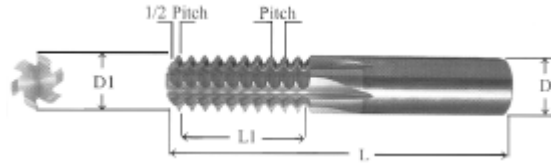


THREADMILLS

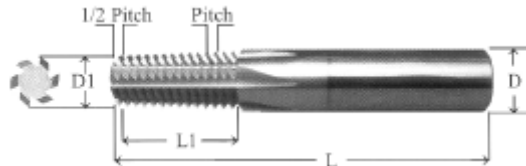
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SOLID CARBIDE THREADMILLS UN INTERNAL THREADS STANDARD



Min. Size	Tool Description	Pitch	No. Of Flutes	D	D1	L	L1	Grade K20C		Grade K27C	
								Part Number	Price Each	Part Number	Price Each
# 8-32	TMN1/8x.120-32UN	32	3	0.125	0.12	1.5	0.25	XF-70107	\$108.00	XF-78107	\$108.00
3/8"-24	TMN1/4x.240-24UN	24	5	0.25	0.24	2.25	0.5833	XF-70135	\$160.20	XF-78135	\$160.20
1/4"-20	TMN3/16x.160-20UN	20	3	0.187	0.16	1.65	0.4	XF-70113	\$113.40	XF-78113	\$113.40
7/16"-20	TMN5/16x.310-20UN	20	5	0.312	0.31	2.48	0.75	XF-70114	\$201.60	XF-78114	\$201.60
5/16"-18	TMN1/4x.200-18UN	18	3	0.25	0.2	2.25	0.5	XF-70116	\$160.20	XF-78116	\$160.20
9/16"-18	TMN3/8x.370-18UN	18	5	0.375	0.37	2.84	0.9444	XF-70117	\$265.50	XF-78117	\$265.50
3/8"-16	TMN1/4x.240-16UN	16	5	0.25	0.24	2.25	0.5625	XF-70118	\$160.20	XF-78118	\$160.20
1/2"-13	TMN5/16x.310-13UN	13	5	0.312	0.31	2.48	0.7693	XF-70122	\$201.60	XF-78122	\$201.60
5/8"-11	TMN1/2x.437-11UN	11	5	0.5	0.437	3.27	1.0901	XF-70126	\$306.00	XF-78126	\$306.00
3/4"-10	TMN1/2x.470-10UN	10	5	0.5	0.47	3.27	1.1	XF-70127	\$306.00	XF-78127	\$306.00
7/8"-9	TMN5/8x.620-9UN	9	6	0.625	0.62	3.62	1.3333	XF-70128	\$424.80	XF-78128	\$424.80
1"-8	TMN5/8x.620-8UN	8	6	0.625	0.62	3.62	1.5	XF-70129	\$424.80	XF-78129	\$424.80

SOLID CARBIDE THREADMILLS NPT (NATIONAL PIPE THREADS) INTERNAL & EXTERNAL

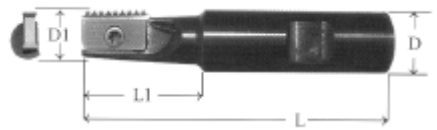


Thread Sizes	Tool Description	Pitch	No. Of Flutes	D	D1	L	L1	Grade K20C		Grade K27C	
								Part Number	Price Each	Part Number	Price Each
1/16" & 1/8" NPT	TMX1/4x.240-27NPT	27	5	0.25	0.24	2.25	0.3703	XF-70300	\$160.20	XF-78300	\$160.20
1/4" & 3/8" NPT	TMX5/16x.310-18NPT	18	5	0.312	0.31	2.48	0.5556	XF-70301	\$201.60	XF-78301	\$201.60
1/2" & 3/4" NPT	TMX1/2x.470-14NPT	14	5	0.5	0.47	3.27	0.7857	XF-70302	\$306.00	XF-78302	\$306.00
1" thru 2" NPT	TMX5/8x.620-11.5NPT	11.5	6	0.625	0.62	3.62	1.0434	XF-70303	\$424.80	XF-78303	\$424.80

THREADMILL INSERT HOLDERS



Standard Straight Neck Style
(For parallel thread applications)



Tapered Neck "T" Style
(For tapered pipe thread applications)

Single Flute Threadmill Insert Holders

Tool Description	D	D1	L	L1	No. Of Flutes	Screw	Use Insert Series	Part Number	Price Each
TMX0075-45-14T*	0.75	0.45	3.39	1	1	T7 x M2.5	14	XF-72120	\$168.00
TMX0075-50-14*	0.75	0.5	3.00	0.8	1	T7 x M2.5	14	XF-72100	\$168.00
TMX0075-50-14HM*	0.75	0.5	3.35	1	1	T7 x M2.5	14	XF-72101	\$330.00
TMX0075-54-14*	0.75	0.54	3.39	0.88	1	T7 x M2.5	14	XF-72123	\$168.00
TMX0075-54-14T*	0.75	0.54	3.39	1.25	1	T7 x M2.5	14	XF-72121	\$168.00
TMX0075-57-14*	0.75	0.57	3.39	1	1	T7 x M2.5	14	XF-72124	\$168.00
TMX0075-67-14*	0.75	0.67	3.39	1.18	1	T7 x M2.5	14	XF-72102	\$168.00
TMX0075-70-21T*	0.75	0.7	3.75	1.375	1	T20 x M4	21	XF-72122	\$187.00
TMX0075-75-21**	0.75	0.75	3.75	1.575	1	T20 x M4	21	XF-72104	\$187.00
TMX0075-88-21	0.75	0.88	3.75	1.575	1	T20 x M4	21	XF-72115	\$187.00
TMX0100-114-30	1	1.14	4.37	1.968	1	T20 x M5	30	XF-72107	\$205.00
TMX0150-173-40	1.5	1.73	6.00	3.07	1	T20 x M5	40	XF-72112	\$260.00

1) For 3/8" - 18 NPT 2) For 1/2" - 14 NPT 3) For 3/4" - 14 NPT. For larger NPT threads, use straight neck styles.

* These tool styles do not have through hole coolant. ** Tool not recommended for 1" - 8 UN internal thread application.

Two Flute Threadmill Insert Holders

Tool Description	D	D1	L	L1	No. Of Flutes	Screw	Use Insert Series	Part Number	Price Each
TMX0075-79-2-14	0.75	0.79	3.75	1.63	2	T7 x M2.5	14	XF-72103	\$340.00
TMX0100-118-2-21	1	1.18	4.25	2	2	T20 x M4	21	XF-72106	\$350.00
TMX0125-158-2-30	1.25	1.58	5.12	2.85	2	T20 x M5	30	XF-72109	\$360.00
TMX0150-197-2-40	1.5	1.97	6	3.25	2	T20 x M5	40	XF-72113	\$390.00



Two Flute Style

Call Us Or Visit Our Website For Our Complete Selection!

2005-06 Product Catalog

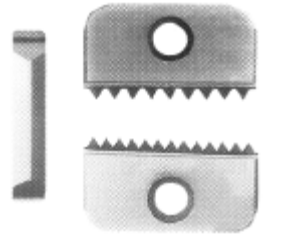
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THREADMILL INSERTS

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CARBIDE INSERTS FOR THREADMILL HOLDERS

Internal and External UN Threads



Insert Series	TPI	Dec. Ptch	EXTERNAL UN INSERTS				INTERNAL UN INSERTS			
			EXTERNAL UN Insert Description	Grade K20C Part Number	Grade K27C Part Number	Price Each	INTERNAL UN Insert Description	Grade K20C Part Number	Grade K27C Part Number	Price Each
14	48	0.0208	14ETM-48UN	XF-74200	XF-76200	\$33.00	14NTM-48UN	XF-74100	XF-76100	\$35.00
	40	0.025	14ETM-40UN	XF-74201	XF-76201	\$33.00	14NTM-40UN	XF-74101	XF-76101	\$25.00
	32	0.0313	14ETM-32UN	XF-74202	XF-76202	\$33.00	14NTM-32UN	XF-74102	XF-76102	\$25.00
	28	0.0357	14ETM-28UN	XF-74203	XF-76203	\$33.00	14NTM-28UN	XF-74103	XF-76103	\$25.00
	27	0.037	14ETM-27UN	XF-74204	XF-76204	\$33.00	14NTM-27UN	XF-74104	XF-76104	\$25.00
	24	0.0417	14ETM-24UN	XF-74205	XF-76205	\$33.00	14NTM-24UN	XF-74105	XF-76105	\$25.00
	20	0.050	14ETM-20UN	XF-74206	XF-76206	\$33.00	14NTM-20UN	XF-74106	XF-76106	\$25.00
	18	0.0556	14ETM-18UN	XF-74208	XF-76208	\$33.00	14NTM-18UN	XF-74107	XF-76107	\$25.00
	16	0.0625	14ETM-16UN	XF-74210	XF-76210	\$33.00	14NTM-16UN	XF-74108	XF-76108	\$25.00
	14	0.0714	14ETM-14UN	XF-74212	XF-76212	\$33.00	14NTM-14UN	XF-74109	XF-76109	\$25.00
12	0.0833	14ETM-12UN	XF-74214	XF-76214	\$33.00	14NTM-12UN	XF-74110	XF-76110	\$25.00	
21	32	0.0313	-	-	-	-	21NTM-32UN	XF-74112	XF-76112	\$43.00
	20	0.050	21ETM-20UN	XF-74217	XF-76217	\$57.00	21NTM-20UN	XF-74113	XF-76113	\$43.00
	18	0.0556	21ETM-18UN	XF-74219	XF-76219	\$57.00	21NTM-18UN	XF-74114	XF-76114	\$43.00
	16	0.0625	21ETM-16UN	XF-74221	XF-76221	\$57.00	21NTM-16UN	XF-74115	XF-76115	\$43.00
	14	0.0714	21ETM-14UN	XF-74223	XF-76223	\$57.00	21NTM-14UN	XF-74116	XF-76116	\$43.00
	12	0.0833	21ETM-12UN	XF-74225	XF-76225	\$57.00	21NTM-12UN	XF-74117	XF-76117	\$43.00
	10	0.100	21ETM-10UN	XF-74227	XF-76227	\$57.00	21NTM-10UN	XF-74118	XF-76118	\$43.00
	9	0.1111	21ETM-9UN	XF-74229	XF-76229	\$57.00	-	-	-	-
8	0.125	21ETM-8UN-S*	XF-74230	XF-76230	\$57.00	21NTM-8UN-S*	XF-74119	XF-76119	\$43.00	
30	18	0.0556	30ETM-18UN	XF-74232	XF-76232	\$85.00	30NTM-18UN	XF-74120	XF-76120	\$64.00
	16	0.0625	30ETM-16UN	XF-74234	XF-76234	\$85.00	30NTM-16UN	XF-74121	XF-76121	\$64.00
	14	0.0714	30ETM-14UN	XF-74236	XF-76236	\$85.00	30NTM-14UN	XF-74122	XF-76122	\$64.00
	12	0.0833	30ETM-12UN	XF-74238	XF-76238	\$85.00	30NTM-12UN	XF-74123	XF-76123	\$64.00
	10	0.1	30ETM-10UN	XF-74240	XF-76240	\$85.00	30NTM-10UN	XF-74124	XF-76124	\$64.00
	8	0.125	30ETM-8UN	XF-74242	XF-76242	\$85.00	30NTM-8UN	XF-74125	XF-76125	\$64.00
	7	0.1429	30ETM-7UN	XF-74244	XF-76244	\$85.00	30NTM-7UN	XF-74126	XF-76126	\$64.00
	6	0.1667	30ETM-6UN-S*	XF-74245	XF-76245	\$85.00	30NTM-6UN-S*	XF-74127	XF-76127	\$64.00
5	0.2	30ETM-5UN-S*	XF-74246	XF-76246	\$85.00	30NTM-5UN-S*	XF-74128	XF-76128	\$64.00	
40	18	0.0556	40ETM-18UN	XF-74247	XF-76247	\$122.00	40NTM-18UN	XF-74129	XF-76129	\$105.00
	16	0.0625	40ETM-16UN	XF-74248	XF-76248	\$122.00	40NTM-16UN	XF-74130	XF-76130	\$105.00
	14	0.0714	40ETM-14UN	XF-74249	XF-76249	\$122.00	-	-	-	-
	12	0.0833	40ETM-12UN	XF-74250	XF-76250	\$122.00	40NTM-12UN	XF-74131	XF-76131	\$105.00
	10	0.1	40ETM-10UN	XF-74251	XF-76251	\$122.00	40NTM-10UN	XF-74132	XF-76132	\$105.00
	8	0.125	40ETM-8UN	XF-74252	XF-76252	\$122.00	40NTM-8UN	XF-74133	XF-76133	\$105.00
	7	0.1429	40ETM-7UN	XF-74253	XF-76253	\$122.00	40NTM-7UN	XF-74134	XF-76134	\$105.00
	6	0.1667	40ETM-6UN	XF-74254	XF-76254	\$122.00	40NTM-6UN	XF-74135	XF-76135	\$105.00
	5	0.2	40ETM-5UN	XF-74255	XF-76255	\$122.00	40NTM-5UN	XF-74136	XF-76136	\$105.00
	4.5	0.2222	40ETM-4.5UN	XF-74256	XF-76256	\$122.00	40NTM-4.5UN	XF-74137	XF-76137	\$105.00
4	0.25	40ETM-4UN-S*	XF-74257	XF-76257	\$122.00	40NTM-4UN-S*	XF-74138	XF-76138	\$105.00	
3	0.3333	40ETM-3UN-S*	XF-74258	XF-76258	\$122.00	40NTM-3UN-S*	XF-74139	XF-76139	\$105.00	

GRADE INFORMATION

Grade	Description
K20C	Utilizes an ISO K20 carbide base grade but has the added benefit of a PVD TiN (Titanium Nitride) coating. K20C is the standard stocked grade and satisfies the greatest range of material applications. K20C should be the first choice for most applications.
K27C	TiAlN (Titanium Aluminum Nitride), PVD coated grade recommended for difficult to machine alloys having work-hardening or abrasive wear characteristics. K27C could improve wear life in materials such as stainless steels, nickel alloys, most cast irons as well as graphite resin composites.

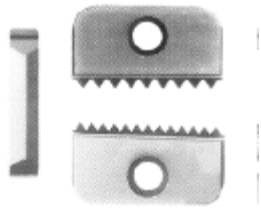
Call Us Today For All Of Your Machine Tool Needs!

THREADMILLS

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INSERTS FOR THREADMILL HOLDERS

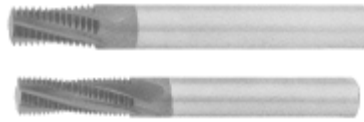
Internal or External NPT
(National Pipe Taper)



Inserts for NPT- Internal or External

Insert Series	Insert Description	TPI	Dec. Pitch	NPT Size	Max LOC**	Recommended Tool Holder	Grade K20C		Grade K27C	
							Part Number	Price Each	Part Number	Price Each
14 mm Inserts										
14	14XTM-18NPT-SXP*	18	0.0556	3/8" - 18 NPT	0.4626	TMX 0075 - 45 - 14T	XF-74360	\$25.00	XF-76360	\$25.00
	14XTM-14NPT-SXP*	14	0.0714	1/2" - 14 NPT	0.5	TMX 0075 - 54 - 14T	XF-74361	\$25.00	XF-76361	\$25.00
21mm Inserts										
21	21XTM-18NPT-S*	18	0.0556	External use only	0.7778	TMX 0075 - 70 - 21T	XF-74302	\$43.00	XF-76302	\$43.00
	21XTM-14NPT-SXP*	14	0.0714	3/4" - 14 NPT	0.7857	TMX 0075 - 70 - 21T	XF-74362	\$43.00	XF-76362	\$43.00
	21XTM-11.5NPT-S*	11.5	0.087	1" thru 2" -11.5 NPT	0.7826	TMX 0075 - 88 - 21	XF-74304	\$43.00	XF-76304	\$43.00
30mm Inserts										
30	30XTM-11.5NPT-S*	11.5	0.087	1 -1/4" - 2" -11.5 NPT	1.1304	TMX 0100 - 114 - 30	XF-74305	\$64.00	XF-76305	\$64.00
	30XTM-8NPT-S*	8	0.125	2 -1/2" - 8 NPT	1.125	TMX 0125 - 158 - 2 - 30	XF-74306	\$64.00	XF-76306	\$64.00
40mm Inserts										
40	40XTM-11.5NPT-S*	11.5	0.1667	2" - 11.5 NPT	1.5652	TMX 0150 - 173 - 40	XF-74307	\$105.00	XF-76307	\$105.00
	40XTM-8NPT-S*	8	0.125	2-1/2" - 8 NPT & UP	1.5	TMX 0150 - 173 - 40	XF-74308	\$105.00	XF-76308	\$105.00

HELICAL FLUTE THREAD MILLS UN, NPT & NPTF THREADS SOLID CARBIDE-AITiN Coated



MICRO 100

C

FEATURES:

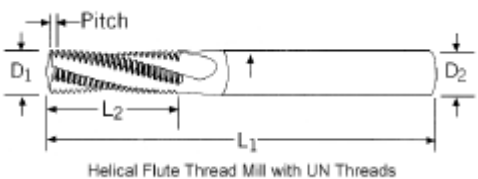
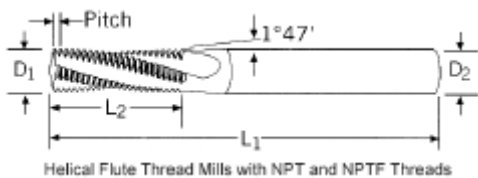
- Completely CNC ground
- Helical flute design for reduced cutting forces, smoother cuts, longest tool life and maximum thread milling performance
- 100% thread form for superior threads compared to tapping
- Cuts right and left hand threads
- Suitable for all types of materials, including heat treated and difficult to machine workpieces.
- Supplied with AlTiN coating. Uncoated thread mills also available, please call for more information

HELICAL FLUTE THREAD MILLS- NPT, NPTF THREADS

Minimum Thread	Pitch	Cut. Dia D1	Shank Dia D2	OAL L1	LOC L2	No. Of Flutes	Part Number	Price Each
1/16 & 1/8 NPT	27	.245	1/4	2-1/2	0.437	3	MI-TM27NPTX	\$144.00
1/4 & 3/8 NPT	18	.305	5/16	2-1/2	0.625	4	MI-TM18NPTX	\$175.00
1/2 & 3/4 NPT	14	.495	1/2	4	0.875	4	MI-TM14NPTX	\$180.90
1" & 2" NPT	11.5	.620	5/8	4	1.125	4	MI-TM11NPTX	\$238.05
1/16 & 1/8 NPTF	27	.245	1/4	2-1/2	0.437	3	MI-TM27NPTFX	\$163.00
1/4 & 3/8 NPTF	18	.305	5/16	2-1/2	0.625	4	MI-TM18NPTFX	\$186.00
1/2 & 3/4 NPTF	14	.495	1/2	4	0.875	4	MI-TM14NPTFX	\$206.25
1" & 2" NPTF	11.5	.620	5/8	4	1.125	4	MI-TM11NPTFX	\$270.95

HELICAL FLUTE THREAD MILLS- UN THREADS

Minimum Thread & Pitch	Cut. Dia D1	Shank Dia D2	OAL L1	LOC L2	No. Of Flutes	Part Number	Price Each
4-40	.080	1/4	2	3/16	2	MI-TM11240X	\$119.25
6-32	.100	1/4	2	1/4	2	MI-TM13832X	\$119.25
8-32	.115	1/4	2	1/4	3	MI-TM16432X	\$119.25
10-24	.120	1/4	2	5/16	3	MI-TM19024X	\$125.00
10-28	.120	1/4	2	5/16	3	MI-TM19028X	\$125.00
10-32	.120	1/4	2	5/16	3	MI-TM19032X	\$125.00
1/4-20	.180	1/4	2-1/2	1/2	3	MI-TM25020X	\$131.50
1/4-28	.180	1/4	2-1/2	1/2	3	MI-TM25028X	\$131.50
5/16-18	.235	1/4	2-1/2	5/8	3	MI-TM31218X	\$143.50
5/16-24	.235	1/4	2-1/2	5/8	3	MI-TM31224X	\$143.50
3/8-16	.285	5/16	2-1/2	3/4	4	MI-TM37516X	\$174.50
3/8-24	.285	5/16	2-1/2	3/4	4	MI-TM37524X	\$174.50
7/16-14	.305	5/16	2-1/2	3/4	4	MI-TM43714X	\$174.50
7/16-20	.335	3/8	3	7/8	4	MI-TM43720X	\$183.00
1/2-13	.350	3/8	3	7/8	4	MI-TM50013X	\$183.00
9/16-12	.370	3/8	3	7/8	4	MI-TM5622X	\$183.00
9/16-18	.370	3/8	3	7/8	4	MI-TM56218X	\$183.00
5/8-11	.470	1/2	4	1-1/4	4	MI-TM62511X	\$212.95
3/4-10	.495	1/2	4	1-1/4	4	MI-TM75010X	\$212.95
3/4-12	.495	1/2	4	1-1/4	4	MI-TM75012X	\$212.95
3/4-16	.495	1/2	4	1-1/4	4	MI-TM75016X	\$212.95
7/8-9	.620	5/8	4	1-3/8	4	MI-TM87509X	\$229.75
7/8-14	.490	1/2	4	1-1/4	4	MI-TM87514X	\$229.75
1"-8	.620	5/8	4	1-3/8	4	MI-TM00108X	\$229.75



Shank Diameter	-.0001 to -.0003"
Cutter Diameter	± .0005"
Length of Cut	+.050 to .000"
Overall Length	± .015"
T.I.R. Maximum	.0005"

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