

# 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/  
Medical Surgical Instruments

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①-125

## SU2-SP

Spiral Fluted Taps for Tough Stainless Steels



### Specification



### Tapping Speeds depending on Materials

Low carbon steels 低炭素鋼	Medium carbon steels 中炭素鋼	High carbon steels 高炭素鋼	Alloy steels 合金鋼	Stainless steels ステンレス鋼
5~20 (m/min)	5~20 (m/min)	5~20 (m/min)	5~20 (m/min)	5~15 (m/min)



BLF Shape

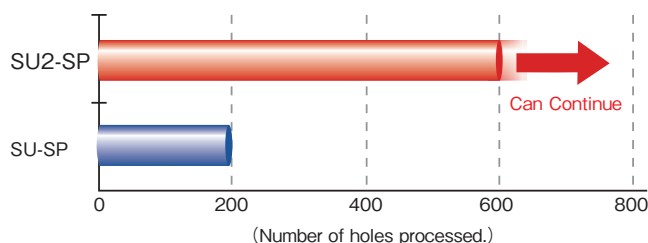
### Product Features

- The SU2-SP is a spiral flute tap for hard to cut stainless steel that is optimum for blind hole machining of stainless steel such as SUS 316 and SUS 317.
- It is a special design of full threads for the first few threads and the balance are half the thread height.
- With this special shape, it is effective in the prevention of flute chipping of the full threads. It reduces tapping torque and has good abrasion resistance while allowing to maintain the screw thread guide specifications.
- It has improved chip ejection from the unique flute design.

### Tapping Data

#### Thread Size [M12×1.75]

Workpiece Material	SUS316
Bored Hole Size	φ10.3
Tapping Length	25mm blind hole
Machinery Type	CNC tapping machine
Tapping Speed	8m/min
Tapping Fluid	Non-water soluble cutting oil



### Characteristics of stainless steel

- It work hardens easily. Chip welding occurs frequently.
- Chip ejection is poor. • It tends to shrink.
- Tool friction tends to occur.

In general wear, austenitic stainless steel have the characteristics described above and are regarded as difficult to cut materials. Among these stainless steels there are a few that have a higher Ni content. Austenitic stainless steel with the Ni content of more than 10% such as SUS 316 is regarded as "difficult-to-cut stainless steel".

Type of Material	Element Content (%)	
	Ni	Cr
SUS303	8.00 ~ 10.00	17.00 ~ 19.00
SUS304	8.00 ~ 10.50	18.00 ~ 20.00
SUS316	10.00 ~ 14.00	16.00 ~ 18.00
SUS317	11.00 ~ 15.00	18.00 ~ 20.00

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1

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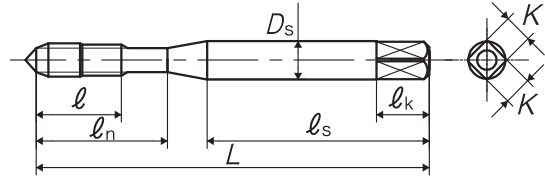
Precision Machinery/  
Metal Surgical Instruments

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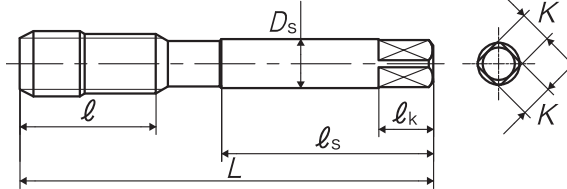
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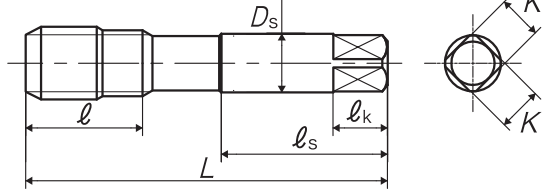
TYPE: 1



TYPE: 2



TYPE: 3



Segment : 1C

Size	Class	Code	Chamfer	L (mm)	$\ell$ (mm)	$\ell_n$ (mm)	$\ell_s$ (mm)	Ds (mm)	K (mm)	$\ell_k$ (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M3 × 0.5	P2	SU2MQ3.0G	3P	46	9	14	26	4	3.2	6	3	1	¥ 1,810
M3.5 × 0.6	P2	SU2MQ3.5H	3P	52	11	16	29	5	4	7	3	1	¥ 1,810 *
M4 × 0.7	P2	SU2MQ4.0I	3P	52	11	17	29	5	4	7	3	1	¥ 1,810
M5 × 0.8	P2	SU2MQ5.0K	3P	60	13	22	33	5.5	4.5	7	3	1	¥ 1,820
M6 × 1	P2	SU2MQ6.0M	3P	62	15	26	33	6	4.5	7	3	1	¥ 2,000
M8 × 1.25	P3	SU2MR8.0N	3P	70	19	-	36	6.2	5	8	3	2	¥ 2,790
M10 × 1.5	P3	SU2MR010O	3P	75	23	-	38	7	5.5	8	3	2	¥ 3,540
M10 × 1.25	P3	SU2MR010N	3P	75	23	-	38	7	5.5	8	3	2	¥ 3,540
M10 × 1	P3	SU2MR010M	3P	75	23	-	38	7	5.5	8	3	2	¥ 4,220 *
M12 × 1.75	P3	SU2MR012P	3P	82	26	-	42	8.5	6.5	9	4	2	¥ 5,030
M12 × 1.5	P3	SU2MR012O	3P	82	26	-	42	8.5	6.5	9	4	2	¥ 5,030 *
M12 × 1.25	P3	SU2MR012N	3P	82	26	-	42	8.5	6.5	9	4	2	¥ 5,030 *
M12 × 1	P3	SU2MR012M	3P	82	26	-	42	8.5	6.5	9	4	2	¥ 5,910 *
M14 × 2	P3	SU2MR014Q	3P	88	26	-	45	10.5	8	11	4	2	¥ 6,850 *
M14 × 1.5	P3	SU2MR014O	3P	88	26	-	45	10.5	8	11	4	2	¥ 6,850 *
M16 × 2	P3	SU2MR016Q	3P	95	26	-	48	12.5	10	13	4	2	¥ 9,160
M16 × 1.5	P3	SU2MR016O	3P	95	26	-	48	12.5	10	13	4	2	¥ 9,160 *
M18 × 2.5	P4	SU2MS018R	3P	100	33	-	51	14	11	14	4	2	¥ 12,300 *
M18 × 1.5	P3	SU2MR018O	3P	100	33	-	51	14	11	14	4	2	¥ 12,300 *
M20 × 2.5	P4	SU2MS020R	3P	105	33	-	50	15	12	15	4	3	¥ 16,800
M20 × 1.5	P4	SU2MS020O	3P	105	33	-	50	15	12	15	4	3	¥ 16,800 *
M22 × 2.5	P4	SU2MS022R	3P	115	33	-	55	17	13	16	4	3	¥ 21,400 *
M22 × 1.5	P4	SU2MS022O	3P	115	33	-	55	17	13	16	4	3	¥ 21,400 *
M24 × 3	P4	SU2MS024S	3P	120	39	-	55	19	15	18	4	3	¥ 26,600 *
M24 × 1.5	P4	SU2MS024O	3P	120	39	-	55	19	15	18	4	3	¥ 26,600 *

\* = Specified Distribution Items. Made to order products.

 Think threads with  
YAMAWA