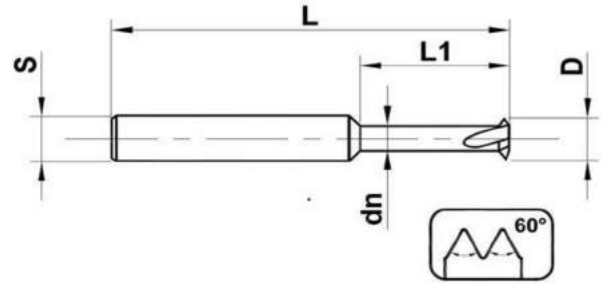


**Solid Carbide Single Profile Thread Mill
Partial Profile 60°**

7 S I E B

For Internal / External Threads and Right/Left Hand threads
ALTiSiN PVD coated
Ideal for Steel, Stainless Steel, Aluminum
Fully ground, High performance, High wear resistance



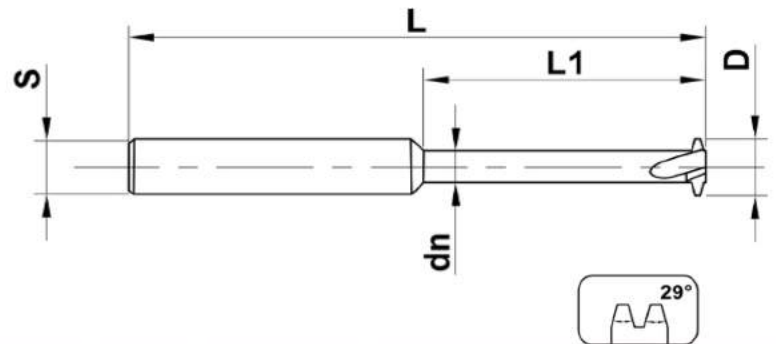
Unit : mm

7 S I E B

Order No.	Pitch Range TPI	Pitch Range(mm)	D	dn	S	L1	L	No. of Flute
7010-1010	48-28	0.5-0.8	3.90	2.7	4	16	50	4
7010-1020	48-24	0.5-1.0	4.85	3.4	6	20	60	5
7010-1030	48-20	0.5-1.25	5.9	4.1	6	25	60	5
7010-1035	24-16	1.0-1.5	7.9	5.7	8	32	75	6
7010-1040	24-14	1.0-1.75	9.9	7.5	10	38	75	6
7010-1050	24-13	1.0-2.0	11.9	9.6	12	40	75	6
7010-1060	12-9	2.0-3.0	14	10.0	14	48	100	6
7010-1070	12-8	2.0-3.5	16	11.4	16	50	100	6

ACME Single Profile Thread Mills

For Internal and External Threads
ALTiSiN PVD coated
Ideal for Steel, Stainless Steel, Aluminum
Fully ground, High performance, High wear resistance



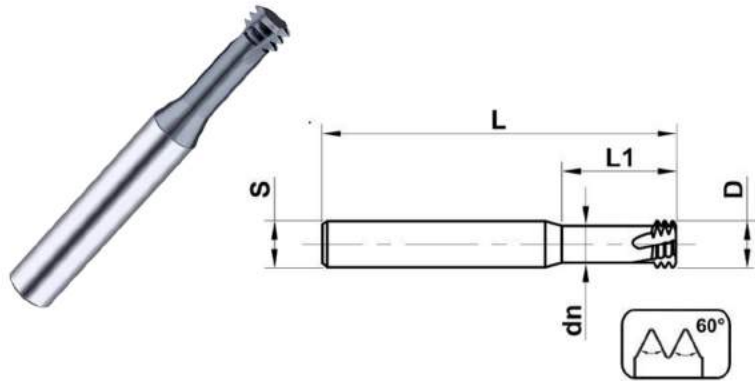
7 S I E B

Order No.	Thread	D	dn	S	L1	L	No. of Flute
7010-7010	1/4-16	0.185	0.100	0.236	0.590	1.968	4
7010-7020	5/16-14	0.236	0.138	0.236	0.787	1.968	4
7010-7030	3/8-12	0.284	0.174	0.315	0.984	2.362	4
7010-7040	1/2-10	0.394	0.300	0.394	1.378	2.953	4
7010-7050	5/8-8	0.472	0.290	0.472	1.378	2.953	4
7010-7060	3/4-6	0.472	0.250	0.472	1.378	2.953	4

Solid Carbide Micro Thread Mills Imperial

7 S I E B

For Internal / External Threads and Right/Left Hand threads
ALTiSiN PVD coated
Ideal for Steel, Stainless Steel, Aluminum
Fully ground, High performance, High wear resistance

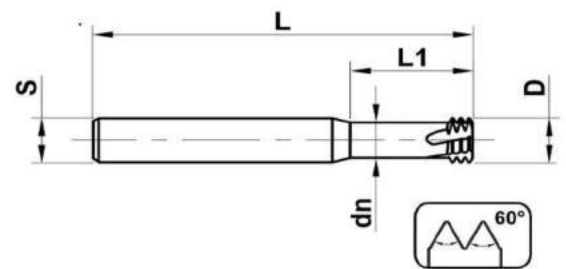


7 S I E B

Order No.	Thread	D	dn	S	L1	L	No. of Flute
7010-2005	2-56	0.065	0.043	0.157	0.196	2.000	3
7010-2010	4-40	0.085	0.047	0.157	0.374	2.000	3
7010-2015	4-48	0.089	0.063	0.157	0.374	2.000	3
7010-2020	6-32	0.104	0.061	0.157	0.429	2.000	3
7010-2025	8-36	0.126	0.091	0.157	0.492	2.000	3
7010-2030	8-32	0.126	0.084	0.157	0.492	2.000	3
7010-2040	10-24	0.146	0.092	0.157	0.591	2.000	3
7010-2050	10-32	0.146	0.113	0.157	0.591	2.000	3
7010-2060	1/4-20	0.193	0.127	0.236	0.768	2.000	3
7010-2070	1/4-28	0.209	0.162	0.236	0.768	2.000	3
7010-2080	5/16-18	0.252	0.180	0.315	0.957	2.360	4
7010-2090	5/16-24	0.252	0.187	0.315	0.957	2.360	4
7010-2100	3/8-16	0.307	0.230	0.315	1.157	2.360	4
7010-2110	3/8-24	0.307	0.270	0.315	1.157	2.360	4
7010-2120	7/16-14	0.362	0.273	0.394	1.339	3.000	4
7010-2125	7/16-20	0.362	0.278	0.394	1.339	3.000	4
7010-2130	1/2-13	0.413	0.295	0.472	1.535	3.000	4
7010-2140	1/2-20	0.413	0.304	0.472	1.535	3.000	4

Solid Carbide Micro Thread Mills Metric

For Internal / External and Right / Left Hand threads
ALTiSiN PVD coated
Ideal for Steel, Stainless Steel, Exotic Metals, Aluminum
Fully ground, High performance, High wear resistance



Unit : mm

7 S I E B

Order No.	Thread	D	dn	S	L1	L	No. of Flute
7010-3010	M2 x 0.4	1.6	1.00	4.0	6.6	50	3
7010-3015	M2.5 x 0.45	2.0	1.40	4.0	8.2	50	3
7010-3020	M3 x 0.5	2.3	1.60	4.0	9.3	50	3
7010-3030	M4 x 0.7	3.2	2.20	4.0	12.4	50	3
7010-3040	M5 x 0.8	4.0	3.00	4.0	15.4	50	3
7010-3050	M6 x 1.0	4.8	3.50	6.0	18.5	50	3
7010-3060	M8 x 1.25	6.0	4.40	6.0	24.6	50	4
7010-3070	M10 x 1.5	8.0	6.10	8.0	30.8	60	4
7010-3080	M12 x 1.75	10.0	7.70	10.0	36.9	75	4

Solid Carbide Full Profile Thread Mills Imperial

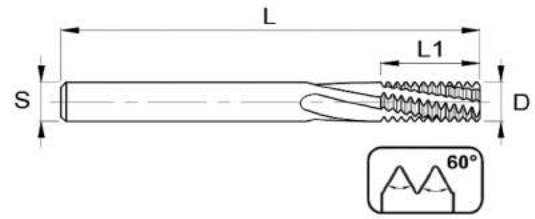
7 S I E B

For Internal and External Threads

ALTiSiN PVD coated

Ideal for Steel, Stainless Steel, Exotic Metals, Aluminum

Fully ground, High performance, High wear resistance



7 S I E B

Order No.	Thread	D	S	L1	L	No. of Flute
7010-4020	1/4-20	0.197	0.236	0.472	2.362	4
7010-4030	1/4-28	0.209	0.236	0.472	2.362	4
7010-4040	5/16-18	0.256	0.315	0.709	2.362	4
7010-4050	5/16-24	0.268	0.315	0.709	2.362	4
7010-4060	3/8-16	0.307	0.315	0.827	2.362	4
7010-4080	7/16-14	0.366	0.394	0.945	2.953	4
7010-4100	1/2-13	0.394	0.394	0.945	2.953	4
7010-4110	9/16-12	0.472	0.472	1.102	2.953	4
7010-4120	5/8-11	0.472	0.472	1.102	2.953	4
7010-4130	3/4-10	0.630	0.472	1.496	3.937	4

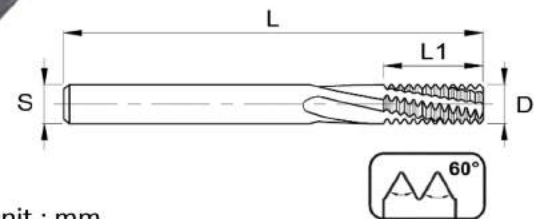
Solid Carbide Full Profile Thread Mills Metric

For Internal and External Threads

ALTiSiN PVD coated

Ideal for Steel, Stainless Steel, Aluminum

Fully ground, High performance, High wear resistance



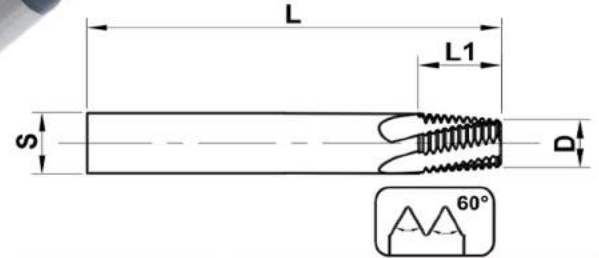
7 S I E B

unit : mm

Order No.	Thread	D	S	L1	L	No. of Flute
7010-5020	M3 x 0.5	2.35	4.0	6.0	50	4
7010-5030	M4 x 0.7	3.15	4.0	8.0	50	4
7010-5040	M5 x 0.8	4.0	4.0	10.0	50	4
7010-5050	M6 x 1.0	4.8	6.0	12.0	60	4
7010-5060	M8 x 1.25	6.0	6.0	16.0	60	4
7010-5070	M10 x 1.5	8.0	8.0	21.0	60	4
7010-5080	M12 x 1.75	10.0	10.0	24.0	75	4
7010-5090	M14 x 2.0	12.0	12.0	28.0	75	4
7010-5100	M16 x 1.5	12.0	12.0	28.0	75	4
7010-5130	M18 x 2.5	14.8	16.0	38.0	100	4
7010-5150	M24 x 3.0	16.0	16.0	42.0	100	4

Solid Carbide NPT and NPTF Full Profile Thread Mills

For Internal & External Right & Left Hand Threads
 ALTiSiN PVD coated
 Ideal for Steel, Stainless Steel, Aluminum, Exotic Metals
 Fully ground, High performance, High wear resistance

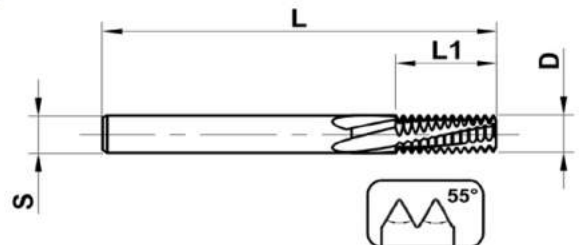


7SIEB

Order No.	Thread	D	S	L1	L	No. of Flute
7010-6011	1/16-27 NPT	0.213	0.236	0.370	2.362	4
7010-6010	1/16-27 NPTF	0.213	0.236	0.370	2.362	4
7010-6020	1/8-27 NPT	0.291	0.315	0.700	2.362	4
7010-6030	1/4-18 NPT	0.358	0.394	0.551	2.953	4
7010-6031	1/4-18 NPTF	0.358	0.394	0.551	2.953	4
7010-6040	3/8-18 NPT	0.437	0.473	0.555	2.953	4
7010-6050	1/2-14 NPT	0.425	0.472	0.709	2.953	4
7010-6051	1/2-14 NPTF	0.425	0.472	0.709	2.953	4
7010-6060	1"-11.5 NPT	0.575	0.630	0.866	3.937	4
7010-6061	1"-11.5 NPTF	0.575	0.630	0.866	3.937	4

Solid Carbide BSP or G Full Profile Thread Mills

For Internal & External Right & Left Hand Threads
 ALTiSiN PVD coated
 Ideal for Steel, Stainless Steel, Aluminum, Exotic Metals
 Fully ground, High performance, High wear resistance



7SIEB

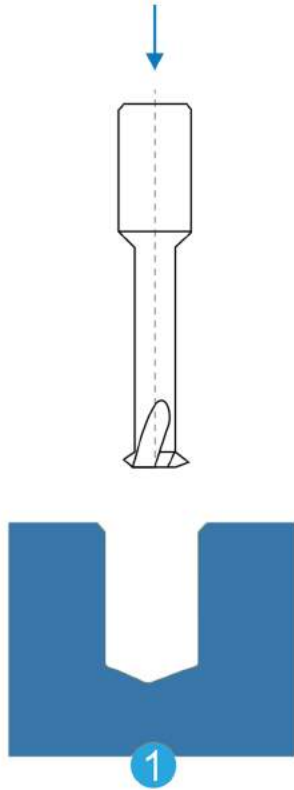
Order No.	Thread	D	S	L1	L	No. of Flute
7010-8010	1/8-28 BSP	0.315	0.315	0.551	2.362	4
7010-8020	1/4-19 BSP	0.315	0.315	0.709	2.360	4
7010-8040	1/2-14 BSP	0.472	0.472	0.787	2.950	4
7010-8060	1"-11 BSP	0.630	0.630	1.260	4.000	4

Micro and Single Profile Thread Mill Speed and Feed Selection (Imperial)																
ISO Standard	Materials	Cutting Speed SFM	Feed Chipload per Tooth (IPT)													
			Cutting Diameter													
			0.04"	0.06"	0.08"	0.12"	0.16"	0.20"	0.24"	0.28"	0.32"	0.36"	0.40"	0.48"	0.56"	0.64"
P	Low and Medium Carbon Steels < 0.55%C	195-390	0.0016	0.0020	0.0020	0.0028	0.0035	0.0043	0.0051	0.0055	0.0059	0.0063	0.0063	0.0067	0.0003	0.0071
	High Carbon Steels ≥ 0.55%C	195-295	0.0012	0.0016	0.0020	0.0024	0.0031	0.0035	0.0039	0.0047	0.0051	0.0055	0.0055	0.0063	0.0002	0.0071
	Alloy Steels, Treated Steels	165-260	0.0012	0.0016	0.0016	0.0020	0.0020	0.0024	0.0028	0.0028	0.0031	0.0035	0.0039	0.0047	0.0002	0.0055
M	Stainless Steels - Free Cutting	230-325	0.0008	0.0012	0.0012	0.0016	0.0020	0.0024	0.0024	0.0028	0.0031	0.0035	0.0039	0.0043	0.0002	0.0051
	Stainless Steels - Austenitic	195-295	0.0008	0.0012	0.0012	0.0016	0.0020	0.0024	0.0024	0.0028	0.0031	0.0035	0.0039	0.0043	0.0002	0.0051
K	Cast Steels	230-295	0.0012	0.0016	0.0016	0.0020	0.0020	0.0024	0.0028	0.0028	0.0031	0.0035	0.0039	0.0047	0.0002	0.0055
	Cast Iron	130-260	0.0016	0.0020	0.0020	0.0028	0.0035	0.0043	0.0051	0.0055	0.0059	0.0063	0.0063	0.0067	0.0003	0.0071
N	Aluminum ≤12%Si, Copper	325-650	0.0016	0.0020	0.0020	0.0028	0.0035	0.0043	0.0051	0.0055	0.0059	0.0063	0.0063	0.0067	0.0003	0.0071
	Aluminum >12% Si	195-460	0.0012	0.0012	0.0012	0.0016	0.0020	0.0024	0.0024	0.0028	0.0031	0.0035	0.0039	0.0043	0.0002	0.0055
S	Synthetics, Duroplastics, Thermoplastic	165-650	0.0035	0.0039	0.0043	0.0047	0.0055	0.0063	0.0071	0.0075	0.0075	0.0075	0.0075	0.0075	0.0003	0.0079
	Nickel Alloys and Titanium Alloys	65-130	0.0012	0.0012	0.0012	0.0016	0.0016	0.0020	0.0024	0.0024	0.0024	0.0028	0.0028	0.0028	0.0001	0.0031

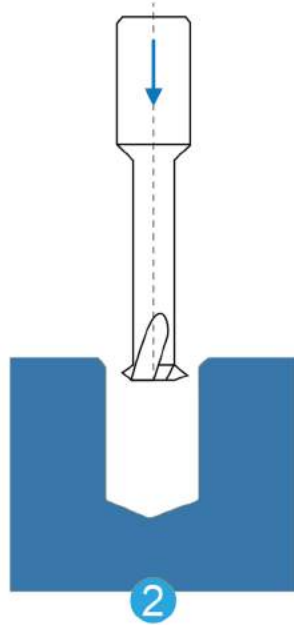
Micro and Single Profile Thread Mill Speed and Feed Selection (Metric)																
ISO Standard	Materials	Cutting Speed m/min	Feed mm/tooth													
			Cutting Diameter = D													
			ø1	ø1.5	ø2	ø3	ø4	ø5	ø6	ø7	ø8	ø9	ø10	ø12	ø14	ø16
P	Low and Medium Carbon Steels < 0.55%C	60-120	0.04	0.05	0.05	0.07	0.09	0.11	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.18
	High Carbon Steels ≥ 0.55%C	60-90	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.12	0.13	0.14	0.14	0.16	0.17	0.18
	Alloy Steels, Treated Steels	50-80	0.03	0.04	0.04	0.05	0.05	0.06	0.07	0.07	0.08	0.09	0.10	0.12	0.13	0.14
M	Stainless Steels - Free Cutting	70-100	0.02	0.03	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13
	Stainless Steels - Austenitic	60-90	0.02	0.03	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13
K	Cast Steels	70-90	0.03	0.04	0.04	0.05	0.05	0.06	0.07	0.07	0.08	0.09	0.10	0.12	0.13	0.14
	Cast Iron	40-80	0.04	0.05	0.05	0.07	0.09	0.11	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.18
N	Aluminum ≤12%Si, Copper	100-200	0.04	0.05	0.05	0.07	0.09	0.11	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.18
	Aluminum >12% Si	60-140	0.03	0.03	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.10	0.11	0.13	0.14
S	Synthetics, Duroplastics, Thermoplastic	50-200	0.09	0.10	0.11	0.12	0.14	0.16	0.18	0.19	0.19	0.19	0.19	0.19	0.20	0.20
	Nickel Alloys and Titanium Alloys	20-40	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.08

Full Thread Mill Speed and Feed Selection (Imperial)													
ISO	Materials	Cutting Speed SFM	Feed mm/tooth Cutting IPT										
			Cutting Diameter										
			0.08"	0.12"	0.16"	0.24"	0.31"	0.39"	0.47"	0.55"	0.63"	0.79"	0.98"
P	Low and Medium Carbon Steels <0.55%C	295 - 655	0.0012	0.0016	0.0016	0.0024	0.0028	0.0031	0.0035	0.0043	0.0047	0.0059	0.0071
	High Carbon Steels ≥0.55%C	325 - 475	0.0008	0.0012	0.0012	0.0020	0.0024	0.0028	0.0031	0.0035	0.0039	0.0047	0.0059
	Alloy Steels, Treated Steels		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
M	Stainless Steels - Free Cutting	180 - 425	0.0008	0.0012	0.0012	0.0016	0.0020	0.0024	0.0024	0.0028	0.0031	0.0035	0.0043
	Stainless Steels - Austenitic		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Cast Steels	390 - 440	0.0008	0.0008	0.0012	0.0012	0.0016	0.0020	0.0020	0.0024	0.0028	0.0031	0.0039
K	Cast Iron	215 - 390	0.0012	0.0016	0.0016	0.0024	0.0028	0.0031	0.0035	0.0043	0.0047	0.0059	0.0071
N	Aluminum ≤12%Si, Copper	440 - 918	0.0012	0.0016	0.0016	0.0024	0.0028	0.0031	0.0035	0.0043	0.0047	0.0059	0.0071
	Aluminum >12% Si	295 - 655	0.0008	0.0008	0.0012	0.0012	0.0016	0.0020	0.0020	0.0024	0.0028	0.0031	0.0039
	Synthetics, Duroplastics, Thermoplastics	295 - 1050	0.0020	0.0024	0.0028	0.0031	0.0039	0.0043	0.0047	0.0055	0.0059	0.0071	0.0087
S	Nickel Alloys, Titanium Alloys	65 - 230	0.0008	0.0008	0.0008	0.0012	0.0012	0.0012	0.0012	0.0016	0.0016	0.0016	0.0020

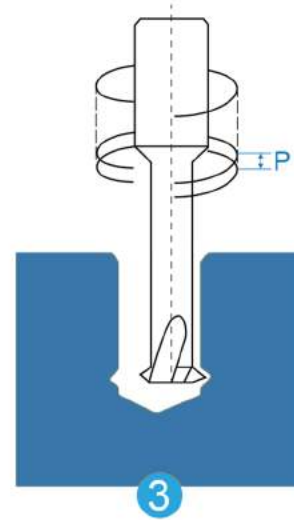
Full Thread Mill Speed , Feed Recommended Table (Metric)														
ISO	Materials	Cutting Speed m/min	Feed mm/tooth Cutting											
			Cutting Diameter = D											
			ø2	ø3	ø4	ø6	ø8	ø10	ø12	ø14	ø16	ø20	ø25	
P	Low and Medium Carbon Steels <0.55%C	90 - 200	0.03	0.04	0.04	0.06	0.07	0.08	0.09	0.11	0.12	0.15	0.18	
	High Carbon Steels ≥0.55%C	100 - 145	0.02	0.03	0.03	0.05	0.06	0.07	0.08	0.09	0.1	0.12	0.15	
	Alloy Steels, Treated Steels													
M	Stainless Steels - Free Cutting	55 - 130	0.02	0.03	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.11	
	Stainless Steels - Austenitic													
	Cast Steels	120 - 135	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.10	
K	Cast Iron	65 - 120	0.03	0.04	0.04	0.06	0.07	0.08	0.09	0.11	0.12	0.15	0.18	
N	Aluminum ≤12%Si, Copper	135 - 280	0.03	0.04	0.04	0.06	0.07	0.08	0.09	0.11	0.12	0.15	0.18	
	Aluminum >12% Si	90 - 200	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.10	
	Synthetics, Duroplastics, Thermoplastics	90 - 320	0.05	0.06	0.07	0.08	0.10	0.11	0.12	0.14	0.15	0.18	0.22	
S	Nickel Alloys, Titanium Alloys	20 - 70	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05	



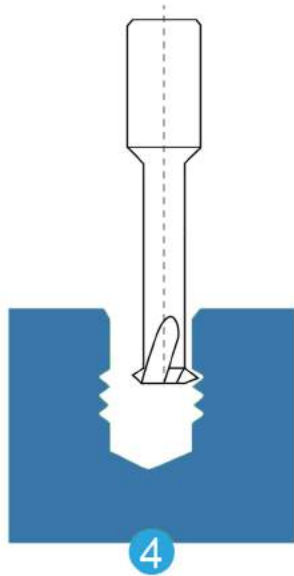
1
Position above
Hole Center



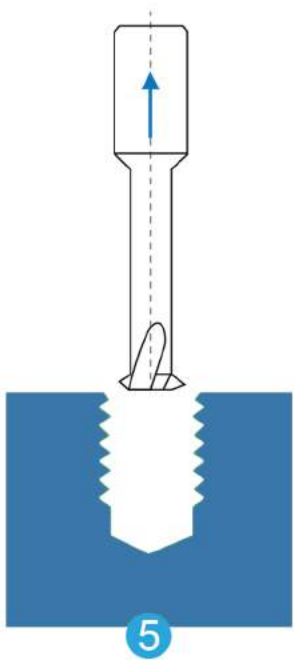
2
Feed to Bottom
of Hole



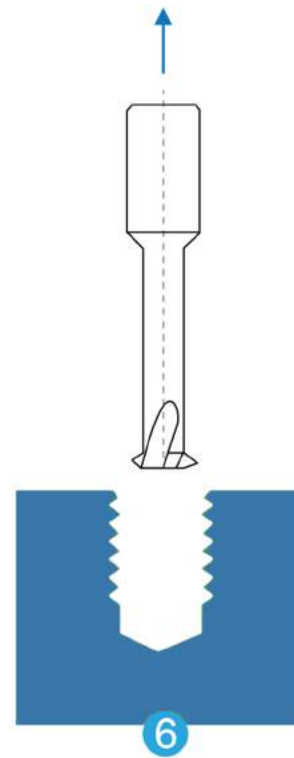
3
Feed to Arc on
Position, Spiral Feed
acc. to Thread Pitch



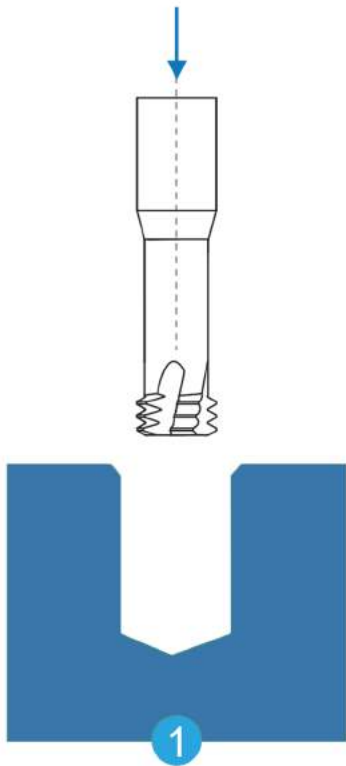
4
Continue Process Upward
until Thread is Complete



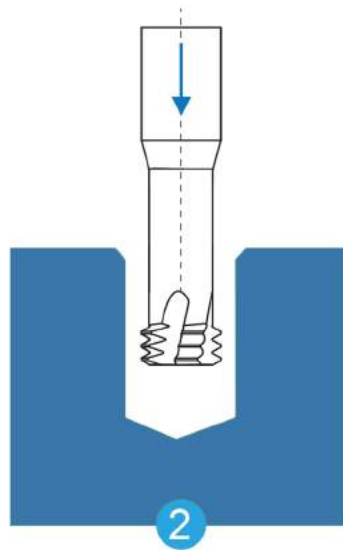
5
Arc Exit



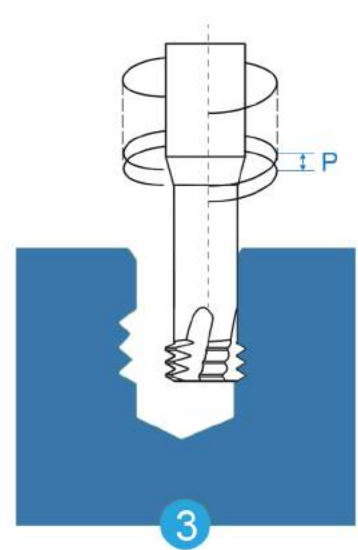
6
End Point



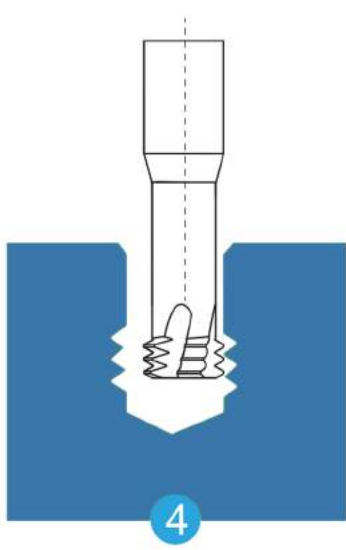
1
Position above
Hole Center



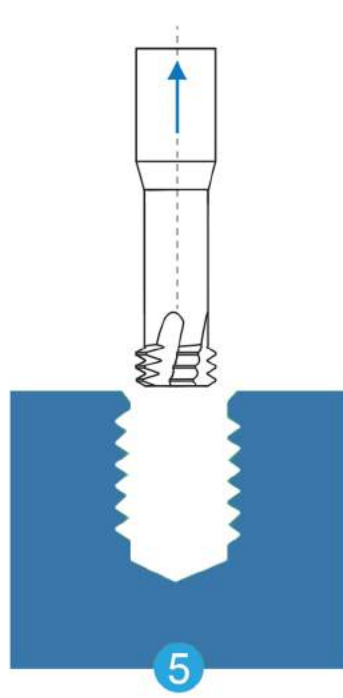
2
Feed to Bottom
of Hole



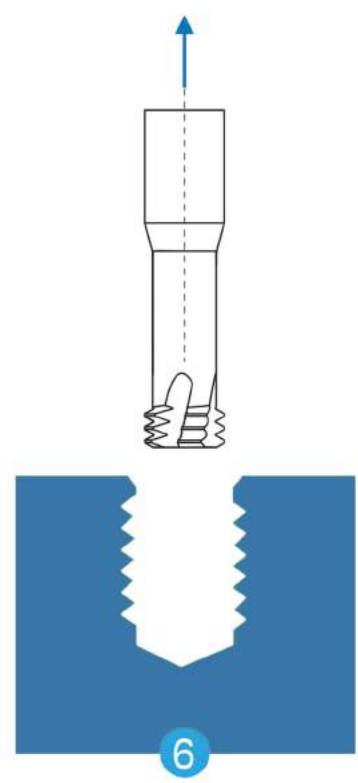
3
Feed to Arc on
Position, Spiral Feed
acc. to Thread Pitch



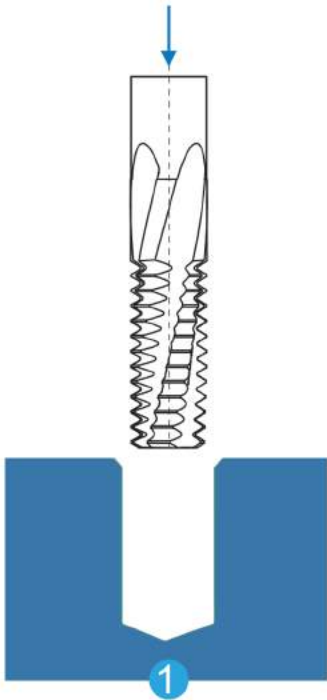
4
Continue Process Upward
until Thread is Complete



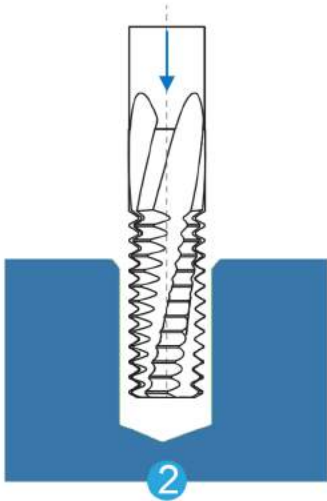
5
Arc Exit



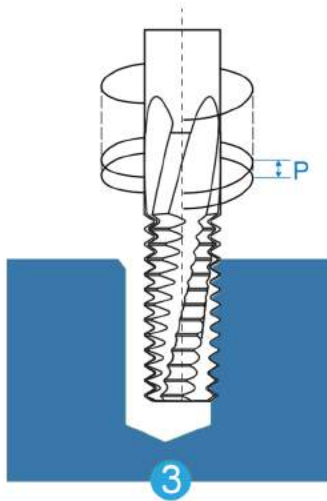
6
End Point



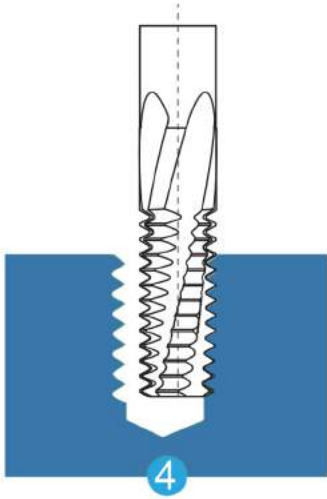
1
Position above
Hole Center



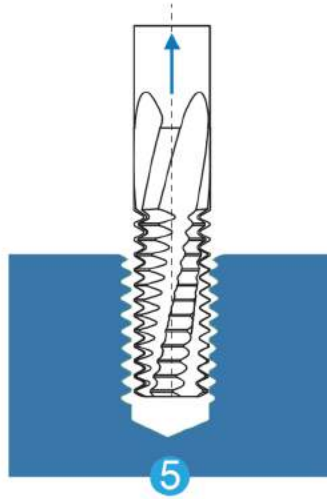
2
Feed to Bottom
of Hole



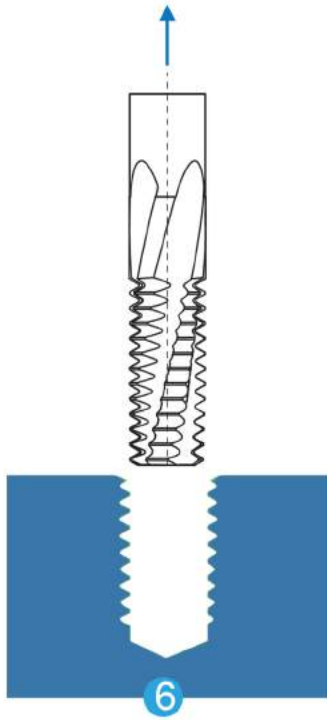
3
Feed to Arc on
Position and Spiral
Feed for One Pitch



4
360° Spiral Machining



5
Arc Exit



6
End Point

