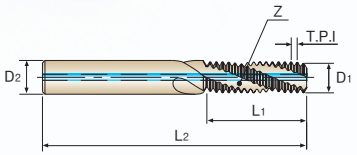
BSP(G) Solid Carbide Thread Mill with Internal Coolant Hole for BSP(G) Internal/External Thread



L6215 SERIES TiAlN

- **Material** : Solid Carbide
- **Shank** : DIN6535 HA
- **Spiral Angle** : 15°
- **Internal Coolant Hole**

unit : mm

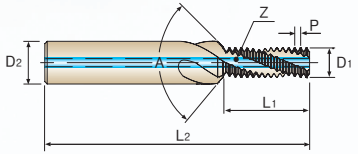
EDP No.	Nominal Diameter [D]	T.P.I	Cutter Diameter	Shank Diameter	Thread Length	Over All Length	No. of Flute
TiAlN			D_1	D_2	L_1	L_2	Z
L6215020	1/16"	28	**5.9**	6	16.3	65	3
L6215200	1/8"	28	**7.9**	8	20.0	70	4
L6215400	1/4"	19	**9.9**	10	26.7	80	4
L6215480	3/8"	19	**13.9**	14	33.4	92	4
L6215560	1/2"	14	**15.9**	16	43.5	104	5
L6215700	3/4"	14	**17.9**	18	34.5	100	5
L6215780	1"	11	**19.9**	20	34.6	100	5

* Other coatings are available on your request.

◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Heat Treated Steels	Cast Iron	Stainless Steels	Titanium Alloy	Chrome-Nickel Alloy	Non Ferrous Materials
◎	◎	◎	◎	○	○	○	◎

M Solid Carbide Thread Mill with Coolant Hole & Chamfer for ISO Metric Internal Thread - DIN 13



L4271 SERIES TiAlN

- **Material** : Solid Carbide
- **Shank** : DIN6535 HA
- **Spiral Angle** : 15°
- **Thread Length** : 2×D

unit : mm

EDP No.	Nominal Diameter [D]	Pitch	Cutter Diameter	Shank Diameter	Thread Length	Over All Length	Angle	No. of Flute
TiAlN		P	D_1	D_2	L_1	L_2	A	Z
L4271310	M6	1.0	**4.8**	8	12.4	62	90°	3
L4271360	M8	1.25	**6.5**	10	16.8	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

Carbon Steels	Alloy Steels	Heat Treated Steels	Cast Iron	Stainless Steels	Titanium Alloy	Chrome-Nickel Alloy	Non Ferrous Materials
◎	◎	◎	◎	○	○	○	◎

RECOMMENDED CUTTING SPEED

Application Program Available

RECOMMENDED CUTTING CONDITION for Thread Mills

unit : mm

Material	Cutting Speed (m/min)	Feed per Tooth (fz)	
		Cutter Diameter ≤ Ø8.0	Cutter Diameter 〉Ø8.0
Low Carbon Steel Medium Carbon Steel	80 - 120	0.02 - 0.04	0.04 - 0.10
High Carbon Steel	80 - 120	0.02 - 0.04	0.04 - 0.10
Alloy Steel	80 - 120	0.02 - 0.04	0.04 - 0.10
Heat Treated Steel	60 - 100	0.02 - 0.04	0.04 - 0.10
Stainless Steel	40 - 80	0.01 - 0.02	0.02 - 0.06
Cast Iron	50 - 100	0.02 - 0.04	0.04 - 0.10
Chrome-Nickel Alloys Titanium Alloys	20 - 60	0.01 - 0.02	0.02 - 0.06
Non Ferrous Material	100 - 300	0.03 - 0.07	0.05 - 0.10

RECOMMENDED CUTTING CONDITION for Drill and Thread Mills

unit : mm

Material	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	80-150	0.03-0.08	0.08-0.12	0.10-0.20	0.20-0.25
Aluminium Aluminium-alloy Magnesium	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

TO CALCULATE SPEED & FEED RATES

Calculate R.P.M of cutter

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

Calculate Feed per Revolution

$$F_1 = fz \times Z \times N$$

Finally Calculate Feed at Tool Center Line

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

N : R.P.M
V : Recommended Cutting Speed
d : Diameter of Cutter
fz : Recommended Feed per Tooth
Z : Number of Teeth
F_2 : Feed at Center Line of Cutting
F_1 : Feed at Cutting Edge
D : Major Diameter of Component

THREAD MILLS

Solid Carbide Thread Mill without Coolant Hole
Solid Carbide Thread Mill with Coolant Hole
Solid Carbide Thread Mill with Coolant Hole & Chamfer
Solid Carbide Miniature Thread Mill
Solid Carbide Drill and Thread Mill