

382P

ISO 측정항목

단위 Unit : mm

Order Number	피치 규격		날수		날경			유효장 Effective Length L2	길이 Lk	전장 Overall Length L	샹크 Shank Dia d
	Thread	Pitch	Flutes Z	Teeth Zt	D0	D1	D2				
4ETM 024 070 S06 M3	M3	0.5	4	2	1.37	2.17	2.4	7	0.4	60	6
4ETM 024 085 S06 M3	M3	0.5	4	2	1.37	2.17	2.4	8.5	0.4	60	6
4ETM 032 092 S06 M4	M4	0.7	4	2	1.74	2.88	3.2	9.2	0.57	60	6
4ETM 032 112 S06 M4	M4	0.7	4	2	1.74	2.88	3.2	11.2	0.57	60	6
4ETM 039 115 S06 M5	M5	0.8	4	2	2.21	3.61	3.9	11.5	0.7	60	6
4ETM 039 144 S06 M5	M5	0.8	4	2	2.21	3.61	3.9	14.4	0.7	60	6
4ETM 047 140 S06 M6	M6 ~ M9	1	4	2	2.82	4.4	4.7	14	0.79	60	6
4ETM 047 170 S06 M6	M6 ~ M9	1	4	2	2.82	4.4	4.7	17	0.79	60	6
4ETM 061 180 S08 M8	M8 ~ M12	1.25	4	2	4	5.8	6.1	18	0.9	65	8
4ETM 061 220 S08 M8	M8 ~ M12	1.25	4	2	4	5.8	6.1	22	0.9	65	8
4ETM 078 230 S08 M10	M10 ~ M15	1.5	4	2	5.16	7.4	7.8	23	1.12	65	8
4ETM 078 280 S08 M10	M10 ~ M15	1.5	4	2	5.16	7.4	7.8	28	1.12	65	8
4ETM 090 260 S10 M12	M12	1.75	4	2	6.2	8.6	9	26	1.2	80	10
4ETM 090 330 S10 M12	M12	1.75	4	2	6.2	8.6	9	33	1.2	80	10
4ETM 118 350 S12 M16	M16 ~ M23	2	4	2	7.4	11.4	11.8	35	2	100	12
4ETM 118 430 S12 M16	M16 ~ M23	2	4	2	7.4	11.4	11.8	43	2	100	12

외부 급유형 (Without coolant)

내부 급유형 (With coolant)

4ETM 047 140 S06 M6C	M6 ~ M9	1	4	2	2.82	4.4	4.7	14	0.79	60	6
4ETM 047 170 S06 M6C	M6 ~ M9	1	4	2	2.82	4.4	4.7	17	0.79	60	6
4ETM 061 180 S08 M8C	M8 ~ M12	1.25	4	2	4	5.8	6.1	18	0.9	65	8
4ETM 061 220 S08 M8C	M8 ~ M12	1.25	4	2	4	5.8	6.1	22	0.9	65	8
4ETM 078 230 S08 M10C	M10 ~ M15	1.5	4	2	5.16	7.4	7.8	23	1.12	65	8
4ETM 078 280 S08 M10C	M10 ~ M15	1.5	4	2	5.16	7.4	7.8	28	1.12	65	8
4ETM 090 260 S10 M12C	M12	1.75	4	2	6.2	8.6	9	26	1.2	80	10
4ETM 090 330 S10 M12C	M12	1.75	4	2	6.2	8.6	9	33	1.2	80	10
4ETM 118 350 S12 M16C	M16 ~ M23	2	4	2	7.4	11.4	11.8	35	2	100	12
4ETM 118 430 S12 M16C	M16 ~ M23	2	4	2	7.4	11.4	11.8	43	2	100	12

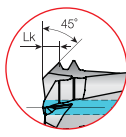
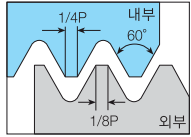
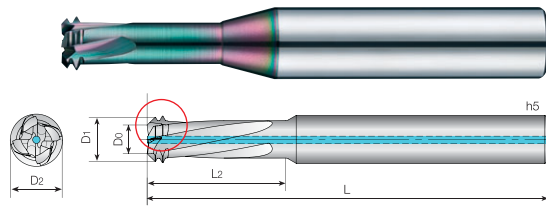
Inch 측정항목

단위 Unit : mm

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내부 급유형 (With coolant)

[illegible]



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ISO 측정항목

단위 Unit : mm

Order Number	피치 규격		날수		날경			유효장 Effective Length L2	길이 Lk	전장 Overall Length L	샙크 Shank Dia d
	Thread	Pitch	Flutes Z	Teeth Zt	D0	D1	D2				

외부 급유형 (Without coolant)

4ETMA 0105 033 S04 M014	M1.4	0.3	4	2	0.61	0.95	1.05	3.3	0.17	45	4
4ETMA 0105 040 S04 M014	M1.4	0.3	4	2	0.61	0.95	1.05	4	0.17	45	4
4ETMA 012 037 S04 M016	M1.6~M1.8	0.35	4	2	0.65	1.04	1.2	3.7	0.195	45	4
4ETMA 012 045 S04 M016	M1.6~M1.8	0.35	4	2	0.65	1.04	1.2	4.5	0.195	45	4
4ETMA 0155 045 S04 M2	M2	0.4	4	2	0.94	1.4	1.55	4.5	0.23	45	4
4ETMA 0155 055 S04 M2	M2	0.4	4	2	0.94	1.4	1.55	5.5	0.23	45	4
4ETMA 020 055 S04 M025	M2.5~M2.6	0.45	4	2	1.16	1.85	2	5.5	0.345	45	4
4ETMA 020 0675 S04 M025	M2.5~M2.6	0.45	4	2	1.16	1.85	2	6.75	0.345	45	4
4ETMA 024 070 S06 M3	M3	0.5	4	2	1.37	2.17	2.4	7	0.4	60	6
4ETMA 024 085 S06 M3	M3	0.5	4	2	1.37	2.17	2.4	8.5	0.4	60	6
4ETMA 032 092 S06 M4	M4	0.7	4	2	1.74	2.88	3.2	9.2	0.57	60	6
4ETMA 032 112 S06 M4	M4	0.7	4	2	1.74	2.88	3.2	11.2	0.57	60	6
4ETMA 039 115 S06 M5	M5	0.8	4	2	2.21	3.61	3.9	11.5	0.7	60	6
4ETMA 039 144 S06 M5	M5	0.8	4	2	2.21	3.61	3.9	14.4	0.7	60	6
4ETMA 047 140 S06 M6	M6~M9	1	4	2	2.82	4.4	4.7	14	0.79	60	6
4ETMA 047 170 S06 M6	M6~M9	1	4	2	2.82	4.4	4.7	17	0.79	60	6
4ETMA 061 180 S08 M8	M8~M12	1.25	4	2	4	5.8	6.1	18	0.9	65	8
4ETMA 061 220 S08 M8	M8~M12	1.25	4	2	4	5.8	6.1	22	0.9	65	8
4ETMA 078 230 S08 M10	M10~M15	1.5	4	2	5.16	7.4	7.8	23	1.12	65	8
4ETMA 078 280 S08 M10	M10~M15	1.5	4	2	5.16	7.4	7.8	28	1.12	65	8
4ETMA 090 260 S10 M12	M12	1.75	4	2	6.2	8.6	9	26	1.2	80	10
4ETMA 090 330 S10 M12	M12	1.75	4	2	6.2	8.6	9	33	1.2	80	10
4ETMA 118 350 S12 M16	M16~M23	2	4	2	7.4	11.4	11.8	35	2	100	12
4ETMA 118 430 S12 M16	M16~M23	2	4	2	7.4	11.4	11.8	43	2	100	12

내부 급유형 (With coolant)

4ETMA 047 140 S06 M6C	M6~M9	1	4	2	2.82	4.4	4.7	14	0.79	60	6
4ETMA 047 170 S06 M6C	M6~M9	1	4	2	2.82	4.4	4.7	17	0.79	60	6
4ETMA 061 180 S08 M8C	M8~M12	1.25	4	2	4	5.8	6.1	18	0.9	65	8
4ETMA 061 220 S08 M8C	M8~M12	1.25	4	2	4	5.8	6.1	22	0.9	65	8
4ETMA 078 230 S08 M10C	M10~M15	1.5	4	2	5.16	7.4	7.8	23	1.12	65	8
4ETMA 078 280 S08 M10C	M10~M15	1.5	4	2	5.16	7.4	7.8	28	1.12	65	8
4ETMA 090 260 S10 M12C	M12	1.75	4	2	6.2	8.6	9	26	1.2	80	10
4ETMA 090 330 S10 M12C	M12	1.75	4	2	6.2	8.6	9	33	1.2	80	10
4ETMA 118 350 S12 M16C	M16~M23	2	4	2	7.4	11.4	11.8	35	2	100	12
4ETMA 118 430 S12 M16C	M16~M23	2	4	2	7.4	11.4	11.8	43	2	100	12

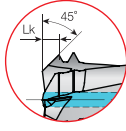
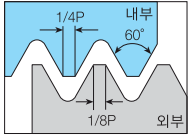
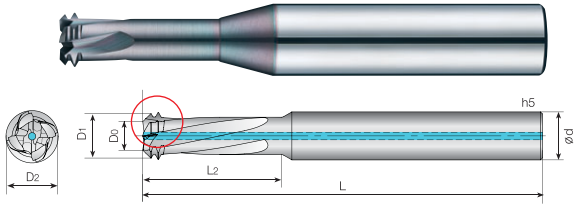
Inch 측정항목

단위 Unit : mm

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내부 급유형 (With coolant)

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ISO 측정항목

단위 Unit : mm

Order Number	피치 규격		날수		날경			유효장 Effective Length L2	길이 Lk	전장 Overall Length L	샙크 Shank Dia d
	Thread	Pitch	Flutes Z	Teeth Zt	D0	D1	D2				

외부 급유형 (Without coolant)

4ETMS 024 070 S06 M3	M3	0.5	4	2	1.37	2.17	2.4	7	0.4	60	6
4ETMS 024 085 S06 M3	M3	0.5	4	2	1.37	2.17	2.4	8.5	0.4	60	6
4ETMS 032 092 S06 M4	M4	0.7	4	2	1.74	2.88	3.2	9.2	0.57	60	6
4ETMS 032 112 S06 M4	M4	0.7	4	2	1.74	2.88	3.2	11.2	0.57	60	6
4ETMS 039 115 S06 M5	M5	0.8	4	2	2.21	3.61	3.9	11.5	0.7	60	6
4ETMS 039 144 S06 M5	M5	0.8	4	2	2.21	3.61	3.9	14.4	0.7	60	6
4ETMS 047 140 S06 M6	M6 ~ M9	1	4	2	2.82	4.4	4.7	14	0.79	60	6
4ETMS 047 170 S06 M6	M6 ~ M9	1	4	2	2.82	4.4	4.7	17	0.79	60	6
4ETMS 061 180 S08 M8	M8 ~ M12	1.25	4	2	4	5.8	6.1	18	0.9	65	8
4ETMS 061 220 S08 M8	M8 ~ M12	1.25	4	2	4	5.8	6.1	22	0.9	65	8
4ETMS 078 230 S08 M10	M10 ~ M15	1.5	4	2	5.16	7.4	7.8	23	1.12	65	8
4ETMS 078 280 S08 M10	M10 ~ M15	1.5	4	2	5.16	7.4	7.8	28	1.12	65	8
4ETMS 090 260 S10 M12	M12	1.75	4	2	6.2	8.6	9	26	1.2	80	10
4ETMS 090 330 S10 M12	M12	1.75	4	2	6.2	8.6	9	33	1.2	80	10
4ETMS 118 350 S12 M16	M16 ~ M23	2	4	2	7.4	11.4	11.8	35	2	100	12
4ETMS 118 430 S12 M16	M16 ~ M23	2	4	2	7.4	11.4	11.8	43	2	100	12

내부 급유형 (With coolant)

4ETMS 047 140 S06 M6C	M6~M9	1	4	2	2.82	4.4	4.7	14	0.79	60	6
4ETMS 047 170 S06 M6C	M6~M9	1	4	2	2.82	4.4	4.7	17	0.79	60	6
4ETMS 061 180 S08 M8C	M8~M12	1.25	4	2	4	5.8	6.1	18	0.9	65	8
4ETMS 061 220 S08 M8C	M8~M12	1.25	4	2	4	5.8	6.1	22	0.9	65	8
4ETMS 078 230 S08 M10C	M10~M15	1.5	4	2	5.16	7.4	7.8	23	1.12	65	8
4ETMS 078 280 S08 M10C	M10~M15	1.5	4	2	5.16	7.4	7.8	28	1.12	65	8
4ETMS 090 260 S10 M12C	M12	1.75	4	2	6.2	8.6	9	26	1.2	80	10
4ETMS 090 330 S10 M12C	M12	1.75	4	2	6.2	8.6	9	33	1.2	80	10
4ETMS 118 350 S12 M16C	M16~M23	2	4	2	7.4	11.4	11.8	35	2	100	12
4ETMS 118 430 S12 M16C	M16~M23	2	4	2	7.4	11.4	11.8	43	2	100	12

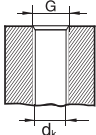
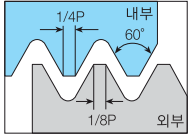
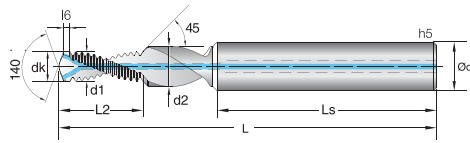
Inch 측정항목

단위 Unit : mm

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내부 급유형 (With coolant)

[illegible]



383P

ISO 측정항목

- 알루미늄, 알루미늄 합금 등 비철 비금속 가공
- 2DTM 공구는 하나의 공구 작업에서 드릴, 나사 및 챔퍼 작업을 모두 수행합니다.
- 하나의 공구로 드릴작업 및 나사작업을 동시에 진행하여 가공시간을 단축시킵니다.
- 최대 나사가공 길이 : 2xdk 및 2.5xdk
- 비철금속에 권장합니다.
- ER Chuck 사용을 권장하지 않습니다.
- Thread Mill for Aluminum, Aluminum alloy, non-ferrous and non-metallic materials.
- 2DTM tool performs both drilling, threading and chamfering in one tool operation.
- Drill and thread mill with one tool.
- Maximum thread length : 2xdk and 2.5xdk
- Recommended for non-ferrous materials.
- We do not recommend using a ER Chuck.

단위 Unit : mm

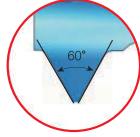
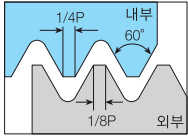
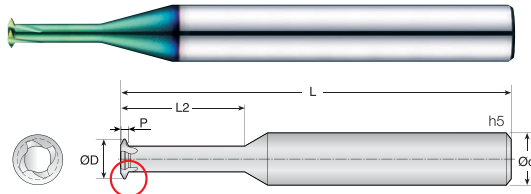
Order Number		피치규격		드릴 직경	외경	목부 직경	유효장	샙크 길이	드릴 길이	전장	샙크
비코팅 Un coated	코팅 Coated	Thread	Pitch	dk	d1	Max. C'sink d2	Effective Length L2	Shank Length Ls	Drill Length I6	Overall Length L	Shank Dia d

외부 급유형 (Without coolant)

2DTM 011 0276 M014	2DTMC 011 0276 M014	M1.4	0.3	1.1	1.05	1.55	2.76	33	0.2	45	4
2DTM 011 0367 M014	2DTMC 011 0367 M014	M1.4	0.3	1.1	1.05	1.55	3.67	33	0.2	45	4
2DTM 0125 032 M016	2DTMC 0125 032 M016	M1.6	0.35	1.25	1.2	1.75	3.2	33	0.25	45	4
2DTM 0125 0425 M016	2DTMC 0125 0425 M016	M1.6	0.35	1.25	1.2	1.75	4.25	33	0.25	45	4
2DTM 0145 0358 M018	2DTMC 0145 0358 M018	M1.8	0.35	1.45	1.4	2	3.58	33	0.25	45	4
2DTM 0145 0463 M018	2DTMC 0145 0463 M018	M1.8	0.35	1.45	1.4	2	4.63	33	0.25	45	4
2DTM 016 0448 M2	2DTMC 016 0448 M2	M2	0.4	1.6	1.55	2.25	4.48	32	0.3	45	4
2DTM 016 0568 M2	2DTMC 016 0568 M2	M2	0.4	1.6	1.55	2.25	5.68	32	0.3	45	4
2DTM 0205 0554 M025	2DTMC 0205 0554 M025	M2.5	0.45	2.05	2	2.85	5.54	30.5	0.35	45	4
2DTM 0205 0689 M025	2DTMC 0205 0689 M025	M2.5	0.45	2.05	2	2.85	6.89	30.5	0.35	45	4
2DTM 0215 0554 M026	2DTMC 0215 0554 M026	M2.6	0.45	2.15	2.1	2.95	5.54	30.5	0.35	45	4
2DTM 0215 0691 M026	2DTMC 0215 0691 M026	M2.6	0.45	2.15	2.1	2.95	6.91	30.5	0.35	45	4
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 042 133 S06 M5	2DTMC 042 133 S06 M5	M5	0.8	4.2	4	5.5	13.3	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 140 435 S18 M16	2DTMC 140 435 S18 M16	M16	2	14	13.2	17.5	43.5	48	1.5	100	18

내부 급유형 (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 042 133 S06 M5C	2DTMC 042 133 S06 M5C	M5	0.8	4.2	4	5.5	13.3	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



나사산 확대

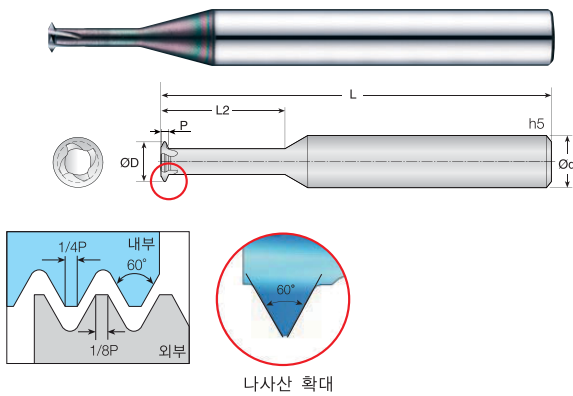


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ISO 측정항목

단위 Unit : mm

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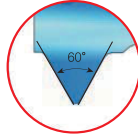
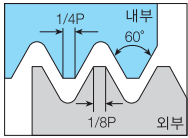
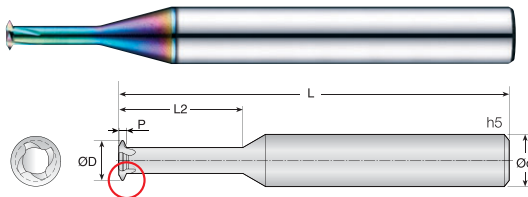


- **알루미늄, 알루미늄 합금 등 비철 비금속 가공**
- 4MTMA 공구는 소구경 크기의 깊은홀의 나사 가공에 사용할 수 있습니다.
- 프로파일에 따라 나사산 깊이는 최대가 될 수 있습니다.
- 나사 길이 : 3.6x0.25부터 쓰레드 규격을 지원합니다.
- ISO 및 유니파이 나사 가공까지 가능합니다.
- **ER Chuck 사용을 권장하지 않습니다.**
- **Thread mill for aluminum, aluminum alloy, non-ferrous and non-metallic materials.**
- 4MTMA tools can be used for threading deep holes the size of a small diameter.
- Depending on the profile, thread depth can be maximum.
- Screw Length : Supports thread specifications from 3.6x0.25.
- ISO and unified UNC screws can be processed.
- **We do not recommend using a ER Chuck.**



ISO 측정항목

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나사산 확대

- SUS, 티타늄 합금, 동 합금 가공

- 4MTMS 공구는 소구경 크기의 깊은홀의 나사 가공에 사용할 수 있습니다.
- 프로파일에 따라 나사산 깊이는 최대가 될 수 있습니다.
- 나사 길이 : 3.6x0.25부터 쓰레드 규격을 지원합니다.
- ISO 및 유니파이스 나사 가공까지 가능합니다.
- **ER Chuck 사용을 권장하지 않습니다.**

- Thread Mill for SUS, Titanium alloy, Copper alloy.

- 4MTMS tools can be used for threading deep holes the size of a small diameter.
- Depending on the profile, thread depth can be maximum.
- Screw Length : Supports thread specifications from 3.6x0.25.
- ISO and unified UNC screws can be processed.
- **We do not recommend using a ER Chuck.**

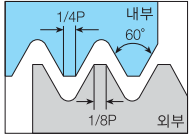
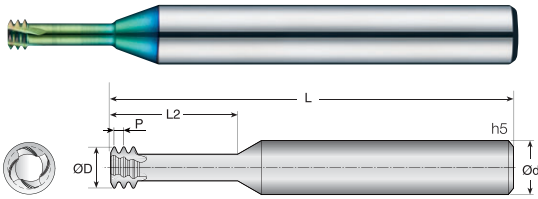


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ISO 측정항목

단위 Unit : mm

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- HRc 50이하, 열처리강, 프리하든강, 합금강, 탄소강, 주철 가공
- 경화강 내 나사 가공을 위한 견고하고 강력한 날 디자인.
- 향상된 절삭 및 칩 제거를 통해 공구가 구멍 안에서 끊어지는 위험을 줄입니다.
- 팁 형상은 절삭 저항을 줄이고 공구 구부림을 억제합니다.
- 공구 파손을 대폭 감소시킵니다.
- ER Chuck 사용을 권장하지 않습니다.

- 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 removal, reducing the risk of the cutting tool breaking off inside of hole.
- Tip shape reduces cutting resistance and suppresses tool bending.
- Drastically reduces tool breakage.
- We do not recommend using a ER Chuck.



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ISO 측정항목

단위 Unit : mm

Order Number	피치 규격		날수	산수	날경	유효장	전장	샹크
	Thread	Pitch	Flutes	Teeth	Diameter	Effective Length	Overall Length	Shank Dia
			Z	Zt	D	L2	L	d
외부 급유형 (Without coolant)								
4STM 0072 020 S04 M1	M1	0.25	4	3	0.72	2	45	4
4STM 0072 025 S04 M1	M1	0.25	4	3	0.72	2.5	45	4
4STM 009 024 S04 M012	M1.2	0.25	4	3	0.9	2.4	45	4
4STM 009 030 S04 M012	M1.2	0.25	4	3	0.9	3	45	4
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 S06 M016	M1.6	0.35	4	3	1.1	4	50	6
4STM 012 050 S03 M016	M1.6	0.35	4	3	1.2	5	40	3
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 0155 062 S03 M2	M2	0.4	4	3	1.55	6.2	40	3
4STM 0155 062 S06 M2	M2	0.4	4	3	1.55	6.2	60	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 0195 077 S03 M025	M2.5	0.45	4	3	1.95	7.7	40	3
4STM 0195 077 S06 M025	M2.5	0.45	4	3	1.95	7.7	60	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 024 092 S03 M3	M3	0.5	4	3	2.4	9.2	40	3
4STM 024 092 S06 M3	M3	0.5	4	3	2.4	9.2	60	6
4STM 0275 108 S06 M035	M3.5	0.6	4	3	2.75	10.8	60	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 0315 123 S06 M4	M4	0.7	4	3	3.15	12.3	60	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 0405 154 S06 M5	M5	0.8	4	3	4.05	15.4	60	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 048 185 S06 M6	M6	1	4	3	4.8	18.5	60	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 065 246 S08 M8	M8	1.25	4	3	6.5	24.6	65	8
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 082 308 S10 M10	M10	1.5	4	3	8.2	30.8	80	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 099 370 S10 M12	M12	1.75	4	3	9.9	37	85	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 119 490 S12 M16	M16	2	4	3	11.9	49	95	12

ISO 측정항목

단위 Unit : mm

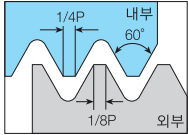
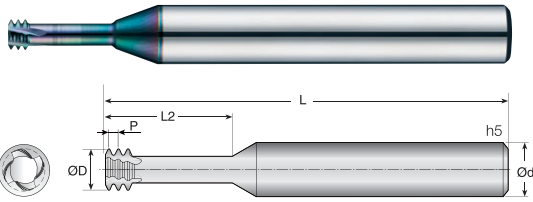
Order Number	피치규격		날수	산수	날경	유효장	전장	생크
	Thread	Pitch	Flutes Z	Teeth Zt	Diameter D	Effective Length L2	Overall Length L	Shank Dia d

외부 급유형 (Without coolant)

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
4STM 159 613 S16 M20	M20	2.5	4	3	15.9	61.3	115	16

내부 급유형 (With coolant)

4STM 031 080 S06 M4C	M4	0.7	4	3	3.1	8	50	6
4STM 031 100 S06 M4C	M4	0.7	4	3	3.1	10	50	6
4STM 038 100 S06 M5C	M5	0.8	4	3	3.8	10	50	6
4STM 038 125 S06 M5C	M5	0.8	4	3	3.8	12.5	50	6
4STM 046 120 S06 M6C	M6	1	4	3	4.6	12	50	6
4STM 046 150 S06 M6C	M6	1	4	3	4.6	15	50	6
4STM 048 185 S06 M6C	M6	1	4	3	4.8	18.5	60	6
4STM 062 160 S10 M8C	M8	1.25	4	3	6.2	16	70	10
4STM 062 200 S10 M8C	M8	1.25	4	3	6.2	20	70	10
4STM 065 246 S08 M8C	M8	1.25	4	3	6.5	24.6	65	8
4STM 075 200 S10 M10C	M10	1.5	4	3	7.5	20	70	10
4STM 075 250 S10 M10C	M10	1.5	4	3	7.5	25	70	10
4STM 082 308 S10 M10C	M10	1.5	4	3	8.2	30.8	80	10
4STM 090 240 S10 M12C	M12	1.75	4	3	9	24	80	10
4STM 090 300 S10 M12C	M12	1.75	4	3	9	30	80	10
4STM 099 370 S10 M12C	M12	1.75	4	3	9.9	37	85	10
4STM 115 320 S12 M16C	M16	2	4	3	11.5	32	100	12
4STM 115 400 S12 M16C	M16	2	4	3	11.5	40	100	12
4STM 119 490 S12 M16C	M16	2	4	3	11.9	49	95	12
4STM 140 360 S16 M18C	M18	2.5	4	3	14	36	135	16
4STM 140 450 S16 M18C	M18	2.5	4	3	14	45	135	16
4STM 150 400 S16 M20C	M20	2.5	4	3	15	40	135	16
4STM 150 500 S16 M20C	M20	2.5	4	3	15	50	135	16
4STM 159 613 S16 M20C	M20	2.5	4	3	15.9	61.3	115	16



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ISO 측정항목

단위 Unit : mm

Order Number	피치 규격		날수	산수	날경	유효장	전장	생크
	Thread	Pitch	Flutes Z	Teeth Zt	Diameter D	Effective Length L2	Overall Length L	Shank Dia d

외부 급유형 (Without coolant)

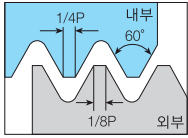
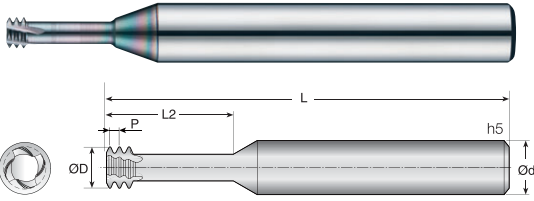
4STMA 0072 020 S04 M1	M1	0.25	4	3	0.72	2	45	4
4STMA 0072 025 S04 M1	M1	0.25	4	3	0.72	2.5	45	4
4STMA 009 024 S04 M012	M1.2	0.25	4	3	0.9	2.4	45	4
4STMA 009 030 S04 M012	M1.2	0.25	4	3	0.9	3	45	4
4STMA 0095 028 S06 M014	M1.4	0.3	4	3	0.95	2.8	50	6
4STMA 0095 035 S06 M014	M1.4	0.3	4	3	0.95	3.5	50	6
4STMA 011 032 S06 M016	M1.6	0.35	4	3	1.1	3.2	50	6
4STMA 011 040 S06 M016	M1.6	0.35	4	3	1.1	4	50	6
4STMA 012 050 S03 M016	M1.6	0.35	4	3	1.2	5	40	3
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 0155 062 S03 M2	M2	0.4	4	3	1.55	6.2	40	3
4STMA 0155 062 S06 M2	M2	0.4	4	3	1.55	6.2	60	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 0195 077 S03 M025	M2.5	0.45	4	3	1.95	7.7	40	3
4STMA 0195 077 S06 M025	M2.5	0.45	4	3	1.95	7.7	60	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 024 092 S03 M3	M3	0.5	4	3	2.4	9.2	40	3
4STMA 024 092 S06 M3	M3	0.5	4	3	2.4	9.2	60	6
4STMA 0275 108 S06 M035	M3.5	0.6	4	3	2.75	10.8	60	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 0315 123 S06 M4	M4	0.7	4	3	3.15	12.3	60	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 0405 154 S06 M5	M5	0.8	4	3	4.05	15.4	60	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 048 185 S06 M6	M6	1	4	3	4.8	18.5	60	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 065 246 S08 M8	M8	1.25	4	3	6.5	24.6	65	8
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 082 308 S10 M10	M10	1.5	4	3	8.2	30.8	80	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 099 370 S10 M12	M12	1.75	4	3	9.9	37	85	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 119 490 S12 M16	M16	2	4	3	11.9	49	95	12

ISO 측정항목

단위 Unit : mm

Order Number	피치규격		날수	산수	날경	유효장	전장	샹크
	Thread	Pitch	Flutes Z	Teeth Zt	Diameter D	Effective Length L2	Overall Length L	Shank Dia d
외부 급유형 (Without coolant)								
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
4STMA 159 613 S16 M20	M20	2.5	4	3	15.9	61.3	115	16

내부 급유형 (With coolant)								
4STMA 031 080 S06 M4C	M4	0.7	4	3	3.1	8	50	6
4STMA 031 100 S06 M4C	M4	0.7	4	3	3.1	10	50	6
4STMA 038 100 S06 M5C	M5	0.8	4	3	3.8	10	50	6
4STMA 038 125 S06 M5C	M5	0.8	4	3	3.8	12.5	50	6
4STMA 046 120 S06 M6C	M6	1	4	3	4.6	12	50	6
4STMA 046 150 S06 M6C	M6	1	4	3	4.6	15	50	6
4STMA 048 185 S06 M6C	M6	1	4	3	4.8	18.5	60	6
4STMA 062 160 S10 M8C	M8	1.25	4	3	6.2	16	70	10
4STMA 062 200 S10 M8C	M8	1.25	4	3	6.2	20	70	10
4STMA 065 246 S08 M8C	M8	1.25	4	3	6.5	24.6	65	8
4STMA 075 200 S10 M10C	M10	1.5	4	3	7.5	20	70	10
4STMA 075 250 S10 M10C	M10	1.5	4	3	7.5	25	70	10
4STMA 082 308 S10 M10C	M10	1.5	4	3	8.2	30.8	80	10
4STMA 090 240 S10 M12C	M12	1.75	4	3	9	24	80	10
4STMA 090 300 S10 M12C	M12	1.75	4	3	9	30	80	10
4STMA 099 370 S10 M12C	M12	1.75	4	3	9.9	37	85	10
4STMA 115 320 S12 M16C	M16	2	4	3	11.5	32	100	12
4STMA 115 400 S12 M16C	M16	2	4	3	11.5	40	100	12
4STMA 119 490 S12 M16C	M16	2	4	3	11.9	49	95	12
4STMA 140 360 S16 M18C	M18	2.5	4	3	14	36	135	16
4STMA 140 450 S16 M18C	M18	2.5	4	3	14	45	135	16
4STMA 150 400 S16 M20C	M20	2.5	4	3	15	40	135	16
4STMA 150 500 S16 M20C	M20	2.5	4	3	15	50	135	16
4STMA 159 613 S16 M20C	M20	2.5	4	3	15.9	61.3	115	16



• SUS, 티타늄 합금 가공

- 경화강 내 나사 가공을 위한 견고하고 강력한 날 디자인.
- 향상된 절삭 및 칩 제거를 통해 공구가 구멍 안에서 끊어지는 위험을 줄입니다.
- 팁 형상은 절삭 저항을 줄이고 공구 구부림을 억제합니다.
- 공구 파손을 대폭 감소시킵니다.
- ER Chuck 사용을 권장하지 않습니다.

• Thread Mill for SUS, Titanium alloy.

- Tough and strong edge design for threading in hardened steels.
- Deliver improved cutting and chip removal, reducing the risk of the cutting tool breaking off inside of hole.
- Tip shape reduces cutting resistance and suppresses tool bending.
- Drastically reduces tool breakage.
- We do not recommend using a ER Chuck.



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ISO 측정항목

단위 Unit : mm

Order Number	피치 규격		날수	산수	날경	유효장	전장	샹크
	Thread	Pitch	Flutes	Teeth	Diameter	Effective Length	Overall Length	Shank Dia
			Z	Zt	D	L2	L	d
외부 급유형 (Without coolant)								
4STMS 0072 020 S04 M1	M1	0.25	4	3	0.72	2	45	4
4STMS 0072 025 S04 M1	M1	0.25	4	3	0.72	2.5	45	4
4STMS 009 024 S04 M012	M1.2	0.25	4	3	0.9	2.4	45	4
4STMS 009 030 S04 M012	M1.2	0.25	4	3	0.9	3	45	4
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 S06 M016	M1.6	0.35	4	3	1.1	4	50	6
4STMS 012 050 S03 M016	M1.6	0.35	4	3	1.2	5	40	3
4STMS 014 040 S06 M2	M2	0.4	4	3	1.4	4	50	6
4STMS 14 050 S06 M2	M2	0.4	4	3	1.4	5	50	6
4STMS 0155 062 S03 M2	M2	0.4	4	3	1.55	6.2	40	3
4STMS 0155 062 S06 M2	M2	0.4	4	3	1.55	6.2	60	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 0195 077 S03 M025	M2.5	0.45	4	3	1.95	7.7	40	3
4STMS 0195 077 S06 M025	M2.5	0.45	4	3	1.95	7.7	60	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 024 092 S03 M3	M3	0.5	4	3	2.4	9.2	40	3
4STMS 024 092 S06 M3	M3	0.5	4	3	2.4	9.2	60	6
4STMS 0275 108 S06 M3.5	M3.5	0.6	4	3	2.75	10.8	60	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 0315 123 S06 M4	M4	0.7	4	3	3.15	12.3	60	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 0405 154 S06 M5	M5	0.8	4	3	4.05	15.4	60	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 048 185 S06 M6	M6	1	4	3	4.8	18.5	60	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 065 246 S08 M8	M8	1.25	4	3	6.5	24.6	65	8
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 082 308 S10 M10	M10	1.5	4	3	8.2	30.8	80	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 099 370 S10 M12	M12	1.75	4	3	9.9	37	85	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 119 490 S12 M16	M16	2	4	3	11.9	49	95	12

ISO 측정항목

단위 Unit : mm

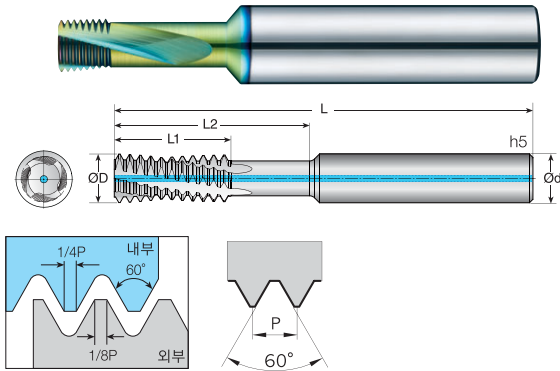
Order Number	피치규격		날수	산수	날경	유효장	전장	샹크
	Thread	Pitch	Flutes Z	Teeth Zt	Diameter D	Effective Length L2	Overall Length L	Shank Dia d

외부 급유형 (Without coolant)

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
4STMS 159 613 S16 M20	M20	2.5	4	3	15.9	61.3	115	16

내부 급유형 (With coolant)

4STMS 031 080 S06 M4C	M4	0.7	4	3	3.1	8	50	6
4STMS 031 100 S06 M4C	M4	0.7	4	3	3.1	10	50	6
4STMS 038 100 S06 M5C	M5	0.8	4	3	3.8	10	50	6
4STMS 038 125 S06 M5C	M5	0.8	4	3	3.8	12.5	50	6
4STMS 046 120 S06 M6C	M6	1	4	3	4.6	12	50	6
4STMS 046 150 S06 M6C	M6	1	4	3	4.6	15	50	6
4STMS 048 185 S06 M6C	M6	1	4	3	4.8	18.5	60	6
4STMS 062 160 S10 M8C	M8	1.25	4	3	6.2	16	70	10
4STMS 062 200 S10 M8C	M8	1.25	4	3	6.2	20	70	10
4STMS 065 246 S08 M8C	M8	1.25	4	3	6.5	24.6	65	8
4STMS 075 200 S10 M10C	M10	1.5	4	3	7.5	20	70	10
4STMS 075 250 S10 M10C	M10	1.5	4	3	7.5	25	70	10
4STMS 082 308 S10 M10C	M10	1.5	4	3	8.2	30.8	80	10
4STMS 090 240 S10 M12C	M12	1.75	4	3	9	24	80	10
4STMS 090 300 S10 M12C	M12	1.75	4	3	9	30	80	10
4STMS 099 370 S10 M12C	M12	1.75	4	3	9.9	37	85	10
4STMS 115 320 S12 M16C	M16	2	4	3	11.5	32	100	12
4STMS 115 400 S12 M16C	M16	2	4	3	11.5	40	100	12
4STMS 119 490 S12 M16C	M16	2	4	3	11.9	49	95	12
4STMS 140 360 S16 M18C	M18	2.5	4	3	14	36	135	16
4STMS 140 450 S16 M18C	M18	2.5	4	3	14	45	135	16
4STMS 150 400 S16 M20C	M20	2.5	4	3	15	40	135	16
4STMS 150 500 S16 M20C	M20	2.5	4	3	15	50	135	16
4STMS 159 613 S16 M20C	M20	2.5	4	3	15.9	61.3	115	16



- HRc 50이하의 열처리강, 프리하든강, 합금강, 탄소강, 주철 가공
- 더 깊은 나사 가공을 위한 쿨런트 타입 헬릭컬 날
- 다중 날 구조
- 최대 나사 가공 깊이 : 3xD2 (나사가공 직경)
- 긴 나사 가공 시간의 단축
- ER Chuck 사용을 권장하지 않습니다.

- 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 : 3xD2 (thread diameter)
- Reduced machining times for long threads.
- We do not recommend using a ER Chuck.



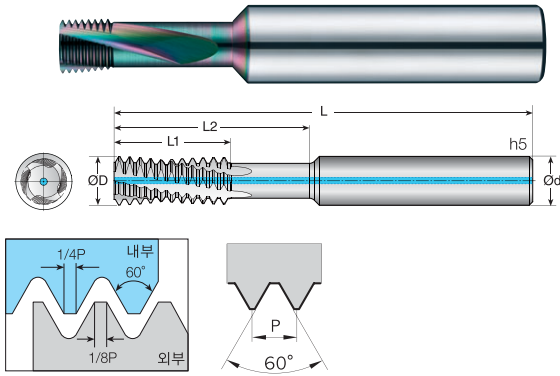
ISO 측정항목

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단위 Unit : mm

Order Number	피치 규격		기초홀 직경 Guide Hole mm	날경 Diameter D	나사부 길이 Thread Length L1	유효장 Effective Length L2	전장 Overall Length L	샹크 Shank Dia d
	Thread	Pitch						
외부 급유형 (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

내부 급유형 (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



- 알루미늄, 알루미늄 합금 등 비철 비금속 가공
- 더 깊은 나사 가공을 위한 쿨런트 타입 헬릭컬 날
- 다중 날 구조
- 최대 나사 가공 깊이 : 3xD2 (나사가공 직경)
- 긴 나사 가공 시간의 단축
- ER Chuck 사용을 권장하지 않습니다.
- Thread Mill for Aluminum, Aluminum alloy, non-ferrous and non-metallic materials.
- Helical flutes with coolant thru for extra deep threading applications.
- Multi-tooth geometry.
- Maximum thread length : 3xD2 (thread diameter)
- Reduced machining times for long threads.
- We do not recommend using a ER Chuck.



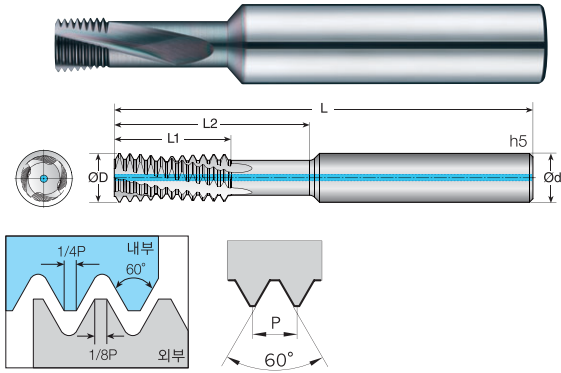
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ISO 측정항목

단위 Unit : mm

Order Number	피치규격		기초홀 직경	날경	나사부 길이	유효장	전장	샹크
	Thread	Pitch	Guide Hole mm	Diameter D	Thread Length L1	Effective Length L2	Overall Length L	Shank Dia d
외부 급유형 (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

내부 급유형 (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



- **SUS, 티타늄 합금 가공**
- 더 깊은 나사 가공을 위한 쿨런트 타입 헬릭컬 날
- 다중 날 구조
- 최대 나사 가공 깊이 : 3xD2 (나사가공 직경)
- 긴 나사 가공 시간의 단축
- **ER Chuck 사용을 권장하지 않습니다.**
- **Thread Mill for SUS, Titanium alloy.**
- Helical flutes with coolant thru for extra deep threading applications.
- Multi-tooth geometry.
- Maximum thread length : 3xD2 (thread diameter)
- Reduced machining times for long threads.
- **We do not recommend using a ER Chuck.**



ISO 측정항목

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단위 Unit : mm

Order Number	피치 규격		기초홀 직경 Guide Hole mm	날경 Diameter D	나사부 길이 Thread Length L1	유효장 Effective Length L2	전장 Overall Length L	샹크 Shank Dia d
	Thread	Pitch						
외부 급유형 (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

내부 급유형 (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

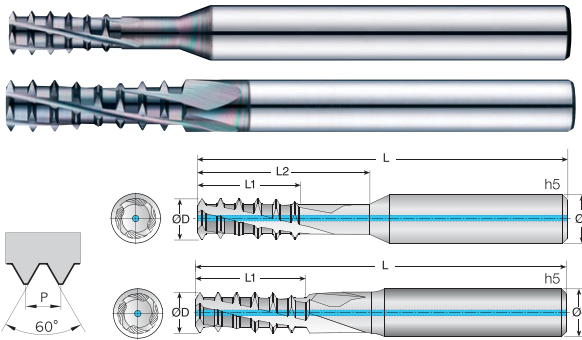
ISO 측정항목

단위 Unit : mm

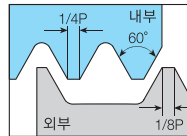
Order Number	피치 규격		날수	날경	나사부 길이	유효장	전장	생크
	Thread	Pitch	Flutes	Diameter	Thread Length	Effective Length	Overall Length	Shank Dia
			Z	D	L1	L2	L	d

내부 급유형 (With coolant)

411 2118 (with 600mm)								
4NKTM 045 120 S06 M6C	M6	1	4	4.5	12	-	60	6
4NKTM 045 160 S06 M6C	M6	1	4	4.5	16	-	60	6
4NKTM 048 180 S06 M6C	M6	1	4	4.8	10.9	18	60	6
4NKTM 060 175 S06 M8C	M8	1.25	4	6	17.5	-	65	6
4NKTM 060 200 S06 M8C	M8	1.25	4	6	20	-	65	6
4NKTM 065 240 S08 M8C	M8	1.25	4	6.5	13.62	24	65	8
4NKTM 075 210 S08 M10C	M10	1.5	4	7.5	21	-	75	8
4NKTM 075 270 S08 M10C	M10	1.5	4	7.5	27	-	75	8
4NKTM 082 300 S10 M10C	M10	1.5	4	8.2	16.34	30	75	10
4NKTM 095 245 S10 M12C	M12	1.75	4	9.5	24.5	-	80	10
4NKTM 095 315 S10 M12C	M12	1.75	4	9.5	31.5	-	80	10
4NKTM 099 360 S10 M12C	M12	1.75	4	9.9	19.06	36	85	10
4NKTM 100 280 S10 M14C	M14	2	4	10	28	-	85	10
4NKTM 100 360 S10 M14C	M14	2	4	10	36	-	90	10
4NKTM 116 420 S12 M14C	M14	2	4	11.6	21.75	42	90	12
4NKTM 120 320 S12 M16C	M16	2	4	12	32	-	95	12
4NKTM 120 400 S12 M16C	M16	2	4	12	40	-	100	12
4NKTM 136 480 S14 M16C	M16	2	4	13.6	25.75	48	100	14
4NKTM 140 400 S14 M18C	M18	2.5	5	14	40	-	95	14
4NKTM 140 450 S14 M18C	M18	2.5	5	14	45	-	105	14
4NKTM 160 400 S16 M20C	M20	2.5	5	16	40	-	105	16
4NKTM 160 500 S16 M20C	M20	2.5	5	16	50	-	115	16



- **알루미늄, 알루미늄 합금 등 비철 비금속 가공**
- 높은 절삭 속도와 날당 높은 이송이 가능합니다.
- 최대 나사가공 길이 : 2xD, 2.5xD, 3xD(나사가공 직경)
- 더 깊은 나사가공을 위한 헬릭컬 리브 타입을 채용하였습니다.
- 긴 나사 가공 시간이 크게 단축됩니다.
- **ER Chuck 사용을 권장하지 않습니다.**
- **Thread Mill for Aluminum, Aluminum alloy, non-ferrous and non-metallic materials.**
- High cutting speed and high Feed per tooth are possible.
- Maximum thread length : 2xD, 2.5xD, 3xD(thread diameter)
- Helical rib type is applied for deeper screw machining.
- Reduced machining times for long threads.
- **We do not recommend using a ER Chuck.**



ISO 측정항목

단위 Unit : mm

[illegible]

ISO 측정항목

단위 Unit : mm

Order Number	파치 규격		날수	날경	나사부 길이	유효장	전장	샹크
	Thread	Pitch	Flutes	Diameter	Thread Length	Effective Length	Overall Length	Shank Dia
			Z	D	L1	L2	L	d

내부 급유형 (With coolant)

4NKTMA 045 120 S06 M6C	M6	1	4	4.5	12	-	60	6
4NKTMA 045 160 S06 M6C	M6	1	4	4.5	16	-	60	6
4NKTMA 048 180 S06 M6C	M6	1	4	4.8	10.9	18	60	6
4NKTMA 060 175 S06 M8C	M8	1.25	4	6	17.5	-	65	6
4NKTMA 060 200 S06 M8C	M8	1.25	4	6	20	-	65	6
4NKTMA 065 240 S08 M8C	M8	1.25	4	6.5	13.62	24	65	8
4NKTMA 075 210 S08 M10C	M10	1.5	4	7.5	21	-	75	8
4NKTMA 075 270 S08 M10C	M10	1.5	4	7.5	27	-	75	8
4NKTMA 082 300 S10 M10C	M10	1.5	4	8.2	16.34	30	75	10
4NKTMA 095 245 S10 M12C	M12	1.75	4	9.5	24.5	-	80	10
4NKTMA 095 315 S10 M12C	M12	1.75	4	9.5	31.5	-	80	10
4NKTMA 099 360 S10 M12C	M12	1.75	4	9.9	19.06	36	85	10
4NKTMA 100 280 S10 M14C	M14	2	4	10	28	-	85	10
4NKTMA 100 360 S10 M14C	M14	2	4	10	36	-	90	10
4NKTMA 116 420 S12 M14C	M14	2	4	11.6	21.75	42	90	12
4NKTMA 120 320 S12 M16C	M16	2	4	12	32	-	95	12
4NKTMA 120 400 S12 M16C	M16	2	4	12	40	-	100	12
4NKTMA 136 480 S14 M16C	M16	2	4	13.6	25.75	48	100	14
4NKTMA 140 400 S14 M18C	M18	2.5	5	14	40	-	95	14
4NKTMA 140 450 S14 M18C	M18	2.5	5	14	45	-	105	14
4NKTMA 160 400 S16 M20C	M20	2.5	5	16	40	-	105	16
4NKTMA 160 500 S16 M20C	M20	2.5	5	16	50	-	115	16

ISO 측정항목

단위 Unit : mm

Order Number	피치 규격		날수	날경	나사부 길이	유효장	전장	샹크
	Thread	Pitch	Flutes	Diameter	Thread Length	Effective Length	Overall Length	Shank Dia
			Z	D	L1	L2	L	d

내부 급유형 (With coolant)

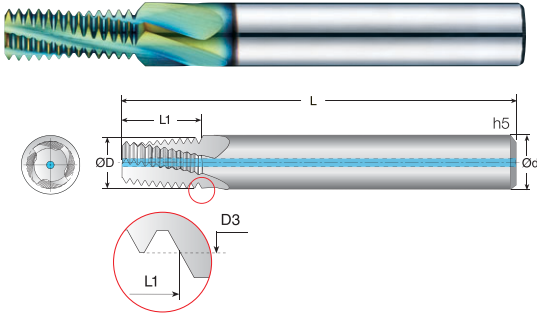
[illegible]

4NPTM

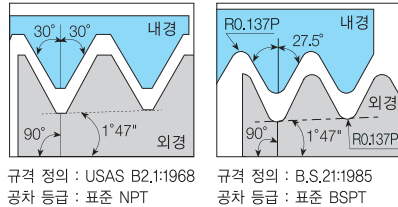
4 Flutes Pipe Taper Thread Mill for generality with Thru-Coolant

4날 범용 관용 테이퍼 나사 가공 쓰레드밀

New



- HRC50이하의 열처리강, 합금강, 탄소강, 주철 가공
- 내부 홀을 통한 효과적인 냉각수 공급이 가능합니다.
- 절삭 영역으로 직접 절삭유를 공급하여 칩의 융착 현상을 제거합니다.
- ER Chuck 사용을 권장하지 않습니다.
- Thread Mill for hardened steel(~Hrc50), alloy steel, carbon steel, cast iron.
- Effective coolant supply is possible through the inner holes.
- Remove the fusion of chips by supplying cutting oil directly to the cutting area.
- We do not recommend using a ER Chuck.



규격 정의 : USAS B2.1:1968
공차 등급 : 표준 NPT

규격 정의 : B.S.21:1985
공차 등급 : 표준 BSPT



ISO 측정항목

단위 Unit : mm

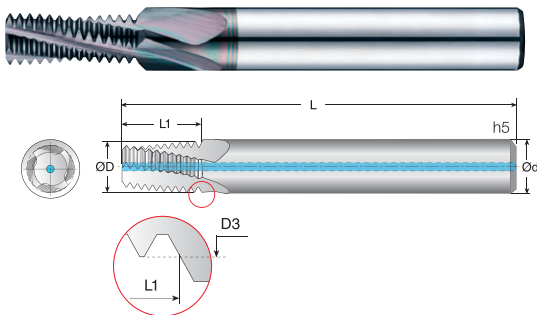
Order Number	피치규격 Thread	Pitch (TPI)	기초홀 Guide Hole mm	날수 Flutes Z	산수 Teeth Zt	날경 Diameter D	나사부 길이 Thread Length L1	전장 Overall Length L	생크 Shank Dia d
내부 급유형 (With coolant)									
4NPTM 059 098 S06	1/16-27C NPT	27	6.3	4	10	5.9	9.8	60	6
4NPTM 0765 098 S08	1/8-27C NPT	27	8.5	4	10	7.65	9.8	60	8
4NPTM 099 147 S10	1/4-18C NPT	18	11.1	4	10	9.9	14.7	70	10
4NPTM 1115 147 S12	3/8-18C NPT	18	14.5	4	10	11.15	14.7	70	12
4NPTM 1425 189 S16	1/2(3/4)-14C NPT	14	17.7(23)	4	10	14.25	18.9	90	16

4NPTMA

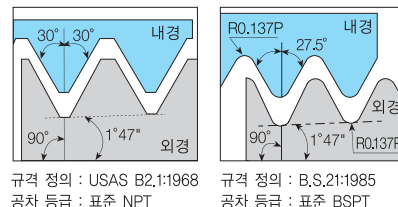
4 Flutes Pipe Taper Thread Mill for Aluminum with Thru-Coolant

4날 알루미늄 관용 테이퍼 나사 가공 쓰레드밀

New



- 알루미늄, 알루미늄 합금 등 비철 비금속 가공
- 내부 홀을 통한 효과적인 냉각수 공급이 가능합니다.
- 절삭 영역으로 직접 절삭유를 공급하여 칩의 융착 현상을 제거합니다.
- ER Chuck 사용을 권장하지 않습니다.
- Thread Mill for Aluminum, Aluminum alloy, non-ferrous and non-metallic materials.
- Effective coolant supply is possible through the inner holes.
- Remove the fusion of chips by supplying cutting oil directly to the cutting area.
- We do not recommend using a ER Chuck.



규격 정의 : USAS B2.1:1968
공차 등급 : 표준 NPT

규격 정의 : B.S.21:1985
공차 등급 : 표준 BSPT



ISO 측정항목

단위 Unit : mm

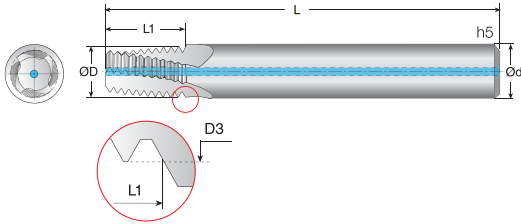
Order Number	피치규격 Thread	Pitch (TPI)	기초홀 Guide Hole mm	날수 Flutes Z	산수 Teeth Zt	날경 Diameter D	나사부 길이 Thread Length L1	전장 Overall Length L	생크 Shank Dia d
내부 급유형 (With coolant)									
4NPTMA 059 098 S06	1/16-27C NPT	27	6.3	4	10	5.9	9.8	60	6
4NPTMA 0765 098 S08	1/8-27C NPT	27	8.5	4	10	7.65	9.8	60	8
4NPTMA 099 147 S10	1/4-18C NPT	18	11.1	4	10	9.9	14.7	70	10
4NPTMA 1115 147 S12	3/8-18C NPT	18	14.5	4	10	11.15	14.7	70	12
4NPTMA 1425 189 S16	1/2(3/4)-14C NPT	14	17.7(23)	4	10	14.25	18.9	90	16

4NPTMS

4 Flutes Pipe Taper Thread Mill for Stainless Steel with Thru-Coolant

4날 SUS 관용 테이퍼 나사 가공 쓰레드밀

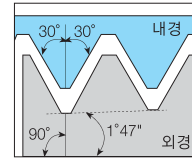
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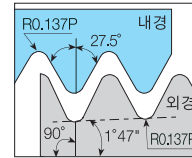
ISO 측정항목

Order Number	Thread	Pitch (TPI)	Guide Hole mm	Flutes Z	Teeth Zt	Diameter D	Thread Length L1	Overall Length L	Shank Dia d
내부 급유형 (With coolant)									
4NPTMS 059 098 S06	1/16-27C NPT	27	6.3	4	10	5.9	9.8	60	6
4NPTMS 0765 098 S08	1/8-27C NPT	27	8.5	4	10	7.65	9.8	60	8
4NPTMS 099 147 S10	1/4-18C NPT	18	11.1	4	10	9.9	14.7	70	10
4NPTMS 1115 147 S12	3/8-18C NPT	18	14.5	4	10	11.15	14.7	70	12
4NPTMS 1425 189 S16	1/2(3/4)-14C NPT	14	17.7(23)	4	10	14.25	18.9	90	16

단위 Unit : mm



규격 정의 : USAS B2.1:1968
공차 등급 : 표준 NPT



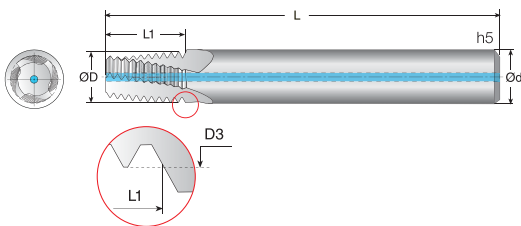
규격 정의 : B.S.21:1985
공차 등급 : 표준 BSPT

4BSTM

4 Flutes Pipe Taper Thread Mill for generality with Thru-Coolant

4날 범용 관용 테이퍼 나사 가공 쓰레드밀

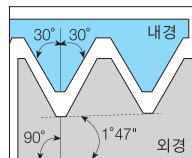
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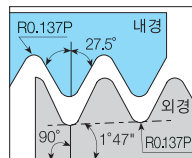
ISO 측정항목

Order Number	Thread	Pitch (TPI)	Guide Hole mm	Flutes Z	Teeth Zt	Diameter D	Thread Length L1	Overall Length L	Shank Dia d
내부 급유형 (With coolant)									
4BSTM 059 103 S06	1/16-28C BSPT	28	6.7	4	10	5.9	10.3	60	6
4BSTM 0765 103 S08	1/8-28C BSPT	28	8.7	4	10	7.65	10.3	60	8
4BSTM 099 152 S10	1/4-19C BSPT	19	11.8	4	10	9.9	15.2	70	10
4BSTM 1115 152 S12	3/8-19C BSPT	19	15.2	4	10	11.15	15.2	70	12
4BSTM 1425 224 S16	1/2(3/4)-14C BSPT	14	19	4	10	14.25	22.4	90	16

단위 Unit : mm

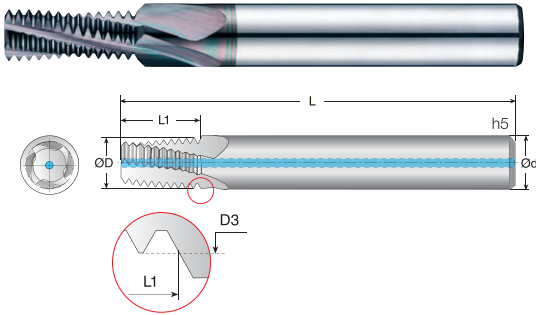


규격 정의 : USAS B2.1:1968
공차 등급 : 표준 NPT

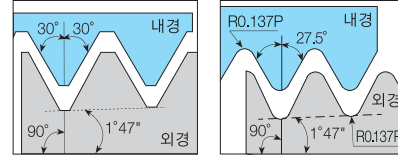


규격 정의 : B.S.21:1985
공차 등급 : 표준 BSPT

THREAD MILL



- 알루미늄, 알루미늄 합금 등 비철 비금속 가공
- 내부 홀을 통한 효과적인 냉각수 공급이 가능합니다.
- 절삭 영역으로 직접 절삭유를 공급하여 칩의 융착 현상을 제거합니다.
- ER Chuck 사용을 권장하지 않습니다.
- Thread Mill for Aluminum, Aluminum alloy, non-ferrous and non-metallic materials.
- Effective coolant supply is possible through the inner holes.
- Remove the fusion of chips by supplying cutting oil directly to the cutting area.
- We do not recommend using a ER Chuck.



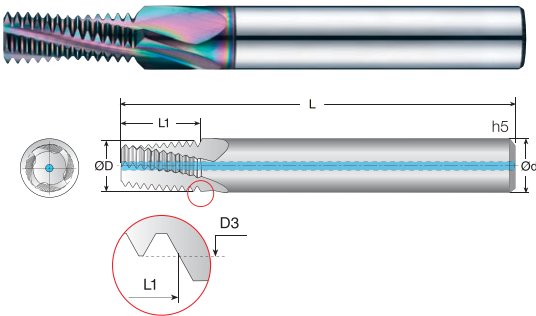
규격 정의 : USAS B2.1:1968
공차 등급 : 표준 NPT

규격 정의 : B.S.21:1985
공차 등급 : 표준 BSPT

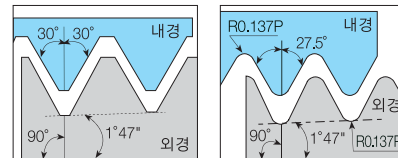
ISO 측정항목

단위 Unit : mm

Order Number	피치규격 Thread	Pitch (TPI)	기초홀 Guide Hole mm	날수 Flutes Z	산수 Teeth Zt	날경 Diameter D	나사부 길이 Thread Length L1	전장 Overall Length L	생크 Shank Dia d
내부 급유형 (With coolant)									
4BSTMA 059 103 S06	1/16-28C BSPT	28	6.7	4	10	5.9	10.3	60	6
4BSTMA 0765 103 S08	1/8-28C BSPT	28	8.7	4	10	7.65	10.3	60	8
4BSTMA 099 152 S10	1/4-19C BSPT	19	11.8	4	10	9.9	15.2	70	10
4BSTMA 1115 152 S12	3/8-19C BSPT	19	15.2	4	10	11.15	15.2	70	12
4BSTMA 1425 224 S16	1/2(3/4)-14C BSPT	14	19	4	10	14.25	22.4	90	16



- SUS, 티타늄 합금 가공
- 내부 홀을 통한 효과적인 냉각수 공급이 가능합니다.
- 절삭 영역으로 직접 절삭유를 공급하여 칩의 융착 현상을 제거합니다.
- ER Chuck 사용을 권장하지 않습니다.
- Thread Mill for SUS, Titanium alloy.
- Effective coolant supply is possible through the inner holes.
- Remove the fusion of chips by supplying cutting oil directly to the cutting area.
- We do not recommend using a ER Chuck.



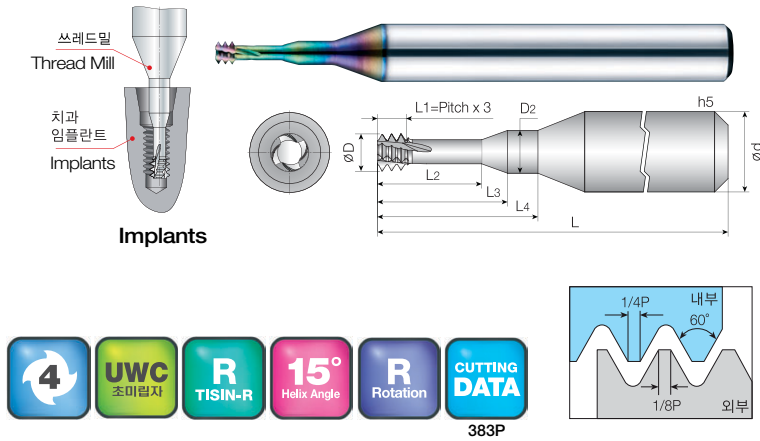
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공차 등급 : 표준 NPT

규격 정의 : B.S.21:1985
공차 등급 : 표준 BSPT

ISO 측정항목

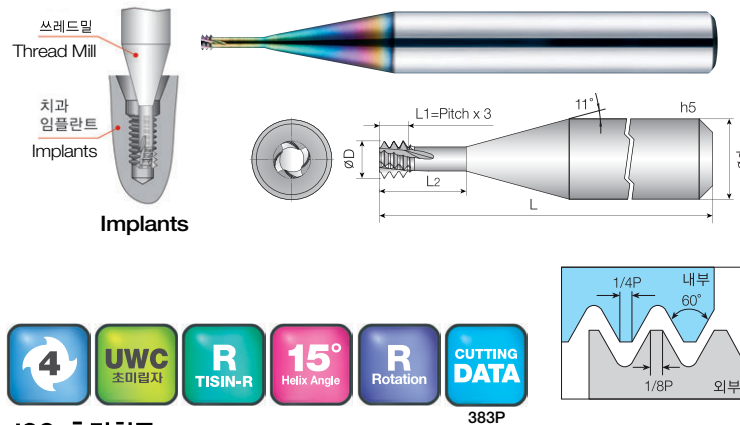
단위 Unit : mm

Order Number	피치규격 Thread	Pitch (TPI)	기초홀 Guide Hole mm	날수 Flutes Z	산수 Teeth Zt	날경 Diameter D	나사부 길이 Thread Length L1	전장 Overall Length L	생크 Shank Dia d
내부 급유형 (With coolant)									
4BSTMS 059 103 S06	1/16-28C BSPT	28	6.7	4	10	5.9	10.3	60	6
4BSTMS 0765 103 S08	1/8-28C BSPT	28	8.7	4	10	7.65	10.3	60	8
4BSTMS 099 152 S10	1/4-19C BSPT	19	11.8	4	10	9.9	15.2	70	10
4BSTMS 1115 152 S12	3/8-19C BSPT	19	15.2	4	10	11.15	15.2	70	12
4BSTMS 1425 224 S16	1/2(3/4)-14C BSPT	14	19	4	10	14.25	22.4	90	16



ISO 측정항목

Order Number	피치 규격		날수	산수	날경	목부경	유효장			전장	샹크
	Thread	Pitch	Flutes	Teeth	Diameter	Neck Diameter	Effective Length			Overall Length	Shank Dia
			Z	Zt	D	D2	L2	L3	L4	L	d
외부 급유형 (Without coolant)											
4IMTM 009 025 S03 M012	M1.2	0.25	4	3	0.9	0.95	2.5	3.3	4.3	40	3
4IMTM 0105 028 S03 M014	M1.4	0.3	4	3	1.05	1.1	2.8	3.5	5	40	3
4IMTM 012 033 S03 M016	M1.6	0.35	4	3	1.2	1.25	3.3	4.2	5.9	40	3
4IMTM 014 038 S03 M018	M1.8	0.35	4	3	1.4	1.45	3.8	4.7	6.6	40	3
4IMTM 0154 039 S03 M2	M2	0.4	4	3	1.54	1.7	3.9	4.9	6.7	40	3
4IMTM 0196 048 S03 M025	M2.5	0.45	4	3	1.96	2	4.8	5.8	8.2	40	3



ISO 측정항목

Order Number	피치 규격		날수	산수	날경	유효장	전장	샹크
	Thread	Pitch	Flutes	Teeth	Diameter	Effective Length	Overall Length	Shank Dia
			Z	Zt	D	L2	L	d
외부 급유형 (Without coolant)								
4IMTM 0057 023 S06 M008	M0.8	0.2	3	3	0.57	2.3	50	6
4IMTM 0064 026 S06 M009	M0.9	0.225	3	3	0.64	2.6	50	6
4IMTM 0071 029 S06 M1	M1	0.25	4	3	0.71	2.9	50	6
4IMTM 0091 034 S06 M012	M1.2	0.25	4	3	0.91	3.4	50	6
4IMTM 0105 039 S06 M014	M1.4	0.3	4	3	1.05	3.9	50	6
4IMTM 012 045 S06 M016	M1.6	0.35	4	3	1.2	4.5	50	6
4IMTM 014 050 S06 M018	M1.8	0.35	4	3	1.4	5	50	6
4IMTM 0154 056 S06 M2	M2	0.4	4	3	1.54	5.6	50	6
4IMTM 0184 063 S06 M023	M2.3	0.4	4	3	1.84	6.3	50	6
4IMTM 0198 069 S06 M025	M2.5	0.45	4	3	1.98	6.9	50	6
4IMTM 0208 071 S06 M026	M2.6	0.45	4	3	2.08	7.1	50	6

- 티타늄, 티타늄 합금 가공
- 경화강 내 나사 가공을 위한 견고하고 강력한 날 디자인.
- 향상된 절삭 및 칩 제거를 통해 공구가 구멍 안에서 끊어지는 위험을 줄입니다.
- 팁 형상은 절삭 저항을 줄이고 공구 구부림을 억제합니다.
- 공구 파손을 대폭 감소시킵니다.
- ER Chuck 사용을 권장하지 않습니다.
- Thread Mill for Titanium, Titanium alloy.
- Tough and strong edge design for threading in hardened steels.
- Deliver improved cutting and chip removal, reducing the risk of the cutting tool breaking off inside of hole.
- Tip shape reduces cutting resistance and suppresses tool bending.
- Drastically reduces tool breakage.
- We do not recommend using a ER Chuck.

- 티타늄, 티타늄 합금 가공
- 경화강 내 나사 가공을 위한 견고하고 강력한 날 디자인.
- 향상된 절삭 및 칩 제거를 통해 공구가 구멍 안에서 끊어지는 위험을 줄입니다.
- 팁 형상은 절삭 저항을 줄이고 공구 구부림을 억제합니다.
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- ER Chuck 사용을 권장하지 않습니다.
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- Deliver improved cutting and chip removal, reducing the risk of the cutting tool breaking off inside of hole.
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- Drastically reduces tool breakage.
- We do not recommend using a ER Chuck.