA	9.3	24.4	73	10	3	FBV0503334
9/16"			12	TMRSS-12-UN-10.6MMX26.4X84 SH12 4FL TA	10.6	26.4	84	12	4	FBV0503335
	1"		12	TMRSS-12-UN-15.9MMX39.1X105 SH16 5FL TA	15.9	39.1	105	16	5	FBV0503336
5/8"			11	TMRSS-11-UN-11.5MMX31.1X84 SH12 4FL TA	11.5	31.1	84	12	4	FBV0503337
3/4"			10	TMRSS-10-UN-14.3MMX36.8X105 SH16 4FL TA	14.3	36.8	105	16	4	FBV0503338
7/8"			9	TMRSS-9-UN-15.9MMX40.9X105 SH16 4FL TA	15.9	40.9	105	16	4	FBV0503339
1"			8	TMRSS-8-UN-19.7MMX39.7X105 SH20 4FL TA	19.7	39.7	105	20	4	FBV0503340

Multi Flute

NPT
Internal/external threading

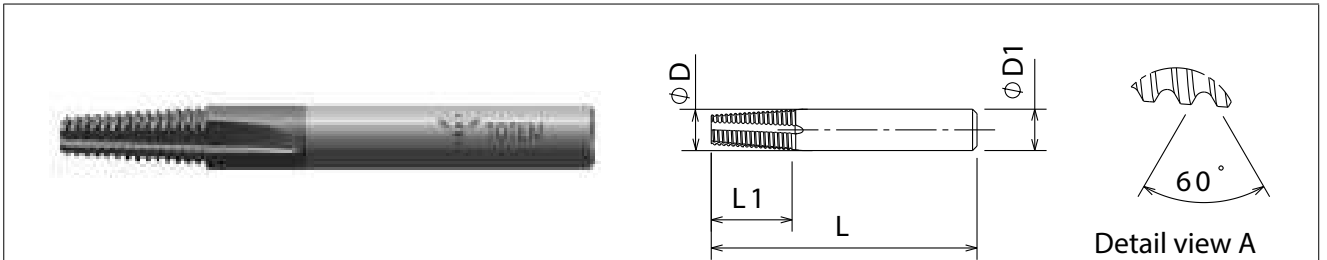
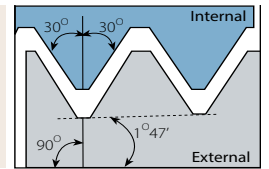


THREAD MILL

Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"-1/8"	27	TMRSTS-27-NPT-5.9MMX9.8X57 SH6 3FL TA	5.9	9.8	57	6	3	FBV0503341
1/4"-3/8"	18	TMRSTS-18-NPT-9.9MMX16.2X73 SH10 4FL TA	9.9	16.2	73	10	4	FBV0503342
1/2"	14	TMRSTS-14-NPT-11.9MMX20.8X83 SH12 4FL TA	11.9	20.8	83	12	4	FBV0503343
1"-2"	11.5	TMRSTS-11.5-NPT-19.9MMX29.7X105 SH20 4FL TA	19.9	29.7	105	20	4	FBV0503344
2 1/2"-6"	8	TMRSTS-8-NPT-19.9MMX38.1X105 SH20 4FL TA	19.9	38.1	105	20	4	FBV0503345

Multi Flute

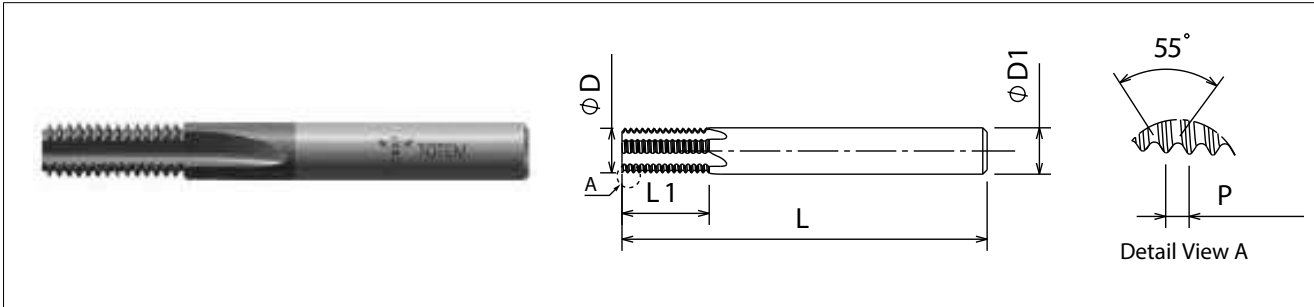
NPTF
Internal/external threading



Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"-1/8"	27	TMRSTS-27-NPTF-5.9MMX9.9X57 SH6 3FL TA	5.9	9.9	57	6	3	FBV0503346
1/4"-3/8"	18	TMRSTS-18-NPTF-9.9MMX16.2X73 SH10 4FL TA	9.9	16.2	73	10	4	FBV0503347
1/2"	14	TMRSTS-14-NPTF-11.9MMX20.8X83 SH12 4FL TA	11.9	20.8	83	12	4	FBV0503348
1"-2"	11.5	TMRSTS-11.5-NPTF-19.9MMX29.7X105SH20 4FTA	19.9	29.7	105	20	4	FBV0503349
2 1/2"-6"	8	TMRSTS-8-NPTF-19.9MMX38.1X105 SH20 4FL TA	19.9	38.1	105	20	4	FBV0503350

Multi Flute
BSP (G)

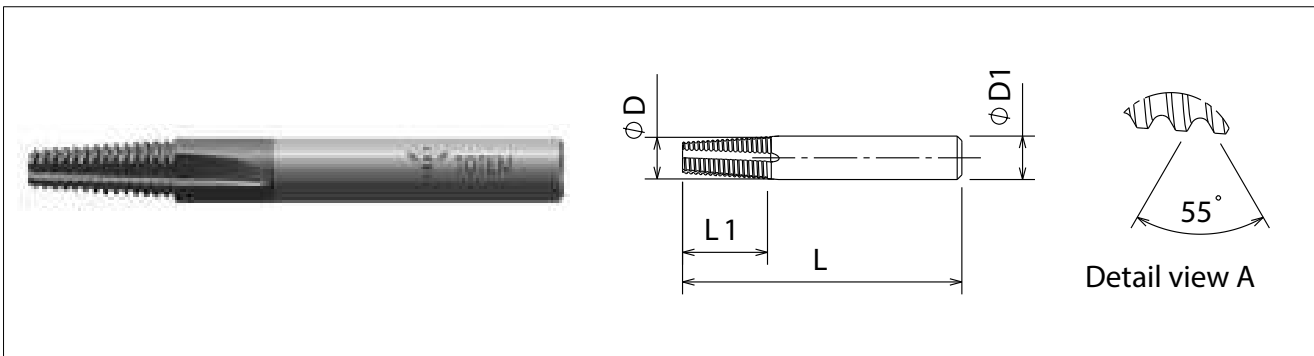
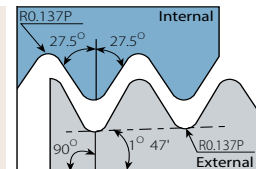
Internal/external threading


THREAD MILL


Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"-1/8"	28	TMRSS-28-BSP-5.9MMX11.3X57 SH6 3FL TA	5.9	11.3	57	6	3	FBV0503351
1/4"-3/8"	19	TMRSS-19-BSP-9.9MMX16.6X73 SH10 4FL TA	9.9	16.6	73	10	4	FBV0503352
1/2"-7/8"	14	TMRSS-14-BSP-11.9MMX22.7X83 SH12 4FL TA	11.9	22.7	83	12	4	FBV0503353
1"-2"	11	TMRSS-11-BSP-15.9MMX32.1X105 SH16 4FL TA	15.9	32.1	105	16	4	FBV0503354

Multi Flute
BSPT (Rc)

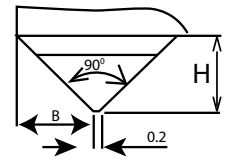
Internal/external threading



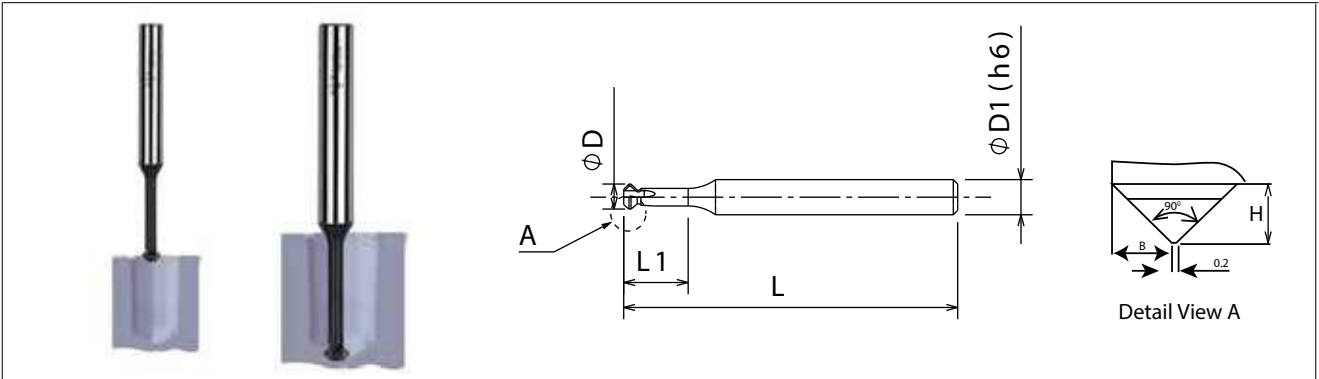
Thread Size	Pitch TPI	Description	D	L1	L	D1	No. of Flutes	EDP No
			mm	mm	mm	mm		
1/16"-1/8"	28	TMRSTS-28-BSPT-5.9MMX11.3X57 SH6 3FL TA	5.9	11.3	57	6	3	FBV0503355
1/4"-3/8"	19	TMRSTS-19-BSPT-9.9MMX16.6X73 SH10 4FL TA	9.9	16.6	73	10	4	FBV0503356
1/2"-7/8"	14	TMRSTS-14-BSPT-11.9MMX22.7X83 SH12 4FL TA	11.9	22.7	83	12	4	FBV0503357
1"-2"	11	TMRSTS-11-BSPT-15.9MMX32.1X105 SH16 4FL TA	15.9	32.1	105	16	4	FBV0503358

3 Flute

Chamfer tools Internal chamfering- short



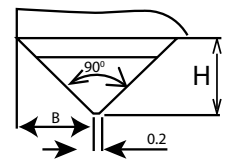
CT A90S SHORT IC IT TiAIN



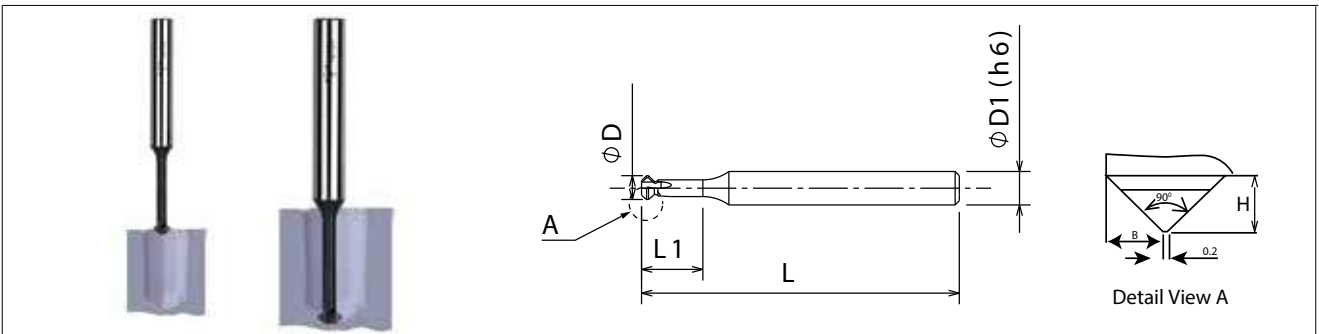
Description	D	L1	L	D1	H	B	Angle	No. Of Flutes	EDP No
	mm	mm	mm	mm	mm	mm	a		
CT-A90S-1.5MMX4X39 SH3 3FL TA	1.50	4	39	3	0.3	0.4	90	3	FBV0503359
CT-A90S-2MMX5X39 SH3 3FL TA	2.00	5	39	3	0.4	0.5	90	3	FBV0503360
CT-A90S-2.5MMX6X39 SH3 3FL TA	2.50	6	39	3	0.5	0.6	90	3	FBV0503361
CT-A90S-3.1MMX8X51 SH4 3FL TA	3.10	8	51	4	0.6	0.6	90	3	FBV0503362
CT-A90S-3.9MMX10X51 SH4 3FL TA	3.90	10	51	4	0.8	0.9	90	3	FBV0503363
CT-A90S-4.5MMX11X58 SH6 3FL TA	4.50	11	58	6	1.1	1.2	90	3	FBV0503364
CT-A90S-4.9MMX12X58 SH6 3FL TA	4.90	12	58	6	1.1	1.2	90	3	FBV0503365
CT-A90S-5.9MMX14X58 SH6 3FL TA	5.90	14	58	6	1.5	1.6	90	3	FBV0503366
CT-A90S-7.9MMX20X64 SH6 3FL TA	7.90	20	64	8	1.6	1.7	90	3	FBV0503367

3 Flute

Chamfer tools Internal chamfering- long



CT A90L LONG IC IT TiAIN



Description	D	L1	L	D1	H	B	Angle	No. Of Flutes	EDP No
	mm	mm	mm	mm	mm	mm	a		
CT-A90L-3.1MMX12X51 SH4 3FL TA	3.1	12	51	4	0.6	0.6	90	3	FBV0503368
CT-A90L-3.9MMX16X51 SH4 3FL TA	3.9	16	51	4	0.8	0.9	90	3	FBV0503369
CT-A90L-4.9MMX20X58 SH6 3FL TA	4.9	20	58	6	1.1	1.2	90	3	FBV0503370
CT-A90L-5.9MMX24X58 SH4 3FL TA	5.9	24	58	6	1.5	1.6	90	3	FBV0503371
CT-A90L-7.9MMX30X64 SH8 3FL TA	7.9	30	64	8	1.6	1.7	90	3	FBV0503372

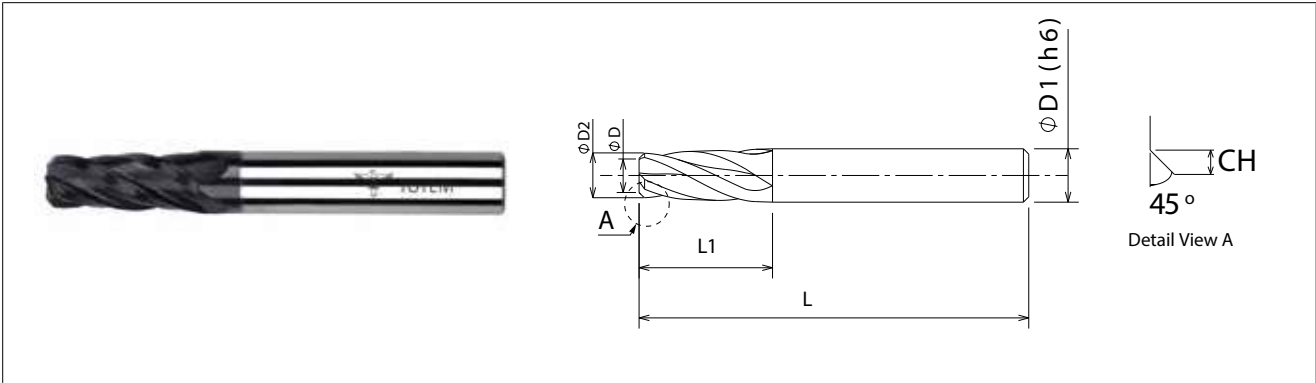


4 Flute

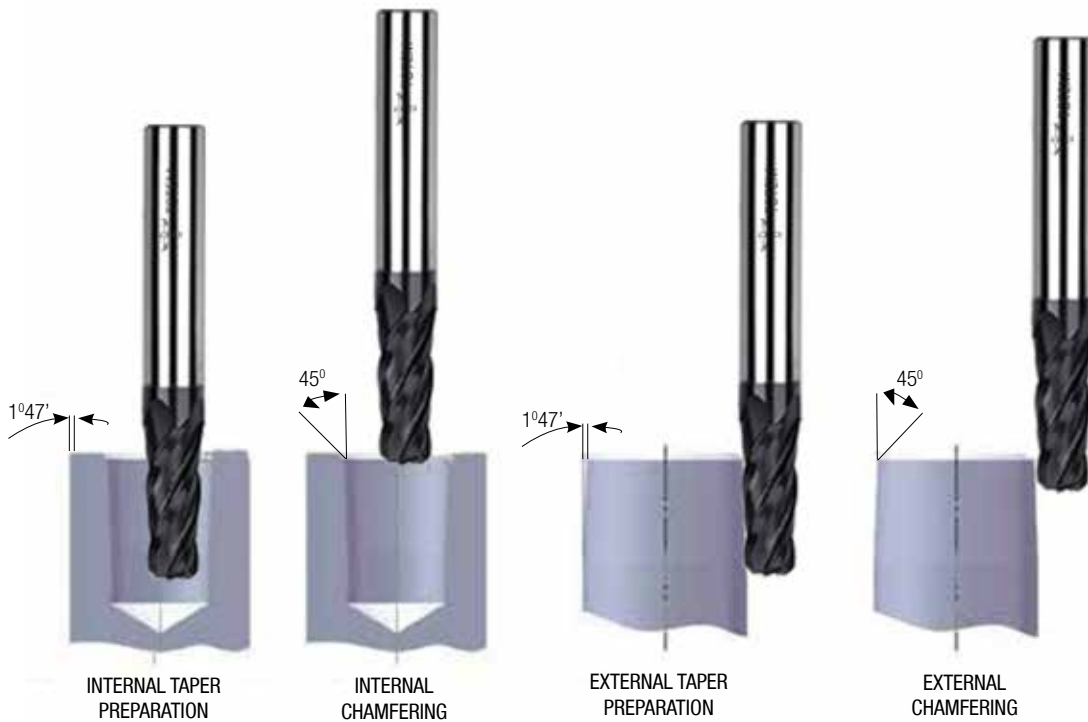
Taper end mills for conic preparation for taper threads (NPT, NPTF, BSPT) 45 degree chamfer preparation tool
Internal chamfering- short

TP IC EC ICP ECP TiAlN

THREAD MILL



Description	D	L1	L	D1	D2	TPR Angle	CH	No. of Flutes	EDP No
	mm	mm	mm	mm	mm	a	mm		
EM 3.00MMX15X58 SH6 CH1 TPR1.47 4FL TA	3	15	58	6	5	1.47	1	4	FBV0503373
EM 5.60MMX25X73 SH10 CH1.4 TPR1.47 4F TA	5.6	25	73	10	8.4	1.47	1.4	4	FBV0503374
EM 6.30MMX33X84 SH12 CH1.8 TPR1.47 4FTA	6.3	33	84	12	9.9	1.47	1.8	4	FBV0503375





Technical Details

CARBIDE GRADE : K40UF

AN ADVANCED PVD TiAlN COATED GRADE OVER A TOUGH WEAR-RESISTANT SUBMICRON

SUBSTRATE FOR GENERAL PURPOSE MACHINING OF STEEL, STAINLESS STEEL, SUPERALLOYS.

Workpiece Material Group		Hardness HB	Cutting Speed m/min (Vc)	Feed (fz) mm/tooth Cutting Diameters							
				1.5-3	3-5	5-7	7-9	9-11	11-14	14-20	
Steel	P	1	130	70-130	0.03	0.04	0.06	0.07	0.09	0.09	0.12
		2	200	60-120	0.02	0.04	0.05	0.06	0.08	0.08	0.1
		3	240	60-110	0.02	0.03	0.04	0.05	0.05	0.05	0.08
		4	270	60-100	0.02	0.03	0.04	0.05	0.05	0.05	0.06
		5	400	50-80	0.01	0.02	0.03	0.03	0.04	0.04	0.05
Stainless Steel	M	1	200	70-100	0.02	0.02	0.03	0.04	0.05	0.05	0.07
		2	240	70-90	0.02	0.02	0.03	0.04	0.04	0.04	0.06
		3	400	60-80	0.015	0.02	0.02	0.03	0.03	0.03	0.04
Cast Iron K	K	1	190	60-110	0.02	0.03	0.06	0.07	0.08	0.09	0.11
		2	180	60-90	0.02	0.03	0.05	0.06	0.08	0.09	0.12
		3	240	60-90	0.02	0.02	0.03	0.05	0.07	0.08	0.11
Non Ferrous	N	1	80	80-300	0.03	0.04	0.06	0.07	0.10	0.13	0.15
		2	90	100-300	0.03	0.04	0.06	0.07	0.11	0.13	0.16
		3	100	60-250	0.03	0.04	0.06	0.07	0.11	0.13	0.16
		4		100-400	0.05	0.06	0.08	0.09	0.13	0.15	0.18
Super Alloys	N	1	270	25-50	0.01	0.01	0.01	0.02	0.02	0.03	0.03
		2	350	20-40	0.01	0.01	0.01	0.02	0.02	0.03	0.03
		3	300	20-40	0.01	0.01	0.01	0.02	0.02	0.03	0.03
		4		40-80 30-60 20-50 20-50	0.02 0.02 0.02 0.02	0.02 0.02 0.02 0.02	0.02 0.02 0.02 0.02	0.03 0.03 0.03 0.02	0.04 0.03 0.03 0.03	0.04 0.04 0.03 0.03	0.05 0.05 0.04 0.04
Hardened Steel	H	2	50 HRc	25-40	0.01	0.01	0.02	0.02	0.02	0.03	0.03
		3	56 HRc	25-50	0.01	0.01	0.02	0.02	0.02	0.03	0.03

THREAD MILL

Troubleshooting

THREAD MILL

PROBLEM	CAUSE	SOLUTION
Chipping in cutting edges	Unstable conditions	Check tool and workpiece clamping and stability
	Feed rate too high	Decrease feed per tooth
	Depth of cut large	Increase the number of thread milling passes
Excessive wear	Incorrect cutting speed	Decrease cutting speed
	Incorrect feed per tooth	Increase feed per tooth
	Insufficient coolant	Check stability increase the coolant flow change to climb milling
Vibrations	Cutting speed too high	Change cutting speed
Vibrations	Incorrect tool and workpiece installation	Check stability of workpiece
Vibrations	Large depth of cut stability: tool/machine, workpiece/workpiece clamping	Change to number of passes
Vibrations	Concentricity	Make sure tool overhang in the holding device as short as possible
Bad surface finish on workpiece		Increase cutting speed decrease feed per tooth check stability and overhang of tools
Small difference between gauges (go/no go)	Ratio too close (tool cutting diameter / thread diameter)	Choose tool with smaller cutting diameter

Tips:



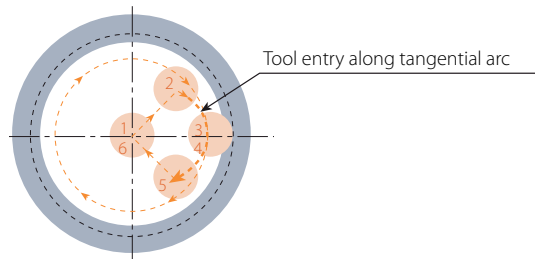
*** Recommendation:**

At tool entry, set the Feed f [mm/tooth] to 70% lower than the threading Feed.

Example:

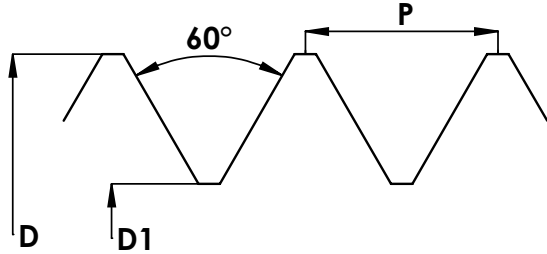
Threading Feed: 0.3[mm/tooth]

Tool entry Feed: 0.09[mm/tooth]

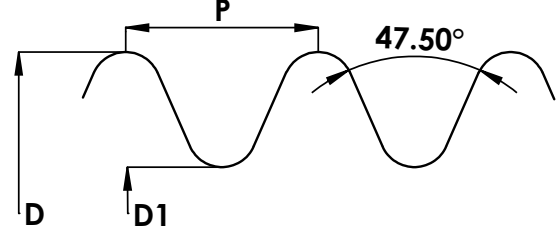


Thread forms

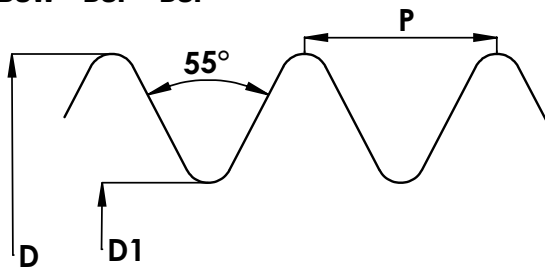
Metric ISO - UNC - UNF



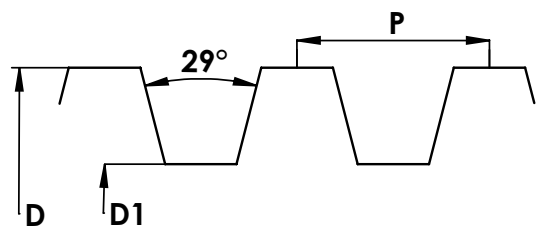
B.A



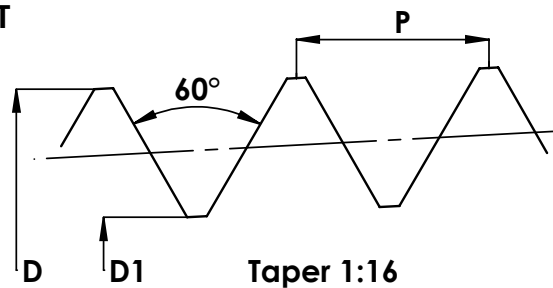
BSW - BSF - BSP



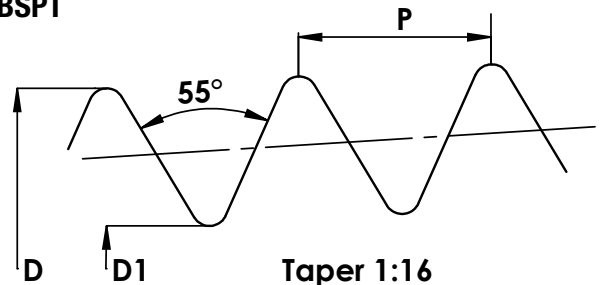
ACME



NPT



BSPT



ACME : Acme Thread
 BA : British Association Standard Thread
 BSF : British Standard Fine Thread Series
 BSP : British Standard Pipe
 BSPT : British Standard Taper Pipe Thread
 BSW : British Standard Whitworth Coarse Thread Series
 M : Metric Screw Thread Series
 NGT : National Gas Taper Thread (See "SGT")
 NPS : for Tap marking only (See NPSC, NPSM)
 NPSF : Dryseal American National Standard Fuel Internal Straight Pipe Thread
 NPSI : Dryseal American National Standard Intermediate Internal Straight Pipe Thread

NPT : American National Standard Taper Pipe Thread
 NPTF : Dryseal American National Standard Taper Pipe Thread
 PG : Panzer Gewinder
 STI : Special Thread for Helial Coil Wire Screw Thread Inserts
 UN : Unified Constant Pitch Thread Series
 UNC : Unified Coarse Thread Series
 UNEF : Unified Extra Fine Thread Series
 UNF : Unified Fine Thread Series
 UNS : Unified Thread-Special
 WW : British Standard Whitworth Special Thread

Advantages of thread milling

« Thread milling is a secure machining operation with less chances of part damage and breakage of the tool

« Threading in difficult to machine materials and hard materials is easy

« Higher thread quality

The cutting conditions are extremely good when you are thread milling. The result of the thread is a higher quality of surface finish, tolerance, angle, etc. Compared with other threading methods.

« Flexible tool

Same cutter can be used for right hand and left hand thread. Threads with different diameters can be made with the same tool as long as the pitch is the same. The same thread mill can be used for blind holes and through holes.

« Threading in blind holes

When thread milling you will get a complete thread profile to the bottom of the hole. When tapping it's necessary to drill much deeper as it's not until the third thread the tap will make a complete thread profile.

« Less wear on the machine spindle

Thread milling will give you longer life to the machine spindle compared with tapping as the rotation on the spindle doesn't need to be stopped and reversed for every thread.

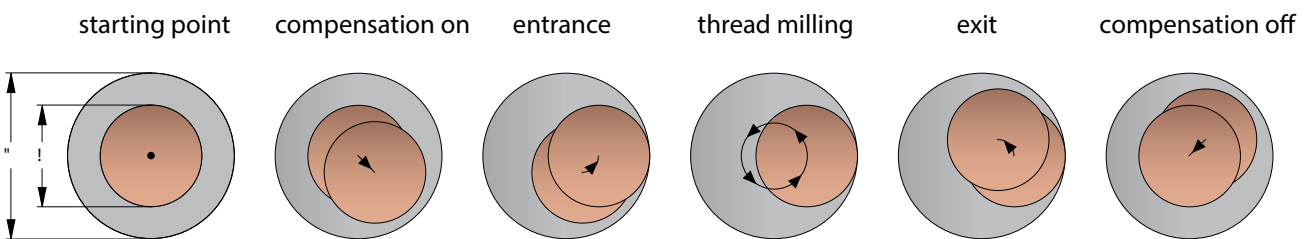
« Energy-saving production

Low energy consumption as the machine spindle doesn't need to be stopped and started after each thread.

« Thread Milling in a lathe with live tools

Reduced machining time compared with thread turning. Excellent chip control.

Threadmill movement during the interpolation cycle



Infeed method

TANGENTIAL APPROACH

Thread milling cutter strategy of Machining and how to enter and exit the work piece. The Tangential arc approach is considered as the best method.

With this method, the tool enters and exits the work piece smoothly. No marks are left on the work piece and there is no vibration, even with harder materials.

Although it requires slightly more complex programming than the radial approach (see below), this is the method recommended for machining the highest quality threads.

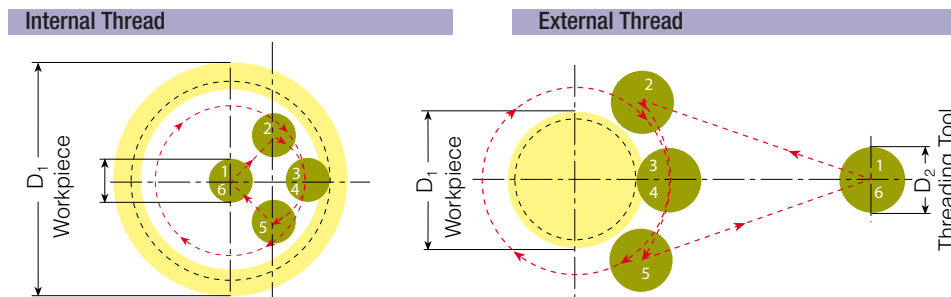
1-2: Rapid approach

2-3: Tool entry along tangential arc, with simultaneous feed along z-axis (@ 30% of the programming Feed)

3-4: Helical movement during one full orbit (360 degrees in cut at full programmed Feed)

4-5: Tool exit along tangential arc, with continuing feed along z-axis

5-6: Rapid return



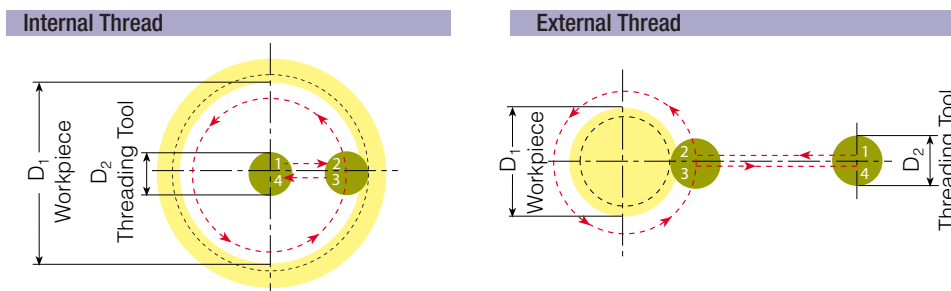
RADIAL APPROACH

This is the simplest method.

There are two characteristics worth noting about the radial approach:

- a small vertical mark may be left at the entry (and exit) point. This is of no significance to the thread itself.
- when using this method with very hard materials, the tool may have a tendency to vibrate as it approaches the full cutting depth.

Note: Radial feed during entry to the full profile depth should only be 1/3 of the subsequent circular feed.



1-2: Radial entry

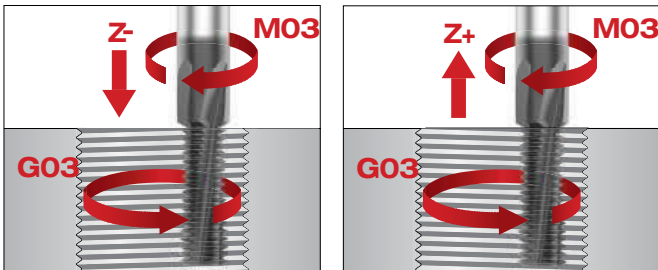
2-3: Helical movement during one full orbit (360 degrees in cut at full programmed Feed)

3-4: Radial exit

Thread milling methods

INTERNAL THREADING

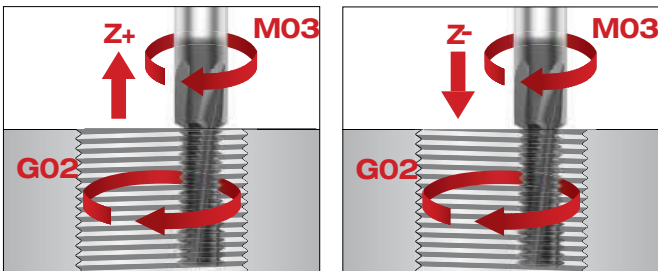
Climb Milling



Internal left hand thread

Internal right hand thread

Conventional Milling

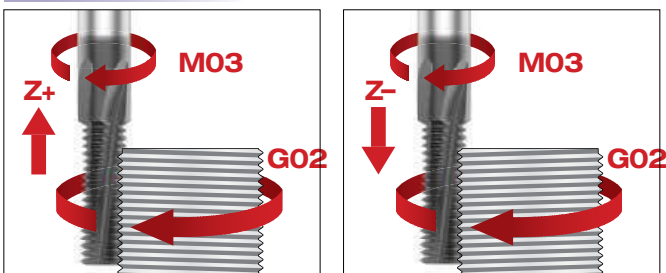


Internal left hand thread

Internal right hand thread

EXTERNAL THREADING

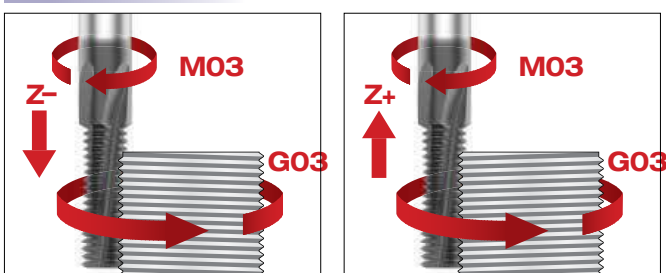
Climb Milling



External left hand thread

External right hand thread

Conventional Milling



External left hand thread

External right hand thread

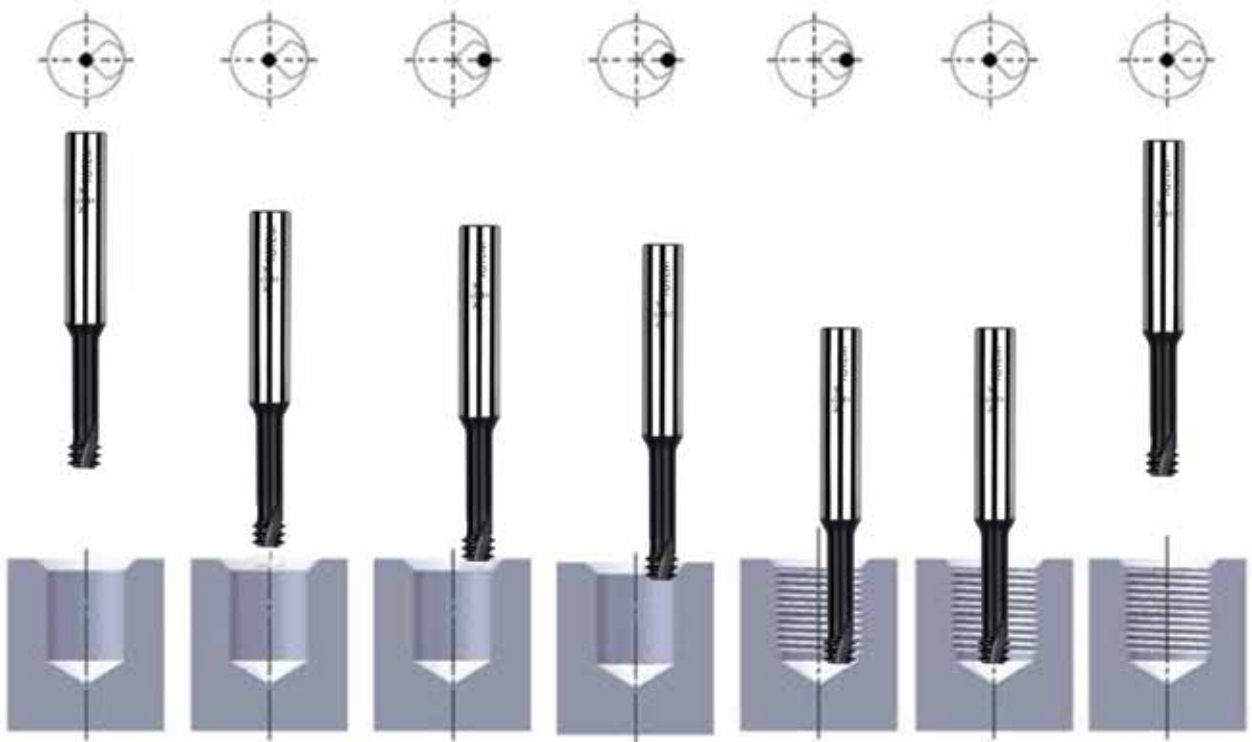
G CODES

G00	Send to position with rapid feed
G01	Send to position with linear movement and control by feed
G02	Clockwise circular interpolation
G03	Counter-clockwise circular interpolation
G40	Cutter compensation cancel
G41	Turn on left hand cutter compensation
G42	Turn on right hand cutter compensation
G54-59	Available workpiece coordinate settings
G90	Absolute positioning
G91	Incremental positioning

M CODES

M00	Program stop
M01	Program optional stop
M03	Turn on spindle clockwise direction
M04	Turn on spindle counter-clockwise direction
M05	Turn off spindle rotation
M06	Tool change
M08	Coolant on
M09	Coolant off
M30	Program end and reset to start of program

Threadmill cycle for MT2D/MT3D/MT4D



THREAD MILL

THREADMILL CYCLE FOR RHTS/RHTC/RHS/RHC/RSS/RSTS

