Your specials are our standards.
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韩国匠精工具
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4ETM/2DTM SERIES

钻孔、攻丝、倒角工艺，无需更换工具一次性完成

THREAD MILLS

Drilling, threading and chamfering in one tool operation without changingtools.

4ETM 2DTM Series

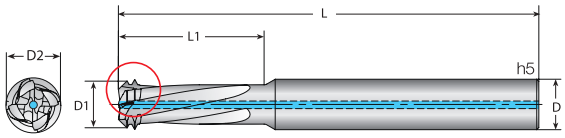
4ETM Series | 2DTM Series | 4STM Series | 4HTM Series

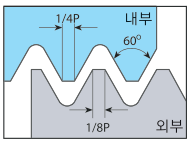
4ETM

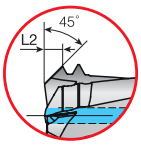
4 Flutes Thread Mill for Generality

New

4刃 多功能通用螺纹铣刀







- **适用于HRC50以下的热处理钢、模具钢、合金钢、碳素钢、铸铁加工**
- 钻孔，攻丝，倒角，无需更换工具一次性完成。
- 无需预先加工底孔。
- 钻孔和螺纹铣削同时进行完成后倒角，对斜面进行螺纹精加工。
- 多功能螺纹铣刀适用于加工所有盲孔和通孔。
- 对于直径为8、10、12mm的刀柄，建议使用内冷设计的型号。
- 刀具是右旋螺纹铣刀，可加工左螺纹和右螺纹。

- **Thread Mill for hardened and pre-hardened steel(~Hrc50), alloy steel, carbon steel, cast iron**
- 4ETM tool performs both drilling, threading and chamfering in one tool operation.
- Pre-drilled holes are no longer necessary.
- While drilling and thread milling are performed simultaneously, the chamfer is threaded finish.
- This multifunctional tool can be used with all blind holes and through holes.
- For shank diametwrs 8, 10, 12mm tools are recommended for internal grade type.
- All tools are left-handed, thread mills capable of right-handed rotation and leftt-handed rotation.

单位 : mm

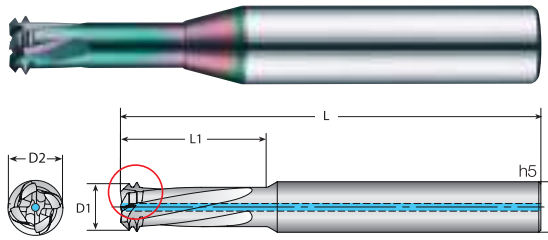
Order Number	齿距 Thread	Pitch	刃数 Flutes Z	齿数 Teeth Zt	刃径 Diameter D1	D2	有效长 Effective Length L1	长度 Length L2	全长 Overall Length L	柄径 Shank Dia D
外冷却 (Without coolant)										
4ETM 024 070 S06 M3	M3	0.5	4	2	2.17	2.4	7	0.4	60	6
4ETM 024 085 S06 M3	M3	0.5	4	2	2.17	2.4	8.5	0.4	60	6
4ETM 032 092 S06 M4	M4	0.7	4	2	2.88	3.2	9.2	0.57	60	6
4ETM 032 112 S06 M4	M4	0.7	4	2	2.88	3.2	11.2	0.57	60	6
4ETM 039 115 S06 M5	M5	0.8	4	2	3.61	3.9	11.5	0.7	60	6
4ETM 039 144 S06 M5	M5	0.8	4	2	3.61	3.9	14.4	0.7	60	6
4ETM 047 140 S06 M6	M6 ~ M9	1	4	2	4.4	4.7	14	0.79	60	6
4ETM 047 170 S06 M6	M6 ~ M9	1	4	2	4.4	4.7	17	0.79	60	6
4ETM 061 180 S08 M8	M8 ~ M12	1.25	4	2	5.8	6.1	18	0.9	65	8
4ETM 061 220 S08 M8	M8 ~ M12	1.25	4	2	5.8	6.1	22	0.9	65	8
4ETM 078 230 S08 M10	M10 ~ M15	1.5	4	2	7.4	7.8	23	1.12	65	8
4ETM 078 280 S08 M10	M10 ~ M15	1.5	4	2	7.4	7.8	28	1.12	65	8
4ETM 090 260 S10 M12	M12	1.75	4	2	8.6	9	26	1.2	80	10
4ETM 090 330 S10 M12	M12	1.75	4	2	8.6	9	33	1.2	80	10
4ETM 118 350 S12 M16	M16 ~ M23	2	4	2	11.4	11.8	35	2	100	12
4ETM 118 430 S12 M16	M16 ~ M23	2	4	2	11.4	11.8	43	2	100	12
单孔内冷却 (With coolant)										
4ETM 047 140 S06 M6C	M6 ~ M9	1	4	2	4.4	4.7	14	0.79	60	6
4ETM 047 170 S06 M6C	M6 ~ M9	1	4	2	4.4	4.7	17	0.79	60	6
4ETM 061 180 S08 M8C	M8 ~ M12	1.25	4	2	5.8	6.1	18	0.9	65	8
4ETM 061 220 S08 M8C	M8 ~ M12	1.25	4	2	5.8	6.1	22	0.9	65	8
4ETM 078 230 S08 M10C	M10 ~ M15	1.5	4	2	7.4	7.8	23	1.12	65	8
4ETM 078 280 S08 M10C	M10 ~ M15	1.5	4	2	7.4	7.8	28	1.12	65	8
4ETM 090 260 S10 M12C	M12	1.75	4	2	8.6	9	26	1.2	80	10
4ETM 090 330 S10 M12C	M12	1.75	4	2	8.6	9	33	1.2	80	10
4ETM 118 350 S12 M16C	M16 ~ M23	2	4	2	11.4	11.8	35	2	100	12
4ETM 118 430 S12 M16C	M16 ~ M23	2	4	2	11.4	11.8	43	2	100	12

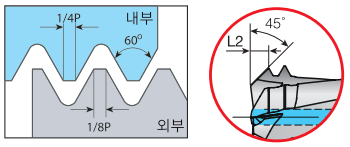
4ETMA

4 Flutes Multi-functional Thread Mill for Aluminum

New

4刃 铝合金专用多功能螺纹铣刀





- **铝合金，非铁，非金属加工**
- 钻孔，攻丝，倒角，无需更换工具一次性完成。
- 无需预先加工底孔。
- 钻孔和螺纹铣削同时进行完成后倒角，对斜面进行螺纹精加工。
- 多功能螺纹铣刀适用于加工所有盲孔和通孔。
- 对于直径为8、10、12mm的刀柄，建议使用内冷设计的型号。
- 刀具是右旋螺纹铣刀，可加工左螺纹和右螺纹。

- **Thread Mill for Aluminum, Aluminum alloy, non-ferrous and non-metalic materials**
- 4ETMA tool performs both drilling, threading and chamfering in one tool operation.
- Pre-drilled holes are no longer necessary.
- While drilling and thread milling are performed simultaneously, the chamfer is threaded finish.
- This multifunctional tool can be used with all blind holes and through holes.
- For shank diametwrs 8, 10, 12mm tools are recommended for internal grade type.
- All tools are left-handed, thread mills capable of right-handed rotation and leftt-handed rotation.

4 | UWC 초미립자 | GTAC Coating | 15° Helix Angle | L Lotation

单位 : mm

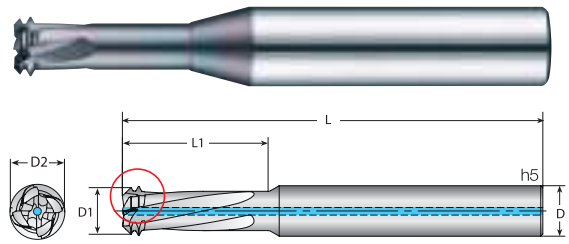
Order Number	齿距 Thread	齿距 Pitch	刃数 Flutes Z	齿数 Teeth Zt	刃径 Diameter D1	刃径 Diameter D2	有效长 Effective Length L1	长度 Length L2	全长 Overall Length L	柄径 Shank Dia D
外冷却 (Without coolant)										
4ETMA 0105 033 S04 M014	M1.4	0.3	4	2	0.95	1.05	3.3	0.17	45	4
4ETMA 0105 040 S04 M014	M1.4	0.3	4	2	0.95	1.05	4	0.17	45	4
4ETMA 012 037 S04 M016	M1.6 ~ M1.8	0.35	4	2	1.04	1.2	3.7	0.195	45	4
4ETMA 012 045 S04 M016	M1.6 ~ M1.8	0.35	4	2	1.04	1.2	4.5	0.195	45	4
4ETMA 0155 045 S04 M2	M2	0.4	4	2	1.4	1.55	4.5	0.23	45	4
4ETMA 0155 055 S04 M2	M2	0.4	4	2	1.4	1.55	5.5	0.23	45	4
4ETMA 020 055 S04 M025	M2.5	0.45	4	2	1.85	2	5.5	0.345	45	4
4ETMA 020 0675 S04 M025	M2.5	0.45	4	2	1.85	2	6.75	0.345	45	4
4ETMA 024 070 S06 M3	M3	0.5	4	2	2.17	2.4	7	0.4	60	6
4ETMA 024 085 S06 M3	M3	0.5	4	2	2.17	2.4	8.5	0.4	60	6
4ETMA 032 092 S06 M4	M4	0.7	4	2	2.88	3.2	9.2	0.57	60	6
4ETMA 032 112 S06 M4	M4	0.7	4	2	2.88	3.2	11.2	0.57	60	6
4ETMA 039 115 S06 M5	M5	0.8	4	2	3.61	3.9	11.5	0.7	60	6
4ETMA 039 144 S06 M5	M5	0.8	4	2	3.61	3.9	14.4	0.7	60	6
4ETMA 047 140 S06 M6	M6 ~ M9	1	4	2	4.4	4.7	14	0.79	60	6
4ETMA 047 170 S06 M6	M6 ~ M9	1	4	2	4.4	4.7	17	0.79	60	6
4ETMA 061 180 S08 M8	M8 ~ M12	1.25	4	2	5.8	6.1	18	0.9	65	8
4ETMA 061 220 S08 M8	M8 ~ M12	1.25	4	2	5.8	6.1	22	0.9	65	8
4ETMA 078 230 S08 M10	M10 ~ M15	1.5	4	2	7.4	7.8	23	1.12	65	8
4ETMA 078 280 S08 M10	M10 ~ M15	1.5	4	2	7.4	7.8	28	1.12	65	8
4ETMA 090 260 S10 M12	M12	1.75	4	2	8.6	9	26	1.2	80	10
4ETMA 090 330 S10 M12	M12	1.75	4	2	8.6	9	33	1.2	80	10
4ETMA 118 350 S12 M16	M16 ~ M23	2	4	2	11.4	11.8	35	2	100	12
4ETMA 118 430 S12 M16	M16 ~ M23	2	4	2	11.4	11.8	43	2	100	12
单孔内冷却 (With coolant)										
4ETMA 047 140 S06 M6C	M6 ~ M9	1	4	2	4.4	4.7	14	0.79	60	6
4ETMA 047 170 S06 M6C	M6 ~ M9	1	4	2	4.4	4.7	17	0.79	60	6
4ETMA 061 180 S08 M8C	M8 ~ M12	1.25	4	2	5.8	6.1	18	0.9	65	8
4ETMA 061 220 S08 M8C	M8 ~ M12	1.25	4	2	5.8	6.1	22	0.9	65	8
4ETMA 078 230 S08 M10C	M10 ~ M15	1.5	4	2	7.4	7.8	23	1.12	65	8
4ETMA 078 280 S08 M10C	M10 ~ M15	1.5	4	2	7.4	7.8	28	1.12	65	8
4ETMA 090 260 S10 M12C	M12	1.75	4	2	8.6	9	26	1.2	80	10
4ETMA 090 330 S10 M12C	M12	1.75	4	2	8.6	9	33	1.2	80	10
4ETMA 118 350 S12 M16C	M16 ~ M23	2	4	2	11.4	11.8	35	2	100	12
4ETMA 118 430 S12 M16C	M16 ~ M23	2	4	2	11.4	11.8	43	2	100	12

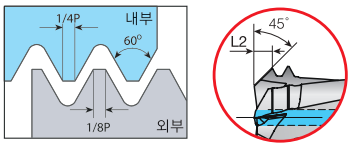
4ETMS

4 Flutes Multi-functional Thread Mill for Stainless Steel

New

4刃 不锈钢专用螺纹铣刀





- **不锈钢，钛合金加工**
- 钻孔，攻丝，倒角，无需更换工具一次性完成。
- 无需预先加工底孔。
- 钻孔和螺纹铣削同时进行完成后倒角，对斜面进行螺纹精加工。
- 多功能螺纹铣刀适用于加工所有盲孔和通孔。
- 对于直径为8、10、12mm的刀柄，建议使用内冷设计的型号。
- 刀具是右旋螺纹铣刀，可加工左螺纹和右螺纹。

- **Thread Mill for SUS, Titanium alloy**
- 4ETMS tool performs both drilling, threading and chamfering in one tool operation.
- Pre-drilled holes are no longer necessary.
- While drilling and thread milling are performed simultaneously, the chamfer is threaded finish.
- This multifunctional tool can be used with all blind holes and through holes.
- For shank diametwrs 8, 10, 12mm tools are recommended for internal grade type.
- All tools are left-handed, thread mills capable of right-handed rotation and lefft-handed rotation.

4 | UWC 초미립자 | TISIN-R Coating | 15° Helix Angle | L Lotation

单位 : mm

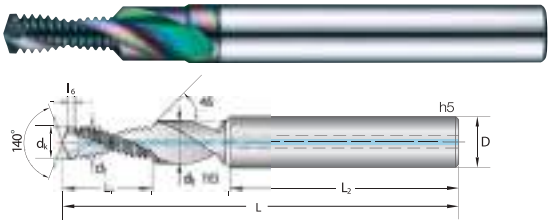
Order Number	齿距 Thread	Pitch	刃数 Flutes Z	齿数 Teeth Zt	刃径 Diameter D1	D2	有效长 Effective Length L1	长度 Length L2	全长 Overall Length L	柄径 Shank Dia D
外冷却 (Without coolant)										
4ETMS 024 070 S06 M3	M3	0.5	4	2	2.17	2.4	7	0.4	60	6
4ETMS 024 085 S06 M3	M3	0.5	4	2	2.17	2.4	8.5	0.4	60	6
4ETMS 032 092 S06 M4	M4	0.7	4	2	2.88	3.2	9.2	0.57	60	6
4ETMS 032 112 S06 M4	M4	0.7	4	2	2.88	3.2	11.2	0.57	60	6
4ETMS 039 115 S06 M5	M5	0.8	4	2	3.61	3.9	11.5	0.7	60	6
4ETMS 039 144 S06 M5	M5	0.8	4	2	3.61	3.9	14.4	0.7	60	6
4ETMS 047 140 S06 M6	M6 ~ M9	1	4	2	4.4	4.7	14	0.79	60	6
4ETMS 047 170 S06 M6	M6 ~ M9	1	4	2	4.4	4.7	17	0.79	60	6
4ETMS 061 180 S08 M8	M8 ~ M12	1.25	4	2	5.8	6.1	18	0.9	65	8
4ETMS 061 220 S08 M8	M8 ~ M12	1.25	4	2	5.8	6.1	22	0.9	65	8
4ETMS 078 230 S08 M10	M10 ~ M15	1.5	4	2	7.4	7.8	23	1.12	65	8
4ETMS 078 280 S08 M10	M10 ~ M15	1.5	4	2	7.4	7.8	28	1.12	65	8
4ETMS 090 260 S10 M12	M12	1.75	4	2	8.6	9	26	1.2	80	10
4ETMS 090 330 S10 M12	M12	1.75	4	2	8.6	9	33	1.2	80	10
4ETMS 118 350 S12 M16	M16 ~ M23	2	4	2	11.4	11.8	35	2	100	12
4ETMS 118 430 S12 M16	M16 ~ M23	2	4	2	11.4	11.8	43	2	100	12
单孔内冷却 (With coolant)										
4ETMS 047 140 S06 M6C	M6 ~ M9	1	4	2	4.4	4.7	14	0.79	60	6
4ETMS 047 170 S06 M6C	M6 ~ M9	1	4	2	4.4	4.7	17	0.79	60	6
4ETMS 061 180 S08 M8C	M8 ~ M12	1.25	4	2	5.8	6.1	18	0.9	65	8
4ETMS 061 220 S08 M8C	M8 ~ M12	1.25	4	2	5.8	6.1	22	0.9	65	8
4ETMS 078 230 S08 M10C	M10 ~ M15	1.5	4	2	7.4	7.8	23	1.12	65	8
4ETMS 078 280 S08 M10C	M10 ~ M15	1.5	4	2	7.4	7.8	28	1.12	65	8
4ETMS 090 260 S10 M12C	M12	1.75	4	2	8.6	9	26	1.2	80	10
4ETMS 090 330 S10 M12C	M12	1.75	4	2	8.6	9	33	1.2	80	10
4ETMS 118 350 S12 M16C	M16 ~ M23	2	4	2	11.4	11.8	35	2	100	12
4ETMS 118 430 S12 M16C	M16 ~ M23	2	4	2	11.4	11.8	43	2	100	12

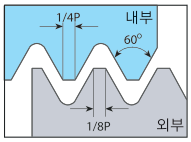
2DTM

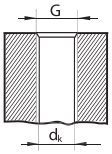
2 Flutes Multi-functional Thread Mill for Non-ferrous Metal

New

2刃 非金属专用多功能 螺纹铣刀







- **铝合金，非铁，非金属加工**
- 无需更换工具一次性完成攻丝，斜面，钻孔加工。
- 钻孔，攻丝同时进行可减少加工时间。
- 最大攻丝深度：2xDo及2.5xDo（攻丝加工直径）。
- 建议使用在非金属加工。

- **Thread Mill for Aluminum, Aluminum alloy, non-ferrous and non-metalic materials**
- 2DTM tool performs both drilling, threading and chamfering in one tool operation.
- Drill and thread mill with one tool.
- Maximum thread length : 2xDo and 2.5xDo (thread diameter)
- Recommended for non-ferrous materials.

单位 : mm

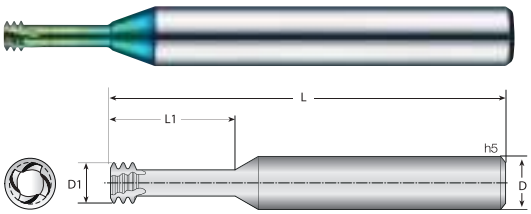
Order Number 未涂层 Non coated	Order Number 涂层 Coated	齿距 Thread	齿距 Pitch	孔径 Drill Dia dk	外径 Cutter Dia d1	颈部直径 Max. C'sink d2	有效长 Effective Length L1	柄径长度 Shank Length L2	长度 Shank Length l6	全长 Overall Length L	柄径 Shank Dia D
外冷却 (Without coolant)											
2DTM 025 067 S06 M3	2DTMC 025 067 S06 M3	M3	0.5	2.5	2.45	3.4	6.7	36	0.4	50	6
2DTM 025 082 S06 M3	2DTMC 025 082 S06 M3	M3	0.5	2.5	2.45	3.4	8.2	36	0.4	50	6
2DTM 033 087 S06 M4	2DTMC 033 087 S06 M4	M4	0.7	3.3	3.25	4.5	8.7	36	0.6	50	6
2DTM 033 108 S06 M4	2DTMC 033 108 S06 M4	M4	0.7	3.3	3.25	4.5	10.8	36	0.6	50	6
2DTM 042 109 S06 M5	2DTMC 042 109 S06 M5	M5	0.8	4.2	4	5.5	10.9	36	0.7	55	6
2DTM 042 140 S06 M5	2DTMC 042 140 S06 M5	M5	0.8	4.2	4	5.5	14	36	0.7	55	6
2DTM 050 137 S08 M6	2DTMC 050 137 S08 M6	M6	1	5	4.75	6.6	13.7	36	1	60	8
2DTM 050 167 S08 M6	2DTMC 050 167 S08 M6	M6	1	5	4.75	6.6	16.7	36	1	60	8
2DTM 068 184 S10 M8	2DTMC 068 184 S10 M8	M8	1.25	6.8	6.35	9	18.4	40	1.2	75	10
2DTM 068 221 S10 M8	2DTMC 068 221 S10 M8	M8	1.25	6.8	6.35	9	22.1	40	1.2	75	10
2DTM 085 222 S12 M10	2DTMC 085 222 S12 M10	M10	1.5	8.5	7.95	11	22.2	45	1.5	80	12
2DTM 085 267 S12 M10	2DTMC 085 267 S12 M10	M10	1.5	8.5	7.95	11	26.7	45	1.5	80	12
2DTM 102 255 S14 M12	2DTMC 102 255 S14 M12	M12	1.75	10.2	9.95	13.5	25.5	45	1.5	90	14
2DTM 102 308 S14 M12	2DTMC 102 308 S14 M12	M12	1.75	10.2	9.95	13.5	30.8	45	1.5	90	14
2DTM 120 312 S16 M14	2DTMC 120 312 S16 M14	M14	2	12	11.2	15.5	31.2	48	1.5	100	16
2DTM 120 392 S16 M14	2DTMC 120 392 S16 M14	M14	2	12	11.2	15.5	39.2	48	1.5	100	16
2DTM 140 355 S18 M16	2DTMC 140 355 S18 M16	M16	2	14	13.2	17.5	35.5	48	1.5	100	18
2DTM 140 455 S18 M16	2DTMC 140 455 S18 M16	M16	2	14	13.2	17.5	45.5	48	1.5	100	18
双孔内冷却 (With coolant)											
2DTM 033 087 S06 M4C	2DTMC 033 087 S06 M4C	M4	0.7	3.3	3.25	4.5	8.7	36	0.6	50	6
2DTM 033 108 S06 M4C	2DTMC 033 108 S06 M4C	M4	0.7	3.3	3.25	4.5	10.8	36	0.6	50	6
2DTM 042 109 S06 M5C	2DTMC 042 109 S06 M5C	M5	0.8	4.2	4	5.5	10.9	36	0.7	55	6
2DTM 042 140 S06 M5C	2DTMC 042 140 S06 M5C	M5	0.8	4.2	4	5.5	14	36	0.7	55	6
2DTM 050 137 S08 M6C	2DTMC 050 137 S08 M6C	M6	1	5	4.75	6.6	13.7	36	1	60	8
2DTM 050 167 S08 M6C	2DTMC 050 167 S08 M6C	M6	1	5	4.75	6.6	16.7	36	1	60	8
2DTM 068 184 S10 M8C	2DTMC 068 184 S10 M8C	M8	1.25	6.8	6.35	9	18.4	40	1.2	75	10
2DTM 068 221 S10 M8C	2DTMC 068 221 S10 M8C	M8	1.25	6.8	6.35	9	22.1	40	1.2	75	10
2DTM 085 222 S12 M10C	2DTMC 085 222 S12 M10C	M10	1.5	8.5	7.95	11	22.2	45	1.5	80	12
2DTM 085 267 S12 M10C	2DTMC 085 267 S12 M10C	M10	1.5	8.5	7.95	11	26.7	45	1.5	80	12
2DTM 102 255 S14 M12C	2DTMC 102 255 S14 M12C	M12	1.75	10.2	9.95	13.5	25.5	45	1.5	90	14
2DTM 102 308 S14 M12C	2DTMC 102 308 S14 M12C	M12	1.75	10.2	9.95	13.5	30.8	45	1.5	90	14
2DTM 120 312 S16 M14C	2DTMC 120 312 S16 M14C	M14	2	12	11.2	15.5	31.2	48	1.5	100	16
2DTM 120 392 S16 M14C	2DTMC 120 392 S16 M14C	M14	2	12	11.2	15.5	39.2	48	1.5	100	16
2DTM 140 355 S18 M16C	2DTMC 140 355 S18 M16C	M16	2	14	13.2	17.5	35.5	48	1.5	100	18
2DTM 140 455 S18 M16C	2DTMC 140 455 S18 M16C	M16	2	14	13.2	17.5	45.5	48	1.5	100	18

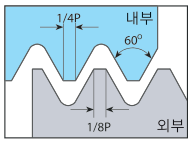
4STM

4 Flutes Short Flute Thread Mill for Generality

New

4刃 通用短型螺纹铣刀





- **适用于加工HRC50以下热处理钢、模具钢、合金钢、碳素钢、铸铁**
- 强力的刀刃设计，用于硬化钢的螺纹加工。
- 改进了切削及排屑功能，减少了刀具在孔内折断的风险。
- 独特研发设计降低了切削阻力，并降低了弯曲度。
- 大幅减少了刀具破损。

- **Thread Mill for hardened and pre-hardened steel(~Hrc50), alloy steel, carbon steel, cast iron**
- Tough and strong edge design for threading in hardened steels.
- Deliver improved cutting and chip revoval, reducing the risk of the cutting tool breaking off inside of hole
- Tip shape reduces cutting resisitance and supresses tool bending.
- Drastically reduces tool breakage.

4 | UWC 초미립자 | TISIN-S Coating | R Lotation

单位 : mm

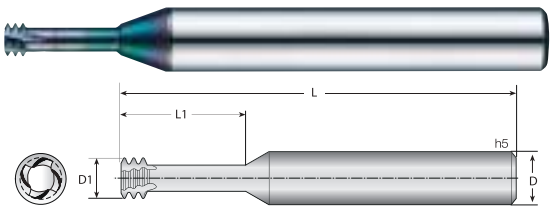
Order Number	齿距 Thread	齿距 Pitch	刃数 Flutes Z	齿数 Teeth Zt	刃径 Diameter D1	有效长 Effective Length L1	全长 Overall Length L	柄径 Shank Dia D
外冷却 (Without coolant)								
4STM 0095 028 S06 M014	M1.4	0.3	4	3	0.95	2.8	50	6
4STM 0095 035 S06 M014	M1.4	0.3	4	3	0.95	3.5	50	6
4STM 011 032 S06 M016	M1.6	0.35	4	3	1.1	3.2	50	6
4STM 011 040 S 06 M016	M1.6	0.35	4	3	1.1	4	50	6
4STM 014 040 S06 M2	M2	0.4	4	3	1.4	4	50	6
4STM 014 050 S06 M2	M2	0.4	4	3	1.4	5	50	6
4STM 016 044 S06 M022	M2.2	0.45	4	3	1.6	4.4	50	6
4STM 016 055 S06 M022	M2.2	0.45	4	3	1.6	5.5	50	6
4STM 018 050 S06 M025	M2.5	0.45	4	3	1.8	5	50	6
4STM 018 0625 S06 M025	M2.5	0.45	4	3	1.8	6.25	50	6
4STM 024 060 S06 M3	M3	0.5	4	3	2.4	6	50	6
4STM 024 075 S06 M3	M3	0.5	4	3	2.4	7.5	50	6
4STM 031 080 S06 M4	M4	0.7	4	3	3.1	8	50	6
4STM 031 100 S06 M4	M4	0.7	4	3	3.1	10	50	6
4STM 038 100 S06 M5	M5	0.8	4	3	3.8	10	50	6
4STM 038 125 S06 M5	M5	0.8	4	3	3.8	12.5	50	6
4STM 046 120 S06 M6	M6	1	4	3	4.6	12	50	6
4STM 046 150 S06 M6	M6	1	4	3	4.6	15	50	6
4STM 062 160 S10 M8	M8	1.25	4	3	6.2	16	70	10
4STM 062 200 S10 M8	M8	1.25	4	3	6.2	20	70	10
4STM 075 200 S10 M10	M10	1.5	4	3	7.5	20	70	10
4STM 075 250 S10 M10	M10	1.5	4	3	7.5	25	70	10
4STM 090 240 S10 M12	M12	1.75	4	3	9	24	80	10
4STM 090 300 S10 M12	M12	1.75	4	3	9	30	80	10
4STM 115 320 S12 M16	M16	2	4	3	11.5	32	100	12
4STM 115 400 S12 M16	M16	2	4	3	11.5	40	100	12
4STM 140 360 S16 M18	M18	2.5	4	3	14	36	135	16
4STM 140 450 S16 M18	M18	2.5	4	3	14	45	135	16
4STM 150 400 S16 M20	M20	2.5	4	3	15	40	135	16
4STM 150 500 S16 M20	M20	2.5	4	3	15	50	135	16

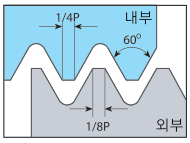
4STMA

4 Flutes Short Flute Thread Mill for Aluminum

4刃 铝合金专用短型螺纹铣刀

New





- **铝合金，非铁，非金属加工**
- 强力的刀刃设计，用于硬化钢的螺纹加工。
- 改进了切削及排屑功能，减少了刀具在孔内折断的风险。
- 独特研发设计降低了切削阻力，并降低了弯曲度。
- 大幅减少了刀具破损。

- **Thread Mill for Aluminum, Aluminum alloy, non-ferrous and non-metalic materials**
- Tough and strong edge design for threading in hardened steels.
- Deliver improved cutting and chip revoval, reducing the risk of the cutting tool breaking off inside of hole
- Tip shape reduces cutting resisitance and supresses tool bending.
- Drastically reduces tool breakage.

4 | UWC 초미립자 | GTAC Coating | R Lotation

单位 : mm

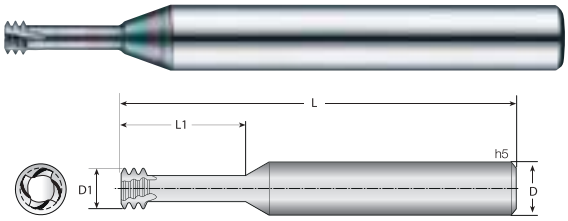
Order Number	齿距 Thread	齿距 Pitch	刃数 Flutes Z	齿数 Teeth Zt	刃径 Diameter D1	有效长 Effective Length L1	全长 Overall Length L	柄径 Shank Dia D
外冷却 (Without coolant)								
4STMA 0095 028 S06 M014	M1.4	0.3	4	3	0.95	2.8	50	6
4STMA 0095 035 S06 M014	M1.4	0.3	4	3	0.95	3.5	50	6
4STMA 011 032 S06 M016	M1.6	0.35	4	3	1.1	3.2	50	6
4STMA 011 040 S 06 M016	M1.6	0.35	4	3	1.1	4	50	6
4STMA 014 040 S06 M2	M2	0.4	4	3	1.4	4	50	6
4STMA 014 050 S06 M2	M2	0.4	4	3	1.4	5	50	6
4STMA 016 044 S06 M022	M2.2	0.45	4	3	1.6	4.4	50	6
4STMA 016 055 S06 M022	M2.2	0.45	4	3	1.6	5.5	50	6
4STMA 018 050 S06 M025	M2.5	0.45	4	3	1.8	5	50	6
4STMA 018 0625 S06 M025	M2.5	0.45	4	3	1.8	6.25	50	6
4STMA 024 060 S06 M3	M3	0.5	4	3	2.4	6	50	6
4STMA 024 075 S06 M3	M3	0.5	4	3	2.4	7.5	50	6
4STMA 031 080 S06 M4	M4	0.7	4	3	3.1	8	50	6
4STMA 031 100 S06 M4	M4	0.7	4	3	3.1	10	50	6
4STMA 038 100 S06 M5	M5	0.8	4	3	3.8	10	50	6
4STMA 038 125 S06 M5	M5	0.8	4	3	3.8	12.5	50	6
4STMA 046 120 S06 M6	M6	1	4	3	4.6	12	50	6
4STMA 046 150 S06 M6	M6	1	4	3	4.6	15	50	6
4STMA 062 160 S10 M8	M8	1.25	4	3	6.2	16	70	10
4STMA 062 200 S10 M8	M8	1.25	4	3	6.2	20	70	10
4STMA 075 200 S10 M10	M10	1.5	4	3	7.5	20	70	10
4STMA 075 250 S10 M10	M10	1.5	4	3	7.5	25	70	10
4STMA 090 240 S10 M12	M12	1.75	4	3	9	24	80	10
4STMA 090 300 S10 M12	M12	1.75	4	3	9	30	80	10
4STMA 115 320 S12 M16	M16	2	4	3	11.5	32	100	12
4STMA 115 400 S12 M16	M16	2	4	3	11.5	40	100	12
4STMA 140 360 S16 M18	M18	2.5	4	3	14	36	135	16
4STMA 140 450 S16 M18	M18	2.5	4	3	14	45	135	16
4STMA 150 400 S16 M20	M20	2.5	4	3	15	40	135	16
4STMA 150 500 S16 M20	M20	2.5	4	3	15	50	135	16

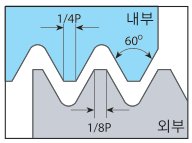
4STMS

4 Flutes Short Flute Thread Mill for Stainless

New

4刃 不锈钢加工用短型螺纹铣刀





- **不锈钢，钛合金加工**
- 强力的刀刃设计，用于硬化钢的螺纹加工。
- 改进了切削及排屑功能，减少了刀具在孔内折断的风险。
- 独特研发设计降低了切削阻力，并降低了弯曲度。
- 大幅减少了刀具破损。

- **Thread Mill for SUS, Titanium alloy**
- Tough and strong edge design for threading in hardened steels.
- Deliver improved cutting and chip revoval, reducing the risk of the cutting tool breaking off inside of hole
- Tip shape reduces cutting resisitance and supresses tool bending.
- Drastically reduces tool breakage.

4 | UWC 초미립자 | TISIN-R Coating | R Lotation

单位 : mm

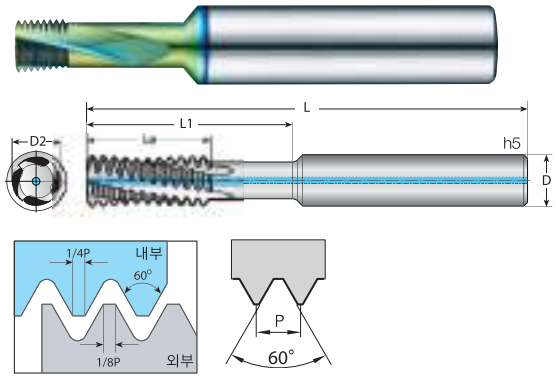
Order Number	齿距 Thread	齿距 Pitch	刃数 Flutes Z	齿数 Teeth Zt	刃径 Diameter D1	有效长 Effective Length L1	全长 Overall Length L	柄径 Shank Dia D
							外冷却 (Without coolant)	
4STMS 0095 028 S06 M014	M1.4	0.3	4	3	0.95	2.8	50	6
4STMS 0095 035 S06 M014	M1.4	0.3	4	3	0.95	3.5	50	6
4STMS 011 032 S06 M016	M1.6	0.35	4	3	1.1	3.2	50	6
4STMS 011 040 S 06 M016	M1.6	0.35	4	3	1.1	4	50	6
4STMS 014 040 S06 M2	M2	0.4	4	3	1.4	4	50	6
4STMS 014 050 S06 M2	M2	0.4	4	3	1.4	5	50	6
4STMS 016 044 S06 M022	M2.2	0.45	4	3	1.6	4.4	50	6
4STMS 016 055 S06 M022	M2.2	0.45	4	3	1.6	5.5	50	6
4STMS 018 050 S06 M025	M2.5	0.45	4	3	1.8	5	50	6
4STMS 018 0625 S06 M025	M2.5	0.45	4	3	1.8	6.25	50	6
4STMS 024 060 S06 M3	M3	0.5	4	3	2.4	6	50	6
4STMS 024 075 S06 M3	M3	0.5	4	3	2.4	7.5	50	6
4STMS 031 080 S06 M4	M4	0.7	4	3	3.1	8	50	6
4STMS 031 100 S06 M4	M4	0.7	4	3	3.1	10	50	6
4STMS 038 100 S06 M5	M5	0.8	4	3	3.8	10	50	6
4STMS 038 125 S06 M5	M5	0.8	4	3	3.8	12.5	50	6
4STMS 046 120 S06 M6	M6	1	4	3	4.6	12	50	6
4STMS 046 150 S06 M6	M6	1	4	3	4.6	15	50	6
4STMS 062 160 S10 M8	M8	1.25	4	3	6.2	16	70	10
4STMS 062 200 S10 M8	M8	1.25	4	3	6.2	20	70	10
4STMS 075 200 S10 M10	M10	1.5	4	3	7.5	20	70	10
4STMS 075 250 S10 M10	M10	1.5	4	3	7.5	25	70	10
4STMS 090 240 S10 M12	M12	1.75	4	3	9	24	80	10
4STMS 090 300 S10 M12	M12	1.75	4	3	9	30	80	10
4STMS 115 320 S12 M16	M16	2	4	3	11.5	32	100	12
4STMS 115 400 S12 M16	M16	2	4	3	11.5	40	100	12
4STMS 140 360 S16 M18	M18	2.5	4	3	14	36	135	16
4STMS 140 450 S16 M18	M18	2.5	4	3	14	45	135	16
4STMS 150 400 S16 M20	M20	2.5	4	3	15	40	135	16
4STMS 150 500 S16 M20	M20	2.5	4	3	15	50	135	16

4HTM

4Flutes Helix Thread Mill for Generality

New

4刃 通用螺旋螺纹铣刀



- **适用于加工HRC50以下的热处理钢、模具钢、合金钢、碳素钢、铸铁**
- 为了更深的攻丝加工，设计了内冷却方式螺旋角刀刃。
- 多刃设计。
- 最大攻丝加工深度：3xDo（攻丝加工直径）。
- 减少深孔攻丝加工时间。

- **Thread Mill for hardened and pre-hardened steel (~Hrc50), alloy steel, carbon steel, cast iron**
- Helical flutes with coolant thru for extra deep threading applications
- Multi-tooth geometry
- Maximum thread length : 3xDo (thread diameter)
- Reduced machining times for long threads

4 | UWC 초미립자 | TISIN-S Coating | 15° Helix Angle | R Lotation

单位 : mm

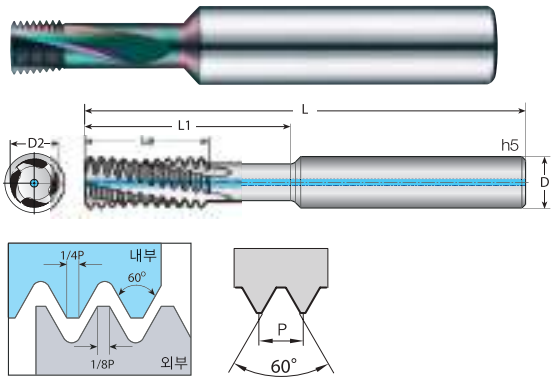
Order Number	齿距 Thread	Pitch	孔径 mm	刃径 Diameter D2	攻丝长度 Thread Length Le	有效长 Thread Length L1	全长 Overall Length L	柄径 Shank Dia D
外冷却 (Without coolant)								
4HTM 024 090 S04 M3	M3	0.5	2.5	2.4	4.7	9	45	4
4HTM 0315 120 S04 M4	M4	0.7	3.3	3.15	6.6	12	45	4
4HTM 039 150 S04 M5	M5	0.8	4.2	3.9	7.6	15	50	4
4HTM 048 180 S06 M6	M6	1	5	4.8	9.5	18	60	6
4HTM 065 240 S08 M8	M8	1.25	6.8	6.5	13.1	24	65	8
4HTM 082 300 S10 M10	M10	1.5	8.5	8.2	15.7	30	75	10
4HTM 099 360 S10 M12	M12	1.75	10.2	9.9	18.4	36	85	10
4HTM 116 420 S12 M14	M14	2	12	11.6	21	42	90	12
4HTM 136 480 S14 M16	M16	2	14	13.6	25	48	100	14
内冷却 (With coolant)								
4HTM 024 090 S04 M3C	M3	0.5	2.5	2.4	4.7	9	45	4
4HTM 0315 120 S04 M4C	M4	0.7	3.3	3.15	6.6	12	45	4
4HTM 039 150 S04 M5C	M5	0.8	4.2	3.9	7.6	15	50	4
4HTM 048 180 S06 M6C	M6	1	5	4.8	9.5	18	60	6
4HTM 065 240 S08 M8C	M8	1.25	6.8	6.5	13.1	24	65	8
4HTM 082 300 S10 M10C	M10	1.5	8.5	8.2	15.7	30	75	10
4HTM 099 360 S10 M12C	M12	1.75	10.2	9.9	18.4	36	85	10
4HTM 116 420 S12 M14C	M14	2	12	11.6	21	42	90	12
4HTM 136 480 S14 M16C	M16	2	14	13.6	25	48	100	14

4HTMA

4 Flutes Helix Thread Mill for Aluminum

4刃 铝合金专用螺旋螺纹铣刀

New



- **铝合金，非铁，非金属加工**
- 为了更深的攻丝加工，设计了内冷却方式螺旋角刀刃。
- 多刃设计。
- 最大攻丝加工深度：3xDo（攻丝加工直径）。
- 减少深孔攻丝加工时间。

- **Thread Mill for Aluminum, Aluminum alloy, non-ferrous and non-metalic materials**
- Helical flutes with coolant thru for extra deep threading applications
- Multi-tooth geometry
- Maximum thread length : 3xDo (thread diameter)
- Reduced machining times for long threads

4 | UWC 초미립자 | GTAC Coating | 15° Helix Angle | R Lotation

单位 : mm

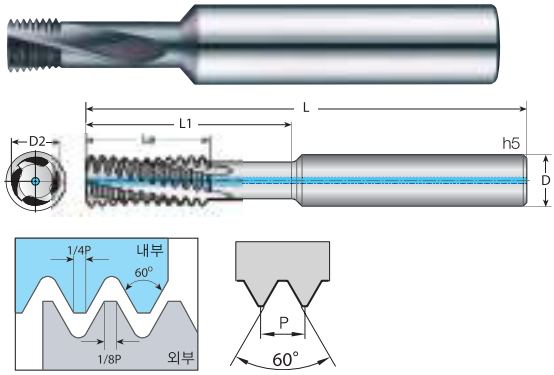
Order Number	齿距 Thread	齿距 Pitch	孔径 mm	刃径 Diameter D2	攻丝长度 Thread Length Le	有效长 Thread Length L1	全长 Overall Length L	柄径 Shank Dia D
外冷却 (Without coolant)								
4HTMA 024 090 S04 M3	M3	0.5	2.5	2.4	4.7	9	45	4
4HTMA 0315 120 S04 M4	M4	0.7	3.3	3.15	6.6	12	45	4
4HTMA 039 150 S04 M5	M5	0.8	4.2	3.9	7.6	15	50	4
4HTMA 048 180 S06 M6	M6	1	5	4.8	9.5	18	60	6
4HTMA 065 240 S08 M8	M8	1.25	6.8	6.5	13.1	24	65	8
4HTMA 082 300 S10 M10	M10	1.5	8.5	8.2	15.7	30	75	10
4HTMA 099 360 S10 M12	M12	1.75	10.2	9.9	18.4	36	85	10
4HTMA 116 420 S12 M14	M14	2	12	11.6	21	42	90	12
4HTMA 136 480 S14 M16	M16	2	14	13.6	25	48	100	14
内冷却 (With coolant)								
4HTMA 024 090 S04 M3C	M3	0.5	2.5	2.4	4.7	9	45	4
4HTMA 0315 120 S04 M4C	M4	0.7	3.3	3.15	6.6	12	45	4
4HTMA 039 150 S04 M5C	M5	0.8	4.2	3.9	7.6	15	50	4
4HTMA 048 180 S06 M6C	M6	1	5	4.8	9.5	18	60	6
4HTMA 065 240 S08 M8C	M8	1.25	6.8	6.5	13.1	24	65	8
4HTMA 082 300 S10 M10C	M10	1.5	8.5	8.2	15.7	30	75	10
4HTMA 099 360 S10 M12C	M12	1.75	10.2	9.9	18.4	36	85	10
4HTMA 116 420 S12 M14C	M14	2	12	11.6	21	42	90	12
4HTMA 136 480 S14 M16C	M16	2	14	13.6	25	48	100	14

4HTMS

4 Flutes Helix Thread Mill for Stainless Steel

New

4刃 不锈钢专用螺旋螺纹铣刀



- **不锈钢，钛合金加工**
- 为了更深的攻丝加工，设计了内冷却方式螺旋角刀刃。
- 多刃设计。
- 最大攻丝加工深度：3xDo（攻丝加工直径）。
- 减少深孔攻丝加工时间。

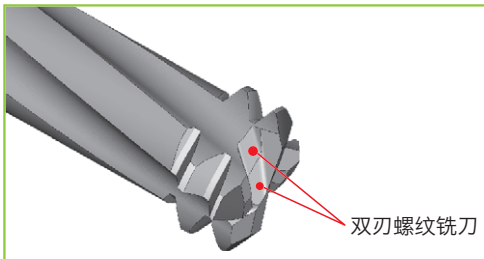
- **Thread Mill for SUS, Titanium alloy**
- Helical flutes with coolant thru for extra deep threading applications
- Multi-tooth geometry
- Maximum thread length : 3xDo (thread diameter)
- Reduced machining times for long threads

4 | UWC 초미립자 | TISIN-R Coating | 15° Helix Angle | R Lotation

单位 : mm

Order Number	齿距 Thread	齿距 Pitch	孔径 mm	刃径 Diameter D2	攻丝长度 Thread Length Le	有效长 Thread Length L1	全长 Overall Length L	柄径 Shank Dia D
外冷却 (Without coolant)								
4HTMS 024 090 S04 M3	M3	0.5	2.5	2.4	4.7	9	45	4
4HTMS 0315 120 S04 M4	M4	0.7	3.3	3.15	6.6	12	45	4
4HTMS 039 150 S04 M5	M5	0.8	4.2	3.9	7.6	15	50	4
4HTMS 048 180 S06 M6	M6	1	5	4.8	9.5	18	60	6
4HTMS 065 240 S08 M8	M8	1.25	6.8	6.5	13.1	24	65	8
4HTMS 082 300 S10 M10	M10	1.5	8.5	8.2	15.7	30	75	10
4HTMS 099 360 S10 M12	M12	1.75	10.2	9.9	18.4	36	85	10
4HTMS 116 420 S12 M14	M14	2	12	11.6	21	42	90	12
4HTMS 136 480 S14 M16	M16	2	14	13.6	25	48	100	14
内冷却 (With coolant)								
4HTMS 024 090 S04 M3C	M3	0.5	2.5	2.4	4.7	9	45	4
4HTMS 0315 120 S04 M4C	M4	0.7	3.3	3.15	6.6	12	45	4
4HTMS 039 150 S04 M5C	M5	0.8	4.2	3.9	7.6	15	50	4
4HTMS 048 180 S06 M6C	M6	1	5	4.8	9.5	18	60	6
4HTMS 065 240 S08 M8C	M8	1.25	6.8	6.5	13.1	24	65	8
4HTMS 082 300 S10 M10C	M10	1.5	8.5	8.2	15.7	30	75	10
4HTMS 099 360 S10 M12C	M12	1.75	10.2	9.9	18.4	36	85	10
4HTMS 116 420 S12 M14C	M14	2	12	11.6	21	42	90	12
4HTMS 136 480 S14 M16C	M16	2	14	13.6	25	48	100	14

4ETM 4ETMA 4ETMS

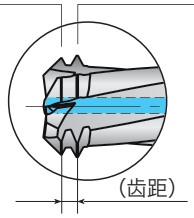


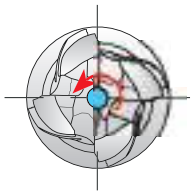
第一个刃齿-如图（粗加工）　第二个刃齿-如图（精加工）

双层刀刃

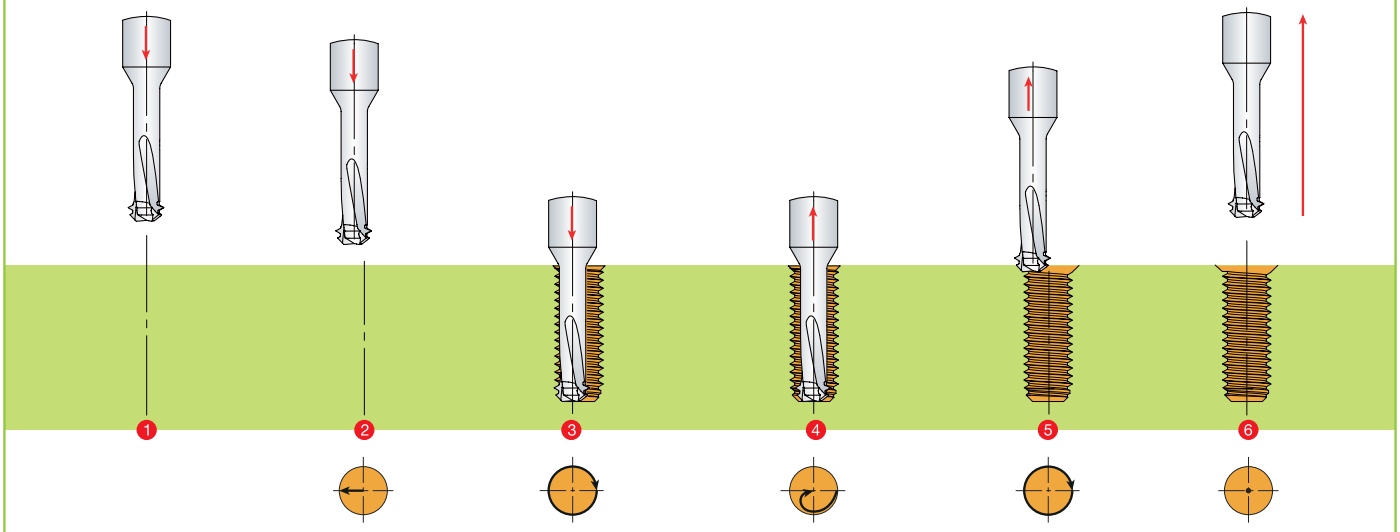
部分加工进行，
紧接精细加工文件

加工方向是从外而内



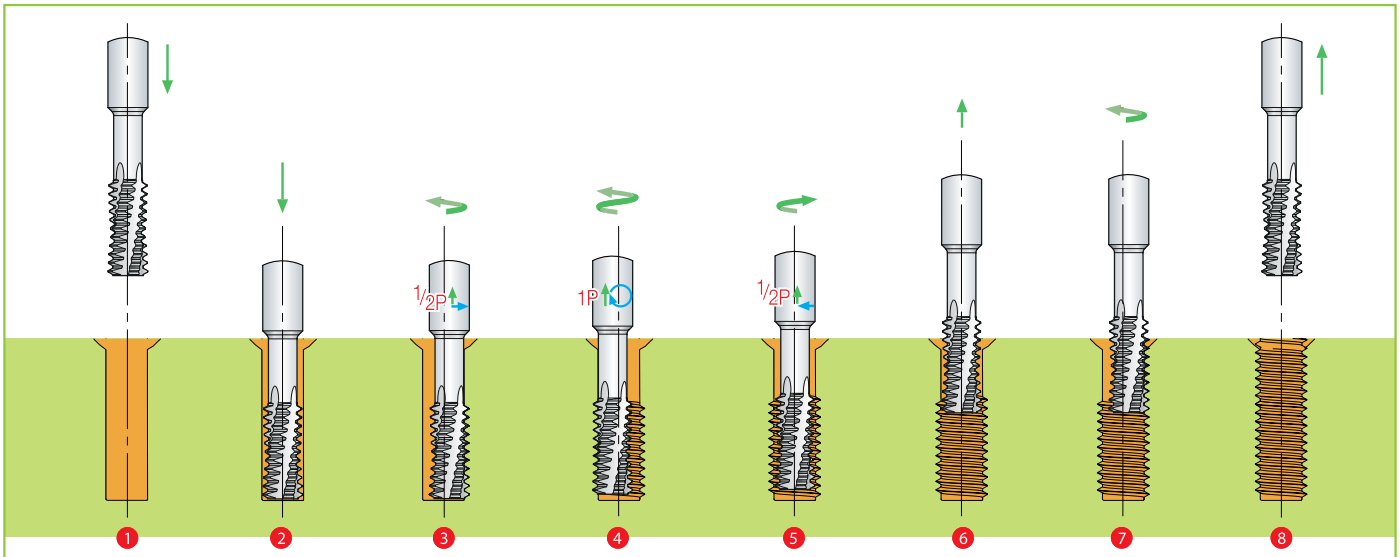


操作方法 Operating Cycle



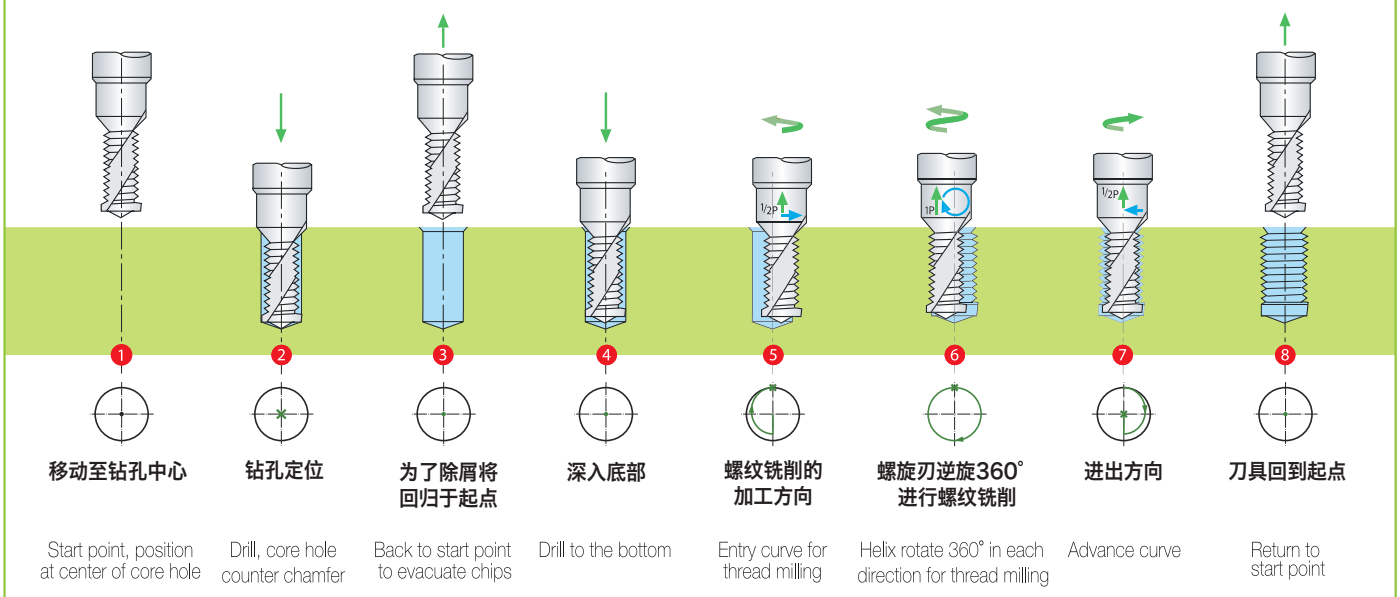
1	2	3	4	5	6
起点 孔中心位置	螺旋方向移动	钻孔&攻丝加工	攻丝加工完成 后移到中心后 从孔抬出	倒角	回到起点位置
Start point, position at center of hole	Move to helical starting position	Drill & thread with helical interpolation	When desired thread is complete, move to center, then exit hole	Chamfer	Return to start point

4HTM 4HTMA 4HTMS 操作方法 Operating Cycle



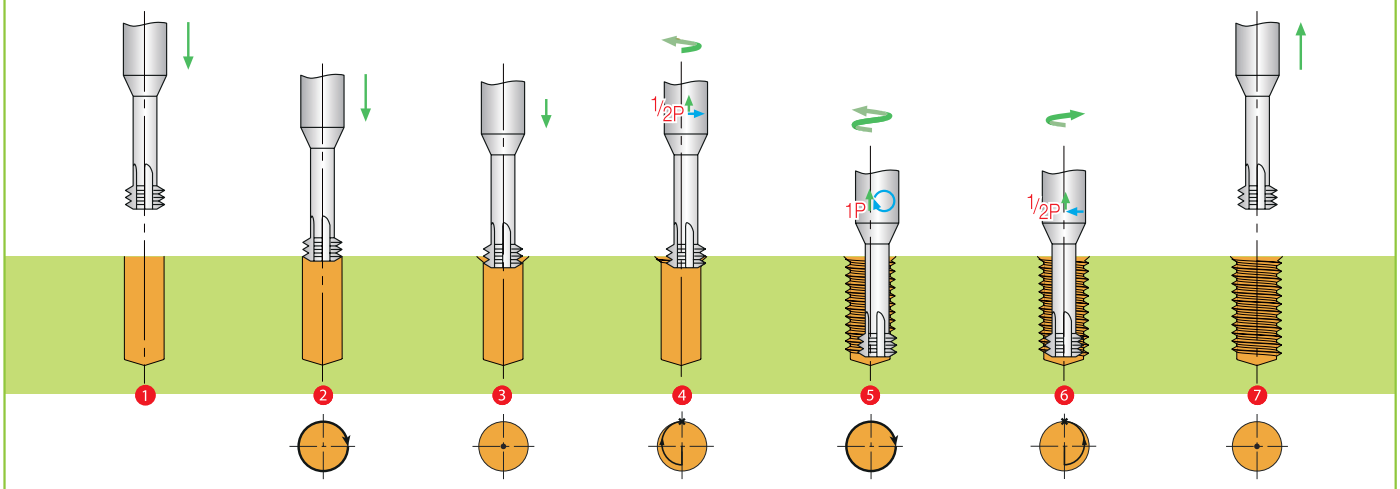
1	2	3	4	5	6	7	8
起点 孔中心位置	螺旋方向移动	螺纹铣削的方向	螺旋刃逆旋 360° 进行 螺纹铣削	进出方向	完成后， 移至第二个加工位置	❸❹❺项 反复加工	回到起点
Start point, position at center of hole	Go to first helical starting position	Entry curve for thread milling	Helix rotate 360° in each direction for thread milling	Advance curve	Complete, move to the second helical position	❸❹❺ repeat task	Return to start point

2DTM 2DTMS 操作方法 Operating Cycle



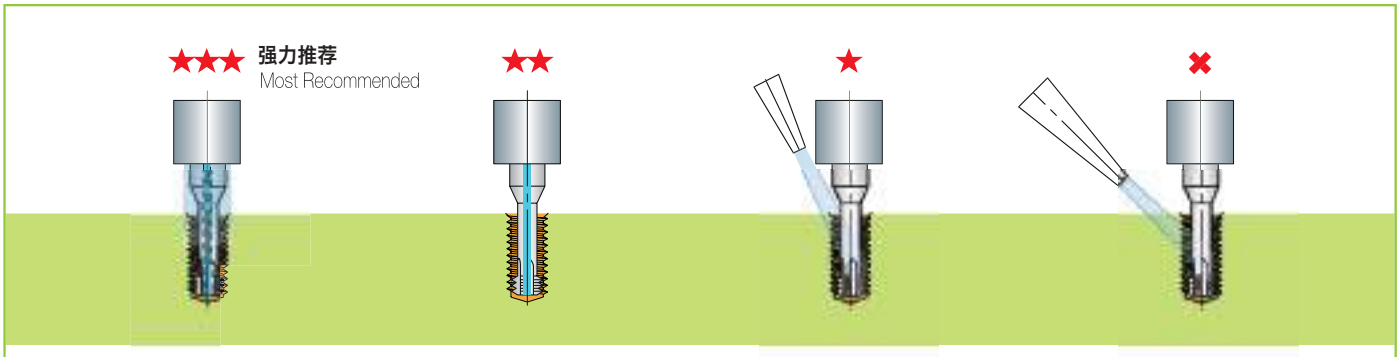
1	2	3	4	5	6	7	8
移动至钻孔中心	钻孔定位	为了除屑将回归于起点	深入底部	螺纹铣削的加工方向	螺旋刃逆旋360°进行螺纹铣削	进出方向	刀具回到起点
Start point, position at center of core hole	Drill, core hole counter chamfer	Back to start point to evacuate chips	Drill to the bottom	Entry curve for thread milling	Helix rotate 360° in each direction for thread milling	Advance curve	Return to start point

4STM 4STMA 4STMS 操作方法 Operating Cycle



1	2	3	4	5	6	7
起点，孔中心位置	倒角	螺旋方向移动	螺纹铣削的加工方向	串铣	进出方向	返回起点
Start point, position at center of hole	Chamfer	Move to helical starting position	Entry curve for thread milling	Threading	Advance curve	Return to start point

建议冷却液使用方法 Coolant use for best chip evacuation



★★★ 强力推荐 Most Recommended	★★	★	✖
内外冷却 Jet Collet with Coolant Thru	内部冷却 Coolant Thru	外部冷却 External Coolant	错误冷却 External Coolant

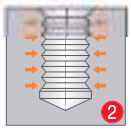
2DM 2DTMS 螺纹铣刀常见问题

螺旋加工处堆积或粘住的铁屑 (Chips packed or glued at the thread profile)

- 不良的冷却方式 (poor coolant)

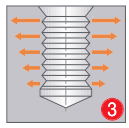
→ 改善冷却方式（即添加刀柄冷却，通孔侧槽冷却装置）
improve coolant (i.e. add flood coolant, lateral flute coolant supply for through holes)

→ 请在刀柄上添加冷却装置
add coolant flutes flutes on shank



螺纹不明显 (Thread go–gage doesn't fit)

- 加工孔太小→(thread too small) → 减少刀具半径 (reduce tool radius in offset register)
- 螺纹上有废削 (chips in thread) → 改善冷却方式 (improve coolant)



螺纹逐渐变细 (Thread is getting tapered)

- 刀柄的夹持不足 (poor tool clamping)
  → 改善刀柄（例如热缩刀柄）improve tool holding (i.e. shrink fit holders)
- 螺纹加工进给量太高(thread milling feed too high) → 减少螺纹加工进给量 (reduce thread milling feed)

不稳定的工具磨损 (Erratic tool wear)

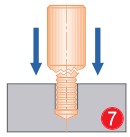
- 刀具磨损太快 → 请使用更好的刀柄（例如热缩刀柄）
- tool run out too high → use better tool holders (i.e. shrink fit holders)

废削会缠绕在工具上 (Counterbore chips are winding around the tool)

- 加工进给太低 (chamfer feed too low)
  → 提高加工进给 (increase chamfer feed)

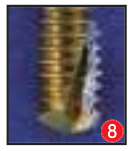
很大的钻孔噪音（特别是朝向最终钻孔深度的噪音） Loud drilling noise (especially towards the final drilling depth)

- 废削问题 (chip problem)
  → 减少钻头移动速度 (reduce drill feed rate)
  → 请喷冷却液 (use tool with coolant through)
  → 增加啄周期 (add peck cycle)



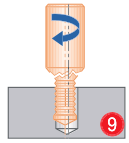
钻孔时导致刀具破损（尤其是加工较长的废削材料） Tool breakage while drilling (especially in long chipping material)

- 废削问题 (chip problem)
  → 减少钻头移动速度 (reduce drill feed rate)
  → 请喷冷却液 (use tool with coolant through)
  → 增加啄周期 (add peck cycle (multiple pecks))



废屑粘在刀刃上 (Chips glued up in the flutes)

- 不良的冷却液 (poor coolant)
  → 改善冷却效果 (improve coolant situation)
  → 请喷冷却液 (use tool with coolant through)
  → 推荐使用带涂层的刀具 (use coated tool)



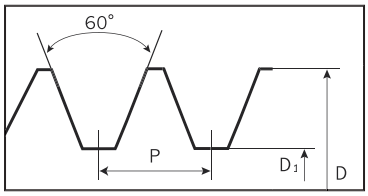
攻丝过程中的刀具破损 (Chippage, tool breakage while thread milling)

- 攻丝进给太块 (feed rate thread milling too high)
  → 检查攻丝后切屑槽是否残留废削
  (check that the chip grooves are free of chips after the boring operation)
- 震动 (vibrations)
  → 降低进给速度（检查NC进给是否与中心点或外部轨迹有关）
  reduce feed rate (check whether NC feeds relate to centre point or external track)

光洁度不好 Poor thread surface (harmonics)

- 震动 (vibrations)
  → 检查刀柄 (check tool holder (do not use modular systems !))
  → 检查刀柄的夹持力和装置。在夹持力不稳定的地方引入。
  (check workpiece clamping and fixture. Where the clamping set-up is unstable introduce a distribution of the cutting force.)
  → 减少切削速度 (reduce cutting speed)
  → 提高刃齿转速 (increase tooth feed rate)
  → 分散切削力 (introduce distribution of cutting force)

ISO 标准螺纹

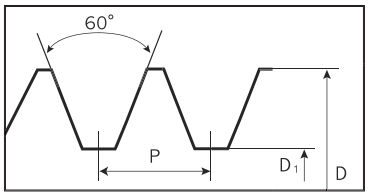


MF ISO 螺纹DIN 13及DIN ISO 965-1

D	D_1		
Ø × P	min. mm	max. mm 6H	Ø mm
M2 x 0.25	1.729	1.785	1.75
M2.2 x 0.25	1.929	1.985	1.95
M2.3 x 0.25	2.029	2.085	2.05
M2.5 x 0.35	2.121	2.221	2.15
M3 x 0.25	2.729	2.785	2.75
M3 x 0.35	2.621	2.721	2.65
M3.5 x 0.35	3.121	3.221	3.15
M4 x 0.35	3.621	3.721	3.65
M4 x 0.5	3.459	3.599	3.50
M4.5 x 0.5	3.959	4.099	4.00
M5 ◊ x.35	4.621	4.721	4.65
M5 x 0.5	4.459	4.599	4.50
M5 x 0.75	4.188	4.378	4.20
M6 x 0.5	5.459	5.599	5.50
M6 x 0.75	5.188	5.378	5.25
M7 x 0.5	6.459	6.599	6.50
M7 x 0.75	6.188	6.378	6.25
M8 x 0.5	7.459	7.599	7.50
M8 x 0.75	7.188	7.378	7.25
M8 x 1	6.917	7.153	7.00
M9 x 0.75	8.188	8.378	8.25
M9 x 1	7.917	8.153	8.00
M10 x 0.5	9.459	9.599	9.50
M10 x 0.75	9.188	9.378	9.25
M10 x 1	8.917	9.153	9.00
M10 x 1.25	8.647	8.912	8.75
M11 x 1	9.917	10.153	10.00
M12 x 0.5	11.459	11.599	11.50
M12 x 1	10.917	11.153	11.00
M12 x 1.25	10.647	10.912	10.75
M12 x 1.5	10.376	10.676	10.50
M13 x 1	11.917	12.153	12.00
M14 x 0.75	13.188	13.378	13.20
M14 x 1	12.917	13.153	13.00
M14 x 1.25	12.647	12.912	12.75
M14 x 1.5	12.376	12.676	12.50
M15 x 1	13.917	14.153	14.00
M15 x 1.5	13.376	13.676	13.50
M16 x 0.75	15.188	15.378	15.20
M16 x 1	14.917	15.153	15.00
M16 x 1.25	14.647	14.912	14.80
M16 x 1.5	14.376	14.676	14.50
M17 x 1	15.917	16.153	16.00
M18 x 1	16.917	17.153	17.00
M18 x 1.5	16.376	16.676	16.50
M18 x 2	15.835	16.210	16.00
M20 x 1	18.917	19.153	19.00
M20 x 1.5	18.376	18.676	18.50
M20 x 2	17.835	18.210	18.00
M22 x 1	20.917	21.153	21.00
M22 x 1.5	20.376	20.676	20.50
M22 x 2	19.835	20.210	20.00

D	D_1		
Ø × P	min. mm	max. mm 6H	Ø mm
M24 x 1.5	22.376	22.676	22.50
M24 x 2	21.835	22.210	22.00
M25 x 1	22.917	23.153	23.00
M25 x 1.5	23.376	23.676	23.50
M26 x 1.5	24.376	24.676	24.50
M27 x 1	25.917	26.153	26.00
M27 x 1.5	25.376	25.676	25.50
M27 x 2	24.835	25.210	25.00
M28 x 1.5	26.376	26.676	26.50
M28 x 2	25.835	26.210	26.00
M30 x 1	28.917	29.153	29.00
M30 x 1.5	28.376	28.676	28.50
M30 x 2	27.835	28.210	28.00
M32 x 1.5	30.376	30.676	30.50
M32 x 2	29.835	30.210	30.00
M33 x 1.5	31.376	31.676	31.50
M33 x 2	30.835	31.210	31.00
M34 x 1.5	32.376	32.676	32.50
M35 x 1.5	33.376	33.676	33.50
M36 x 1.5	34.376	34.676	34.50
M36 x 2	33.835	34.210	34.00
M36 x 3	32.752	33.252	33.00
M38 x 1.5	36.376	36.676	36.50
M39 x 1.5	37.376	37.676	37.50
M39 x 2	36.835	37.210	37.00
M39 x 3	35.752	36.252	36.00
M40 x 1.5	38.376	38.676	38.50
M40 x 2	37.835	38.210	38.00
M40 x 3	36.752	37.252	37.00
M42 x 1.5	40.376	40.676	40.50
M42 x 2	39.835	40.210	40.00
M42 x 3	38.752	39.252	39.00
M45 x 1.5	43.376	43.676	43.50
M45 x 2	42.835	43.210	43.00
M45 x 3	41.752	42.252	42.00
M48 x 1.5	46.376	46.676	46.50
M48 x 2	45.835	46.210	46.00
M48 x 3	44.752	45.252	45.00
M50 x 1.5	48.376	48.676	48.50
M50 x 2	47.835	48.210	48.00
M50 x 3	46.752	47.252	47.00
M52 x 1.5	50.376	50.676	50.50
M52 x 2	49.835	50.210	50.00
M52 x 3	46.587	47.087	49.00
M56 x 1.5	54.376	54.676	54.50
M56 x 2	53.835	54.210	54.00
M56 x 3	52.752	53.252	53.00
M58 x 1.5	56.376	56.676	56.50
M60 x 1.5	58.376	58.676	58.50
M60 x 2	57.835	58.210	58.00
M60 x 3	56.752	57.252	57.00

ISO 标准螺纹

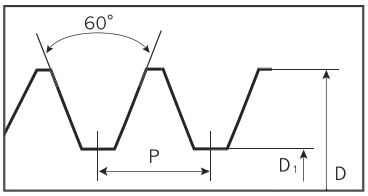


M ISO 螺纹DIN 13及DIN ISO 965-1

D		D_1		
Ø	P (mm)	min. mm	max. mm 5H/6H	Ø mm
M1*	0.25	0.729	0.785	0.75
M1.1*	0.25	0.829	0.885	0.85
M1.2*	0.25	0.929	0.985	0.95
M1.4*	0.30	1.075	1.142	1.10
M1.6	0.35	1.221	1.321	1.25
M1.7	0.35	1.321	1.421	1.35
M1.8	0.35	1.421	1.521	1.45
M2	0.40	1.567	1.679	1.60
M2.2	0.45	1.713	1.838	1.75
M2.3	0.40	1.813	1.938	1.85
M2.5	0.45	2.013	2.138	2.05
M2.6	0.45	2.113	2.238	2.15
M3	0.50	2.459	2.599	2.50
M3.5	0.60	2.850	3.010	2.90
M4	0.70	3.242	3.422	3.30
M4.5	0.75	3.688	3.878	3.70
M5	0.80	4.134	4.334	4.20
M6	1.00	4.917	5.153	5.00
M7	1.00	5.917	6.153	6.00
M8	1.25	6.647	6.912	6.80
M9	1.25	7.647	7.912	7.80
M10	1.50	8.376	8.676	8.50
M11	1.50	9.376	9.676	9.50
M12	1.75	10.106	10.441	10.20
M14	2.00	11.835	12.210	12.00
M16	2.00	13.835	14.210	14.00
M18	2.50	15.294	15.744	15.50
M20	2.50	17.294	17.744	17.50
M22	2.50	19.294	19.744	19.50
M24	3.00	20.752	21.252	21.00
M27	3.00	23.752	24.252	24.00
M30	3.50	26.211	26.771	26.50
M33	3.50	29.211	29.771	29.50
M36	4.00	31.670	32.270	32.00
M39	4.00	34.670	35.270	35.00
M42	4.50	37.129	37.799	37.50
M45	4.50	40.129	40.799	40.50
M48	5.00	42.587	43.297	43.00
M52	5.00	46.587	47.297	47.00
M56	5.50	50.046	50.796	50.50
M60	5.50	54.046	54.796	54.50
M64	6.00	57.505	58.305	58.00
M68	6.00	62.505	62.305	62.00

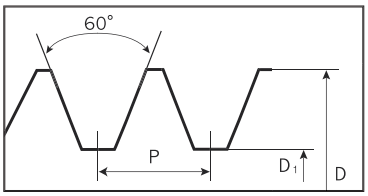
*5H max.

美国标准螺纹



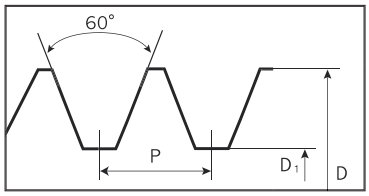
UN ASME B1.1 / 8系列

D	D_1		
Ø P Gg/1″	min. mm 2B/3B	max. mm 2B	Ø mm
1 1/8–8 UN	25.138	25.962	25.40
1 1/4–8 UN	28.313	29.126	28.50
1 3/8–8 UN	31.488	32.123	32.00
1 1/2–8 UN	34.663	35.456	35.00
1 5/8–8 UN	37.838	38.623	38.10
1 3/4–8 UN	41.013	41.790	41.50
1 7/8–8 UN	44.188	44.957	44.45
2–8 UN	47.363	48.125	48.00
2 1/4–8 UN	53.713	54.462	54.00



UNF ASME B1.1系列

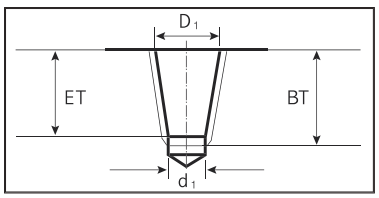
D	D_1		
Ø P Gg/1″	min. mm 2B/3B	max. mm 2B	Ø mm
0–80 UNF	1.181	1.306	1.25
1–72 UNF	1.473	1.613	1.55
2–64 UNF	1.755	1.913	1.85
3–56 UNF	2.024	2.197	2.15
4–48 UNF	2.271	2.459	2.40
5–44 UNF	2.550	2.741	2.70
6–40 UNF	2.819	3.023	2.95
8–36 UNF	3.404	3.607	3.50
10–32 UNF	3.962	4.166	4.10
12–28 UNF	4.496	4.724	4.60
1/4–28 UNF	5.367	5.580	5.50
5/16–24 UNF	6.792	7.038	6.90
3/8–24 UNF	8.379	8.626	8.50
7/16–20 UNF	9.738	10.030	9.90
1/2–20 UNF	11.326	11.618	11.50
9/16–18 UNF	12.761	13.084	12.90
5/8–18 UNF	14.348	14.671	14.50
3/4–16 UNF	17.330	17.689	17.50
7/8–14 UNF	20.262	20.663	20.40
1–12 UNF	23.109	23.569	23.25
1 1/8–12 UNF	26.284	26.744	26.50
1 1/4–12 UNF	29.459	29.919	29.50
1 3/8–12 UNF	32.634	33.094	33.00
1 1/2–12 UNF	35.809	36.269	36.10



UNC ASME B1.1

D	D1		
Ø P Gg/1″	min. mm 2B/3B	max. mm 2B	Ø mm
1–64 UNC	1.425	1.582	1.55
2–56 UNC	1.694	1.872	1.85
3–48 UNC	1.941	2.146	2.10
4–40 UNC	2.156	2.385	2.35
5–40 UNC	2.487	2.697	2.65
6–32 UNC	2.642	2.896	2.85
8–32 UNC	3.302	3.531	3.50
10–24 UNC	3.683	3.962	3.90
12–24 UNC	4.343	4.597	4.50
1/4–20 UNC	4.976	5.268	5.10
5/16–18 UNC	6.411	6.734	6.60
3/8–16 UNC	7.805	8.164	8.00
7/16–14 UNC	9.149	9.550	9.40
1/2–13 UNC	10.584	11.013	10.80
9/16–12 UNC	11.996	12.456	12.20
5/8–11 UNC	13.376	13.868	13.50
3/4–10 UNC	16.299	16.833	16.50
7/8–9 UNC	19.169	19.748	19.50
1–8 UNC	21.963	22.598	22.25
1 1/8–7 UNC	24.648	25.348	25.00
1 1/4–7 UNC	27.823	28.524	28.00
1 1/2–6 UNC	33.518	34.295	34.00
1 3/4–5 UNC	38.951	39.814	39.50
2–4,5 UNC	44.689	45.598	45.00

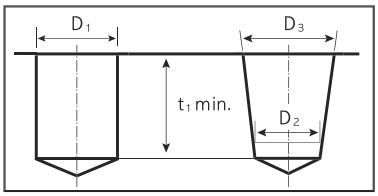
Whitworth 螺纹



Rc DIN EN 10226-2 锥度螺纹 1:16

Ø P Gg/1″	d1 mm	D1 mm	ET mm	min. BT mm
Rc 1/16–28	6.3	6.49	8.31	10.0
Rc 1/8–28	8.3	8.50	8.31	10.1
Rc 1/4–19	11.0	11.35	12.37	15.0
Rc 3/8–19	14.5	14.85	12.77	15.4
Rc 1/2–14	18.1	18.49	16.83	20.5
Rc 3/4–14	23.5	23.98	18.13	21.8
Rc 1–11	29.6	30.11	21.42	26.0
Rc 1 1/4–11	38.1	38.78	23.72	28.3
Rc 1 1/2–11	44.0	44.67	23.72	28.3
Rc 2–11	55.6	56.48	28.02	32.6
Rc 2 1/2–11	71.1	72.00	31.32	37.1
Rc 3–11	83.6	84.71	34.42	40.2

美国标准管件螺纹



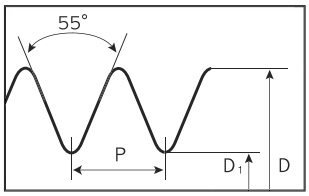
NPT ASME B1.20.1 美国标准螺纹1:16

Ø P Gg/1″	D1 mm	D2 mm	D3 mm	t1 mm
1/16–27 NPT	6.15	5.95	6.39	10.7
1/8–27 NPT	8.40	8.31	8.74	10.8
1/4–18 NPT	11.10	10.73	11.36	15.6
3/8–18 NPT	14.30	14.15	14.80	16.0
1/2–14 NPT	17.90	17.47	18.32	20.8
3/4–14 NPT	23.30	22.79	23.67	21.3
1–11,5 NPT	29.00	28.64	29.69	25.6
1 1/4–11,5 NPT	37.70	37.37	38.45	26.1
1 1/2–11,5 NPT	43.70	43.44	44.52	26.1
2–11,5 NPT	55.60	55.45	56.56	26.5
2 1/2–8 NPT	66.30	66.14	67.62	36.3
3–8 NPT	82.30	81.90	83.52	38.5

NPTF ASME B1.20.3 美国标准螺纹1:16

Ø P Gg/1″	D1 mm	D2 mm	D3 mm	t1 mm
1/16–27 NPTF	6.1	5.97	6.41	10.3
1/8–27 NPTF	8.4	8.33	8.77	10.3
1/4–18 NPTF	11.0	10.77	11.40	15.0
3/8–18 NPTF	14.5	14.19	14.84	15.3
1/2–14 NPTF	17.5	17.48	18.33	19.9
3/4–14 NPTF	23.0	22.84	23.72	20.4
1–11 1/2 NPTF	29.0	28.62	29.76	24.5
1 1/4–11,5 NPTF	37.5	37.44	38.52	25.0
1 1/2–11,5 NPTF	43.5	43.50	44.59	25.0
2–11,5 NPTF	56.0	55.51	56.62	25.4
2 1/2–8 NPTF	66.0	66.03	67.71	38.0
3–8 NPTF	82.0	81.80	83.62	40.0

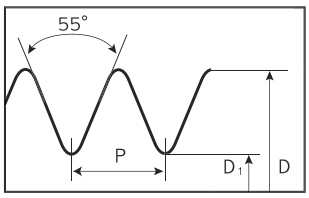
管件螺纹



G DIN EN ISO 228 螺纹

D	D_1		
Ø P Gg/1″	min. mm	max. mm	Ø mm DIN 336 / ISO 2306
G 1/16–28	6.561	6.843	6.80
G 1/8–28	8.566	8.848	8.80
G 1/4–19	11.445	11.890	11.80
G 3/8–19	14.950	15.395	15.25
G 1/2–14	18.632	19.173	19.00
G 5/8–14	20.588	21.129	21.00
G 3/4–14	24.118	24.659	24.50
G 7/8–14	27.878	28.419	28.25
G 1–11	30.292	30.932	30.75
G 1 1/8–11	34.940	35.580	35.50
G 1 1/4–11	38.953	39.593	39.50
G 1 3/8–11	41.366	42.006	41.90
G 1 1/2–11	44.846	45.486	45.25
G 1 3/4–11	50.789	51.429	51.00
G 2–11	56.657	57.297	57.00
G 2 1/4–11	62.753	63.393	63.00
G 2 1/2–11	72.227	72.867	72.60
G 3–11	84.927	85.567	85.00

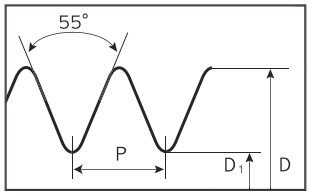
Whitworth 螺纹



Rp DIN EN 10226-1 Whitworth 螺纹

D	D_1		
Ø P Gg/1″	min. mm	max. mm	Ø mm DIN 336 / ISO 2306
Rp 1/16–28	6.490	6.632	6.55
Rp 1/8–28	8.495	8.637	8.60
Rp 1/4–19	11.341	11.549	11.50
Rp 3/8–19	14.846	15.054	15.00
Rp 1/2–14	18.490	18.774	18.50
Rp 5/8–14	20.446	20.730	20.50
Rp 3/4–14	23.976	24.260	24.00
Rp 1–11	30.112	30.472	30.25
Rp 1 1/4–11	38.773	39.133	39.00
Rp 1 1/2–11	44.629	45.063	45.00
Rp 2–11	56.440	56.874	56.50
Rp 2 1/2–11	72.010	72.444	72.20
Rp 3–11	84.710	85.144	85.00

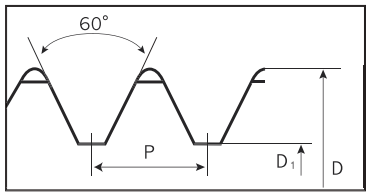
Whitworth 螺纹



BSW BS 84 Whitworth 螺纹

D	D_1		
Ø P Gg/1″	Medium min. mm	Class max. mm	Ø mm
1/16–60	1.045	1.231	1.20
3/32–48	1.703	1.911	1.90
1/8–40	2.362	2.590	2.50
5/32–32	2.952	3.213	3.10
3/16–24	3.407	3.745	3.60
7/32–24	4.201	4.539	4.50
1/4–20	4.724	5.155	5.00
5/16–18	6.131	6.591	6.50
3/8–16	7.493	7.988	7.90
7/16–14	8.790	9.330	9.20
1/2–12	9.989	10.590	10.50
9/16–12	11.577	12.178	12.00
5/8–11	12.919	13.558	13.40
3/4–10	15.798	16.484	16.40
7/8–9	18.612	19.354	19.25
1–8	21.335	22.148	22.00
1 1/8–7	23.929	24.833	24.75
1 1/4–7	27.104	28.008	27.50
1 3/8–6	29.505	30.529	30.00
1 1/2–6	32.680	33.704	33.50
1 5/8–5	34.771	35.965	35.50
1 3/4–5	37.946	39.140	39.00
1 7/8–4.5	40.398	41.705	41.50
2–4 1/2	43.573	44.880	44.50
2 1/4–4	49.020	50.468	50.00
2 1/2–4	55.370	56.818	56.00

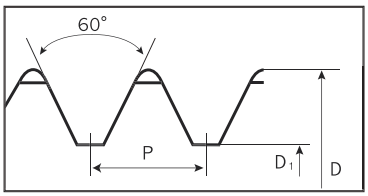
ISO标准螺纹



MJ DIN ISO 5855 螺纹

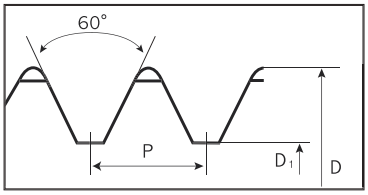
D	D_1		
Ø × P	min. mm	max. mm	Ø mm
MJ3 x 0.5	2.513	2.653	2.60
MJ4 x 0.7	3.318	3.498	3.40
MJ5 x 0.8	4.221	4.421	4.30
MJ6 x 1	5.026	5.215	5.10
MJ8 x 1.25	6.782	6.994	6.90
MJ10 x 1.5	8.539	8.779	8.70
MJ12 x 1.75	10.295	10.563	10.50
MJ16 x 2	14.051	14.351	14.30

美国螺纹



UNJC AASME B1.15及 ISO 3161 螺纹

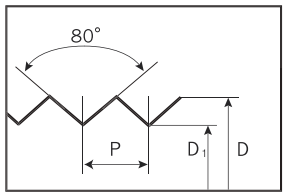
D	D1		
Ø × P	min. mm 3B	max. mm 3B	Ø mm
1–64 UNJC	1.467	1.570	1.50
2–56 UNJC	1.742	1.860	1.80
3–48 UNJC	1.999	2.137	2.05
4–40 UNJC	2.226	2.391	2.30
5–40 UNJC	2.556	2.721	2.65
6–32 UNJC	2.732	2.938	2.80
8–32 UNJC	3.393	3.599	3.50
10–24 UNJC	3.795	4.064	3.90
12–24 UNJC	4.455	4.704	4.60
1/4–20 UNJC	5.113	5.387	5.20
5/16–18 UNJC	6.563	6.833	6.70
3/8–16 UNJC	7.978	8.255	8.10
7/16–14 UNJC	9.344	9.637	9.50
1/2–13 UNJC	10.796	11.093	10.90
9/16–12 UNJC	12.226	12.480	12.30
5/8–11 UNJC	13.625	13.902	13.70
3/4–10 UNJC	16.575	16.880	16.75



UNJF ASME B1.15 及 ISO 3161 螺纹

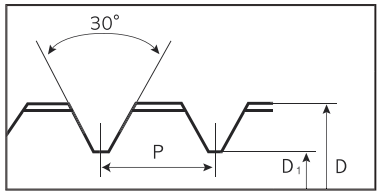
D	D1		
Ø × P	min. mm 3B	max. mm 3B	Ø mm
0–80 UNJF	1.215	1.297	1.25
1–72 UNJF	1.510	1.602	1.55
2–64 UNJF	1.797	1.900	1.85
3–56 UNJF	2.073	2.191	2.10
4–48 UNJF	2.329	2.467	2.40
5–44 UNJF	2.613	2.763	2.70
6–40 UNJF	2.886	3.051	2.95
8–36 UNJF	3.479	3.662	3.60
10–32 UNJF	4.053	4.253	4.15
12–28 UNJF	4.602	4.815	4.70
1/4–28 UNJF	5.466	5.662	5.60
5/16–24 UNJF	6.907	7.110	7.00
3/8–24 UNJF	8.494	8.680	8.60
7/16–20 UNJF	9.875	10.083	10.00
1/2–20 UNJF	11.463	11.660	11.50
9/16–18 UNJF	12.913	13.123	13.00
5/8–18 UNJF	14.500	14.702	14.50

其他 -



Pg DIN 40 430 钢材电线管螺纹

D	D1		
Ø P Gg/1″	min. mm	max. mm	Ø mm
Pg 7 x 20	11.29	11.43	11.40
Pg 9 x 18	13.85	14.01	14.00
Pg 11 x 18	17.25	17.41	17.25
Pg 13.5 x 18	19.05	19.21	19.00
Pg 16 x 18	21.15	21.31	21.25
Pg 21 x 16	26.79	27.03	27.00
Pg 29 x 16	35.49	35.73	35.50
Pg 36 x 16	45.49	45.73	45.50
Pg 42 x 16	52.49	52.73	52.50
Pg 48 x 16	57.79	58.03	58.00



Tr ISO 阶梯型螺纹

D	D1		
Ø P Gg/1″	min. mm	max. mm	Ø mm
8 x 1.5	6.5	6.69	6.60
9 x 2	7.0	7.236	7.20
10 x 2	8.0	8.236	8.20
11 x 3	8.0	8.315	8.25
12 x 3	9.0	9.315	9.25
14 x 3	11.0	11.315	11.25
16 x 4	12.0	12.375	12.25
18 x 4	14.0	14.375	14.25
20 x 4	16.0	16.375	16.25
22 x 5	17.0	17.45	17.25
24 x 5	19.0	19.45	19.25
26 x 5	21.0	21.45	21.25
28 x 5	23.0	23.45	23.25
30 x 6	24.0	24.5	24.25
32 x 6	26.0	26.5	26.25
34 x 6	28.0	28.5	28.25
36 x 6	30.0	30.5	30.25
38 x 7	31.0	31.56	31.50
40 x 7	33.0	33.56	33.50
42 x 7	35.0	35.56	35.50
44 x 7	37.0	37.56	37.50
46 x 8	38.0	38.63	38.50
48 x 8	40.0	40.63	40.50
50 x 8	42.0	42.63	42.50
52 x 8	44.0	44.63	44.50

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