



THREAD MILLS

SOLID CARBIDE THREAD MILLS

Excellent Performance on Various Work Materials
Higher Cutting Speeds and Feeds than Tapping
One Tool for Blind Holes and Through Holes



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Note The new address above has currently been updated since Korean new postal standard was valid from 2014.
Be noticed that the physical Headquarter location is NOT changed.



Search 'YG-1' on social media outlets

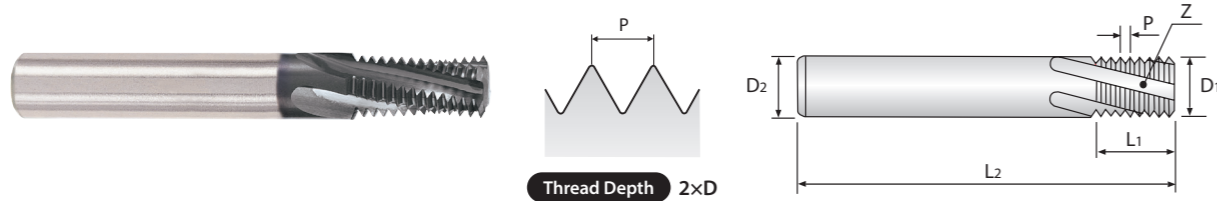
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M SOLID CARBIDE THREAD MILLS

For ISO Metric Internal Thread - DIN 13

L1211 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D1	D2	L1	L2	Z
L1211200	M3	0.5	2.2	6	5.00	57	3
L1211240	M4	0.7	2.9	6	7.00	57	3
L1211280	M5	0.8	3.8	6	8.00	57	3
L1211310	M6	1.0	4.5	6	13.00	57	3
L1211360	M8	1.25	6.0	6	17.50	65	3
L1211420	M10	1.5	7.5	8	21.00	72	4
L1211500	M12	1.75	9.5	10	26.25	80	4
L1211540	M14	2.0	10.0	10	30.00	83	4
L1211600	M16	2.0	12.0	12	34.00	92	4
L1211650	M18	2.5	14.0	14	37.50	92	5
L1211700	M20	2.5	16.0	16	42.50	105	5

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

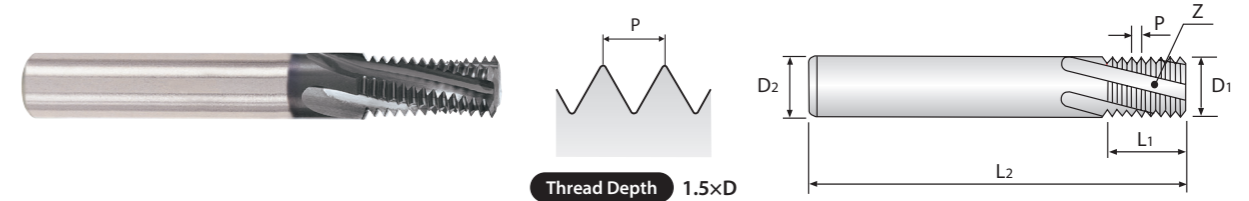
P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

MF SOLID CARBIDE THREAD MILLS

For ISO Metric Internal Thread - DIN 13

L1212 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D1	D2	L1	L2	Z
L1212370	M8	1.0	6.0	6	13.00	57	3
L1212380	M8	0.75	6.0	6	12.75	57	3
L1212440	M10	1.0	8.0	8	16.00	63	4
L1212510	M12	1.5	9.5	10	19.50	72	4
L1212520	M12	1.25	9.5	10	18.75	72	4
L1212530	M12	1.0	9.5	10	19.00	72	4
L1212550	M14	1.5	10.0	10	22.50	83	4
L1212570	M14	1.0	10.0	10	22.00	83	4
L1212610	M16	1.5	12.0	12	25.50	83	4
L1212620	M16	1.0	12.0	12	25.00	83	4
L1212670	M18	1.5	14.0	14	28.50	92	5
L1212680	M18	1.0	14.0	14	28.00	92	5
L1212720	M20	1.5	16.0	16	31.50	92	5
L1212730	M20	1.0	16.0	16	31.00	92	5

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

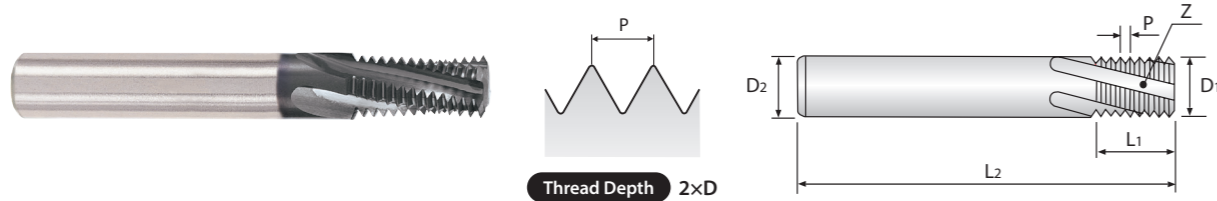
P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

UNC SOLID CARBIDE THREAD MILLS

For UNC Internal Thread - ANSI B 1.1

L1213 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
			D1	D2	L1	L2	Z
L1213400	1/4	20	4.5	6	14.00	57	3
L1213440	5/16	18	5.8	6	16.90	65	3
L1213480	3/8	16	7.0	8	20.60	72	4
L1213520	7/16	14	8.0	8	23.60	72	4
L1213560	1/2	13	9.5	10	27.40	80	4
L1213600	9/16	12	10.0	10	31.80	83	4
L1213640	5/8	11	12.0	12	34.60	92	4
L1213700	3/4	10	14.0	14	40.60	104	5

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

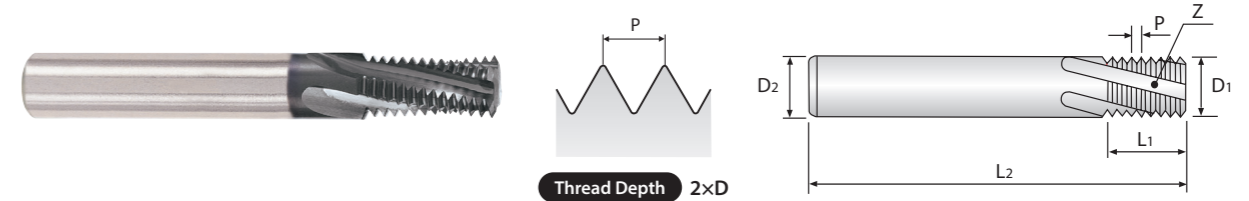
P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

UNF SOLID CARBIDE THREAD MILLS

For UNF Internal Thread - ANSI B 1.1

L1214 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
			D1	D2	L1	L2	Z
L1214420	1/4	28	5.0	6	13.60	57	3
L1214460	5/16	24	6.0	6	16.90	65	3
L1214500	3/8	24	8.0	8	20.10	72	4
L1214540	7/16	20	8.0	8	24.10	72	4
L1214580	1/2	20	10.0	10	26.70	80	4
L1214620	9/16	18	12.0	12	29.60	83	4
L1214660	5/8	18	12.0	12	33.90	92	4
L1214720	3/4	16	14.0	14	39.70	104	5

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

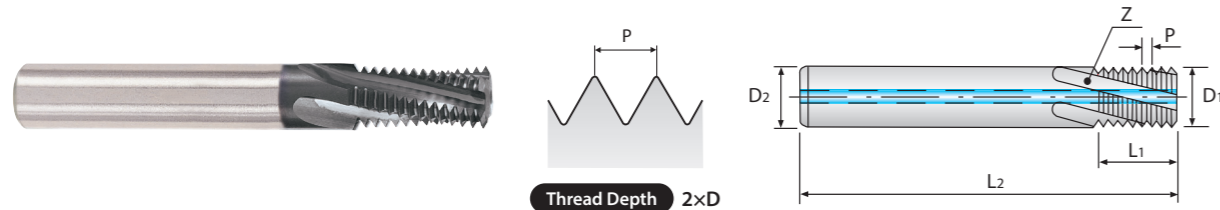
P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

M SOLID CARBIDE THREAD MILLS with COOLANT HOLE

For ISO Metric Internal Thread - DIN 13

L4211 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D1	D2	L1	L2	Z
L4211310	M6	1.0	4.5	6	13.00	57	3
L4211360	M8	1.25	6.0	6	17.50	65	3
L4211420	M10	1.5	7.5	8	21.00	72	4
L4211500	M12	1.75	9.5	10	26.25	80	4
L4211540	M14	2.0	10.0	10	30.00	83	4
L4211600	M16	2.0	12.0	12	34.00	92	4
L4211700	M20	2.5	16.0	16	42.50	105	5

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

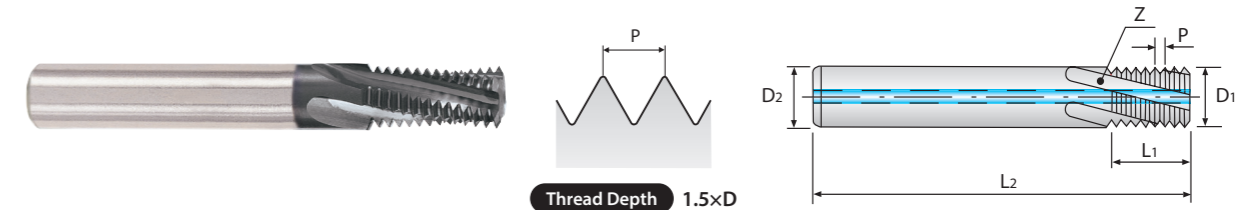
P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

MF SOLID CARBIDE THREAD MILLS with COOLANT HOLE

For ISO Metric Internal Thread - DIN 13

L4212 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN		P	D1	D2	L1	L2	Z
L4212370	M8	1.0	6.0	6	13.00	57	3
L4212380	M8	0.75	6.0	6	12.75	57	3
L4212440	M10	1.0	8.0	8	16.00	63	4
L4212510	M12	1.5	9.5	10	19.50	72	4
L4212520	M12	1.25	9.5	10	18.75	72	4
L4212530	M12	1.0	9.5	10	19.00	72	4
L4212550	M14	1.5	10.0	10	22.50	83	4
L4212570	M14	1.0	10.0	10	22.00	83	4
L4212610	M16	1.5	12.0	12	25.50	83	4
L4212620	M16	1.0	12.0	12	25.00	83	4
L4212670	M18	1.5	14.0	14	28.50	92	5
L4212680	M18	1.0	14.0	14	28.00	92	5
L4212720	M20	1.5	16.0	16	31.50	92	5
L4212730	M20	1.0	16.0	16	31.00	92	5

▶ Other coatings are available on your request.

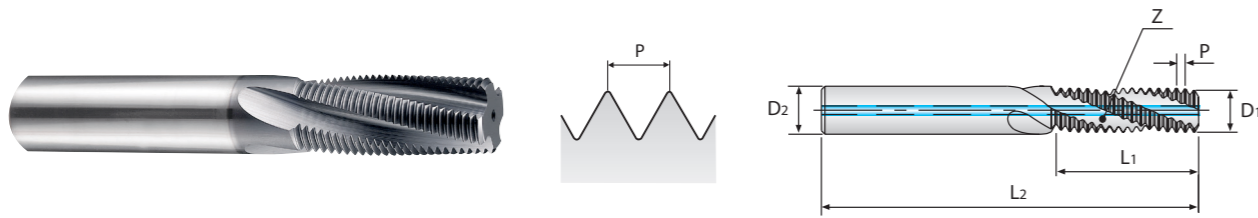
◎ : Excellent ○ : Good

P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

BSP(G) SOLID CARBIDE THREAD MILLS with COOLANT HOLE For BSP(G) Internal/External Thread

L6215 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	No. of Flute
TiAlN			D1	D2	L1	L2	Z
L6215020	1/16	28	5.9	6	16.30	65	3
L6215200	1/8	28	7.9	8	20.00	70	4
L6215400	1/4	19	9.9	10	26.70	80	4
L6215480	3/8	19	13.9	14	33.40	92	4
L6215560	1/2	14	15.9	16	43.50	104	5
L6215700	3/4	14	17.9	18	34.50	100	5
L6215780	1	11	19.9	20	34.60	100	5

▶ Other coatings are available on your request.

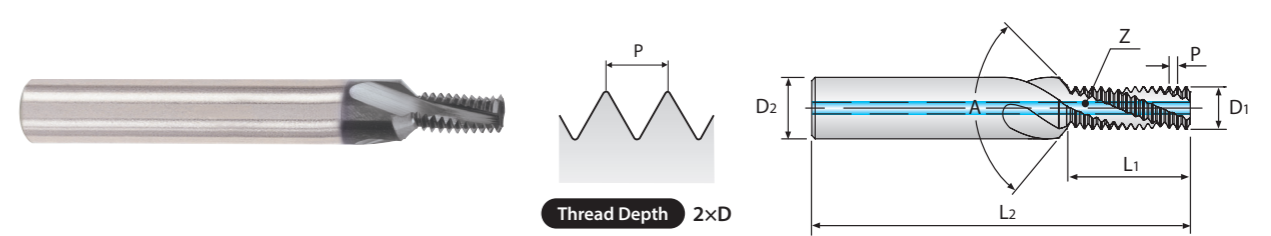
◎ : Excellent ○ : Good

P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

M SOLID CARBIDE THREAD MILLS with COOLANT HOLE & CHAMFER For ISO Metric Internal Thread - DIN 13

L4271 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN		P	D1	D2	L1	L2	A	Z
L4271310	M6	1.0	4.8	8	12.40	62	90°	3
L4271360	M8	1.25	6.5	10	16.80	74	90°	3
L4271420	M10	1.5	8.2	12	20.15	80	90°	4
L4271500	M12	1.75	9.9	14	25.25	90	90°	4
L4271540	M14	2.0	11.6	16	28.85	100	90°	4
L4271600	M16	2.0	13.6	18	32.85	102	90°	4

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

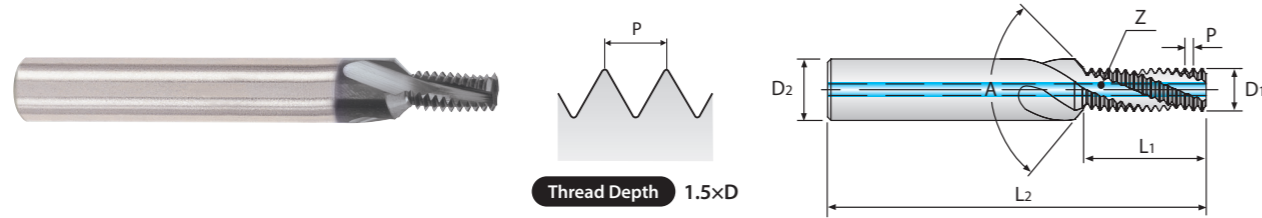
P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

MF SOLID CARBIDE THREAD MILLS with COOLANT HOLE & CHAMFER

For ISO Metric Internal Thread - DIN 13

L4272 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN		P	D1	D2	L1	L2	A	Z
L4272370	M8	1.0	6.7	10	12.40	74	90°	3
L4272430	M10	1.25	8.3	12	15.90	80	90°	4
L4272440	M10	1.0	8.7	12	15.40	80	90°	4
L4272510	M12	1.5	10.0	14	18.65	90	90°	4
L4272520	M12	1.25	10.3	14	18.30	80	90°	4
L4272530	M12	1.0	10.7	14	18.40	90	90°	4
L4272550	M14	1.5	12.0	16	21.65	100	90°	4
L4272610	M16	1.5	14.0	18	24.65	102	90°	5

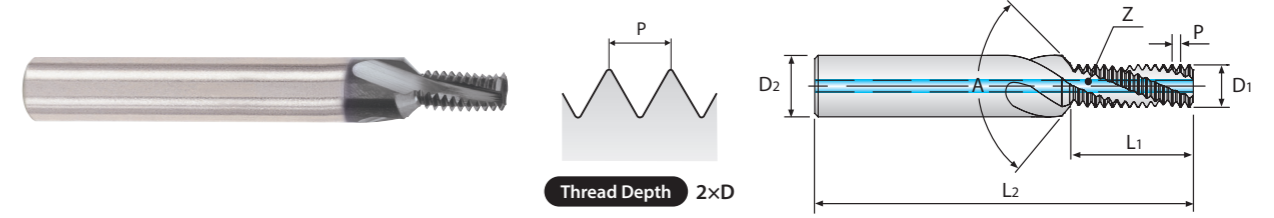
▶ Other coatings are available on your request.

UNC SOLID CARBIDE THREAD MILLS with COOLANT HOLE & CHAMFER

For UNC Internal Thread - ANSI B 1.1

L4273 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN			D1	D2	L1	L2	A	Z
L4273400	1/4	20	4.8	8	13.30	62	90°	3
L4273440	5/16	18	6.2	10	16.18	74	90°	3
L4273480	3/8	16	7.6	12	19.80	80	90°	4
L4273520	7/16	14	8.9	12	22.62	80	90°	4
L4273560	1/2	13	10.3	14	26.32	90	90°	4
L4273600	9/16	12	11.7	16	30.63	100	90°	4
L4273640	5/8	11	13.1	18	33.41	102	90°	4
L4273700	3/4	10	16.0	20	39.29	110	90°	5

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

◎ : Excellent ○ : Good

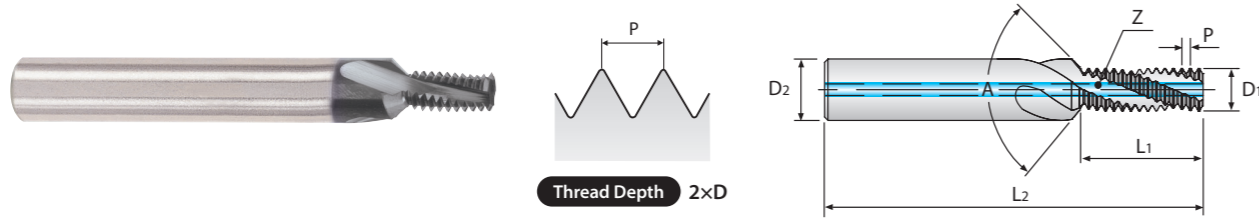
P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

UNF SOLID CARBIDE THREAD MILLS with COOLANT HOLE & CHAMFER

For UNF Internal Thread - ANSI B 1.1

L4274 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN			D1	D2	L1	L2	A	Z
L4274420	1/4	28	5.1	8	13.21	62	90°	3
L4274460	5/16	24	6.5	10	16.37	74	90°	3
L4274500	3/8	24	8.1	12	19.54	80	90°	4
L4274540	7/16	20	9.4	12	22.19	80	90°	4
L4274580	1/2	20	11.0	14	26.00	90	90°	4
L4274620	9/16	18	12.4	16	28.88	100	90°	4
L4274660	5/8	18	14.0	18	33.12	102	90°	5
L4274720	3/4	16	17.0	20	38.86	110	90°	5

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

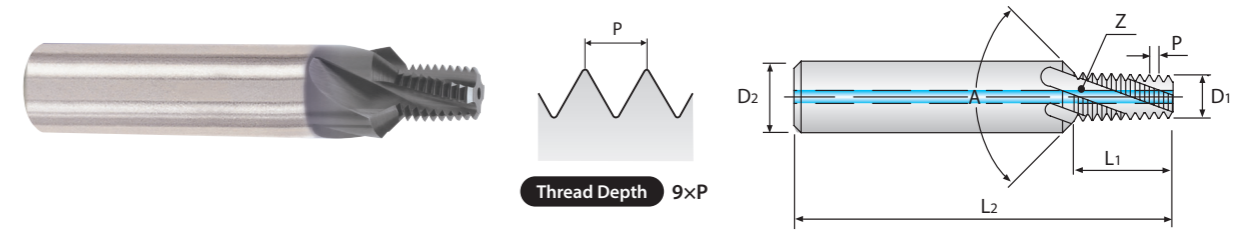
P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

NPT SOLID CARBIDE THREAD MILLS with COOLANT HOLE & CHAMFER

For NPT Thread - ANSI B 1.20.1

L4276 SERIES

▶ Easy to cut threads even if exotic materials like Nickel, Titanium or their alloys.



Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Overall Length	Angle	No. of Flute
TiAlN			D1	D2	L1	L2	A	Z
L4276020	NPT1/16	27	5.9	10	8.90	64	90°	3
L4276200	NPT1/8	27	7.8	12	8.90	70	90°	4
L4276400	NPT1/4	18	10.05	16	13.40	81	90°	4
L4276480	NPT3/8	18	13.45	18	13.40	81	90°	4

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

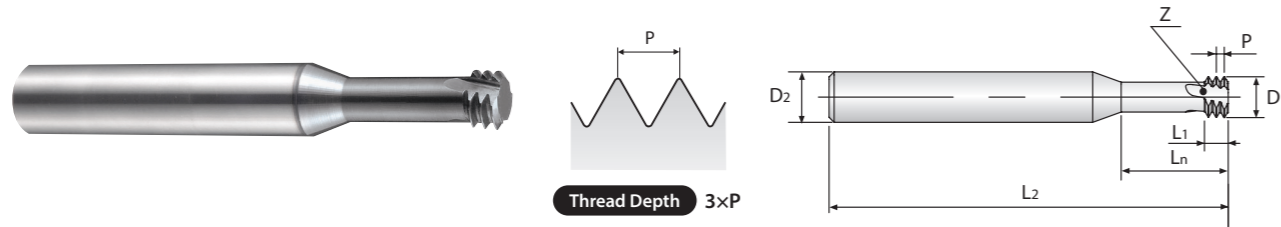
P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

M SOLID CARBIDE MINIATURE THREAD MILLS

For ISO Metric Internal Thread - DIN 13

L12D1 SERIES

▶ Short thread length



Unit : mm

EDP No.	Nominal Diameter [D]	Pitch P	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Neck Length Ln	Overall Length L2	No. of Flute Z
L12D1010	M1	0.25	0.70	3	0.75	2.1	30	3
L12D1050	M1.2	0.25	0.90	3	0.75	2.5	30	3
L12D1070	M1.4	0.3	1.04	3	0.90	2.9	30	3
L12D1090	M1.6	0.35	1.18	3	1.05	3.4	30	3
L12D1130	M2	0.4	1.52	6	1.20	4.2	57	3
L12D1150	M2.2	0.45	1.66	6	1.35	4.6	57	3
L12D1170	M2.5	0.45	1.96	6	1.35	5.3	57	3
L12D1200	M3	0.5	2.4	6	1.50	6.3	57	3
L12D1240	M4	0.7	3.16	6	2.10	8.4	57	3
L12D1280	M5	0.8	4.04	6	2.40	10.5	57	3
L12D1310	M6	1.0	4.8	6	3.00	12.6	57	3
L12D1360	M8	1.25	6.5	8	3.75	16.8	63	3
L12D1420	M10	1.5	8.2	10	4.50	21.0	73	3
L12D1500	M12	1.75	9.9	10	5.25	25.2	73	3

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

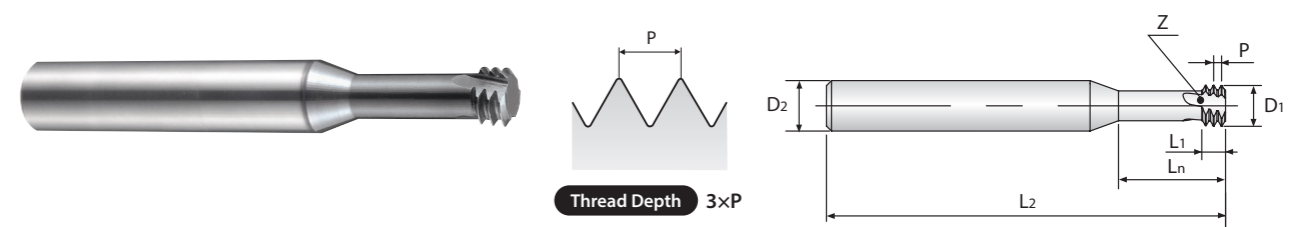
P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

UNC SOLID CARBIDE MINIATURE THREAD MILLS

For UNC Internal Thread - ANSI B 1.1

L12D3 SERIES

▶ Short thread length



Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter D1	Shank Diameter D2	Thread Length L1	Neck Length Ln	Overall Length L2	No. of Flute Z
L12D3040	#1	64	1.38	6	1.19	3.9	57	3
L12D3080	#2	56	1.64	6	1.36	4.6	57	3
L12D3160	#4	40	2.08	6	1.91	6.0	57	3
L12D3240	#6	32	2.55	6	2.38	7.4	57	3
L12D3280	#8	32	3.21	6	2.38	8.7	57	3
L12D3320	#10	24	3.56	6	3.18	10.1	57	3
L12D3360	#12	24	4.22	6	3.18	11.5	57	3
L12D3400	1/4	20	4.83	6	3.81	13.3	57	3
L12D3440	5/16	18	6.24	8	4.23	16.7	63	3
L12D3480	3/8	16	7.62	8	4.76	20.0	63	3
L12D3520	7/16	14	8.94	10	5.44	23.3	73	3

▶ Other coatings are available on your request.

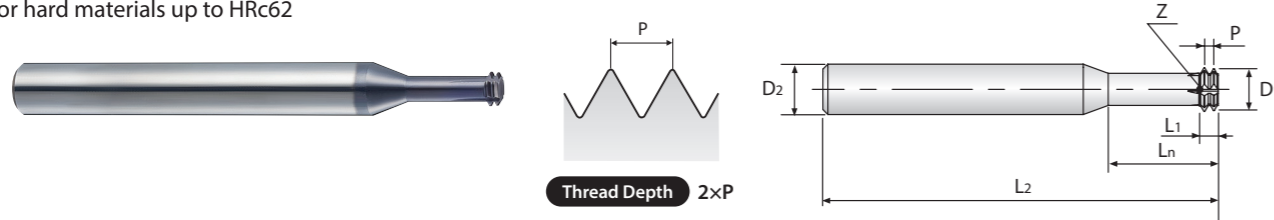
◎ : Excellent ○ : Good

P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
◎	◎	◎		○	◎	◎	○	○

M SOLID CARBIDE MINIATURE THREAD MILLS

For Hard Materials, ISO Metric Internal Thread - DIN 13 **L19E1 SERIES**

- ▶ Short thread length
- ▶ Left Hand Cut, Straight Flute
- ▶ Left hand Cut (CNC code : M04)
- ▶ The work direction is from top to bottom (Climb Milling)
- ▶ For hard materials up to HRc62



Unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute
AITiN		P	D1	D2	L1	Ln	L2	Z
L19E1130	M2	0.4	1.52	6	0.80	4.2	57	4
L19E1150	M2.2	0.45	1.66	6	0.90	4.6	57	4
L19E1170	M2.5	0.45	1.96	6	0.90	5.3	57	4
L19E1200	M3	0.5	2.4	6	1.00	6.3	57	4
L19E1240	M4	0.7	3.16	6	1.40	8.4	57	4
L19E1280	M5	0.8	4.04	6	1.60	10.5	57	4
L19E1310	M6	1.0	4.8	6	2.00	12.6	57	5
L19E1360	M8	1.25	6.5	8	2.50	16.8	63	5
L19E1420	M10	1.5	8.2	10	3.00	21.0	73	6
L19E1500	M12	1.75	9.9	10	3.50	25.2	73	6

▶ Other coatings are available on your request.

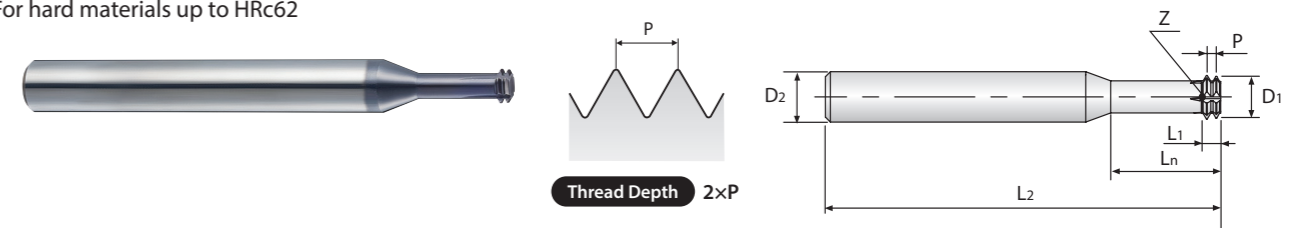
◎ : Excellent ○ : Good

P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
	○	◎	◎	○	◎		○	◎

UNC SOLID CARBIDE MINIATURE THREAD MILLS

for Hard Materials, UNC Internal Thread - ANSI B 1.1 **L19E3 SERIES**

- ▶ Short thread length
- ▶ Left Hand Cut, Straight Flute
- ▶ Left hand Cut (CNC code : M04)
- ▶ The work direction is from top to bottom (Climb Milling)
- ▶ For hard materials up to HRc62



Unit : mm

EDP No.	Nominal Diameter [D]	TPI	Cutter Diameter	Shank Diameter	Thread Length	Neck Length	Overall Length	No. of Flute
AITiN			D1	D2	L1	Ln	L2	Z
L19E3080	#2	56	1.64	6	0.91	4.6	57	4
L19E3160	#4	40	2.08	6	1.27	6.0	57	4
L19E3240	#6	32	2.55	6	1.59	7.4	57	4
L19E3280	#8	32	3.21	6	1.59	8.7	57	4
L19E3320	#10	24	3.56	6	2.12	10.1	57	4
L19E3360	#12	24	4.22	6	2.12	11.5	57	4
L19E3400	1/4	20	4.83	6	2.54	13.3	57	5
L19E3440	5/16	18	6.24	8	2.82	16.7	63	5
L19E3480	3/8	16	7.62	8	3.18	20.0	63	6
L19E3520	7/16	14	8.94	10	3.63	23.3	73	6

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

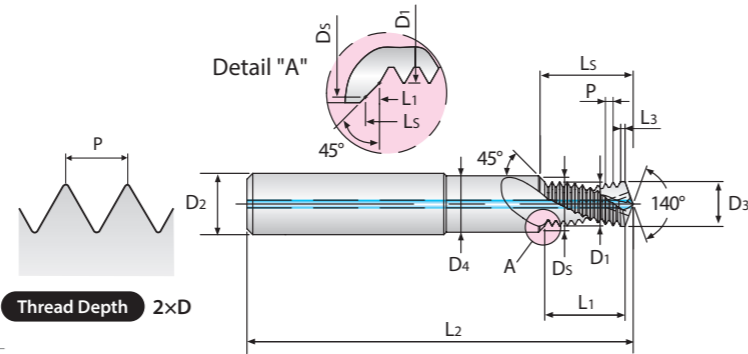
P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
	○	◎	◎	○	◎		○	◎

M SOLID CARBIDE DRILL and THREAD MILLS with CHAMFER

For ISO Metric Internal Thread - DIN 13

L41A1 SERIES
L42A1 SERIES

- ▶ No. of Flute : 2
- ▶ Drill Point : 140° / Countersink : 90°
- ▶ Drilling, Chamfering and Thread milling



Thread Depth 2xD



Unit : mm

EDP No.		Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Effect. Diameter	Drill Diameter	Max. C'sink	Thread Length	Effect. Length	Drill Length	Overall Length
UNCOATED	TAIN	D	P	D1	D2	D5	D3	D4	L1	L5	L3	L2
L41A1310	L42A1310	M6	1.0	4.75	8	6.3	5.00	6.6	13.00	14.68	1.00	62
L41A1360	L42A1360	M8	1.25	6.35	10	8.3	6.75	9.0	16.27	18.48	1.25	74
L41A1420	L42A1420	M10	1.5	7.95	12	10.3	8.50	11.0	21.05	23.77	1.50	79
L41A1500	L42A1500	M12	1.75	9.95	14	12.3	10.25	13.5	24.21	27.25	1.50	89
L41A1540	L42A1540	M14	2.0	11.20	16	14.3	12.00	15.5	29.58	33.32	1.50	102

▶ Other coatings are available on your request.

◎ : Excellent ○ : Good

P			H	M	K	N	S	
Carbon Steels	Alloy Steels	Heat Treated Steels	High Hardened Steels	Stainless Steels	Cast Iron	Non Ferrous Materials	Titanium Alloys	Chrome-Nickel Alloys
					◎	◎		

TECHNICAL DATA

RECOMMENED CUTTING CONDITIONS

For Thread Mills

Unit : mm

MATERIALS	HARDNESS (HB)	STRENGTH (N/mm ²)	CUTTING SPEED (m/min.)	FEED PER TOOTH (Fz)	
				CUTTER DIAMETER ≤ Ø8.0	CUTTER DIAMETER > Ø8.0
Low Carbon Steels	≤ 200	≤ 700	80 - 120	0.02 - 0.04	0.04 - 0.10
Medium Carbon Steels High Carbon Steels	≤ 250	≤ 850	80 - 120	0.02 - 0.04	0.04 - 0.10
Alloy Steels	≤ 250	≤ 850	80 - 120	0.02 - 0.04	0.04 - 0.10
Heat Treated Steels	≤ 400	≤ 1400	60 - 100	0.02 - 0.04	0.04 - 0.10
Stainless Steels	≤ 300	≤ 1000	40 - 80	0.01 - 0.02	0.02 - 0.06
Cast Iron	≤ 300	≤ 1000	50 - 100	0.02 - 0.04	0.04 - 0.10
Chrome-Nickel Alloys Titanium Alloys	≤ 350	≤ 1200	20 - 60	0.01 - 0.02	0.02 - 0.06
Non Ferrous Materials	≤ 200	≤ 700	100 - 300	0.03 - 0.07	0.05 - 0.10

For Drill and Thread Mills

Unit : mm

MATERIALS	HARDNESS (HB)	STRENGTH (N/mm ²)	CUTTING SPEED (m/min.)	Fz (THREAD MILLING) - FEED PER TOOTH		Fdr (DRILLING) - FEED PER REVOLUTION	
				CUTTER DIAMETER ≤ Ø8.0	CUTTER DIAMETER > Ø8.0	CUTTER DIAMETER ≤ Ø8.0	CUTTER DIAMETER > Ø8.0
Cast Iron	≤ 200	≤ 700	80 - 150	0.03 - 0.08	0.08 - 0.12	0.10 - 0.20	0.20 - 0.25
Aluminium Aluminium-alloy Magnesium	≤ 180	≤ 600	100 - 300	0.05 - 0.10	0.10 - 0.15	0.10 - 0.20	0.20 - 0.30
Plastics	-	-	80 - 150	0.05 - 0.10	0.10 - 0.15	0.10 - 0.20	0.20 - 0.30

For Hard Material Miniature Thread Mills

Unit : mm

MATERIALS	HARDNESS (HB)	STRENGTH (N/mm ²)	CUTTING SPEED (m/min.)	FEED (mm/tooth)	
				CUTTER DIAMETER ≤ Ø6.0	CUTTER DIAMETER > Ø6.0
Alloy Steels	295 - 415HB	1000 - 1400	80 - 120	0.02 - 0.04	0.04 - 0.06
Stainless Steels	280 - 415HB	950 - 1250	40 - 80	0.02 - 0.04	0.04 - 0.06
Cast Iron	≤ HB300	≤ 1000	50 - 100	0.03 - 0.05	0.05 - 0.07
Chrome-Nickel Alloys Titanium Alloys	≤ HB445	≤ 1500	20 - 60	0.02 - 0.03	0.03 - 0.05
Hardened Materials	45 - 50HRC		25 - 70	0.03 - 0.05	0.05 - 0.07
	51 - 55HRC		25 - 60	0.02 - 0.04	0.04 - 0.06
	56 - 62HRC		25 - 50	0.01 - 0.03	0.03 - 0.05

RECOMMENDED CUTTING CONDITIONS

TO CALCULATE SPEED & FEED RATES

Calculate RPM of Cutter

$$n = \frac{1000 \times V}{d \times \pi}$$

Calculate Feed per Revolution

$$F_1 = F_z \times Z \times N$$

Finally Calculate Feed at Tool Center Line

$$F_2 = \frac{F_1 \times (D - d)}{D}$$

N	RPM
V	Recommended Cutting Speed
d	Diameter of Cutter
Fz	Recommended Feed per Tooth
Z	Number of Teeth
F₂	Feed at Center Line of Cutting
F₁	Feed at Cutting Edge
D	Major Diameter of Component



SOLID DRILLS

PERFECT HOLES FOR PRECISE THREADING
 DRILLING TOOLS

YG-1 Drilling tools are well known for its tight tolerance and high technology, continuously impressing various manufacturers around the world. Its advance designed geometry brings out extraordinary performances, creating a longer tool life with outstanding productivity. Also a variety of size and shapes are available for multiple applications.

P M K

SOLID CARBIDE



**DREAM DRILLS
GENERAL**

2-Flute Drills with/without Internal Coolant
 Wide range of sizes and flute lengths
 Perfect choice for general purpose

P K

SOLID CARBIDE



**DREAM DRILLS
HIGH FEED**

3-Flute Drills with Internal Coolant
 Up to 1.6 times faster drilling
 compared to conventional 2-flute drills

P M N S

SOLID CARBIDE



**DREAM DRILLS
INOX**

For drilling Stainless Steels
 Special geometry and flute shape
 for excellent chip evacuation and self-centering

N

SOLID CARBIDE



**DREAM DRILLS
ALU**

For drilling Aluminum & Aluminum Alloys
 Good chip evacuation due to
 flute geometry & enough chip space

P M K N

SOLID CARBIDE



**DREAM DRILLS
FLAT BOTTOM**

180° Point Angle with/without Internal Coolant
 Perfect choice for a various angled surface

P M K N S

PREMIUM HSS-PM



**MULTI-1 DRILLS
Multi-Purpose**

For Drilling various work materials;
 Carbon Steel, Alloy Steels, Cast Iron,
 Stainless Steels, Aluminum, Titanium, etc