

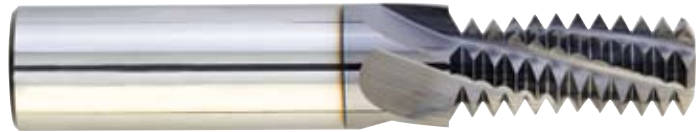
Solid Carbide Thread Mills

ALTiN Coated
10% Micrograin Carbide

Solid Carbide offers higher cutting speeds, high rigidity, excellent hardness, wear resistance and heat resistance and long tool life.

Fraise à fileter au carbure

Fresa de roscar de carburo



List No. 5900 Fractional & Machine Screw

ALTiN - Aluminum Titanium Nitride is an excellent all-around coating that is especially recommended for high thermal stress applications including dry machining, abrasive materials and difficult-to-machine materials. Benefits include higher cutting speeds and longer tool life.

THREAD MILLING FEATURES & BENEFITS

- **Reduced Tool Inventory. One Thread Mill Can Produce** internal & external threads, left hand & right hand threads, different thread diameters of the same pitch and through hole & blind hole threads.
- **Requires Less Power.** Produce coarse pitches and large diameters on lower H.P. machines.
- **Tough Threading Applications.** Thread harder, difficult-to-machine & gummy materials that cause problems for taps.
- **Helical Flutes** for reduced cutting forces, improved thread quality & increased tool life.
- **Precision Threading.** Control pitch diameter precisely via programming. Precise thread depth control & positional accuracy. Produce 100% thread heights. Produce full threads to within one pitch of a shoulder or blind hole bottom.
- **Easily Removed if Broken.** No need for EDM burn-out.

Coolant-Through Available

Morse Thread Mills Can Be Supplied With Through-Coolant Holes For Blind And Through-Hole Applications.
Contact Morse Cutting Tools For Assistance.

Fractional & Machine Screw

SIZE	SHANK DIA.	CUTTING DIA.	LENGTH OF CUT	OAL	NO. OF FLUTES	EDP NO.
6-32	1/8	.100	.218	2	3	98600
8-36	1/8	.115	.250	2	3	98601
8-32	1/8	.115	.250	2	3	98602
10-24	3/16	.120	.312	2	3	98603
10-32	3/16	.120	.312	2	3	98604
1/4-20	3/16	.180	.500	2-1/2	3	98605
1/4-28	3/16	.180	.500	2-1/2	3	98606
5/16-18	1/4	.240	.625	2-1/2	3	98607
5/16-24	1/4	.240	.625	2-1/2	3	98608
3/8-16	5/16	.290	.750	3	4	98609
3/8-24	5/16	.290	.750	3	4	98610
7/16-14	3/8	.340	.875	3	4	98611
7/16-20	3/8	.340	.875	3	4	98612
1/2-13	3/8	.350	.875	3-1/2	4	98613
1/2-20	3/8	.350	.875	3-1/2	4	98614
9/16-12	1/2	.370	.875	3-1/2	4	98615
9/16-18	1/2	.370	.875	3-1/2	4	98616
5/8-11	1/2	.470	1.250	3-1/2	5	98617
5/8-18	1/2	.470	1.250	3-1/2	5	98618
3/4-10	1/2	.495	1.250	3-1/2	5	98619
3/4-16	1/2	.495	1.250	3-1/2	5	98620
7/8-9	5/8	.620	1.250	3-1/2	5	98621
7/8-14	5/8	.620	1.250	3-1/2	5	98622
1-8	3/4	.620	1.375	4	5	98623
1-12	3/4	.620	1.375	4	5	98624

Speeds & Feeds: Page 143

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List No. 5902 Pipe Thread

Pipe Thread

SIZE	SHANK DIA.	CUTTING DIA.	LENGTH OF CUT	OAL	NO. OF FLUTES	EDP NO.
NPT						
1/16-27	1/4	.245	.437	2-1/2	3	98641
1/8-27	5/16	.310	.437	2-1/2	4	98642
1/4-18	3/8	.370	.625	3	4	98656
3/8-18	3/8	.370	.625	3	4	98657
1/2-14	1/2	.495	.875	3-1/2	4	98645
3/4-14	1/2	.495	.875	3-1/2	4	98646
1-11½	3/4	.620	1.125	4	5	98647
NPTF						
1/16-27	1/4	.245	.437	2-1/2	3	98648
1/8-27	5/16	.310	.437	2-1/2	4	98649
1/4-18	3/8	.370	.625	3	4	98658
3/8-18	3/8	.370	.625	3	4	98659
1/2-14	1/2	.495	.875	3-1/2	4	98652
3/4-14	1/2	.495	.875	3-1/2	4	98653
1-11½	3/4	.620	1.125	4	5	98654

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Speeds & Feeds: Page 143

6 PIECE SET Fractional & Machine Screw

With just 6 thread mills you can produce 13 different thread sizes:
6-32, 8-32, 10-32, 10-24, 5/16"-24, 3/8"-24, 1/4"-20, 1/2"-20, 5/16"-18,
9/16"-18, 3/8"-16, 3/4"-16, 1/2"-13

With the same thread mill you can produce:

- both left hand & right hand threads
- both internal & external threads

List No. 5900

Sizes: 6-32, 10-24, 1/4"-20, 5/16"-18, 3/8"-16, 1/2"-13
in Plastic Case

EDP No. 98655

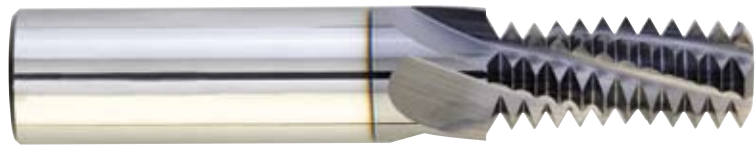


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Metric

List No. 5901 Metric

SIZE	SHANK DIA.	CUTTING DIA.	LENGTH OF CUT	OAL	NO. OF FLUTES	EDP NO.
M4 x 0.7	1/8	.120	.250	2	3	98625
M4.5 x 0.75	1/8	.120	.250	2	3	98626
M5 x 0.8	3/16	.120	.312	2	3	98627
M6 x 1	3/16	.170	.500	2-1/2	3	98628
M8 x 0.75	1/4	.235	.625	2-1/2	3	98629
M8 x 1	1/4	.235	.625	2-1/2	3	98630
M8 x 1.25	1/4	.235	.625	2-1/2	3	98631
M10 x 1.25	5/16	.300	.750	3	4	98632
M10 x 1.5	5/16	.300	.750	3	4	98633
M12 x 1	3/8	.360	.875	3-1/2	4	98634
M12 x 1.25	3/8	.360	.875	3-1/2	4	98635
M12 x 1.75	3/8	.360	.875	3-1/2	4	98636
M14 x 1.5	3/8	.360	.875	3-1/2	4	98637
M16 x 2	1/2	.470	1.250	3-1/2	5	98638
M18 x 2.5	1/2	.470	1.250	3-1/2	5	98639
M20 x 3	5/8	.470	1.250	3-1/2	5	98640

Coolant-Through Available

Morse Thread Mills Can Be Provided With
Coolant Holes For Through Coolant Capability.
Contact Morse Cutting Tools For Assistance.

Thread Milling Feed & Speeds

Material	Speed SFM	Feed Rate (inches/tooth)						
		Tool Diameter						
		1/8	3/16	1/4	5/16	3/8	1/2	5/8
Aluminum	800-1400	.0005-.001	.001-.0015	.0015-.0025	.002-.003	.003-.0045	.0035-.0055	.005-.007
Magnesium	800-1400	.0005-.001	.001-.0015	.0015-.0025	.002-.003	.003-.0045	.0035-.0055	.005-.007
Brass	600-800	.0005-.001	.001-.0015	.0015-.0025	.002-.003	.003-.0045	.0035-.0045	.005-.006
Bronze	500-600	.0005-.001	.001-.0015	.0015-.0025	.002-.003	.003-.0045	.0035-.0045	.005-.006
Hard Bronze	200-300	.0004-.0008	.0007-.0012	.001-.002	.001-.002	.0015-.0025	.002-.003	.003-.004
Low Alloy Steels < 25 Rc	350-500	.0005-.001	.001-.0015	.0015-.0025	.002-.003	.0025-.0035	.003-.004	.004-.005
High Alloy Steels > 25 Rc	250-400	.0003-.0006	.0005-.001	.0008-.0015	.001-.002	.0015-.0025	.002-.003	.003-.004
Stainless Steel	150-250	.0004-.0008	.0006-.001	.001-.0015	.0015-.002	.0015-.003	.002-.0035	.003-.004
Cast Iron - Soft	250-350	.0004-.0008	.0007-.0013	.0007-.0013	.0015-.002	.002-.003	.002-.004	.003-.005
Cast Iron - Hard	200-300	.0003-.0006	.0005-.001	.0008-.0015	.001-.002	.0015-.0025	.002-.003	.003-.004
Titanium	80-150	.0003-.0006	.0005-.001	.0008-.0015	.001-.002	.0015-.0025	.0015-.0025	.0025-.0035
Inconel	60-100	.0003-.0006	.0005-.001	.0008-.0015	.001-.002	.0015-.0025	.0015-.0025	.002-.003