



ALLIED MACHINE & ENGINEERING CORP

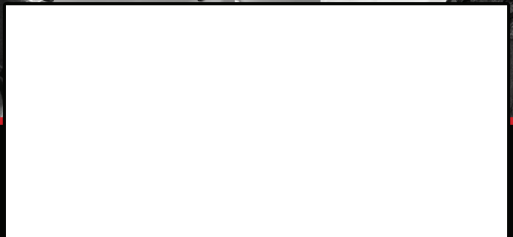


Threadmilling Catalog

www.alliedmachine.com



Represented by:



Made in the USA

Allied Machine & Engineering Corp is Registered to ISO 9001:2008

ALLIED MACHINE & ENGINEERING CORP

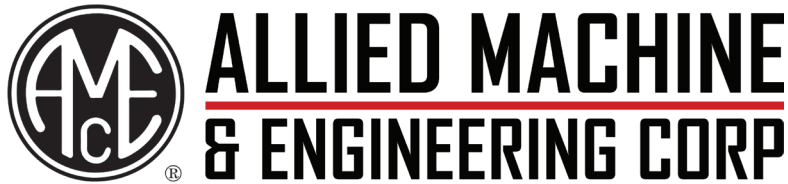
Our focus on product excellence, service to the customer, respect for the individual, and competitive advantage enables us to deliver outstanding results in a diverse range of manufacturing, production and process engineering industries.

As a result, Allied Machine high performance tooling is helping countless businesses around the world to produce better products with greater accuracy, increased speed, and higher quality.

Precision, performance, and productivity are core features of Allied Machine tooling. Our commitment to innovation in all aspects of holmaking technology means we continually set new industry standards in production efficiency, tool life, and manufacturing cost improvements.

This product catalog provides detailed information on products in a comprehensive, easy to use, and informative single source reference guide. However, we recognize that every company's needs are unique, which is why our customer service and technical support teams are always available to provide help and advice, should you need it.

Whatever your need, Allied Machine & Engineering Corp. delivers high performance tooling on the cutting edge.



 **WARNING**

Tool failure during use can cause serious injury. Follow safety precautions and instructions that accompany machinery and all tools.

Wear safety glasses and appropriate safety equipment at all times when machinery is operating.



THREADMILL PROGRAM SOFTWARE


- Create G-code programs in minutes
- Simple and easy to use
- No download necessary
- Available 24/7



**AVAILABLE FOR ALL
THREADMILL PRODUCTS**

Check it out at
www.alliedmachine.com
under Threadmills product section

AccuThread 856®



*ThreadMills
USA*

An Allied Machine & Engineering Co.


This catalog contains important messages that pertain to proper use of the products shown in this catalog. Always read and follow all precautions that use these words.

NOTICE means that failure to follow the precautions in this message could result in damage to the tool or machine but not result in personal injury

NOTE is also used. It is important that you read and follow but is not safety-related.

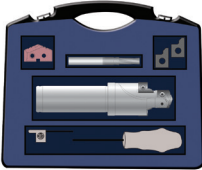
Visit www.alliedmachine.com for the most up-to-date information and procedures.

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AccuThread 856®
Solid Carbide

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AccuThread 856®
Port Specific

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Threadmills USA
Solid Carbide

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AccuThread 856®
Bolt-in Indexable

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Technical



Threadmills

High Performance Threading Solutions

AMEC's threadmilling program has developed into a comprehensive range of high precision tooling offering outstanding productivity with exceptional levels of tool life and thread accuracy. The threadmill range covers both solid carbide and indexable replaceable insert tools with an extensive range of thread forms.

Our threadmilling program has been specifically designed to provide customers with a wide choice. This is achieved by offering two threadmill ranges within our product lineup – the low cost, general purpose Threadmills USA threadmill range, and the high performance, high productivity AccuThread 856® range.

Both product ranges are designed for manufacturing and production environments and offer excellent performance and thread accuracy, allowing AMEC to offer the best product for the job and to give our customers the cutting edge.

Also available are AMEC's 'Special Products,' solutions that provide engineers, designers, and production managers with the opportunity of creating application specific tooling that can achieve levels of efficiency and performance beyond standard threading solutions.

Solid Carbide



AccuThread 856®

The AccuThread 856 is AMEC's premium threadmilling product range, manufactured from micro grain carbide and coated in AMEC's AM210® premium coating. This product is designed for the demanding environment of high production threadmilling, providing extraordinary tool life and exceptionally high quality thread forms. The AccuThread range is available in a wide selection of thread standards and forms part of our specials program, allowing you to tailor design threadmills to your specific requirements.

AccuThread 856®

Features & Benefits

- AMEC's proprietary AM210® coating has a 25-50% increase in tool life over competitor product
- Standard cutting lengths allow for multiple applications without the need for special thread mills
- Helical flute which offers increased strength and rigidity when cutting forces are applied
- Online CNC G code programs available



Threadmills USA

The threadmill range is manufactured from solid carbide with ground helical flutes and a TiAlN coating as standard. These products have been designed for the low volume/low cost production environment, providing excellent performance at a competitive price.

A helical flute design has been maintained across the Threadmills USA range to allow for maximum production benefits and to negate the need for straight flute threadmills. A comprehensive range of thread forms and technical information further supports the program.



An Allied Machine & Engineering Co.

Features & Benefits

- Helical flute which offers increased strength and rigidity when forces are applied
- TiAlN coated for increased tool life over uncoated tools
- Extensive range of thread forms
- High quality for consistent predictable production
- Online CNC G code programs available

AccuThread 856®
Solid Carbide

AccuThread 856®
Port Specific

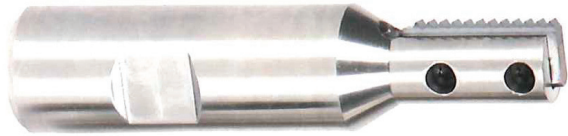
Threadmills USA
Solid Carbide

AccuThread 856®
Bolt-in Indexable

AccuThread 856®
Pin Style Indexable

Technical

Indexable



AccuThread 856® – Bolt-in Style

The AccuThread 856 indexable bolt-in style is our general purpose system available in two insert lengths with an extensive range of thread forms. The tool holders are manufactured from dampened stainless steel providing excellent rigidity when in contact with work pieces, helping to provide quality thread forms.

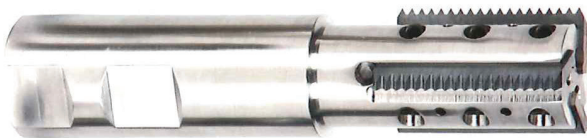
AccuThread 856®

Features & Benefits

- Threadmill holders are manufactured from stainless steel that is engineered to dampen vibration during operation
- Extensive range of thread forms with two thread lengths
- Can produce left or right handed threads
- Online CNC G code programs available

AccuThread 856®
Solid Carbide

AccuThread 856®
Port Specific



AccuThread 856® – Pin Style

The AccuThread 856 indexable pin style is designed to allow for a deeper working thread and higher rigidity, enabling high productivity, extended tool life, and excellent performance when producing threads. The tool holders are manufactured from dampened stainless steel, which provides outstanding rigidity when in contact with the work piece, helping ensure high quality thread forms are produced. Available with a positive and neutral rake to accommodate a variety of applications.

AccuThread 856®

Features & Benefits

- Patented pin style locking system ensures unsurpassed repeatability
- Threadmill holders are manufactured from stainless steel that is engineered to dampen vibration during operation
- Extensive range of thread forms with two thread lengths
- Online CNC G code programs available

Threadmills USA
Solid Carbide

AccuThread 856®
Bolt-In Indexable

AccuThread 856® – Indexable Inserts



Bolt-in Style



Pin Style

AccuThread 856®

Features & Benefits

- Full profiles present on all inserts allow 100% thread form against 65-75% for tapping
- AMEC's proprietary AM210® coating has a 25-50% increase in tool life over competitor product
- AMEC's premium carbide allows for extended tool life while providing high quality thread forms

AccuThread 856®
Pin Style Indexable

Technical



Reference

AccuThread 856® Solid Carbide Threadmills

TM*	U	K	0250	-	20
Threadmill	Thread Class	Coating	Min. Thread Dia		Thread Pitch
TM - Standard HDTM - Heavy Duty	U - UN N - NPT, NPTF M - Metric A - AccuPort® Specific B - BSPP, BSPT, BSW	K - AM210® U - Uncoated	English - 0250 - 1/4" Number Drill - 0008 - #8 Metric - 0450 - M4.5		UN - 20 Metric - 1.0

* To order a threadmill with a Weldon flat, replace leading "TM" designator with "TW"

Threadmills USA Solid Carbide Threadmills

TM*	250	20	CH
Threadmill	Min. Thread Dia	Thread Pitch	Optional
TM - TiAlN TMFT - Uncoated HDTM - Heavy Duty HDTMFT - Heavy Duty Uncoated	English - 250 - 1/4" Number Drill - 08 - #8 Metric - 45 - M4.5	20 - UN 20 TPI 075 - Metric 0.75	CH - Coolant Hole DE - Double End NPT - All pipe threads will show thread form

* To order a threadmill with a Weldon flat, replace leading "TM" designator with "TW"

AccuThread 856® Indexable Threadmill Holders

THT	-	0400	-	1F	075	M
Holder Style		Cutter Dia		# of Flutes	Length of Insert	Shank Designation
THT - Tapered Head THN - Straight Head THP - Straight Head TSN - Shell Mill TNR - Neutral Rake TSR - Shell Mill Neutral Rake		0400 - .400"		1F - 1 flute 2F - 2 flutes 3F - 3 flutes 5F - 5 flutes 6F - 6 flutes 7F - 7 flutes 8F - 8 flutes	075 - 3/4" 100 - 1.00" 150 - 1.50"	Blank - Inch M - Metric

AccuThread 856® Indexable Threadmill Inserts

TP	075	K	-	UN	32	I
Insert Style	Insert Length	Coating		Thread Class	Thread Pitch	Thread Style
TP - Bolt-in TN - Pin & Screw	075 - 3/4" 100 - 1.00" 150 - 1.50"	K - AM210® A - TiAlN U - Uncoated		UN, UNJ NPT, NPTF BSPP, BSPT M - Metric FA - Full ACME AP - API Round	UN - 20 Metric - 1.0	I - Internal E - External

AccuThread 856®
Solid Carbide

AccuThread 856®
Port Specific

Threadmills USA
Solid Carbide

AccuThread 856®
Bolt-in Indexable

AccuThread 856®
Pin Style Indexable

Technical

AccuThread 856® Solid Carbide



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Features & Benefits

- AM210® premium coating for improved tool life and higher speeds
- Helical flutes for increased stability
- Thicker core for increased strength



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Solid Carbide

AccuThread 856®
Port Specific

Threadmills USA
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Bolt-In Indexable

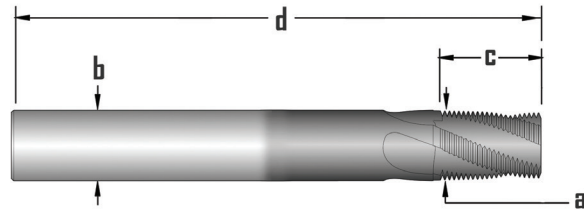
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Pin Style Indexable

Technical



AccuThread 856®

Solid Carbide



NPT

Inch Shank

Item No.	Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	AM210®
TMNK0063-NPT	1/16" and 1/8"	27	3	0.245	0.250	0.437	2.500	○
TMNK0250-NPT	1/4" and 3/8"	18	4	0.305	0.312	0.625	3.000	○
TMNK0500-NPT	1/2" and 3/4"	14	4	0.495	0.500	0.875	3.500	○
TMNK1000-NPT	1" to 2"	11.5	4	0.620	0.625	1.125	4.000	○
TMNK2500-NPT	2-1/2" to 6"	8	4	0.745	0.750	1.500	5.000	○

Metric Shank

Item No.	Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	AM210®
TMNK0063-NPTM	1/16" and 1/8"	27	3	5,95	6,00	11,30	58,00	○
TMNK0250-NPTM	1/4" and 3/8"	18	4	7,75	8,00	15,70	64,00	○
TMNK0500-NPTM	1/2" and 3/4"	14	4	11,95	12,00	23,70	84,00	○
TMNK1000-NPTM	1" to 2"	11.5	4	15,75	16,00	28,75	93,00	○
TMNK2500-NPTM	2-1/2" to 6"	8	5	19,75	20,00	38,10	115,00	○

NPT (Heavy Duty)

Inch Shank

Item No.	Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	AM210®
HDTMKNK0125-NPT	1/8"	27	3	0.300	0.312	0.482	3.000	○
HDTMKNK0250-NPT	1/4" and 3/8"	18	4	0.363	0.375	0.680	3.500	○
HDTMKNK0750-NPT	3/4"	14	4	0.620	0.625	1.000	4.000	○
HDTMKNK1000-NPT	1"	11.5	5	0.745	0.750	1.219	4.000	○

NPTF

Inch Shank

Item No.	Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	AM210®
TMNK0063-NPTF	1/16" and 1/8"	27	3	0.245	0.250	0.437	2.500	○
TMNK0250-NPTF	1/4" and 3/8"	18	4	0.305	0.312	0.625	3.000	○
TMNK0500-NPTF	1/2" and 3/4"	14	4	0.495	0.500	0.875	3.500	○
TMNK1000-NPTF	1" to 2"	11.5	4	0.620	0.625	1.125	4.000	○
TMNK2500-NPTF	2-1/2" to 6"	8	4	0.745	0.750	1.500	5.000	○

Metric Shank

Item No.	Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	AM210®
TMNK0063-NPTFM	1/16" and 1/8"	27	3	5,95	6,00	11,30	58,00	▲
TMNK0250-NPTFM	1/4" and 3/8"	18	4	7,75	8,00	15,70	64,00	▲
TMNK0500-NPTFM	1/2" and 3/4"	14	4	11,95	12,00	23,70	84,00	▲
TMNK1000-NPTFM	1" to 2"	11.5	4	15,75	16,00	28,75	93,00	▲
TMNK2500-NPTFM	2-1/2" to 6"	8	5	19,75	20,00	38,10	115,00	▲

Welded Flat (15 day lead time):

To order a threadmill with a Welded flat, replace leading "TM" designator with "TW" (Available for inch shanks 3/8" and above or metric shanks 6mm and above)

Example Item Numbers: Cylindrical shank = TMNK0500-NPT / Welded shank flat = TWNK0500-NPT

* Welded Flats have a minimum order quantity of 2 pieces.

● Availability Codes

○ Stocked

▲ Non-Stocked - 10 work day lead time

AccuThread 856®
Solid Carbide

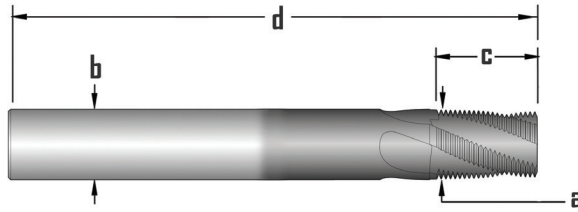
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Port Specific

Threadmills USA
Solid Carbide

AccuThread 856®
Bolt-in Indexable

AccuThread 856®
Pin Style Indexable

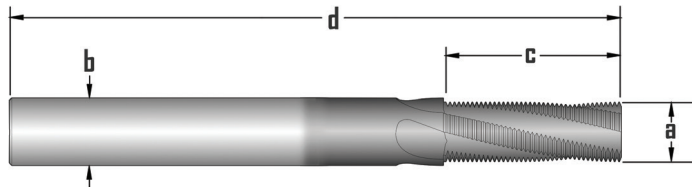
Technical



BSPT

Metric Shank

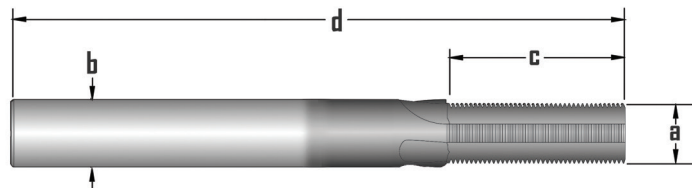
Item No.	Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	AM210®
TMBK0063-BSPTM	1/16" and 1/8"	28	3	5,97	6,00	9,98	51,00	○
TMBK0250-BSPTM	1/4" and 3/8"	19	4	9,91	10,00	14,73	73,00	○
TMBK0500-BSPTM	1/2" and 3/4"	14	4	11,94	12,00	20,00	84,00	○
TMBK1000-BSPTM	1" to 2"	11	4	15,75	16,00	32,31	93,00	○



BSPP

Metric Shank

Item No.	Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	AM210®
TMBK0063-BSPPM	1/16" and 1/8"	28	3	5,97	6,00	14,53	51,00	○
TMBK0250-BSPPM	1/4" and 3/8"	19	4	9,91	10,00	18,72	73,00	○
TMBK0500-BSPPM	1/2" and 3/4"	14	4	11,94	12,00	29,03	84,00	○
TMBK1000-BSPPM	1" to 2"	11	4	15,75	16,00	34,67	93,00	○



BSW

Metric Shank

Item No.	Min. Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	AM210®
TMBK0250-20M	1/4"	20	3	4,50	6,00	10,16	58,00	○
TMBK0312-18M	5/16"	18	3	5,00	6,00	11,29	58,00	○
TMBK0375-16M	3/8"	16	5	7,00	8,00	14,29	64,00	○
TMBK0437-14M	7/16"	14	5	7,90	8,00	18,15	64,00	○
TMBK0500-12M	1/2"	12	5	9,00	10,00	19,10	73,00	○
TMBK0625-11M	5/8"	11	5	9,90	12,00	23,10	84,00	○
TMBK0750-10M	3/4"	10	5	11,90	12,00	27,94	84,00	○
TMBK0875-9M	7/8"	9	5	11,90	16,00	27,95	93,00	○
TMBK1000-8M	1"	8	6	15,90	16,00	34,94	93,00	○

Weld on Flat (15 day lead time):

To order a threadmill with a Weld on flat, replace leading "TM" designator with "TW" (Available for inch shanks 3/8" and above or metric shanks 6mm and above)

Example Item Numbers: Cylindrical shank = **TMNK0500-NPT** / Weld on shank flat = **TWNNK0500-NPT**

* Weld on Flats have a minimum order quantity of 2 pieces.

○ Availability Codes

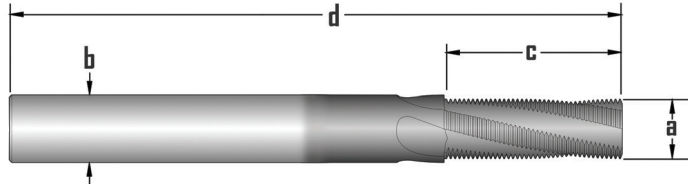
○ Stocked

▲ Non-Stocked - 10 work day lead time



AccuThread 856®

Solid Carbide

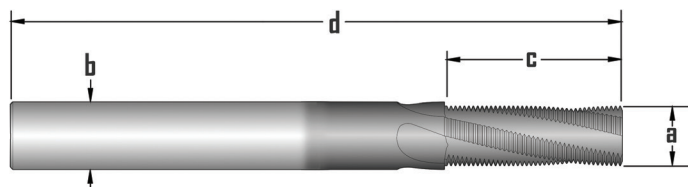


UN

Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	① AM210®
TMUK0002-56	#2	56	3*	0.065	0.125	0.125	2.000	○
TMUK0004-40	#4	40	3*	0.085	0.125	0.175	2.000	○
TMUK0006-32	#6	32	3	0.100	0.125	0.218	2.000	○
TMUK0008-32	#8	32	3	0.115	0.125	0.250	2.000	○
TMUK0010-32	#10	32	3	0.120	0.125	0.312	2.000	○
TMUK0010-28	#10	28	3	0.120	0.125	0.312	2.000	○
TMUK0250-28	1/4"	28	3	0.180	0.187	0.500	2.500	○
TMUK0010-24	#10	24	3	0.120	0.125	0.312	2.000	○
TMUK0313-24	5/16"	24	3	0.235	0.250	0.625	2.500	○
TMUK0375-24	3/8"	24	4	0.285	0.312	0.750	3.000	○
TMUK0250-20	1/4"	20	3	0.180	0.187	0.500	2.500	○
TMUK0438-20	7/16"	20	4	0.335	0.375	0.875	3.500	○
TMUK0313-18	5/16"	18	3	0.235	0.250	0.625	2.500	○
TMUK0563-18	9/16"	18	4	0.370	0.375	0.875	3.500	○
TMUK0375-16	3/8"	16	4	0.285	0.312	0.750	3.000	○
TMUK0750-16	3/4"	16	4	0.490	0.500	1.250	3.500	○
TMUK0438-14	7/16"	14	4	0.305	0.312	0.750	3.000	○
TMUK0875-14	7/8"	14	4	0.490	0.500	1.250	3.500	○
TMUK0500-13	1/2"	13	4	0.350	0.375	0.875	3.500	○
TMUK0563-12	9/16"	12	4	0.370	0.375	0.875	3.500	○
TMUK0750-12	3/4"	12	4	0.495	0.500	1.250	3.500	○
TMUK0625-11	5/8"	11	4	0.470	0.500	1.250	3.500	○
TMUK0750-10	3/4"	10	4	0.495	0.500	1.250	3.500	○
TMUK0875-9	7/8"	9	4	0.620	0.625	1.375	4.000	○
TMUK1000-8	1"	8	4	0.620	0.625	1.375	4.000	○

*Straight fluted



UN (Extra Length)

Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	① AM210®
TMUK0625-11XL	5/8"	11	4	0.470	0.500	1.455	3.500	○
TMUK0750-10XL	3/4"	10	4	0.495	0.500	1.600	4.000	○
TMUK0875-9XL	7/8"	9	4	0.620	0.625	1.778	4.000	○
TMUK1000-8XL	1"	8	6	0.745	0.750	2.000	4.500	○

Welded Flat (15 day lead time):

To order a threadmill with a Welded flat, replace leading "TM" designator with "TW" (Available for inch shanks 3/8" and above or metric shanks 6mm and above)

Example Item Numbers: Cylindrical shank = **TMNK0500-NPT** / Welded shank flat = **TWNBK0500-NPT**

*Welded Flats have a minimum order quantity of 2 pieces.

① Availability Codes

○ Stocked

▲ Non-Stocked - 10 work day lead time

AccuThread 856®
Solid Carbide

AccuThread 856®
Port Specific

Threadmills USA
Solid Carbide

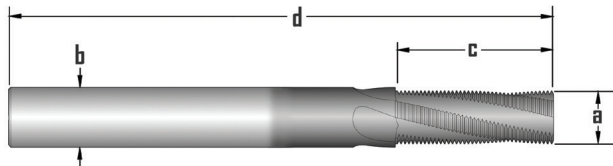
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Technical

AccuThread 856®

Solid Carbide

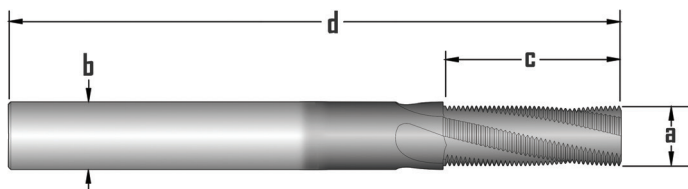


UN

Metric Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	AM210®
TMUK0002-64M	#2	64	3*	1,65	3,00	3,20	39,00	▲
TMUK0002-56M	#2	56	3*	1,65	3,00	3,20	39,00	▲
TMUK0003-48M	#3	48	3*	1,80	3,00	3,75	39,00	▲
TMUK0005-44M	#5	44	3	2,40	3,00	4,65	39,00	▲
TMUK0004-40M	#4	40	3*	2,20	3,00	4,45	39,00	▲
TMUK0008-36M	#8	36	3	3,00	4,00	6,35	51,00	▲
TMUK0006-32M	#6	32	3	2,50	3,00	5,55	39,00	▲
TMUK0008-32M	#8	32	3	3,20	4,00	6,35	51,00	▲
TMUK0010-32M	#10	32	3	3,80	4,00	7,95	51,00	▲
TMUK0010-28M	#10	28	3	3,80	4,00	8,20	51,00	▲
TMUK0250-28M	1/4"	28	3	4,75	6,00	12,70	58,00	▲
TMUK0438-28M	7/16"	28	4	7,90	8,00	19,95	64,00	▲
TMUK0010-24M	#10	24	3	3,70	4,00	8,50	51,00	▲
TMUK0313-24M	5/16"	24	3	5,95	6,00	16,00	58,00	▲
TMUK0375-24M	3/8"	24	4	7,25	8,00	19,00	64,00	▲
TMUK0250-20M	1/4"	20	3	4,75	6,00	12,70	58,00	▲
TMUK0438-20M	7/16"	20	4	8,75	10,00	22,85	73,00	▲
TMUK0313-18M	5/16"	18	3	5,95	6,00	17,00	58,00	▲
TMUK0563-18M	9/16"	18	4	9,90	10,00	22,65	73,00	▲
TMUK0375-16M	3/8"	16	4	7,25	8,00	19,00	64,00	▲
TMUK0750-16M	3/4"	16	4	11,95	12,00	31,75	84,00	▲
TMUK0438-14M	7/16"	14	4	7,75	8,00	20,00	64,00	▲
TMUK0875-14M	7/8"	14	4	11,95	12,00	32,70	84,00	▲
TMUK0500-13M	1/2"	13	4	9,40	10,00	23,50	73,00	▲
TMUK0563-12M	9/16"	12	4	9,90	10,00	23,35	73,00	▲
TMUK0750-12M	3/4"	12	4	11,95	12,00	31,75	84,00	▲
TMUK0625-11M	5/8"	11	4	11,95	12,00	32,40	84,00	▲
TMUK0750-10M	3/4"	10	4	11,95	12,00	33,00	84,00	▲
TMUK0875-9M	7/8"	9	4	15,75	16,00	36,75	93,00	▲
TMUK1000-8M	1"	8	4	15,75	16,00	35,00	93,00	▲
TMUK1125-7M	1-1/8"	7	5	19,90	20,00	36,30	105,00	▲
TMUK1375-6M	1-3/8"	6	5	19,90	20,00	38,10	105,00	▲

*Straight fluted



UN (Extra Length)

Metric Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	AM210®
TMUK0625-11XLM	5/8"	11	4	11,95	12,00	37,00	100,00	▲
TMUK0750-10XLM	3/4"	10	4	11,95	12,00	40,70	100,00	▲
TMUK0875-9XLM	7/8"	9	4	15,75	16,00	45,20	100,00	▲
TMUK1000-8XLM	1"	8	6	19,90	20,00	50,80	115,00	▲

- Availability Codes
- Stocked
- ▲ Non-Stocked - 10 work day lead time

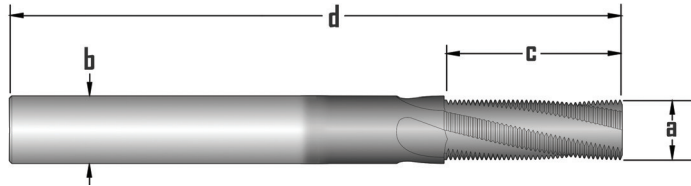
Weldon Flat (15 day lead time):

To order a threadmill with a Weldon flat, replace leading "TM" designator with "TW"
 (Available for inch shanks 3/8" and above or metric shanks 6mm and above)
 Example Item Numbers: Cylindrical shank = **TMNK0500-NPT** / Weldon shank flat = **TWNK0500-NPT**
 * Weldon Flats have a minimum order quantity of 2 pieces.



AccuThread 856®

Solid Carbide



Metric

Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	① AM210®
TMMK0450-075	M4.5	0.75	3	0.120	0.125	0.250	2.000	○
TMMK0800-075	M8	0.75	3	0.235	0.250	0.625	2.500	○
TMMK0500-080	M5	0.80	3	0.120	0.125	0.312	2.000	○
TMMK0600-100	M6	1.00	3	0.170	0.187	0.500	2.500	○
TMMK1200-100	M12	1.00	4	0.360	0.375	0.875	3.500	○
TMMK0800-125	M8	1.25	3	0.235	0.250	0.625	2.500	○
TMMK1000-150	M10	1.50	4	0.300	0.312	0.750	3.000	○
TMMK1400-150	M14	1.50	4	0.370	0.375	0.875	3.500	○
TMMK1800-150	M18	1.50	4	0.490	0.500	1.250	3.500	○
TMMK1200-175	M12	1.75	4	0.360	0.375	0.875	3.500	○
TMMK1600-200	M16	2.00	4	0.470	0.500	1.250	3.500	○
TMMK2000-250	M20	2.50	4	0.495	0.500	1.250	3.500	○
TMMK2400-300	M24	3.00	4	0.620	0.625	1.375	4.000	○

Metric Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	① AM210®
TMMK0200-040M	M2	0.40	3*	1,50	3,00	3,20	39,00	○
TMMK0250-045M	M2.5	0.45	3*	1,50	3,00	3,60	39,00	○
TMMK0300-050M	M3	0.50	3*	2,15	3,00	4,50	39,00	○
TMMK0600-050M	M6	0.50	3	4,60	6,00	12,00	58,00	○
TMMK1000-050M	M10	0.50	4	7,95	8,00	15,00	64,00	○
TMMK0400-070M	M4	0.70	3	2,90	3,00	8,00	39,00	○
TMMK0450-075M	M4.5	0.75	3	3,00	4,00	6,75	51,00	○
TMMK0600-075M	M6	0.75	3	4,60	6,00	12,00	51,00	○
TMMK1000-075M	M10	0.75	4	7,95	8,00	15,00	64,00	○
TMMK0500-080M	M5	0.80	3	3,60	4,00	8,00	51,00	○
TMMK0600-100M	M6	1.00	3	4,60	6,00	12,00	51,00	○
TMMK1200-100M	M12	1.00	4	9,40	10,00	20,00	73,00	○
TMMK0800-125M	M8	1.25	3	5,90	6,00	16,25	51,00	○
TMMK1000-150M	M10	1.50	4	7,40	8,00	19,50	64,00	○
TMMK1400-150M	M14	1.50	4	10,90	12,00	27,00	84,00	○
TMMK1800-150M	M18	1.50	4	11,90	12,00	31,50	84,00	○
TMMK1200-175M	M12	1.75	4	9,40	10,00	22,71	73,00	○
TMMK1400-200M	M14	2.00	4	10,90	12,00	28,00	84,00	○
TMMK2000-200M	M20	2.00	4	11,95	12,00	30,00	84,00	○
TMMK2000-250M	M20	2.50	4	11,90	12,00	30,00	84,00	○
TMMK2400-300M	M24	3.00	4	15,90	16,00	36,00	93,00	○
TMMK3000-350M	M30	3.50	4	15,75	16,00	38,50	100,00	○
TMMK3600-400M	M36	4.00	5	19,90	20,00	40,00	105,00	○

*Straight fluted

Welded Flat (15 day lead time):

To order a threadmill with a Weldon flat, replace leading "TM" designator with "TW" (Available for inch shanks 3/8" and above or metric shanks 6mm and above)

Example Item Numbers: Cylindrical shank = TMMK0500-NPT / Weldon shank flat = TWNK0500-NPT

*Weldon Flats have a minimum order quantity of 2 pieces.

① Availability Codes

○ Stocked

▲ Non-Stocked - 10 work day lead time

AccuThread 856®
Solid Carbide

AccuThread 856®
Port Specific

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AccuThread 856®
Bolt-in Indexable

AccuThread 856®
Pin Style Indexable

Technical

AccuThread 856[®] Port Specific



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Features & Benefits

- Includes complete AccuPort 432[®] drill and AccuThread 856[®] threadmill for manufacturing J1926 port
- Available for port sizes #4-#32
- Available for ferrous and non-ferrous applications
- AccuPort's replaceable insert design eliminates regrinding and resetting



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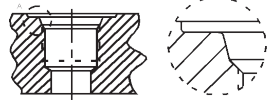
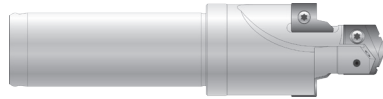
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Pin Style Indexable

Technical

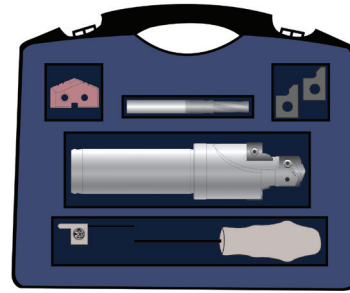


Port Kits

J1926



SAE J-1926-1 / ISO 11926-1



AccuPort 432® J1926 Kits

Ferrous Material Kit

Tube Dash No.	Port Thread Size	Port Contour Cutter No.	Qty.	T-A® Drill Item No.		Port Form Insert Item No.		AccuThread 856® Item No.		Kit Item No.
				Super Cobalt (AM200®)	Qty.	C5 Carbide (TiAlN)	Qty.	Solid Carbide (AM210®)	Qty.	
- 4	7/16-20 UNF-2B	J1926-04Y-063F	1	45YH-.386	2	J1926-02-C5A	2	TMAK0438-20	1	ATK-K-04
- 5	1/2-20 UNF-2B	J1926-05Z-063F	1	45ZH-11.5	2	J1926-02-C5A	2	TMAK0438-20	1	ATK-K-05
- 6	9/16-18 UNF-2B	J1926-060-075F	1	450H-13	2	J1926-02-C5A	2	TMAK0563-18	1	ATK-K-06
- 8	3/4-16 UNF-2B	J1926-080-075F	1	450H-0022	2	J1926-07-C5A	2	TMAK0750-16	1	ATK-K-08
-10	7/8-14 UNF-2B	J1926-101-100F	1	451H-20.5	2	J1926-07-C5A	2	TMAK0875-14	1	ATK-K-10
-12	1 1/16-12 UN-2B	J1926-122-125F	1	452H-25	2	J1926-08-C5A	2	TMAK1063-12	1	ATK-K-12
-14	1 3/16-12UN-2B	J1926-142-125F	1	452H-28	2	J1926-08-C5A	2	TMAK1063-12	1	ATK-K-14
-16	1 5/16-12 UN-2B	J1926-162-125F	1	452H-31	2	J1926-08-C5A	2	TMAK1063-12	1	ATK-K-16
-20	1 5/8-12 UN-2B	J1926-203-150F	1	453H-39	1	J1926-10-C5A	2	TMAK1063-12	1	ATK-K-20
-24	1 7/8-12 UN-2B	J1926-243-150F	1	453H-45.5	1	J1926-10-C5A	2	TMAK1063-12	1	ATK-K-24
-32	2 1/2-12 UN-2B	J1926-324-150F	1	454H-61.5	1	J1926-12-C5A	2	TMAK1063-12	1	ATK-K-32

Non-Ferrous Material Kit

Tube Dash No.	Port Thread Size	Port Contour Cutter No.	Qty.	T-A® Drill Item No.		Port Form Insert Item No.		AccuThread 856® Item No.		Kit Item No.
				Super Cobalt (TiN)	Qty.	C5 Carbide (TiAlN)	Qty.	Solid Carbide (Uncoated)	Qty.	
- 4	7/16-20 UNF-2B	J1926-04Y-063F	1	15YT-.386	2	J1926-02-C5A	2	TMAU0438-20	1	ATK-U-04
- 5	1/2-20 UNF-2B	J1926-05Z-063F	1	15ZT-11.5	2	J1926-02-C5A	2	TMAU0438-20	1	ATK-U-05
- 6	9/16-18 UNF-2B	J1926-060-075F	1	150T-13	2	J1926-02-C5A	2	TMAU0563-18	1	ATK-U-06
- 8	3/4-16 UNF-2B	J1926-080-075F	1	150T-0022	2	J1926-07-C5A	2	TMAU0750-16	1	ATK-U-08
-10	7/8-14 UNF-2B	J1926-101-100F	1	151T-20.5	2	J1926-07-C5A	2	TMAU0875-14	1	ATK-U-10
-12	1 1/16-12 UN-2B	J1926-122-125F	1	152T-25	2	J1926-08-C5A	2	TMAU1063-12	1	ATK-U-12
-14	1 3/16-12 UN-2B	J1926-142-125F	1	152T-28	2	J1926-08-C5A	2	TMAU1063-12	1	ATK-U-14
-16	1 5/16-12 UN-2B	J1926-162-125F	1	152T-31	2	J1926-08-C5A	2	TMAU1063-12	1	ATK-U-16
-20	1 5/8-12 UN-2B	J1926-203-150F	1	453T-39	1	J1926-10-C5A	2	TMAU1063-12	1	ATK-U-20
-24	1 7/8-12 UN-2B	J1926-243-150F	1	453T-45.5	1	J1926-10-C5A	2	TMAU1063-12	1	ATK-U-24
-32	2 1/2-12 UN-2B	J1926-324-150F	1	454T-61.5	1	J1926-12-C5A	2	TMAU1063-12	1	ATK-U-32

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Port Specific

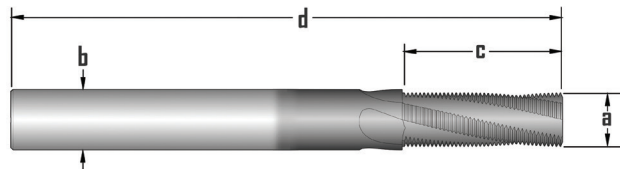
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Pin Style Indexable

Technical

Port Specific Threadmills



UN (AccuPort 432® Specific)

Inch Shank

Item No.	Port Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	① AM210®
TMAK0438-20	-4 to -5	20	4	0.335	0.375	0.600	3.500"	○
TMAK0563-18	-6	18	4	0.370	0.375	0.666	3.500"	○
TMAK0750-16	-8	16	4	0.495	0.500	0.750	3.500"	○
TMAK0875-14	-10	14	4	0.495	0.500	0.857	3.500"	○
TMAK1063-12	-12 to -32	12	4	0.495	0.500	0.917	3.500"	○

Metric Shank

Item No.	Port Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	① AM210®
TMAK0438-20M	-4 to -5	20	4	8,51	10,00	15,24	73,00	○
TMAK0563-18M	-6	18	4	9,40	10,00	16,92	73,00	○
TMAK0750-16M	-8	16	4	11,94	12,00	19,05	84,00	○
TMAK0875-14M	-10	14	4	11,94	12,00	21,77	84,00	○
TMAK1063-12M	-12 to -32	12	4	11,94	12,00	23,29	84,00	○

- ① Availability Codes
- Stocked
- ▲ Non-Stocked - 10 work day lead time

Weldon Flat (15 day lead time):
 To order a threadmill with a Weldon flat, replace leading "TM" designator with "TW"
 (Available for inch shanks 3/8" and above or metric shanks 6mm and above)
 Example Item Numbers: Cylindrical shank = **TMNK0500-NPT** / Weldon shank flat = **TWNK0500-NPT**
 * Weldon Flats have a minimum order quantity of 2 pieces.

Threadmills USA



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Features & Benefits

- TiAlN coating for improved tool life over uncoated tools
- Helical flutes for increased stability
- Thicker core for increased strength



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Technical

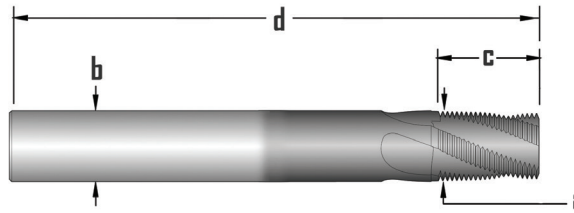


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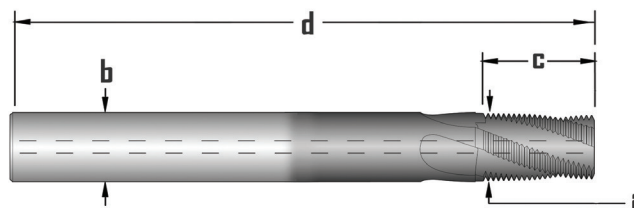


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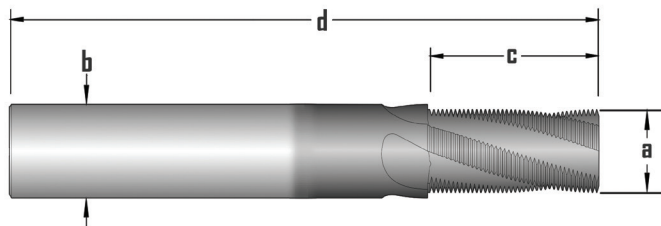
NPT Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	TiAIN
TM27NPT	1/16" and 1/8"	27	3	0.245	0.250	0.437	2.500	○
TM18NPT	1/4" and 3/8"	18	4	0.305	0.312	0.625	3.000	○
TM14NPT	1/2" and 3/4"	14	4	0.495	0.500	0.875	3.500	○
TM11NPT	1" to 2"	11.5	4	0.620	0.625	1.125	4.000	○
TM8NPT	2-1/2" to 6"	8	4	0.745	0.750	1.500	5.000	○



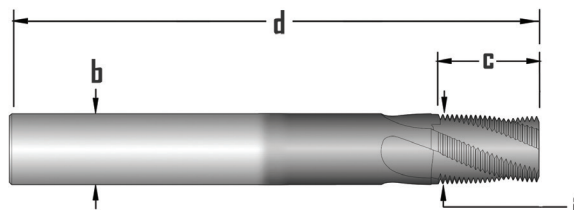
NPT (Coolant Through) Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	Coolant Hole Size	TiAIN
TM18NPTCH	1/4" and 3/8"	18	4	0.305	0.312	0.625	3.000	1.3mm	○
TM14NPTCH	1/2" and 3/4"	14	4	0.495	0.500	0.875	3.500	2.0mm	○



NPT (Heavy Duty) Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	TiAIN
HDTM27NPT	1/8"	27	3	0.300	0.312	0.482	3.000	○
HDTM18NPT	1/4" and 3/8"	18	4	0.363	0.375	0.680	3.500	○
HDTM14NPT	3/4"	14	4	0.620	0.625	1.000	4.000	○
HDTM11NPT	1"	11.5	5	0.745	0.750	1.219	4.000	○



NPTF Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	TiAIN
TM27NPTF	1/16" and 1/8"	27	3	0.245	0.250	0.437	2.500	○
TM18NPTF	1/4" and 3/8"	18	4	0.305	0.312	0.625	3.000	○
TM14NPTF	1/2" and 3/4"	14	4	0.495	0.500	0.875	3.500	○
TM11NPTF	1" to 2"	11.5	4	0.620	0.625	1.125	4.000	○
TM8NPTF	2-1/2" to 6"	8	4	0.745	0.750	1.500	5.000	○

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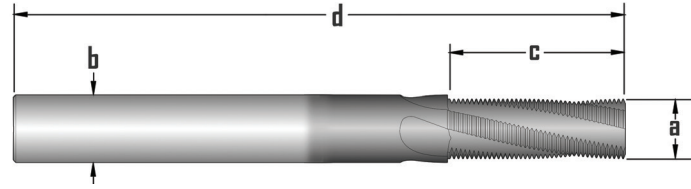
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Port Specific

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Solid Carbide

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AccuThread 856®
Pin Style Indexable

Technical

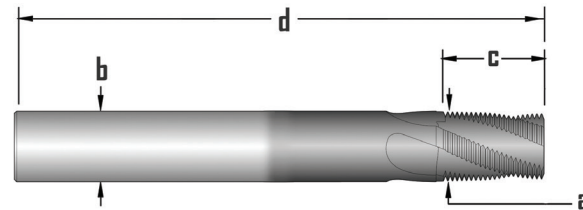


NPS Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	Availability Codes
TM27NPS	1/8"	27	3	0.245	0.250	0.630	2.500	○
TM18NPS	1/4" and 3/8"	18	4	0.370	0.375	0.889	3.500	○
TM14NPS	1/2" and 3/4"	14	4	0.490	0.500	1.288	3.500	○
TM11NPS	1" to 2"	11.5	4	0.620	0.625	1.392	4.000	○

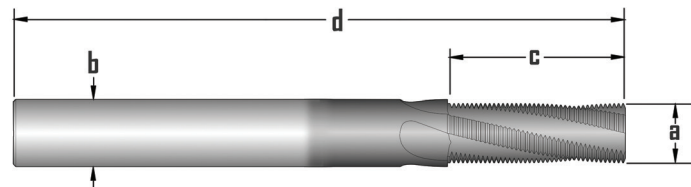
NPSF Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	Availability Codes
TM27NPSF	1/8"	27	3	0.245	0.250	0.630	2.500	○
TM18NPSF	1/4" and 3/8"	18	4	0.370	0.375	0.889	3.500	○
TM14NPSF	1/2" and 3/4"	14	4	0.490	0.500	1.288	3.500	○
TM11NPSF	1" to 2"	11.5	4	0.620	0.625	1.392	4.000	○



BSPT Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	Availability Codes
TM28BSPT	1/16" and 1/8"	28	3	0.240	0.250	0.393	2.500	○
TM19BSPT	1/4" and 3/8"	19	4	0.310	0.312	0.580	3.000	○
TM14BSPT	1/2" and 3/4"	14	4	0.470	0.500	0.787	3.500	○
TM11BSPT	1" to 2"	11	4	0.620	0.625	1.546	4.000	○



BSPP Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	Availability Codes
TM28BSPP	1/16" and 1/8"	28	3	0.240	0.250	0.572	2.500	○
TM19BSPP	1/4" and 3/8"	19	4	0.310	0.312	0.737	3.000	○
TM14BSPP	1/2" and 3/4"	14	4	0.470	0.500	1.143	3.500	○
TM11BSPP	1" to 2"	11	4	0.620	0.625	1.365	4.000	○

- Availability Codes
- Stocked

Uncoated threadmills are non-stock standards - 5 work day delivery applies.

 **Welded Flat (15 day lead time):**

To order a threadmill with a Welded flat, replace leading "TM" designator with "TW" (Available for inch shanks 3/8" and above or metric shanks 6mm and above)

Example Item Numbers: Cylindrical shank = **TMNK0500-NPT** / Welded shank flat = **TWNK0500-NPT**
* Welded Flats have a minimum order quantity of 2 pieces.

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Technical

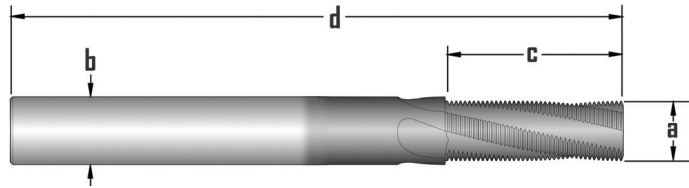


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UN Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	TiAlN
TM08656	#2	56	3*	0.065	0.125	0.125	2.000	○
TM09948	#3	48	3*	0.075	0.125	0.167	2.000	○
TM12544	#5	44	3	0.095	0.125	0.228	2.000	○
TM12540	#4	40	3*	0.085	0.125	0.175	2.000	○
TM16436	#8	36	3	0.115	0.125	0.250	2.000	○
TM13832	#6	32	3	0.100	0.125	0.218	2.000	○
TM16432	#8	32	3	0.115	0.125	0.250	2.000	○
TM19032	#10	32	3	0.120	0.125	0.312	2.000	○
TM50032	1/2"	32	6	0.370	0.375	1.000	3.500	○
TM19028	#10	28	3	0.120	0.125	0.312	2.000	○
TM25028	1/4"	28	3	0.180	0.187	0.500	2.500	○
TM50028	1/2"	28	6	0.370	0.375	1.000	3.500	○
TM19024	#10	24	3	0.120	0.125	0.312	2.000	○
TM31224	5/16"	24	3	0.235	0.250	0.625	2.500	○
TM37524	3/8"	24	4	0.285	0.312	0.750	3.000	○
TM50024	1/2"	24	6	0.370	0.375	1.000	3.500	○
TM25020	1/4"	20	3	0.180	0.187	0.500	2.500	○
TM43720	7/16"	20	4	0.335	0.375	0.875	3.500	○
TM50020	1/2"	20	6	0.370	0.375	1.000	3.500	○
TM31218	5/16"	18	3	0.235	0.250	0.625	2.500	○
TM56218	9/16"	18	4	0.370	0.375	0.875	3.500	○
TM37516	3/8"	16	4	0.285	0.312	0.750	3.000	○
TM75016	3/4"	16	4	0.490	0.500	1.250	3.500	○
TM43714	7/16"	14	4	0.305	0.312	0.750	3.000	○
TM87514	7/8"	14	4	0.490	0.500	1.250	3.500	○
TM50013	1/2"	13	4	0.350	0.375	0.875	3.500	○
TM56212	9/16"	12	4	0.370	0.375	0.875	3.500	○
TM75012	3/4"	12	4	0.495	0.500	1.250	3.500	○
TM10012	1"	12	6	0.745	0.750	1.500	4.000	○
TM62511	5/8"	11	4	0.470	0.500	1.250	3.500	○
TM75010	3/4"	10	4	0.495	0.500	1.250	3.500	○
TM87509	7/8"	9	4	0.620	0.625	1.375	4.000	○
TM10008	1"	8	4	0.620	0.625	1.375	4.000	○
TM12507	1-1/8"	7	5	0.745	0.750	1.572	4.500	○

*Straight fluted

- Availability Codes
- Stocked

Uncoated threadmills are non-stock standards - 5 work day delivery applies.

Weld on Flat (15 day lead time):

To order a threadmill with a Weldon flat, replace leading "TM" designator with "TW" (Available for inch shanks 3/8" and above or metric shanks 6mm and above)

Example Item Numbers: Cylindrical shank = **TMNK0500-NPT** / Weldon shank flat = **TWNBK0500-NPT**
* Weldon Flats have a minimum order quantity of 2 pieces.

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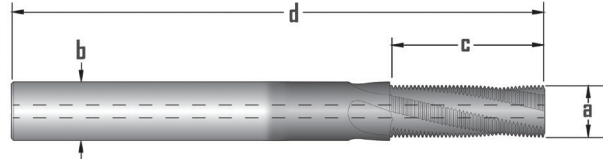
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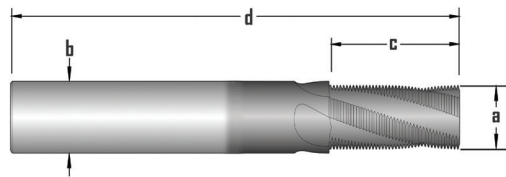
Technical



UN (Coolant Through)

Inch Shank

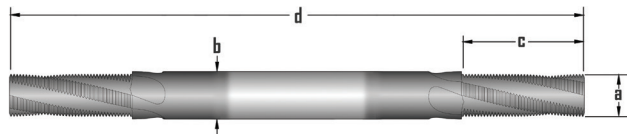
Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	Coolant Hole Size	Ⓢ TiAlN
TM19032CH	#10	32	3	0.150	0.187	0.312	2.375	.5mm	○
TM25028CH	1/4"	28	3	0.180	0.187	0.500	2.375	.5mm	○
TM19024CH	#10	24	3	0.145	0.187	0.312	2.375	.5mm	○
TM31224CH	5/16"	24	3	0.235	0.250	0.625	2.375	1.0mm	○
TM37524CH	3/8"	24	4	0.285	0.312	0.750	3.000	1.3mm	○
TM25020CH	1/4"	20	3	0.180	0.187	0.500	2.375	.5mm	○
TM43720CH	7/16"	20	4	0.335	0.375	0.875	3.000	1.5mm	○
TM31218CH	5/16"	18	3	0.235	0.250	0.625	2.375	1.0mm	○
TM56218CH	9/16"	18	4	0.370	0.375	0.875	3.000	1.5mm	○
TM37516CH	3/8"	16	4	0.285	0.312	0.750	3.000	1.3mm	○
TM75016CH	3/4"	16	4	0.490	0.500	1.250	3.500	2.0mm	○
TM43714CH	7/16"	14	4	0.305	0.312	0.750	3.000	1.3mm	○
TM50013CH	1/2"	13	4	0.350	0.375	0.875	3.000	1.5mm	○
TM75012CH	3/4"	12	4	0.495	0.500	1.250	3.500	2.0mm	○
TM62511CH	5/8"	11	4	0.470	0.500	1.250	3.500	2.0mm	○
TM75010CH	3/4"	10	4	0.495	0.500	1.250	3.500	2.0mm	○
TM87509CH	7/8"	9	4	0.620	0.625	1.375	4.000	2.5mm	○
TM10008CH	1"	8	4	0.620	0.625	1.375	4.000	2.5mm	○



UN (Heavy Duty)

Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	Ⓢ TiAlN
HDTM19032	#10	32	3	0.150	0.187	0.312	2.500	○
HDTM19024	#10	24	3	0.145	0.187	0.312	2.500	○
HDTM25020	1/4"	20	3	0.195	0.250	0.500	2.500	○
HDTM31218	5/16"	18	3	0.245	0.312	0.625	3.000	○
HDTM37516	3/8"	16	4	0.300	0.375	0.750	3.500	○
HDTM50013	1/2"	13	4	0.400	0.500	0.875	3.500	○



UN (Double End)


Inch Shank

Not available with Weldon flat.

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	Ⓢ TiAlN
TM19032DE	#10	32	3	0.120	0.125	0.220	2.000	○
TM25020DE	1/4"	20	3	0.180	0.187	0.350	2.500	○
TM31218DE	5/16"	18	3	0.235	0.250	0.390	2.500	○
TM37516DE	3/8"	16	4	0.285	0.312	0.440	3.000	○
TM50013DE	1/2"	13	4	0.350	0.375	0.620	3.500	○

- Ⓢ Availability Codes
- Stocked

Uncoated threadmills are non-stock standards - 5 work day delivery applies.

 **Welded Flat (15 day lead time):**

To order a threadmill with a Weldon flat, replace leading "TM" designator with "TW" (Available for inch shanks 3/8" and above or metric shanks 6mm and above)

Example Item Numbers: Cylindrical shank = **TMNK0500-NPT** / Weldon shank flat = **TWNK0500-NPT**
* Weldon Flats have a minimum order quantity of 2 pieces.

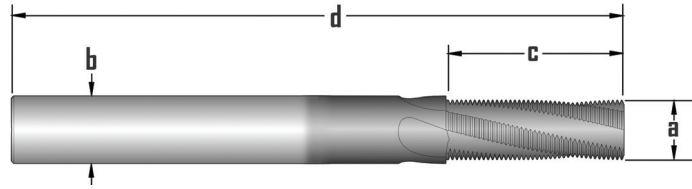


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Metric Inch Shank

Item No.	Min Thread Size	Pitch	Flutes	Max Cutter Dia. (a)	Shank Dia. (b)	Length of Cut (c)	OAL (d)	⓪ TiAlN
TM30050	M3	0.50	3*	0.085	0.125	0.178	2.000	⓪
TM40070	M4	0.70	3	0.115	0.125	0.276	2.000	⓪
TM45075	M4.5	0.75	3	0.120	0.125	0.178	2.000	⓪
TM80075	M8	0.75	3	0.235	0.250	0.625	2.500	⓪
TM50080	M5	0.80	3	0.120	0.125	0.312	2.000	⓪
TM60100	M6	1.00	3	0.170	0.187	0.500	2.500	⓪
TM12100	M12	1.00	4	0.360	0.375	0.875	3.500	⓪
TM80125	M8	1.25	3	0.235	0.250	0.625	2.500	⓪
TM10150	M10	1.50	4	0.300	0.312	0.750	3.000	⓪
TM14150	M14	1.50	4	0.370	0.375	0.875	3.500	⓪
TM18150	M18	1.50	4	0.490	0.500	1.250	3.500	⓪
TM12175	M12	1.75	4	0.360	0.375	0.875	3.500	⓪
TM16200	M16	2.00	4	0.470	0.500	1.250	3.500	⓪
TM20250	M20	2.50	4	0.495	0.500	1.250	3.500	⓪
TM24300	M24	3.00	4	0.620	0.625	1.375	4.000	⓪

*Straight fluted

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Pin Style Indexable

Technical

- ⓪ Availability Codes
- ⓪ Stocked

Uncoated threadmills are non-stock standards - 5 work day delivery applies.



Welded Flat (15 day lead time):

To order a threadmill with a Weldon flat, replace leading "TM" designator with "TW" (Available for inch shanks 3/8" and above or metric shanks 6mm and above)

Example Item Numbers: Cylindrical shank = **TM**NK0500-NPT / Weldon shank flat = **TW**NK0500-NPT

*Weldon Flats have a minimum order quantity of 2 pieces.

AccuThread 856® Bolt-in Indexable



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Features & Benefits

- Dampened stainless steel holders
- Carbide inserts with AM210® coating
- Variety of thread forms interchangeable in a single holder



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Technical



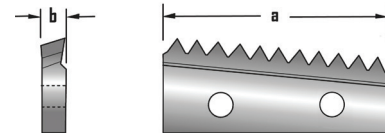
Bolt-in Style

Taper Forms

AccuThread 856®
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NPT

Internal / External

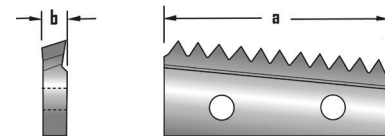


Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TP075K-NPT18	18	0.750	19,05	0.080	2,03	○
TP100K-NPT14	14	1.000	25,40	0.140	3,56	○

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Port Specific

NPTF

Internal / External

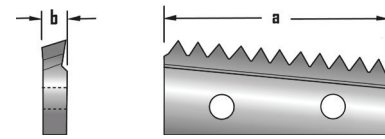


Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TP075K-NPTF18	18	0.750	19,05	0.080	2,03	○
TP100K-NPTF14	14	1.000	25,40	0.140	3,56	○

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BSPT

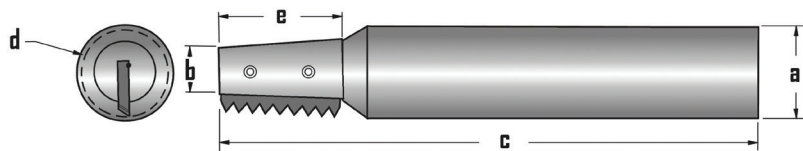
Internal / External



Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TP075K-BSPT19	19	0.750	19,05	0.080	2,03	○
TP100K-BSPT14	14	1.000	25,40	0.140	3,56	○
TP100K-BSPT19	19					○

Note: Indexable Threadmill Inserts are sold in 2 pc. packages.

AccuThread 856®
Bolt-in Indexable



NPT / NPTF / BSPT

Internal / External

Inch Shank

Item No.	Insert	Shank Dia. (a)	Pilot Dia. (b)	OAL (c)	Cutter Dia. (d)	Insert Length (e)	Flutes	Screw	①
THT-0400-1F075	TP075K	0.500	0.229	3.000	0.400	0.750	1	TMS-250	○
THT-0659-1F100	TP100K	0.500	0.379	3.000	0.659	1.000	1	TMS-45	○

Metric Shank

Item No.	Insert	Shank Dia. (a)	Pilot Dia. (b)	OAL (c)	Cutter Dia. (d)	Insert Length (e)	Flutes	Screw	①
THT-0400-1F075M	TP075K	13,00	5,82	76,20	10,16	19,05	1	TMS-250	○
THT-0659-1F100M	TP100K	13,00	9,65	76,20	16,74	25,40	1	TMS-45	○

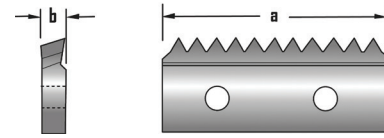
- ① Availability Codes
- Stocked
- ▲ Non-Stocked - Call for delivery

Note: Indexable Threadmill Holders are sold in 1 pc. packages.

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Pin Style Indexable

Technical

Bolt-in Style Straight Forms

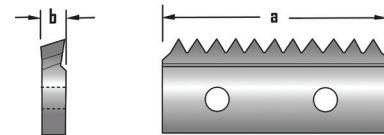


UN Internal

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TP075K-UN32I	32	0.750	19,05	0.080	2,03	○
TP075K-UN24I	24					○
TP075K-UN20I	20					○
TP075K-UN18I	18					○
TP075K-UN16I	16					○
TP100K-UN32I	32	1.000	25,40	0.140	3,56	○
TP100K-UN24I	24					○
TP100K-UN20I	20					○
TP100K-UN18I	18					○
TP100K-UN16I	16					○
TP100K-UN14I	14					○
TP100K-UN13I	13					○
TP100K-UN12I	12					○
TP100K-UN10I*	10					○

*This item is used only with THN-0611-1F100 or TNH-0611-1F100M. The reduced body allows a 3/4"-10 UN/UNJ to be produced.

UN External



Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TP075K-UN32E	32	0.750	19,05	0.080	2,03	▲
TP075K-UN24E	24					▲
TP075K-UN20E	20					▲
TP075K-UN18E	18					▲
TP075K-UN16E	16					▲
TP100K-UN32E	32	1.000	25,40	0.140	3,56	▲
TP100K-UN24E	24					▲
TP100K-UN20E	20					▲
TP100K-UN18E	18					▲
TP100K-UN16E	16					▲
TP100K-UN14E	14					▲
TP100K-UN13E	13					▲
TP100K-UN12E	12					▲
TP100K-UN10E*	10					▲

*This item is used only with THN-0611-1F100 or TNH-0611-1F100M. The reduced body allows a 3/4"-10 UN/UNJ to be produced.

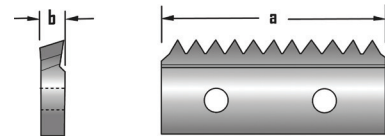
- ① Availability Codes
- Stocked
- ▲ Non-Stocked - Call for delivery

Note: Indexable Threadmill Inserts are sold in 2 pc. packages.



Bolt-in Style

Straight Forms

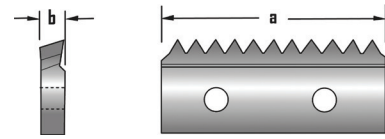


UNJ

Internal

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TP075K-UNJ32I	32	0.750	19,05	0.080	2,03	▲
TP075K-UNJ24I	24					▲
TP075K-UNJ20I	20					▲
TP075K-UNJ18I	18					▲
TP075K-UNJ16I	16					▲
TP100K-UNJ32I	32	1.000	25,40	0.140	3,56	▲
TP100K-UNJ24I	24					▲
TP100K-UNJ20I	20					▲
TP100K-UNJ18I	18					▲
TP100K-UNJ16I	16					▲
TP100K-UNJ14I	14					▲
TP100K-UNJ12I	12					▲
TP100K-UNJ10I*	10					▲

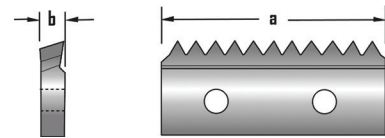
*This item is used only with THN-0611-1F100 or TNH-0611-1F100M. The reduced body allows a 3/4"-10 UN/UNJ to be produced.



UNJ

External

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TP075K-UNJ32E	32	0.750	19,05	0.080	2,03	▲
TP075K-UNJ24E	24					▲
TP075K-UNJ20E	20					▲
TP075K-UNJ18E	18					▲
TP075K-UNJ16E	16					▲
TP100K-UNJ32E	32	1.000	25,40	0.140	3,56	▲
TP100K-UNJ24E	24					▲
TP100K-UNJ20E	20					▲
TP100K-UNJ18E	18					▲
TP100K-UNJ16E	16					▲
TP100K-UNJ12E	12					▲



Metric

Internal

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TP075K-M1.5I	1.5	0.750	19,05	0.080	2,03	○
TP075K-M1.25I	1.25					○
TP075K-M1.0I	1.0					○
TP075K-M0.5I	0.5					○
TP100K-M2.0I	2.0	1.000	25,40	0.140	3,56	○
TP100K-M1.5I	1.5					○
TP100K-M1.0I	1.0					○

- ① Availability Codes
- Stocked
- ▲ Non-Stocked - Call for delivery

Note: Indexable Threadmill Inserts are sold in 2 pc. packages.

AccuThread 856®
Solid Carbide

AccuThread 856®
Port Specific

Threadmills USA
Solid Carbide

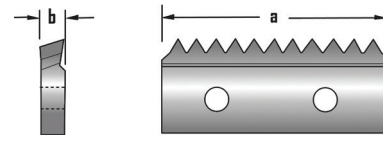
AccuThread 856®
Bolt-in Indexable

AccuThread 856®
Pin Style Indexable

Technical

Bolt-in Style

Straight Forms



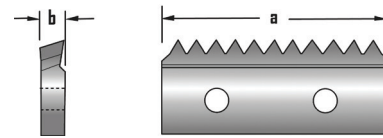
Metric

External

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TP100K-M2.0E	2.0	1.000	25,40	0.140	3,56	▲
TP100K-M1.5E	1.5					▲
TP100K-M1.0E	1.0					▲

BSPP

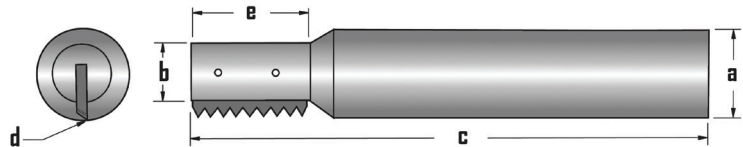
Internal / External



Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TP075K-BSPP19	19	0.750	19,05	0.080	2,03	○
TP100K-BSPP14	14	1.000	25,40	0.140	3,56	○
TP100K-BSPP19	19					○

UN / UNJ / Metric / BSPP

Internal / External



Inch Shank

Item No.	Insert	Shank Dia. (a)	Pilot Dia. (b)	OAL (c)	Cutter Dia. (d)	Insert Length (e)	Flutes	Screw	①
THN-0394-1F075	TP075K	0.500	0.250	3.000	0.394	0.750	1	TMS-250	○
THN-0625-1F100	TP100K	0.750	0.454	3.500	0.625	1.000	1	TMS-40	○
THN-0611-1F100	TP100K	0.750	0.383	3.500	0.611	1.000	1	TMS-40	▲

Metric Shank

Item No.	Insert	Shank Dia. (a)	Pilot Dia. (b)	OAL (c)	Cutter Dia. (d)	Insert Length (e)	Flutes	Screw	①
THN-0394-1F075M	TP075K	13,00	6,35	76,20	10,01	19,05	1	TMS-250	○
THN-0625-1F100M	TP100K	25,00	11,58	88,90	15,88	25,40	1	TMS-40	○

- ① Availability Codes
- Stocked
- ▲ Non-Stocked - Call for delivery

Note: Indexable Threadmill Holders are sold in 1 pc. packages.

AccuThread 856® Pin Style Indexable



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Features & Benefits

- Dampened stainless steel holders
- Carbide inserts with AM210® coating
- Variety of thread forms interchangeable in a single holder
- Body design allows for extended reach for deeper applications



**ALLIED MACHINE
& ENGINEERING CORP**

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Solid Carbide

AccuThread 856®
Port Specific

Threadmills USA
Solid Carbide

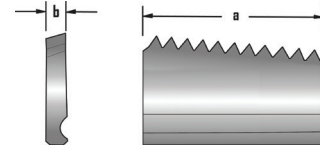
AccuThread 856®
Bolt-In Indexable

AccuThread 856®
Pin Style Indexable

Technical



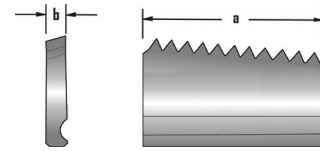
Pin Style Inserts



NPT

Internal / External

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TN150K-NPT11.5	11.5	1.500	38,10	0.140	3,56	○
TN150K-NPT8	8					○



NPTF

Internal / External

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TN150K-NPTF11.5	11.5	1.500	38,10	0.140	3,56	○
TN150K-NPTF8	8					○

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AccuThread 856®
Bolt-in Indexable

AccuThread 856®
Pin Style Indexable

Technical

- ① Availability Codes
- Stocked
- ▲ Non-Stocked - Call for delivery

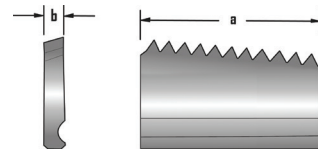
Note: Indexable Threadmill Inserts are sold in 2 pc. packages.

Pin Style Inserts



BSPT

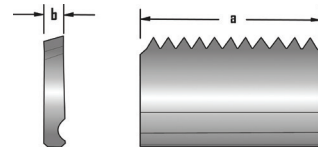
Internal / External



Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TN150K-BSPT11	11	1.500	38,10	0.140	3,56	○

BSPP

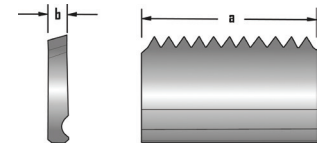
Internal / External



Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TN150K-BSPP11	11	1.500	38,10	0.140	3,56	○

API-ROUND

Internal / External



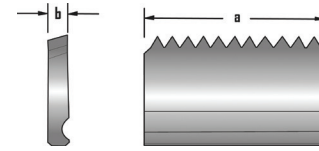
Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TN150K-AP10	10	1.500	38,10	0.140	3,56	○
TN150K-AP8	8					○

- ① Availability Codes
- Stocked
- ▲ Non-Stocked - Call for delivery

Note: Indexable Threadmill Inserts are sold in 2 pc. packages.



Pin Style Inserts



UN Internal

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TN100K-UN32I	32	1.000	25,40	0.140	3,56	○
TN100K-UN24I	24					○
TN100K-UN20I	20					○
TN100K-UN18I	18					○
TN100K-UN16I	16					○
TN100K-UN12I	12					○
TN100K-UN10I	10					○
TN100K-UN8I	8					○
TN100K-UN7I	7					○
TN150K-UN24I	24					1.500
TN150K-UN20I	20	○				
TN150K-UN18I	18	○				
TN150K-UN16I	16	○				
TN150K-UN14I	14	○				
TN150K-UN12I	12	○				
TN150K-UN10I	10	○				
TN150K-UN8I	8	○				
TN150K-UN7I	7	○				
TN150K-UN6I	6	○				

UN External

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®				
		Inch	mm	Inch	mm					
TN100K-UN32E	32	1.000	25,40	0.140	3,56	▲				
TN100K-UN24E	24					▲				
TN100K-UN20E	20					▲				
TN100K-UN18E	18					▲				
TN100K-UN16E	16					▲				
TN100K-UN12E	12					▲				
TN100K-UN10E	10					▲				
TN100K-UN8E	8					▲				
TN150K-UN24E	24					1.500	38,10	0.140	3,56	▲
TN150K-UN20E	20									▲
TN150K-UN18E	18	▲								
TN150K-UN16E	16	▲								
TN150K-UN12E	12	▲								
TN150K-UN10E	10	▲								
TN150K-UN8E	8	▲								
TN150K-UN6E	6	▲								

- ① Availability Codes
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Note: Indexable Threadmill Inserts are sold in 2 pc. packages.

AccuThread 856®
Solid Carbide

AccuThread 856®
Port Specific

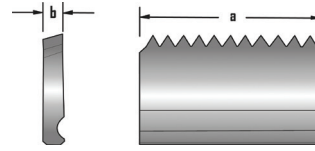
Threadmills USA
Solid Carbide

AccuThread 856®
Bolt-in Indexable

AccuThread 856®
Pin Style Indexable

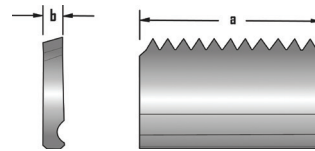
Technical

Pin Style Inserts



UNJ Internal

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TN100K-UNJ32I	32	1.000	25,40	0.140	3,56	▲
TN100K-UNJ24I	24					▲
TN100K-UNJ20I	20					▲
TN100K-UNJ18I	18					▲
TN100K-UNJ16I	16					▲
TN100K-UNJ12I	12					▲
TN100K-UNJ10I	10					▲
TN150K-UNJ24I	24	1.500	38,10	0.140	3,56	▲
TN150K-UNJ20I	20					▲
TN150K-UNJ18I	18					▲
TN150K-UNJ16I	16					▲
TN150K-UNJ12I	12					○
TN150K-UNJ10I	10					▲
TN150K-UNJ8I	8					▲



UNJ External

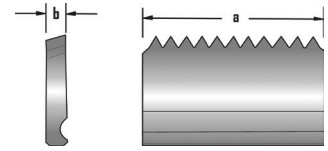
Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TN100K-UNJ32E	32	1.000	25,40	0.140	3,56	▲
TN100K-UNJ24E	24					▲
TN100K-UNJ20E	20					▲
TN100K-UNJ18E	18					▲
TN100K-UNJ16E	16					▲
TN100K-UNJ12E	12					▲
TN100K-UNJ10E	10					▲
TN150K-UNJ24E	24	1.500	38,10	0.140	3,56	▲
TN150K-UNJ20E	20					▲
TN150K-UNJ18E	18					▲
TN150K-UNJ16E	16					▲
TN150K-UNJ12E	12					▲
TN150K-UNJ10E	10					▲
TN150K-UNJ8E	8					▲

- ① Availability Codes
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Note: Indexable Threadmill Inserts are sold in 2 pc. packages.



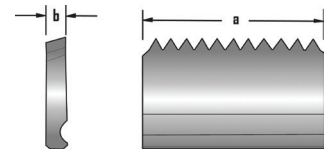
Pin Style Inserts



Metric

Internal

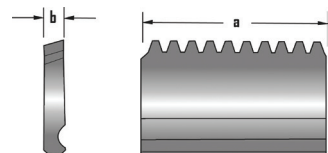
Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TN150K-M6.0I	6.0	1.500	38,10	0.140	3,56	○
TN150K-M5.0I	5.0					○
TN150K-M4.5I	4.5					○
TN150K-M4.0I	4.0					○
TN150K-M3.5I	3.5					○
TN150K-M3.0I	3.0					○
TN150K-M2.5I	2.5					○
TN150K-M2.0I	2.0					○
TN150K-M1.5I	1.5					○



Metric

External

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TN150K-M6.0E	6.0	1.500	38,10	0.140	3,56	▲
TN150K-M5.0E	5.0					▲
TN150K-M4.5E	4.5					▲
TN150K-M4.0E	4.0					▲
TN150K-M2.0E	2.0					▲



ACME (Full Profile)

Internal

Item No.	Pitch	Insert Length (a)		Insert Thickness (b)		① AM210®
		Inch	mm	Inch	mm	
TN100K-FA12	12	1.000	25,40	0.140	3,56	○
TN100K-FA10	10					○
TN100K-FA8	8					○
TN150K-FA12	12	1.500	38,10			○
TN150K-FA10	10					○
TN150K-FA8	8					○
TN150K-FA6	6					○
TN150K-FA5	5					○

- ① Availability Codes
- Stocked
- ▲ Non-Stocked - Call for delivery

Note: Indexable Threadmill Inserts are sold in 2 pc. packages.

AccuThread 856®
Solid Carbide

AccuThread 856®
Port Specific

Threadmills USA
Solid Carbide

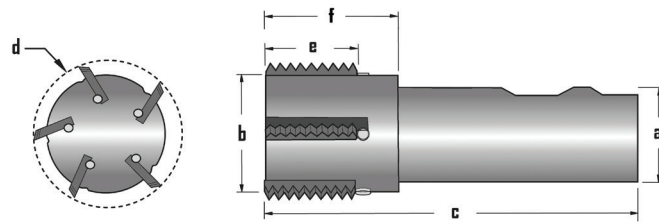
AccuThread 856®
Bolt-in Indexable

AccuThread 856®
Pin Style Indexable

Technical

Pin Style Holders

Positive Rake



Weldon (Positive Rake)

Inch Shank

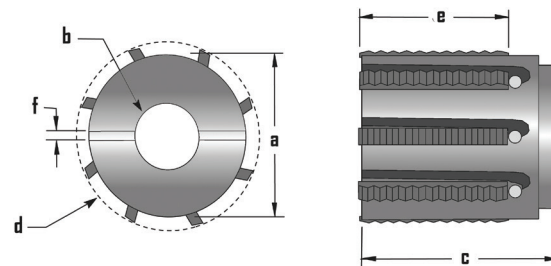
Item No.	Insert	Coolant Port	Shank Dia. (a)	Pilot Dia. (b)	OAL (c)	Cutter Dia. (d)	*Oversized Cutter Dia. (d)	Insert Length (e)	Flute Length (f)	Flutes	Screw	Pin	ⓘ
THP-0969-2F100	TN100K-	N	1.000	0.750	4-1/2"	0.969	-	1.000	1.38	2	TMSS-3	TMP-1	○
THP-1755-5F100		Y	1.250	1.500	4"	1.755	-		2.25	5	TMSS-2	TMP-1	○
THP-0932-1F150	TN150K-	N	1.000	0.722	4-1/2"	0.932	1.063	1.500	1.90	1	TMSS-2	TMP-2	○
THP-1116-3F150		Y	1.000	0.812	4-1/2"	1.116	1.247		2.00	3	TMSS-3	TMP-2	○
THP-1755-5F150		Y	1.250	1.500	4-1/2"	1.755	1.887		2.25	5	TMSS-2	TMP-2	○
THP-0969-2F150		N	1.000	0.750	4-1/2"	0.969	1.100		2.00	2	TMSS-3	TMP-2	○

Metric Shank

Item No.	Insert	Coolant Port	Shank Dia. (a)	Pilot Dia. (b)	OAL (c)	Cutter Dia. (d)	*Oversized Cutter Dia. (d)	Insert Length (e)	Flute Length (f)	Flutes	Screw	Pin	ⓘ
THP-0969-2F100M	TN100K-	N	25,00	19,05	114,30	24,61	-	25,40	35,05	2	TMSS-3	TMP-1	▲
THP-1755-5F100M		Y	32,00	38,10	101,60	44,58	-		57,15	5	TMSS-2	TMP-1	▲
THP-0932-1F150M	TN150K-	N	25,00	18,34	114,30	23,67	27,00	38,10	48,44	1	TMSS-2	TMP-2	▲
THP-1116-3F150M		Y	25,00	20,63	114,30	28,35	31,67		50,80	3	TMSS-3	TMP-2	▲
THP-1755-5F150M		Y	32,00	38,10	114,30	44,58	47,93		57,15	5	TMSS-2	TMP-2	▲
THP-0969-2F150M		N	25,00	19,05	114,30	24,61	27,94		50,80	2	TMSS-3	TMP-2	▲

Shell Mill (Positive Rake)

Inch Connection



Item No.	Insert	Body Dia. (a)	Bore Dia. (b)	OAL (c)	Cutter Dia. (d)	*Oversized Cutter Dia. (d)	Insert Length (e)	Slot Width (f)	Flutes	Screw	Pin	ⓘ
TSN-2846-7F150	TN150K-	2.500	1.000	2.250	2.714	2.845	1.500	0.375	7	TMSS-2	TMP-2	○
TSN-3341-8F150		3.000	1.250	2.250	3.208	3.340	1.500	0.500	8	TMSS-2	TMP-2	○

Metric Connection

Item No.	Insert	Body Dia. (a)	Bore Dia. (b)	OAL (c)	Cutter Dia. (d)	*Oversized Cutter Dia. (d)	Insert Length (e)	Slot Width (f)	Flutes	Screw	Pin	ⓘ
TSN-2846-7F150M	TN150K-	63,50	27,00	57,15	68,94	72,26	38,10	12	7	TMSS-2	TMP-2	▲
TSN-3341-8F150M		76,20	32,00	57,15	81,48	84,84	38,10	14	8	TMSS-2	TMP-2	▲

*Oversized cutter diameter occurs when assembled with the following pin style inserts:

NPT 8 • NPTF 11.5 • NPTF 8 • API 8 • Metric 6.0 • Metric 5.0 • Metric 4.5 • ACME 5 • ACME 6

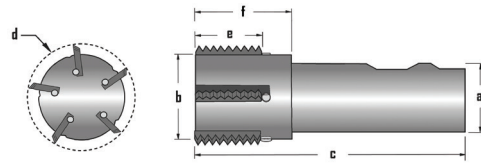
- ⓘ Availability Codes
- Stocked
- ▲ Non-Stocked - Call for delivery

Note: Indexable Threadmill Holders are sold in 1 pc. packages.



Pin Style Holders

Neutral Rake



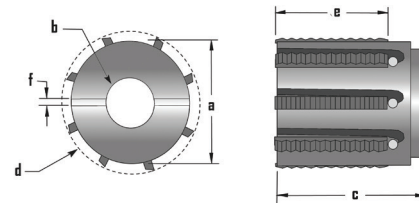
Weldon (Neutral Rake)

Inch Shank

Item No.	Insert	Coolant Port	Shank Dia. (a)	Pilot Dia. (b)	OAL (c)	Cutter Dia. (d)	*Oversized Cutter Dia. (d)	Insert Length (e)	Flute Length (f)	Flutes	Screw	Pin	①
TNR-1116-3F150	TN150K-	Y	1.000	0.812	4.500	1.116	1.247	1.500	2.00	3	TMSS-3	TMP-2	○
TNR-1755-5F150		Y	1.250	1.500	4.531	1.755	1.887		2.25	5	TMSS-2	TMP-2	○

Metric Shank

Item No.	Insert	Coolant Port	Shank Dia. (a)	Pilot Dia. (b)	OAL (c)	Cutter Dia. (d)	*Oversized Cutter Dia. (d)	Insert Length (e)	Flute Length (f)	Flutes	Screw	Pin	①
TNR-1116-3F150M	TN150K-	Y	25,00	20,63	114,30	28,35	31,67	38,10	50,80	3	TMSS-3	TMP-2	▲
TNR-1755-5F150M		Y	32,00	38,10	114,30	44,58	47,93		57,15	5	TMSS-2	TMP-2	▲



Shell Mill (Neutral Rake)

Inch Connection

Item No.	Insert	Body Dia. (a)	Bore Dia. (b)	OAL (c)	Cutter Dia. (d)	*Oversized Cutter Dia. (d)	Insert Length (e)	Slot Width (f)	Flutes	Screw	Pin	①
TSR-2217-6F150	TN150K-	2.000	0.750	2.250	2.217	2.349	1.500	0.312	6	TMSS-2	TMP-2	○

Metric Connection

Item No.	Insert	Body Dia. (a)	Bore Dia. (b)	OAL (c)	Cutter Dia. (d)	*Oversized Cutter Dia. (d)	Insert Length (e)	Slot Width (f)	Flutes	Screw	Pin	①
TSR-2217-6F150M	TN150K-	50,80	22,00	57,15	56,31	59,66	38,10	10,00	6	TMSS-2	TMP-2	▲

*Oversized cutter diameter occurs when assembled with the following pin style inserts:

NPT 8 • NPTF 11.5 • NPTF 8 • API 8 • Metric 6.0 • Metric 5.0 • Metric 4.5 • ACME 5 • ACME 6

- ① Availability Codes
- Stocked
- ▲ Non-Stocked - Call for delivery

Note: Indexable Threadmill Holders are sold in 1 pc. packages.

Technical



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AccuThread 856®
Solid Carbide

AccuThread 856®
Port Specific

Threadmills USA
Solid Carbide

AccuThread 856®
Bolt-In Indexable

AccuThread 856®
Pin Style Indexable



**ALLIED MACHINE
& ENGINEERING CORP**

Technical



Pre-Drill Diameter Chart

Thread Specification and Drill Chart

Thread Specification	Use this drill	Closest Fraction	Decimal Inches	Thread Specification	Use this drill	Closest Fraction	Decimal Inches
#2-56	#50	-	0.0700	1/2-20	29/64"	29/64	0.4531
#3-56	#45	-	0.0820	M14 x 2.0	12,2mm	-	0.4803
#4-40	#43	3/32"	0.0890	9/16-12	31/64"	31/64	0.4844
1/8-40	#38	-	0.1015	M14 x 1.5	12,7mm	-	0.4999
#5-40	#38	-	0.1015	M14 x 1.25	12,8mm	-	0.5039
#6-40	#33	-	0.1130	9/16-18	33/64"	33/64	0.5156
M4 x .07	3,4mm	-	0.1338	5/8-11	17/32"	17/32	0.5312
M4 x .075	3,4mm	-	0.1338	M16 x 2.0	14,2mm	35/64	0.5590
#8-32	#29	-	0.1360	5/8-18	37/64"	37/64	0.5781
#8-40	#28	-	0.1405	M16 x 1.5	14,7mm	-	0.5787
3/16-24	#26	-	0.1470	11/16-11	19/32"	19/32	0.5938
#10-24	#25	5/32"	0.1495	M18 x 2.5	15,8mm	39/64	0.5220
3/16-32	#22	-	0.1570	11/16-16	5/8"	5/8	0.6250
#10-32	#21	5/32"	0.1590	3/4-10	21/32"	21/32	0.6562
M5 x .09	4,2mm	-	0.1653	M18 x 1.5	16,8mm	-	0.6614
M5 x .08	4,2mm	-	0.1693	3/4-16	11/16"	11/16	0.6875
#12-24	#16	11/64"	0.1770	M20 x 2.5	17,8mm	11/16	0.7008
#12-28	#14	3/16"	0.1820	7/8-9	49/64"	49/64	0.7656
#12-32	#13	-	0.1850	7/8-14	13/16"	13/16	0.8125
1/4-20	#10	-	0.1935	M22 x 1.5	20,9mm	-	0.8228
1/4-20	#7	13/64"	0.2010	7/8-18	53/64"	53/64	0.8281
1/4-24	#7	-	0.2010	M24 x 3.0	21,4mm	53/64	0.8425
M6 x 1.0	5,2mm	-	0.2047	1-8	7/8"	7/8	0.8750
1/4-24	#4	-	0.2090	M24 x 2.0	22,3mm	-	0.8779
1/4-28	#3	7/32"	0.2130	1-12	59/64"	59/64	0.9219
1/4-32	7/32"	7/32"	0.2188	1-14	15/16"	15/16	0.9375
1/4-40	#1	-	0.2280	1-1/8-7	63/64"	63/64	0.9844
M7 x 1.0	6,1mm	15/64"	0.2401	1-1/8-12	1-3/64"	1-3/64	1.0469
5/16-18	F	17/64"	0.2570	1-1/4-7	1-7/64"	1-7/64	1.1094
M8 x 1.25	6,9mm	17/64"	0.2716	1-1/4-12	1-11/64"	1-11/64	1.1719
5/16-24	I	-	0.2720	1-3/8-6	1-7/32"	1-7/32	1.2188
M8 x 1.0	7,1mm	-	0.2795	1-3/8-12	1-19/64"	1-19/64	1.2969
5/16-32	9/32"	9/32"	0.2812	1-1/2-6	1-11/32"	1-11/32	1.3438
M9 x 1.25	7,9mm	-	0.3110	1-1/2-12	1-27/32"	1-27/64	1.4219
3/8-16	5/16"	5/16"	0.3125				
M9 x 1.0	8,1mm	-	0.3189				
M9 x 0.75	8,3mm	-	0.3268				
3/8-24	Q	21/64"	0.3320				
M10 x 1.5	8,7mm	-	0.3425				
M10 x 1.25	8,9mm	11/32"	0.3503				
M10 x 1.0	9,1mm	-	0.3583				
7/16-14	U	23/64"	0.3680				
M11 x 1.5	9,7mm	-	0.3818				
7/16-20	25/64"	25/64"	0.3906				
M12 x 1.75	10,5mm	-	0.4133				
M12 x 1.5	10,7mm	27/64"	0.4212				
1/2-13	27/64"	27/64"	0.4291				
M12 x 1.25	10,9mm	27/64"	0.4291				

NPT Threadmill Chart			
Thread Specification	Use this drill	Closest Fraction	Decimal Inches
1/16-27	D	1/4"	0.246
1/8-27	R	11/32"	0.3390
1/4-18	7/16"	7/16"	0.4375
3/8-18	37/64"	37/64"	0.5781
1/2-14	45/64"	45/64"	0.7031
3/4-14	59/64"	59/64"	0.9219
1-11-1/2	1-5/32"	1-5/32"	1.1562
1-1/4-11.5	1-1/2"	1-1/2"	1.5000
1-1/2-11.5	1-47/64"	1-47/64"	1.7344
2-11.5	2-7/32"	2-7/32"	2.2188

Threadmill Drill Calculation

Inch

Based on nominal tap drill diameter. Based on .003" or 0.075mm probable mean oversize

To calculate percent of full thread for given hole diameter:

$$\% \text{ Thread} = \# \text{ of Threads per inch} * \frac{(\text{Basic major diameter of thread (inch)} - \text{Drill hole size (inch)})}{0.0130}$$

Metric

$$\% \text{ Thread} = \frac{76.93}{\text{Pitch (mm)}} * (\text{Basic major diameter of thread (mm)} - \text{Drill hole size (mm)})$$

Major Thread Diameter for # Drills

# 2	-	.086
# 3	-	.099
# 4	-	.112
# 5	-	.125
# 6	-	.132
# 8	-	.164
# 10	-	.190
# 12	-	.216

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Number of Radial Passes

Pitch Size	NPT/NPTF/BSPT/NPS/NPSF		
	Materials Machinability		
	Easy	Average	Difficult
28	1	1	2
27	1	1	2
19	1	1	2
18	1	1	2
14	1	2	3
11.5	1	2	3
11	1	2	3
8	2	3	4

Pitch Size	Metric (ISO)		
	Materials Machinability		
	Easy	Average	Difficult
.40	1	1	2
.45	1	1	2
.50	1	1	2
.70	1	1	2
.75	1	1	2
.80	1	1	2
1.0	1	1	2
1.25	1	2	3
1.5	1	2	3
1.75	1	2	3
2.0	1	2	3
2.5	2	3	4
3.0	2	3	4
3.5	2	3	4
4.5	2	3	4
4.0	2	3	4
5.0	2	3	4
6.0	2	3	4

Pitch Size	UN/UNJ/BSPP/BSW		
	Materials Machinability		
	Easy	Average	Difficult
64	1	1	2
56	1	1	2
48	1	1	2
44	1	1	2
40	1	1	2
36	1	1	2
32	1	1	2
24	1	1	2
28	1	1	2
20	1	2	3
19	1	2	3
18	1	2	3
16	1	2	3
14	1	2	3
13	1	2	3
12	1	2	3
11	2	2	4
10	2	3	4
9	2	3	4
8	2	3	4
7	2	3	4
6	2	3	4

Formulas

Linear Feed Rate (LFR) = RPM • (IPT • No. of Flutes)

SFM = RPM • 0.262 • DIA.

RPM = (SFM • 3.82) / DIA.

Adjusted Feed Rate (AFR) for internal threadmilling = ((Major DIA. - Cutter DIA.) / Major DIA.) • Linear Feed Rate

NOTICE: The above formula on an internal thread program adjusts the linear feed rate to be applied to the O.D. instead of the center of the cutting tool. If the feed rate is not adjusted, the excessive feed rate will cause the threadmill cutting edges to fail.

Example of an internal thread feed rate calculation:

Cast Iron 125 BHN with a 1/2-13 thread form using AccuThread 856® Solid Carbide (TMUK0500-13).

Step 1:

RPM = (SFM • 3.82) / DIA.
 RPM = (675 • 3.82) / .350
 RPM = 7367

Step 2:

LFR = RPM • (IPT • No. of Flutes)
 LFR = 7367 • (.0010 • 4)
 LFR = 29.47 IPM

Step 3:

AFR = ((Major DIA. - Cutter DIA.) / Major DIA.) • LFR
 AFR = ((.500 - .350) / .500) • 29.47
 AFR = 8.84 IPM

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Solid Carbide Speeds & Feeds



Inch

Material	Hardness (BHN)	**Machinability	AM210® SFM	Cutter Diameter (Inch)							
				Chipload per Tooth (IPT)							
				.060-.125	.126-.188	.189-.250	.251-.312	.313-.375	.376-.500	.501-.625	.626-.750
Free Machining Steel 1118, 1215, 12L14, etc.	100-150	Easy	900	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	150-200	Easy	700	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	200-250	Easy	500	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
Low Carbon Steel 1010, 1020, 1025, 1522, 1144	85-125	Average	900	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	125-175	Average	700	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	175-225	Average	600	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	225-275	Average	500	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
Medium Carbon Steel 1010, 1040, 1050, 1527, 1140	125-175	Average	575	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	175-225	Average	500	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	225-275	Average	450	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	275-325	Average	400	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
Alloy Steel 4140, 5140, 8640	125-175	Average	575	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	175-225	Average	500	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	225-275	Average	450	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	275-325	Difficult	400	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
High Strength Alloy 4340, 4330V, 300M	325-375	Difficult	375	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	225-300	Average	450	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	300-350	Difficult	400	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
Structural Steel A36, A285, A516	350-400	Difficult	350	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	100-150	Average	600	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	150-250	Average	500	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
High Temp Alloy Hastelloy B, Inconel 600	250-350	Difficult	450	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	140-220	Difficult	120	0.0003	0.0004	0.0006	0.0008	0.0009	0.0010	0.0012	0.0015
Stainless Steel 303, 416, 420	220-310	Difficult	90	0.0003	0.0004	0.0006	0.0008	0.0009	0.0010	0.0012	0.0015
	135-185	Difficult	525	0.0004	0.0005	0.0006	0.0008	0.0009	0.0010	0.0015	0.0020
Stainless Steel PH 17-4	185-275	Difficult	500	0.0004	0.0005	0.0006	0.0008	0.0009	0.0010	0.0015	0.0020
	185-275	Difficult	300	0.0004	0.0005	0.0006	0.0008	0.0009	0.0010	0.0015	0.0020
Tool Steel H-13, H21, A-4	275-325	Difficult	150	0.0004	0.0005	0.0006	0.0008	0.0009	0.0010	0.0015	0.0020
	150-200	Difficult	575	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
Cast Iron Gray, Ductile, Nodular	200-250	Difficult	500	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	120-150	Easy	675	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	150-200	Easy	625	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	200-220	Easy	575	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	220-260	Average	500	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
Wrought Aluminum 6061 T6	260-320	Average	475	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	30	Easy	1100	0.0005	0.0006	0.0009	0.0010	0.0015	0.0020	0.0025	0.0030
*Cast Aluminum (up to 10% Silicon)	180	Easy	1000	0.0005	0.0006	0.0009	0.0010	0.0015	0.0020	0.0025	0.0030
	120	Easy	625	0.0005	0.0006	0.0009	0.0010	0.0015	0.0020	0.0025	0.0030
Brass	30-125	Easy	1100	0.0005	0.0006	0.0009	0.0010	0.0015	0.0020	0.0025	0.0030

*Uncoated threadmills are recommended for cast aluminum applications

**Refer to recommended pass chart on page 39 when referencing material machinability

NOTICE: Reduce feed and speed by 30% for NPT and NPTF thread forms due to tapered cutting action.

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Solid Carbide Speeds & Feeds



Metric

Material	Hardness (BHN)	**Machinability	AM210® M/min	Cutter Diameter (mm)							
				Chipload per Tooth (mm/tooth)							
				0,00-3,18	3,19-4,76	4,77-6,35	6,36-7,94	7,95-9,53	9,54-12,70	12,71-15,88	15,89-19,05
Free Machining Steel 1118, 1215, 12L14, etc.	100-150	Easy	274	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	150-200	Easy	213	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	200-250	Easy	152	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
Low Carbon Steel 1010, 1020, 1025, 1522, 1144	85-125	Average	274	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	125-175	Average	213	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	175-225	Average	183	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
Medium Carbon Steel 1010, 1040, 1050, 1527, 1140	225-275	Average	152	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	125-175	Average	175	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	175-225	Average	152	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
Alloy Steel 4140, 5140, 8640	225-275	Average	137	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	275-325	Average	122	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	325-375	Difficult	114	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
High Strength Alloy 4340, 4330V, 300M	125-175	Average	175	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	300-350	Difficult	122	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	350-400	Difficult	107	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
Structural Steel A36, A285, A516	100-150	Average	183	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	150-250	Average	152	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	250-350	Difficult	137	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
High Temp Alloy Hastelloy B, Inconel 600	140-220	Difficult	37	0,008	0,010	0,015	0,020	0,023	0,025	0,030	0,038
	220-310	Difficult	27	0,008	0,010	0,015	0,020	0,023	0,025	0,030	0,038
Stainless Steel 303, 416, 420	135-185	Difficult	160	0,010	0,013	0,015	0,020	0,023	0,025	0,038	0,051
	185-275	Difficult	152	0,010	0,013	0,015	0,020	0,023	0,025	0,038	0,051
Stainless Steel PH 17-4	185-275	Difficult	91	0,010	0,013	0,015	0,020	0,023	0,025	0,038	0,051
	275-325	Difficult	46	0,010	0,013	0,015	0,020	0,023	0,025	0,038	0,051
Tool Steel H-13, H21, A-4	150-200	Difficult	175	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	200-250	Difficult	152	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
Cast Iron Gray, Ductile, Nodular	120-150	Easy	206	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	150-200	Easy	191	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	200-220	Easy	175	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	220-260	Average	152	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
Wrought Aluminum 6061 T6	260-320	Average	145	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	30	Easy	335	0,013	0,015	0,023	0,025	0,038	0,051	0,064	0,076
*Cast Aluminum (up to 10% Silicon)	180	Easy	305	0,013	0,015	0,023	0,025	0,038	0,051	0,064	0,076
	120	Easy	191	0,013	0,015	0,023	0,025	0,038	0,051	0,064	0,076
Brass	30-125	Easy	335	0,013	0,015	0,023	0,025	0,038	0,051	0,064	0,076

*Uncoated threadmills are recommended for cast aluminum applications

**Refer to recommended pass chart on page 39 when referencing material machinability

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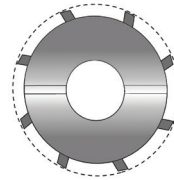
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Technical



AccuThread 856®

Indexable Speeds & Feeds



Inch - Positive Rake

Material	Cutter Diameter (Inch)			.375 - .500	.501 - .750	.751 - 1.000	1.001 - 1.500	1.501 - 2.000	2.001 - 2.750	2.751 - 3.500
	Number of Flutes			1	1	1 & 2	3	5	7	8
	Hardness (BHN)	**Machinability	AM210® SFM	Chipload per Tooth (IPT)						
Free Machining Steel 1118, 1215, 12L14	100-150	Easy	900	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
	150-200	Easy	700	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
	200-250	Easy	500	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
Low Carbon Steel 1010, 1020, 1025, 1522, 1144	85-125	Average	900	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
	125-175	Average	700	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
	175-225	Average	600	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
	225-275	Average	500	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
Medium Carbon Steel 1010, 1040, 1050, 1527, 1140	125-175	Average	575	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
	175-225	Average	500	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
	225-275	Average	450	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
	275-325	Average	400	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
Alloy Steel 4140, 5140, 8640	125-175	Average	575	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
	175-225	Average	500	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
	225-275	Average	450	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
	275-325	Difficult	400	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
High Strength Alloy 4340, 4330V, 300M	325-375	Difficult	375	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
	225-300	Average	450	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
	300-350	Difficult	400	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
Structural Steel A36, A285, A516	350-400	Difficult	350	0.0008	0.0009	0.0010	0.0012	0.0015	0.0020	0.0025
	100-150	Average	600	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
	150-250	Average	500	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
High Temp Alloy Hastelloy B, Inconel 600	250-350	Difficult	450	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
	140-220	Difficult	120	0.0005	0.0006	0.0008	0.0010	0.0015	0.0020	0.0025
Stainless Steel 303, 416, 420	220-310	Difficult	90	0.0005	0.0006	0.0008	0.0010	0.0015	0.0020	0.0025
	135-185	Difficult	525	0.0005	0.0007	0.0009	0.0015	0.0020	0.0025	0.0030
Stainless Steel PH 17-4	185-275	Difficult	500	0.0005	0.0007	0.0009	0.0015	0.0020	0.0025	0.0030
	275-325	Difficult	150	0.0005	0.0007	0.0009	0.0015	0.0020	0.0025	0.0030
Tool Steel H-13, H21, A-4	185-275	Difficult	300	0.0005	0.0007	0.0009	0.0015	0.0020	0.0025	0.0030
	150-200	Difficult	575	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
Cast Iron Gray, Ductile, Nodular	200-250	Difficult	500	0.0008	0.0010	0.0012	0.0015	0.0020	0.0025	0.0030
	120-150	Easy	675	0.0008	0.0012	0.0015	0.0020	0.0030	0.0040	0.0050
	150-200	Easy	625	0.0008	0.0012	0.0015	0.0020	0.0030	0.0040	0.0050
	200-220	Easy	575	0.0008	0.0012	0.0015	0.0020	0.0030	0.0040	0.0050
	220-260	Average	500	0.0008	0.0012	0.0015	0.0020	0.0030	0.0040	0.0050
Wrought Aluminum 6061 T6	260-320	Average	475	0.0008	0.0012	0.0015	0.0020	0.0030	0.0040	0.0050
	30	Easy	1100	0.0015	0.0020	0.0025	0.0030	0.0040	0.0050	0.0060
*Cast Aluminum (up to 10% Silicon)	180	Easy	1000	0.0015	0.0020	0.0025	0.0030	0.0040	0.0050	0.0060
	120	Easy	625	0.0015	0.0020	0.0025	0.0030	0.0040	0.0050	0.0060
Brass	30-125	Easy	1100	0.0020	0.0025	0.0030	0.0040	0.0045	0.0055	0.0065

*Uncoated threadmills are recommended for cast aluminum applications
 **Refer to recommended pass chart on page 39 when referencing material machinability

NOTICE: Reduce feed and speed by 30% for NPT and NPTF thread forms due to tapered cutting action.

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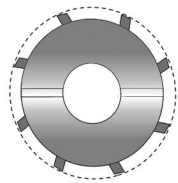
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Threadmills USA
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Technical



AccuThread 856®

Indexable Speeds & Feeds



Metric - Positive Rake

Material	Cutter Diameter (mm)			9,53 - 12,70	12,71 - 19,05	19,06 - 25,40	25,41 - 38,10	38,11 - 50,80	50,81 - 69,85	69,85 - 88,90
	Number of Flutes			1	1	1 & 2	3	5	7	8
	Hardness (BHN)	**Machinability	AM210® M/min	Chipload per Tooth (mm/tooth)						
Free Machining Steel 1118, 1215, 12L14	100-150	Easy	274	0,020	0,025	0,030	0,038	0,051	0,064	0,076
	150-200	Easy	213	0,020	0,025	0,030	0,038	0,051	0,064	0,076
	200-250	Easy	152	0,020	0,025	0,030	0,038	0,051	0,064	0,076
Low Carbon Steel 1010, 1020, 1025, 1522, 1144	85-125	Average	274	0,020	0,025	0,030	0,038	0,051	0,064	0,076
	125-175	Average	213	0,020	0,025	0,030	0,038	0,051	0,064	0,076
	175-225	Average	183	0,020	0,025	0,030	0,038	0,051	0,064	0,076
	225-275	Average	152	0,020	0,025	0,030	0,038	0,051	0,064	0,076
Medium Carbon Steel 1010, 1040, 1050, 1527, 1140	125-175	Average	175	0,020	0,023	0,025	0,030	0,038	0,051	0,064
	175-225	Average	152	0,020	0,023	0,025	0,030	0,038	0,051	0,064
	225-275	Average	137	0,020	0,023	0,025	0,030	0,038	0,051	0,064
	275-325	Average	122	0,020	0,023	0,025	0,030	0,038	0,051	0,064
Alloy Steel 4140, 5140, 8640	125-175	Average	175	0,020	0,023	0,025	0,030	0,038	0,051	0,064
	175-225	Average	152	0,020	0,023	0,025	0,030	0,038	0,051	0,064
	225-275	Average	137	0,020	0,023	0,025	0,030	0,038	0,051	0,064
	275-325	Difficult	122	0,020	0,023	0,025	0,030	0,038	0,051	0,064
High Strength Alloy 4340, 4330V, 300M	325-375	Difficult	114	0,020	0,023	0,025	0,030	0,038	0,051	0,064
	225-300	Average	137	0,020	0,023	0,025	0,030	0,038	0,051	0,064
	300-350	Difficult	122	0,020	0,023	0,025	0,030	0,038	0,051	0,064
Structural Steel A36, A285, A516	350-400	Difficult	107	0,020	0,023	0,025	0,030	0,038	0,051	0,064
	100-150	Average	183	0,020	0,025	0,030	0,038	0,051	0,064	0,076
	150-250	Average	152	0,020	0,025	0,030	0,038	0,051	0,064	0,076
High Temp Alloy Hastelloy B, Inconel 600	250-350	Difficult	137	0,020	0,025	0,030	0,038	0,051	0,064	0,076
	140-220	Difficult	37	0,013	0,015	0,020	0,025	0,038	0,051	0,064
Stainless Steel 303, 416, 420	220-310	Difficult	27	0,013	0,015	0,020	0,025	0,038	0,051	0,064
	135-185	Difficult	160	0,013	0,018	0,023	0,038	0,051	0,064	0,076
Stainless Steel PH 17-4	185-275	Difficult	152	0,013	0,018	0,023	0,038	0,051	0,064	0,076
	185-275	Difficult	91	0,013	0,018	0,023	0,038	0,051	0,064	0,076
Tool Steel H-13, H21, A-4	275-325	Difficult	46	0,013	0,018	0,023	0,038	0,051	0,064	0,076
	150-200	Difficult	175	0,020	0,025	0,030	0,038	0,051	0,064	0,076
Cast Iron Gray, Ductile, Nodular	200-250	Difficult	152	0,020	0,025	0,030	0,038	0,051	0,064	0,076
	120-150	Easy	206	0,020	0,030	0,038	0,051	0,076	0,102	0,127
	150-200	Easy	191	0,020	0,030	0,038	0,051	0,076	0,102	0,127
	200-220	Easy	175	0,020	0,030	0,038	0,051	0,076	0,102	0,127
	220-260	Average	152	0,020	0,030	0,038	0,051	0,076	0,102	0,127
Wrought Aluminum 6061 T6	260-320	Average	145	0,020	0,030	0,038	0,051	0,076	0,102	0,127
	30	Easy	335	0,038	0,051	0,064	0,076	0,102	0,127	0,152
*Cast Aluminum (up to 10% Silicon)	180	Easy	305	0,038	0,051	0,064	0,076	0,102	0,127	0,152
	120	Easy	191	0,038	0,051	0,064	0,076	0,102	0,127	0,152
Brass	30-125	Easy	335	0,051	0,064	0,076	0,102	0,114	0,140	0,165

*Uncoated threadmills are recommended for cast aluminum applications

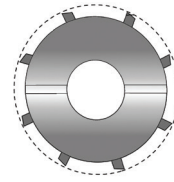
**Refer to recommended pass chart on page 39 when referencing material machinability

NOTICE: Reduce feed and speed by 30% for NPT and NPTF thread forms due to tapered cutting action.



AccuThread 856®

Indexable Speeds & Feeds



Inch - Neutral Rake

Material	Cutter Diameter (Inch)			1.000 - 1.499	1.500 - 1.999	2.000 - 2.750
	Number of Flutes			3	5	6
	Hardness (BHN)	**Machinability	AM210® SFM	Chipload per Tooth (IPT)		
Free Machining Steel 1118, 1215, 12L14	100-150	Easy	765	0.0013	0.0017	0.0021
	150-200	Easy	595	0.0013	0.0017	0.0021
	200-250	Easy	425	0.0013	0.0017	0.0021
Low Carbon Steel 1010, 1020, 1025, 1522, 1144	85-125	Average	765	0.0013	0.0017	0.0021
	125-175	Average	595	0.0013	0.0017	0.0021
	175-225	Average	510	0.0013	0.0017	0.0021
	225-275	Average	425	0.0013	0.0017	0.0021
Medium Carbon Steel 1010, 1040, 1050, 1527, 1140	125-175	Average	490	0.0010	0.0013	0.0017
	175-225	Average	425	0.0010	0.0013	0.0017
	225-275	Average	380	0.0010	0.0013	0.0017
	275-325	Average	340	0.0010	0.0013	0.0017
Alloy Steel 4140, 5140, 8640	125-175	Average	490	0.0010	0.0013	0.0017
	175-225	Average	425	0.0010	0.0013	0.0017
	225-275	Average	380	0.0010	0.0013	0.0017
	275-325	Difficult	340	0.0010	0.0013	0.0017
High Strength Alloy 4340, 4330V, 300M	325-375	Difficult	320	0.0010	0.0013	0.0017
	225-300	Average	390	0.0010	0.0013	0.0017
	300-350	Difficult	340	0.0010	0.0013	0.0017
Structural Steel A36, A285, A516	350-400	Difficult	300	0.0010	0.0013	0.0017
	100-150	Average	510	0.0013	0.0017	0.0021
	150-250	Average	425	0.0013	0.0017	0.0021
High Temp Alloy Hastelloy B, Inconel 600	250-350	Difficult	390	0.0013	0.0017	0.0021
	140-220	Difficult	100	0.0009	0.0013	0.0017
Stainless Steel 303, 416, 420	220-310	Difficult	80	0.0009	0.0013	0.0017
	135-185	Difficult	450	0.0013	0.0017	0.0021
Stainless Steel PH 17-4	185-275	Difficult	425	0.0013	0.0017	0.0021
	185-275	Difficult	250	0.0013	0.0017	0.0021
Tool Steel H-13, H21, A-4	275-325	Difficult	125	0.0013	0.0017	0.0021
	150-200	Difficult	490	0.0013	0.0017	0.0021
Cast Iron Gray, Ductile, Nodular	200-250	Difficult	425	0.0013	0.0017	0.0021
	120-150	Easy	575	0.0017	0.0026	0.0034
	150-200	Easy	525	0.0017	0.0026	0.0034
	200-220	Easy	490	0.0017	0.0026	0.0034
	220-260	Average	425	0.0017	0.0026	0.0034
Wrought Aluminum 6061 T6	260-320	Average	400	0.0017	0.0026	0.0034
	30	Easy	935	0.0026	0.0034	0.0043
*Cast Aluminum (up to 10% Silicon)	180	Easy	850	0.0026	0.0034	0.0043
	120	Easy	525	0.0026	0.0034	0.0043
Brass	30-125	Easy	935	0.0034	0.0038	0.0047

*Uncoated threadmills are recommended for cast aluminum applications
 **Refer to recommended pass chart on page 39 when referencing material machinability

NOTICE: Reduce feed and speed by 30% for NPT and NPTF thread forms due to tapered cutting action.

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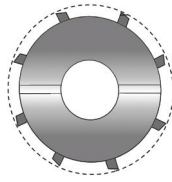
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Pin Style Indexable

Technical



Metric - Neutral Rake

Material	Cutter Diameter (mm)			25.41 - 38.09	38.10 - 50.77	50.78 - 69.85
	Number of Flutes			3	5	6
	Hardness (BHN)	**Machinability	AM210® M/min	Chipload per Tooth (mm/tooth)		
Free Machining Steel 1118, 1215, 12L14	100-150	Easy	233	0,032	0,043	0,054
	150-200	Easy	181	0,032	0,043	0,054
	200-250	Easy	129	0,032	0,043	0,054
Low Carbon Steel 1010, 1020, 1025, 1522, 1144	85-125	Average	233	0,032	0,043	0,054
	125-175	Average	181	0,032	0,043	0,054
	175-225	Average	156	0,032	0,043	0,054
Medium Carbon Steel 1010, 1040, 1050, 1527, 1140	225-275	Average	129	0,032	0,043	0,054
	125-175	Average	149	0,026	0,032	0,043
	175-225	Average	129	0,026	0,032	0,043
Alloy Steel 4140, 5140, 8640	225-275	Average	116	0,026	0,032	0,043
	275-325	Average	104	0,026	0,032	0,043
	125-175	Average	149	0,026	0,032	0,043
High Strength Alloy 4340, 4330V, 300M	175-225	Average	129	0,026	0,032	0,043
	225-275	Average	116	0,026	0,032	0,043
	275-325	Difficult	104	0,026	0,032	0,043
Structural Steel A36, A285, A516	325-375	Difficult	97	0,026	0,032	0,043
	225-300	Average	116	0,026	0,032	0,043
	300-350	Difficult	104	0,026	0,032	0,043
High Temp Alloy Hastelloy B, Inconel 600	350-400	Difficult	91	0,026	0,032	0,043
	140-220	Difficult	31	0,021	0,032	0,043
	220-310	Difficult	23	0,021	0,032	0,043
Stainless Steel 303, 416, 420	100-150	Average	156	0,032	0,043	0,054
	150-250	Average	129	0,032	0,043	0,054
Stainless Steel PH 17-4	250-350	Difficult	116	0,032	0,043	0,054
	135-185	Difficult	136	0,032	0,043	0,054
Tool Steel H-13, H21, A-4	185-275	Difficult	129	0,032	0,043	0,054
	185-275	Difficult	77	0,032	0,043	0,054
Cast Iron Gray, Ductile, Nodular	275-325	Difficult	39	0,032	0,043	0,054
	150-200	Difficult	149	0,032	0,043	0,054
	200-250	Difficult	129	0,032	0,043	0,054
	120-150	Easy	175	0,043	0,065	0,087
	150-200	Easy	162	0,043	0,065	0,087
Wrought Aluminum 6061 T6	200-220	Easy	149	0,043	0,065	0,087
	220-260	Average	129	0,043	0,065	0,087
*Cast Aluminum (up to 10% Silicon)	260-320	Average	123	0,043	0,065	0,087
	30	Easy	285	0,065	0,087	0,108
Brass	180	Easy	259	0,065	0,087	0,108
	120	Easy	162	0,065	0,087	0,108
	30-125	Easy	285	0,087	0,097	0,119

*Uncoated threadmills are recommended for cast aluminum applications

**Refer to recommended pass chart on page 39 when referencing material machinability

NOTICE: Reduce feed and speed by 30% for NPT and NPTF thread forms due to tapered cutting action.

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Inch

Material	Hardness	**Machinability	TiAlN SFM	Cutter Diameter (Inch)							
				Chipload per Tooth (IPT)							
				.060-.125	.126-.188	.189-.250	.251-.312	.313-.375	.376-.500	.501-.625	.626-.750
Free Machining Steel 1118, 1215, 12L14, etc.	100-150	Easy	725	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	150-200	Easy	550	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	200-250	Easy	450	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
Low Carbon Steel 1010, 1020, 1025, 1522, 1144	85-125	Average	725	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	125-175	Average	550	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	175-225	Average	450	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	225-275	Average	400	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
Medium Carbon Steel 1010, 1040, 1050, 1527, 1140	125-175	Average	450	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	175-225	Average	400	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	225-275	Average	350	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	275-325	Average	300	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
Alloy Steel 4140, 5140, 8640	125-175	Average	450	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	175-225	Average	400	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	225-275	Average	350	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	275-325	Difficult	300	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	325-375	Difficult	250	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
High Strength Alloy 4340, 4330V, 300M	225-300	Average	350	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	300-350	Difficult	300	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
	350-400	Difficult	250	0.0004	0.0005	0.0006	0.0008	0.0010	0.0013	0.0018	0.0020
Structural Steel A36, A285, A516	100-150	Average	450	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	150-250	Average	400	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	250-350	Difficult	300	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
High Temp Alloy Hastelloy B, Inconel 600	140-220	Difficult	100	0.0003	0.0004	0.0006	0.0008	0.0009	0.0010	0.0012	0.0015
	220-310	Difficult	75	0.0003	0.0004	0.0006	0.0008	0.0009	0.0010	0.0012	0.0015
Stainless Steel 303, 416, 420	135-185	Difficult	425	0.0004	0.0005	0.0006	0.0008	0.0009	0.0010	0.0015	0.0020
	185-275	Difficult	400	0.0004	0.0005	0.0006	0.0008	0.0009	0.0010	0.0015	0.0020
Stainless Steel PH 17-4	185-275	Difficult	250	0.0004	0.0005	0.0006	0.0008	0.0009	0.0010	0.0015	0.0020
	275-325	Difficult	125	0.0004	0.0005	0.0006	0.0008	0.0009	0.0010	0.0015	0.0020
Tool Steel H-13, H21, A-4	150-200	Difficult	325	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	200-250	Difficult	225	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
Cast Iron Gray, Ductile, Nodular	120-150	Easy	550	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	150-200	Easy	500	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	200-220	Easy	450	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	220-260	Average	400	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
	260-320	Average	375	0.0004	0.0005	0.0007	0.0009	0.0010	0.0015	0.0020	0.0025
Wrought Aluminum 6061 T6	30	Easy	1000	0.0005	0.0006	0.0009	0.0010	0.0015	0.0020	0.0025	0.0030
	180	Easy	900	0.0005	0.0006	0.0009	0.0010	0.0015	0.0020	0.0025	0.0030
*Cast Aluminum (up to 10% Silicon)	120	Easy	500	0.0005	0.0006	0.0009	0.0010	0.0015	0.0020	0.0025	0.0030
Brass	30-125	Easy	1000	0.0005	0.0006	0.0009	0.0010	0.0015	0.0020	0.0025	0.0030

*Uncoated threadmills are recommended for cast aluminum applications

**Refer to recommended pass chart on page 39 when referencing material machinability

NOTICE: Reduce feed and speed by 30% for NPT and NPTF thread forms due to tapered cutting action.

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Technical



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Metric

Material	Hardness	**Machinability	TiAlN M/min	Cutter Diameter (mm)							
				Chipload per Tooth (mm/tooth)							
				1,50-3,18	3,19-4,76	4,77-6,35	6,36-7,94	7,95-9,53	9,54-12,70	12,71-15,88	15,89-19,05
Free Machining Steel 1118, 1215, 12L14, etc.	100-150	Easy	221	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	150-200	Easy	168	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	200-250	Easy	137	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
Low Carbon Steel 1010, 1020, 1025, 1522, 1144	85-125	Average	221	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	125-175	Average	168	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	175-225	Average	137	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	225-275	Average	122	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
Medium Carbon Steel 1010, 1040, 1050, 1527, 1140	125-175	Average	137	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	175-225	Average	122	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	225-275	Average	107	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	275-325	Average	91	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
Alloy Steel 4140, 5140, 8640	125-175	Average	137	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	175-225	Average	122	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	225-275	Average	107	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	275-325	Difficult	91	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	325-375	Difficult	76	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
High Strength Alloy 4340, 4330V, 300M	225-300	Average	107	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	300-350	Difficult	91	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
	350-400	Difficult	76	0,010	0,013	0,015	0,020	0,025	0,033	0,046	0,051
Structural Steel A36, A285, A516	100-150	Average	137	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	150-250	Average	122	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	250-350	Difficult	91	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
High Temp Alloy Hastelloy B, Inconel 600	140-220	Difficult	30	0,008	0,010	0,015	0,020	0,023	0,025	0,030	0,038
	220-310	Difficult	23	0,008	0,010	0,015	0,020	0,023	0,025	0,030	0,038
Stainless Steel 303, 416, 420	135-185	Difficult	130	0,010	0,013	0,015	0,020	0,023	0,025	0,038	0,051
	185-275	Difficult	122	0,010	0,013	0,015	0,020	0,023	0,025	0,038	0,051
Stainless Steel PH 17-4	185-275	Difficult	76	0,010	0,013	0,015	0,020	0,023	0,025	0,038	0,051
	275-325	Difficult	38	0,010	0,013	0,015	0,020	0,023	0,025	0,038	0,051
Tool Steel H-13, H21, A-4	150-200	Difficult	99	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	200-250	Difficult	69	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
Cast Iron Gray, Ductile, Nodular	120-150	Easy	168	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	150-200	Easy	152	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	200-220	Easy	137	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	220-260	Average	122	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
	260-320	Average	114	0,010	0,013	0,018	0,023	0,025	0,038	0,051	0,064
Wrought Aluminum 6061 T6	30	Easy	305	0,013	0,015	0,023	0,025	0,038	0,051	0,064	0,076
	180	Easy	274	0,013	0,015	0,023	0,025	0,038	0,051	0,064	0,076
*Cast Aluminum (up to 10% Silicon)	120	Easy	152	0,013	0,015	0,023	0,025	0,038	0,051	0,064	0,076
Brass	30-125	Easy	305	0,013	0,015	0,023	0,025	0,038	0,051	0,064	0,076

*Uncoated threadmills are recommended for cast aluminum applications

**Refer to recommended pass chart on page 39 when referencing material machinability

NOTICE: Reduce feed and speed by 30% for NPT and NPTF thread forms due to tapered cutting action.

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Technical



Programming Guide

- Threadmilling can be easily accomplished with sample G code programming
- If your machine is capable of 3 axis (Helical) Interpolation, you can and should be threadmilling
- Basic programming of a one pass threadmill can be achieved in 6 basic steps (see below)

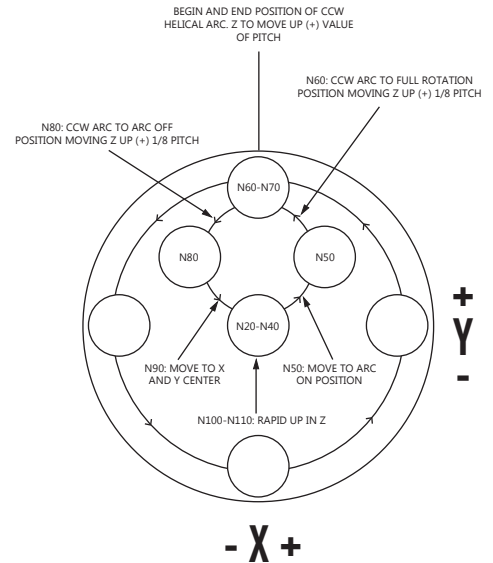
The following are examples of how to calculate and program a 7/16-20 right hand thread that will be 1/2" deep and produced in one pass

Major Thread Diameter	0.4375	Major diameter of thread (7/16 = .4375)
Threads Per Inch	20	Number of threads per inch (20 is from 7/16-20 designation)
Length of Thread	0.5	Desired length of thread
SFM	475	Recommended surface footage for material to be cut
Feed Per Flute	0.0025	Recommended feed rate per cutting edge
Number of Flutes	4	Number of flutes on tool to be used
Tool Diameter	0.335	Diameter of cutting tool

Using the information above, the values can be calculated

Pitch	0.05	= 1/Threads Per Inch
RPM	5416	(SFM * 3.82) / Tool Dia
Linear Feed	54.16	RPM * Feed Per Flute * Number of Flutes
Feed Rate for Threadmilling	12.69	Linear Feed * ((Major Thread Dia - Tool Dia) / Major Thread Dia)
Z axis move for full Thread	0.5063	(pitch / 8) + Length of Thread
Z axis move on Arc On	0.0063	(pitch / 8)
Arc On/Off	0.0256	(Major Thread Dia - Tool Dia) / 4
Full Rotation Value	0.05125	(Major Thread Dia - Tool Dia) / 2

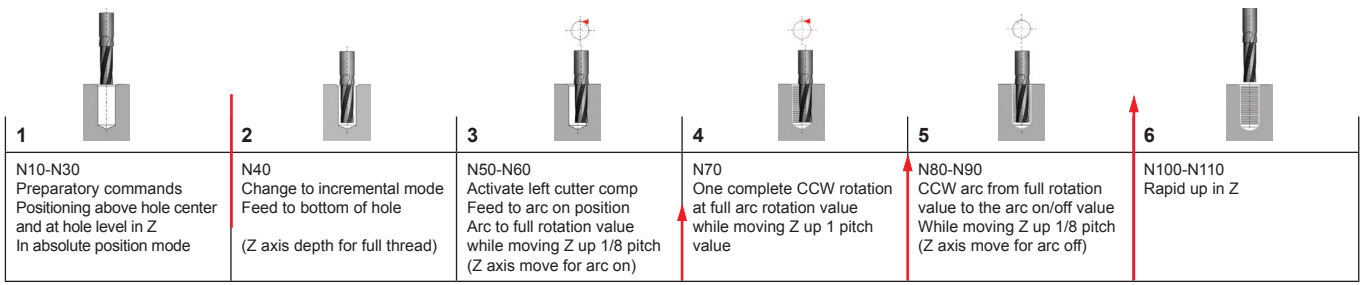
Major Thread Dia	0.4375	Feed Rate for Threadmilling	12.69	Arc On/Off Value	0.0256
Cutter Diameter	0.335	Z Axis Depth for Full Thread	0.5063	Full Rotation Value	0.05125
Length of Thread	0.5	Z Axis for Arc On/Off	0.0063	Pitch Value	0.05



Incremental Program for 1 Pass Threadmill

```

1 N10 S 5416 M03
  N20 G90 G00 X 0.0000 Y 0.0000
  N30 Z 0.0000
2 N40 G91 G01 Z -0.5063 F 50.0
  N50 G41 G01 X 0.0256 Y 0.0256 D1 F 3.17
  N60 G03 X -0.0256 Y 0.0256 Z 0.0063 I -0.0256 J 0.0000 F 12.69
  N70 G03 X 0.0000 Y 0.0000 Z 0.0500 I 0.0000 J -0.0513 F 12.69
  N80 G03 X -0.0256 Y -0.0256 Z 0.0063 I 0.0000 J -0.0256 F 25.38
  N90 G40 G01 X 0.0256 Y -0.0256
  N100 G00 Z 0.4438
  N110 G90 G00 Z 1.0000
  
```



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Technical



Threadmilling

Application Request

Allied Machine & Engineering Corp.
 Telephone: (330) 343-4283
 Toll Free USA & Canada: (800) 321-5537
 Fax: (330) 364-7666
 Email: aesupport@alliedmachine.com

Distributor P.O. #: _____

- Guaranteed Test**
 Program

The following form must be filled out completely before test will be considered.

Distributor: _____ End User: _____
 Contact: _____ Contact: _____
 City: _____ Industry: _____
 Phone: _____ Phone: _____
 Email: _____ Email: _____

Current Process: _____

Application Information

Thread Size and Pitch: _____ Thread Depth: _____ Material: _____ Hardness: _____

Thread: _____ Thread Form % : 100 75 Other _____ Drill Size: _____ Material State: Forged Bar Cast Other _____

Internal External Thru Blind

Machine Information

Machine Type: Machine Center Lathe Mill Other _____ Builder: _____ Model #: _____

Horse Power: _____ Maximum RPM: _____ Tool Rotating: Yes No

CNC Control Type: Fanuc Siemens Mazatrol Other _____ Spindle Orientation: Vertical Horizontal ISO - ASCII Compatible: Yes No

Rigidity: Excellent Good Poor Helical Interpolation: Yes No

Coolant Information

Coolant Pressure: _____ Coolant Volume: _____ Coolant Type: _____

Test Objective: _____

Tooling to be Used		Programming Data	
Item Number	QTY	Dimensions: <input type="checkbox"/> Inch <input type="checkbox"/> Metric	
		Arc Center: <input type="checkbox"/> I and J <input type="checkbox"/> R (Radius)	
		Tool Path: <input type="checkbox"/> Offset <input type="checkbox"/> No Offset	
		Arc Limitation: <input type="checkbox"/> Full Circle <input type="checkbox"/> Quadrant	
		K Value: <input type="checkbox"/> Required <input type="checkbox"/> Not Required	
		If Required: <input type="checkbox"/> In Radians <input type="checkbox"/> Per Revolution	

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