

1 Spiral Fluted Tap Series for blind hole

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓn	ℓs	Ds	K	ℓk

JIS

① Spiral Fluted Taps (for blind hole)

② Spiral Fluted Taps (for through hole)

③ Spiral Pointed Taps (for through hole)

④ Hand Taps

⑤ Cemented Carbide Taps

⑥ Roll Taps

⑦ Special Thread Taps Simple inspection tools

⑧ Pipe Taps

⑨ Thread Mills Premium Thread Mills

⑩ Dies

⑪ Center Drills Centering Tools

⑫ Precision Machinery/Metal Surgical Instruments

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①-69

ISP

ISP

Spiral Fluted Taps for General Purpose



Specification



Tapping Speeds depending on Materials

Low carbon steels
低炭素鋼
~5
(m/min)



Blister Pack



Product Features

- The IPS is for a blind hole and mainly used for low speed machining on a drilling machine.
- Use the IPS for tapping iron products like SPC and SS400 where there are a small quantities of threads.
- The ISP has an ideal oxidation surface treatment for tapping iron materials.
- The ISP is ideal for small quantity tapping components such as prototype non-production parts.
- The ISP has spiral flutes to discharge the chips back out of the hole.
- Please use the ISP for tapping of blind holes.



Chips from a tapped hole.

How to Use

- First create the workpiece bore diameter with a drill that matches the screw thread size minor diameter, and then start the tapping.
- Please use a cutting speed of 5 m/min or less.
- When tapping, please use a cutting oil.



Hand tapping using a tap handle.



Machining with a drilling machine.

Thread bored hole diameter table.

Unit: mm

Thread Size	Internal Thread Diameter			Drill Diameter	Percentage of Thread
	Minimum Allowable Bored Hole.	Maximum Allowable Bored Hole.			
		6H (Level 2)	7H (Level 3)		
M3 × 0.5	2.459	2.599	2.639	2.6 (2.5)	74% (92%)
M4 × 0.7	3.242	3.422	3.466	3.4 (3.3)	79% (92%)
M5 × 0.8	4.134	4.344	4.384	4.3 (4.2)	81% (92%)
M6 × 1	4.917	5.153	5.217	5.1 (5.0)	83% (92%)
M8 × 1.25	6.647	6.912	6.982	6.9 (6.8)	91% (89%)
M10 × 1.5	8.376	8.676	8.751	8.6 (8.5)	86% (92%)

Note 1) Recommended bored hole size in this table is for 7H (3rd grade) internal thread, selected from commercially available standard drills.

Note 2) The size of the drill in parentheses is used for cases where the drill cutting oversize is too large or for 6H (2nd grade) internal thread processing.

[Related Products]

Shank Adjuster

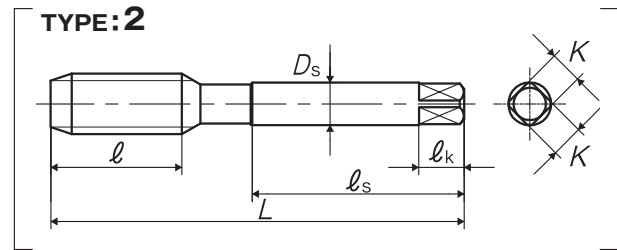
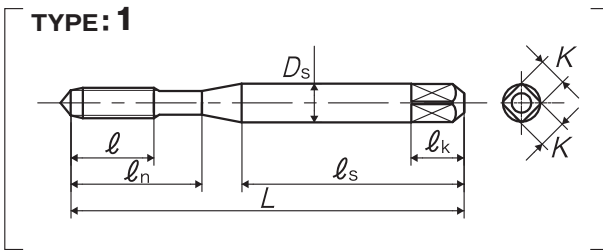
- Use the shank adjuster when tapping into deep holes.
- The I series (IHT / ISP / IPO) can be detached from the shank adjuster with one touch.
- For details on shank adjusters, refer to ⑦-83.



You can also see it from the video site on the right.

Think threads with
YAMAWA

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓ_n	ℓ_s	Ds	K	ℓ_k



Blister Pack

Segment : 1C

Size	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads												
M3 × 0.5	SI73.0GBP	2.5P	46	9	14	26	4	3.2	6	3	1	¥ 910
M4 × 0.7	SI74.0IBP	2.5P	52	11	17	29	5	4	7	3	1	¥ 950
M5 × 0.8	SI75.0KBP	2.5P	60	13	22	33	5.5	4.5	7	3	1	¥ 960
M6 × 1	SI76.0MBP	2.5P	62	15	26	33	6	4.5	7	3	1	¥ 1,010
M8 × 1.25	SI78.0NBP	2.5P	70	19	-	36	6.2	5	8	3	2	¥ 1,550
M10 × 1.5	SI7010OBP	2.5P	75	23	-	38	7	5.5	8	3	2	¥ 1,940

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(for blind hole)

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Hand Taps

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Special Thread Taps
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7

Pipe Taps

8

Thread Mills
Premium Thread Mills

9

Dies

10

Center Drills
Centering Tools

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Precision Machinery/
Medical Surgical Instruments

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