



# Single-Profile Thread Mills

■ Carbide material

Single-profile thread mills create very low side-cutting pressure and provide more control over pitch diameter and cut length during thread-milling tasks than helical-flute or straight-flute thread mills. They are suitable for threading applications with unfavorable length-to-diameter ratios and can create internal threads with a variety of pitch ranges, lengths, and diameters, eliminating the need to change tools when threading multiple holes of different sizes. For use in CNC machines that have helical interpolation capability.

Cutter Dia.	Pitch Range	Length of Cut	Overall Length	Shank Dia.	Item No.
<b>AITIN Finish, Micro 100</b>					
<b>UN, 2 Flutes</b>					
0.1000 in	32-64	0.029 in	1 1/2 in	1/8 in	<b>16R736</b>
0.1000 in	32-64	0.029 in	2 in	1/8 in	<b>16R734</b>
0.0800 in	40-64	0.026 in	1 1/2 in	1/8 in	<b>16R730</b>
0.0800 in	40-64	0.026 in	1 1/2 in	1/8 in	<b>16R732</b>
0.0600 in	56-80	0.017 in	1 1/2 in	1/8 in	<b>16R726</b>
0.0600 in	56-80	0.017 in	1 1/2 in	1/8 in	<b>16R728</b>
<b>UN, 3 Flutes</b>					
0.1400 in	24-56	0.038 in	2 in	3/16 in	<b>16R746</b>
0.1400 in	24-56	0.038 in	2 in	3/16 in	<b>16R748</b>
0.1200 in	32-56	0.030 in	2 in	3/16 in	<b>16R740</b>
0.1200 in	32-56	0.030 in	2 in	3/16 in	<b>16R742</b>
0.1200 in	32-56	0.030 in	2 in	3/16 in	<b>16R744</b>
<b>UN, 4 Flutes</b>					
0.3600 in	12-32	0.085 in	4 in	3/8 in	<b>16R762</b>
0.2900 in	14-40	0.071 in	4 in	3/8 in	<b>16R760</b>
0.2400 in	16-48	0.055 in	3 1/2 in	3/8 in	<b>16R758</b>
0.1800 in	18-56	0.055 in	2 1/2 in	1/4 in	<b>16R750</b>
0.1800 in	18-56	0.055 in	2 1/2 in	1/4 in	<b>16R752</b>
0.1800 in	18-56	0.055 in	2 1/2 in	1/4 in	<b>16R754</b>
1/4 in	14-48	0.065 in	2 1/2 in	1/4 in	<b>16R756</b>
3/8 in	12-32	3/32 in	2.60 in	1/4 in	<b>16R655</b>
<b>UN, 5 Flutes</b>					
1/2 in	11-32	1/8 in	2.61 in	3/8 in	<b>16R657</b>
<b>UN, 6 Flutes</b>					
3/8 in	7-16	5/32 in	2.65 in	3/8 in	<b>16R659</b>
<b>UN, 7 Flutes</b>					
1 in	5-12	3/8 in	3.20 in	1/2 in	<b>16R653</b>



**Bright (Uncoated) Finish**  
**3 Flutes**  
**4PEH2**



Cutter Dia.	Pitch Range	Length of Cut	Overall Length	Shank Dia.	Item No.
<b>Bright (Uncoated) Finish, Scientific Cutting Tools</b>					
<b>UN, 2 Flutes</b>					
0.0500 in	64-80	0.1000 in	1 1/2 in	1/8 in	<b>4PEG7</b>
0.0500 in	64-80	0.1500 in	1 1/2 in	1/8 in	<b>4PEG8</b>
0.0400 in	72-90	0.0900 in	1 1/2 in	1/8 in	<b>4PEG5</b>
<b>UN, 3 Flutes</b>					
0.3720 in	12-32	0.8500 in	3 in	3/8 in	<b>4PEK2</b>
0.3720 in	12-32	1 1/4 in	3 in	3/8 in	<b>4PEK3</b>
0.2900 in	14-40	0.6000 in	3 in	3/8 in	<b>4PEJ9</b>
0.2900 in	14-40	1 in	3 in	3/8 in	<b>4PEK1</b>
0.2400 in	16-48	0.8000 in	2 1/2 in	1/4 in	<b>4PEJ8</b>
0.2400 in	16-48	1 1/4 in	2 1/2 in	1/4 in	<b>4PEJ7</b>
0.1820 in	18-56	0.4000 in	2 1/2 in	1/4 in	<b>4PEJ5</b>
0.1820 in	18-56	0.6500 in	2 1/2 in	1/4 in	<b>4PEJ6</b>
0.1380 in	24-56	0.4000 in	2 in	3/16 in	<b>4PEJ3</b>
0.1380 in	24-56	0.6000 in	2 in	3/16 in	<b>4PEJ4</b>
0.0980 in	32-64	0.4000 in	2 in	3/16 in	<b>4PEH9</b>
0.0980 in	32-64	1/4 in	2 in	3/16 in	<b>4PEH8</b>
0.1200 in	32-56	0.3000 in	2 in	3/16 in	<b>4PEJ1</b>
0.1200 in	32-56	1/2 in	2 in	3/16 in	<b>4PEJ2</b>
0.0800 in	40-64	0.1900 in	2 in	3/16 in	<b>4PEH6</b>
0.0800 in	40-64	0.3000 in	2 in	3/16 in	<b>4PEH7</b>
0.0720 in	48-72	0.1500 in	2 in	3/16 in	<b>4PEH4</b>
0.0720 in	48-72	1/4 in	2 in	3/16 in	<b>4PEH5</b>
0.0590 in	56-80	0.2000 in	1 1/2 in	1/8 in	<b>4PEH1</b>
0.0600 in	56-80	0.2000 in	2 in	3/16 in	<b>4PEH3</b>
0.0590 in	56-80	1/8 in	1 1/2 in	1/8 in	<b>4PEG9</b>
0.0600 in	56-80	1/8 in	2 in	3/16 in	<b>4PEH2</b>
<b>UN, 5 Flutes</b>					
0.4880 in	11-32	0.8500 in	3 1/2 in	1/2 in	<b>4XXP4</b>
0.4880 in	11-32	1.3500 in	3 1/2 in	1/2 in	<b>4XXP5</b>
<b>UN, 6 Flutes</b>					
0.7450 in	4-8	1 1/2 in	5 in	3/4 in	<b>4XXR1</b>
0.7450 in	4-8	2 1/2 in	5 in	3/4 in	<b>4XXR2</b>
0.6950 in	9-24	1 1/2 in	5 in	3/4 in	<b>4XXP8</b>
0.6950 in	9-24	2 1/2 in	5 in	3/4 in	<b>4XXP9</b>
0.5950 in	10-32	1 1/4 in	4 in	3/8 in	<b>4XXP6</b>
0.5950 in	10-32	2 in	4 in	3/8 in	<b>4XXP7</b>

Cutter Dia.	Pitch Range	Length of Cut	Overall Length	Shank Dia.	Item No.
<b>TAIIN Finish, Scientific Cutting Tools</b>					
<b>UN, 2 Flutes</b>					
0.0500 in	64-80	0.1000 in	1 1/2 in	1/8 in	<b>4PEK6</b>
0.0500 in	64-80	0.1500 in	1 1/2 in	1/8 in	<b>4PEK7</b>
0.0400 in	72-90	0.0900 in	1 1/2 in	1/8 in	<b>4PEK4</b>
0.0400 in	72-90	1/8 in	1 1/2 in	1/8 in	<b>4PEK5</b>
<b>UN, 3 Flutes</b>					
0.2900 in	14-40	0.6000 in	3 in	3/8 in	<b>4PEN8</b>
0.2900 in	14-40	1 in	3 in	3/8 in	<b>4PEN9</b>
0.2400 in	16-48	0.8000 in	2 1/2 in	1/4 in	<b>4PEN7</b>
0.2400 in	16-48	1 1/4 in	2 1/2 in	1/4 in	<b>4PEN6</b>
0.1820 in	18-56	0.4000 in	2 1/2 in	1/4 in	<b>4PEN4</b>
0.1380 in	24-56	0.4000 in	2 in	3/16 in	<b>4PEN2</b>
0.1380 in	24-56	0.6000 in	2 in	3/16 in	<b>4PEN3</b>
0.0980 in	32-64	0.4000 in	2 in	3/16 in	<b>4PEL8</b>
0.0980 in	32-64	1/4 in	2 in	3/16 in	<b>4PEL7</b>
0.1200 in	32-56	0.3000 in	2 in	3/16 in	<b>4PEL9</b>
0.1200 in	32-56	1/2 in	2 in	3/16 in	<b>4PEN1</b>
0.0800 in	40-64	0.1900 in	2 in	3/16 in	<b>4PEL5</b>
0.0800 in	40-64	0.3000 in	2 in	3/16 in	<b>4PEL6</b>
0.0720 in	48-72	0.1500 in	2 in	3/16 in	<b>4PEL3</b>
0.0720 in	48-72	1/4 in	2 in	3/16 in	<b>4PEL4</b>
0.0590 in	56-80	0.2000 in	1 1/2 in	1/8 in	<b>4PEK9</b>
0.0600 in	56-80	0.2000 in	2 in	3/16 in	<b>4PEL2</b>
0.0590 in	56-80	1/8 in	1 1/2 in	1/8 in	<b>4PEK8</b>
0.0600 in	56-80	1/8 in	2 in	3/16 in	<b>4PEL1</b>
<b>UN, 4 Flutes</b>					
0.3720 in	12-32	0.8500 in	3 in	3/8 in	<b>4PEP1</b>
0.3720 in	12-32	1 1/4 in	3 in	3/8 in	<b>4PEP2</b>
0.1820 in	18-56	0.6500 in	2 1/2 in	1/4 in	<b>4PEN5</b>
<b>UN, 5 Flutes</b>					
0.4880 in	11-32	0.8500 in	3 1/2 in	1/2 in	<b>4XXR3</b>
0.4880 in	11-32	1.3500 in	3 1/2 in	1/2 in	<b>4XXR4</b>
<b>UN, 6 Flutes</b>					
0.7450 in	4-8	1 1/2 in	5 in	3/4 in	<b>4XXR9</b>
0.7450 in	4-8	2 1/2 in	5 in	3/4 in	<b>4XXT1</b>
0.6950 in	9-24	1 1/2 in	5 in	3/4 in	<b>4XXR7</b>
0.6950 in	9-24	2 1/2 in	5 in	3/4 in	<b>4XXR8</b>
0.5950 in	10-32	1 1/4 in	4 in	3/8 in	<b>4XXR5</b>
0.5950 in	10-32	2 in	4 in	3/8 in	<b>4XXR6</b>

# Straight-Flute Thread Mills

■ Carbide material

Straight-flute thread mills are suitable for general purpose thread-milling applications and create internal threads of the same pitch in a range of hole diameters, eliminating the need to change tools when threading multiple holes of different sizes. They provide good strength but require a rigid machine setup. For use in CNC machines that have helical interpolation capability.

Thread Size	Cutter Dia.	Length of Cut	Overall Length	Shank Dia.	Item No.
<b>Bright (Uncoated) Finish</b>					
<b>Metric, 3 Flutes</b>					
M3.5x.6	0.0900 in	0.2690 in	2 1/2 in	1/4 in	<b>4PET1</b>
M3x.5	0.0900 in	0.2640 in	2 1/2 in	1/4 in	<b>4PET3</b>
M4.5x.75	1/8 in	0.3370 in	2 1/2 in	1/4 in	<b>4PEW5</b>
M4.5x.75	1/8 in	0.2190 in	2 1/2 in	1/4 in	<b>4PEX7</b>
M4x.0.5	3/16 in	0.3230 in	2 1/2 in	1/4 in	<b>4PEX9</b>
M5x.0.7	0.1400 in	0.3970 in	2 1/2 in	1/4 in	<b>4PFA6</b>
M5x.0.8	0.1400 in	0.3910 in	2 1/2 in	1/4 in	<b>4PFA8</b>
M6x.0.5	0.1700 in	0.5200 in	2 1/2 in	1/4 in	<b>4PFD1</b>
M6x.0.75	0.1700 in	0.5430 in	2 1/2 in	1/4 in	<b>4PFE1</b>
M6x1	0.1700 in	0.5280 in	2 1/2 in	1/4 in	<b>4PFE6</b>
M8x.0.75	0.2350 in	0.6620 in	2 1/2 in	1/4 in	<b>4PFL1</b>
M8x1	0.2350 in	0.6850 in	2 1/2 in	1/4 in	<b>4PPF9</b>
M8x1.25	0.2350 in	0.6600 in	2 1/2 in	1/4 in	<b>4PPF5</b>
<b>Metric, 4 Flutes</b>					
M10x1.5	0.2900 in	0.7920 in	3 1/2 in	3/8 in	<b>4LLE6</b>
M12x1	0.4000 in	1.0790 in	3 1/2 in	1/2 in	<b>4PDW7</b>
M12x1.25	0.3450 in	0.8070 in	3 1/2 in	3/8 in	<b>4LLG4</b>
M12x1.5	0.3450 in	0.7920 in	3 1/2 in	3/8 in	<b>4PDV7</b>
M14x1.25	0.4500 in	1.1030 in	3 1/2 in	1/2 in	<b>4PDH8</b>
M14x1.5	0.4500 in	1.0870 in	3 1/2 in	1/2 in	<b>4PEF8</b>
M14x1.75	0.4500 in	1.1340 in	3 1/2 in	1/2 in	<b>4PEG3</b>
M14x2	0.4500 in	1.1340 in	3 1/2 in	1/2 in	<b>4PEP9</b>
M16x2.5	0.4500 in	1.1220 in	3 1/2 in	1/2 in	<b>4XYC1</b>
M24x1	0.7400 in	1.0620 in	6 in	3/4 in	<b>4XYC3</b>
M24x2.5	0.7400 in	1.0760 in	6 in	3/4 in	<b>4XYC4</b>
M24x3	0.7400 in	1.0580 in	6 in	3/4 in	<b>4XYC6</b>
<b>Metric, 6 Flutes</b>					
M36x4	0.9900 in	1.0950 in	7 1/2 in	1 in	<b>4XYC7</b>
M40x6	0.9900 in	1.1920 in	7 1/2 in	1 in	<b>4PFA4</b>
<b>NPT, 4 Flutes</b>					
1/8"-27	0.2750 in	0.7580 in	3 1/2 in	3/8 in	<b>4XXU3</b>
1/4 in, 3/8"-18	0.3300 in	0.6930 in	3 1/2 in	3/8 in	<b>4PEW7</b>
1/2 in, 3/4"-14	0.4300 in	1.1050 in	3 1/2 in	1/2 in	<b>4PEZ1</b>
<b>NPT, 5 Flutes</b>					
2 1/2" up-8	0.6500 in	1.5600 in	4 in	3/4 in	<b>4PFC7</b>



**3 Flutes**  
**4PER8**



Thread Size	Cutter Dia.	Length of Cut	Overall Length	Shank Dia.	Item No.
NPTF, 4 Flutes					
1/8"-27	0.2800 in	0.7580 in	3 1/2 in	3/8 in	4PEV8
1/4 in, 3/8"-18	0.3300 in	0.6930 in	3 1/2 in	3/8 in	4PEW8
1/2 in, 3/4"-14	0.4400 in	1.0340 in	6 in	3/4 in	4XXV7
NPTF, 5 Flutes					
2 1/2" up-8	0.6500 in	1.5600 in	4 in	3/4 in	4PFC8
UN, 3 Flutes					
#10-24	0.1400 in	0.3920 in	2 1/2 in	1/4 in	4PER6
#10-28	0.1400 in	0.4090 in	2 1/2 in	1/4 in	4PER7
#10-32	0.1400 in	0.3880 in	2 1/2 in	1/4 in	4PER8
#10-48	0.1400 in	0.3830 in	2 1/2 in	1/4 in	4PER9
#6-32	0.0980 in	0.2630 in	2 1/2 in	1/4 in	4PEP4
#6-40	0.0980 in	0.2600 in	2 1/2 in	1/4 in	4PEP5
#8-24	1/8 in	0.3500 in	2 1/2 in	1/4 in	4PER4
#8-32	7/64 in	0.3250 in	2 1/2 in	1/4 in	4LL8
#8-36	7/64 in	0.3450 in	2 1/2 in	1/4 in	4LL9
1/4"-20	0.1700 in	0.5700 in	2 1/2 in	1/4 in	4PET5
1/4"-24	0.1700 in	0.5590 in	2 1/2 in	1/4 in	4PET6
1/4"-28	0.1700 in	0.5440 in	2 1/2 in	1/4 in	4PET9
1/4"-20	0.1870 in	0.5700 in	2 1/2 in	1/4 in	4PEU1
1/4"-24	0.1870 in	0.5500 in	2 1/2 in	1/4 in	4PEU2
1/4"-32	0.1870 in	0.5450 in	2 1/2 in	1/4 in	4PEU4
1/4"-36	0.1870 in	0.5400 in	2 1/2 in	1/4 in	4PEU5
1/4"-40	0.1870 in	0.5600 in	2 1/2 in	1/4 in	4PEU6
1/4"-48	0.1870 in	0.5510 in	2 1/2 in	1/4 in	4PEU7
5/16"-18	0.2350 in	0.6890 in	2 1/2 in	1/4 in	4PEV1
UN, 4 Flutes					
1/4 in, 3/8"-18	0.3870 in	0.6820 in	3 1/2 in	7/16 in	4XXV2
3/8"-16	0.2900 in	0.7750 in	3 1/2 in	1/2 in	4PEV9
3/8"-20	0.2900 in	0.8200 in	3 1/2 in	5/16 in	4PEW1
3/8"-24	0.2900 in	0.8090 in	3 1/2 in	5/16 in	4PEW2
3/8"-27	0.2900 in	0.7940 in	3 1/2 in	5/16 in	4PEW3
3/8"-32	0.2900 in	0.7940 in	3 1/2 in	5/16 in	4PEW4
3/8"-18	0.3870 in	0.6620 in	3 1/2 in	7/16 in	4XXV3
7/16"-14	0.3450 in	0.8160 in	3 1/2 in	3/8 in	4PEW9
7/16"-18	0.3450 in	0.8000 in	3 1/2 in	3/8 in	4PEX1
7/16"-20	0.3450 in	0.8210 in	3 1/2 in	3/8 in	4PEX2
7/16"-24	0.3450 in	0.8090 in	3 1/2 in	3/8 in	4PEX3
7/16"-28	0.3450 in	0.8000 in	3 1/2 in	3/8 in	4PEX4
1/2"-13	0.4000 in	1.1080 in	3 1/2 in	1/2 in	4PEY3
1/2"-16	0.4000 in	1.0870 in	3 1/2 in	1/2 in	4PEY4
1/2"-20	0.4000 in	1.1200 in	3 1/2 in	1/2 in	4PEY5
1/2"-24	0.4000 in	1.1000 in	3 1/2 in	1/2 in	4PEY6
1/2"-28	0.4000 in	1.0870 in	3 1/2 in	1/2 in	4PEY7
1/2"-32	0.4000 in	1.1060 in	3 1/2 in	1/2 in	4PEY8
9/16"-12	0.4000 in	1.1170 in	3 1/2 in	1/2 in	4PEY2
9/16"-16	0.4500 in	1.0870 in	3 1/2 in	1/2 in	4PEZ6
9/16"-20	0.4500 in	1.1200 in	3 1/2 in	1/2 in	4PEZ8
3/4"-11	0.4500 in	1.1270 in	3 1/2 in	1/2 in	4PEZ4