

② Spiral Fluted Tap Series for through 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

SU+SL

SU+SL

Spiral Fluted Taps for Stainless Steels, Through Hole Use (with LH Spiral Flutes)



Specification



Tapping Speeds depending on Materials

Low carbon steels 低碳素鋼	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
10~15 (m/min)	10~15 (m/min)	10~15 (m/min)	10~15 (m/min)	5~15 (m/min)

Product Features

- Suitable for stainless steels tending to work-harden and sticky, as well as chrome steels and molybdenum steels, through hole use.
- Recommended speed : 5 ~ 15m/min
- In tapping SUS304, SU+SL has more than 3 times longer tool life than SU-PO. Even in 2000 tapping holes, the surface of thread finish is good and the shape of threads is clearly stable.
- Adopting left hand spiral flutes, compared with SU-PO, SU+SL improves the chip ejection and realizes longer tool life.

Tapping Data

Tapping condition [M5×0.8]

Work Material	SUS304(90HRB)
Hole Size	φ4.2
Tapping Length	12mm, through hole
Tapping Speed	15m/min
Machine	Vertical machining center
Tapping Fluid	Non-water soluble cutting oil without chlorine

Comparison of Internal Threads

SU+SL 2,000 Holes



Roughness of Thread Flank Face Ra=1.1 μm

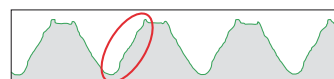


Shape of Internal Thread

SU-PO 700 Holes

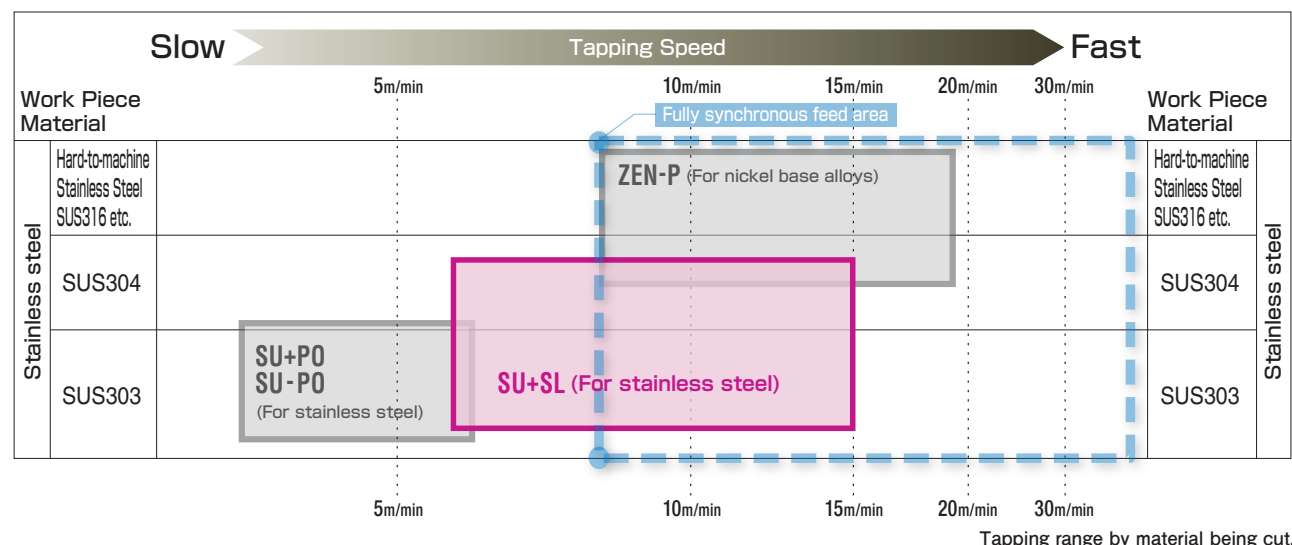


Roughness of Thread Flank Face Ra=2.0 μm



Shape of Internal Thread

Speed chart



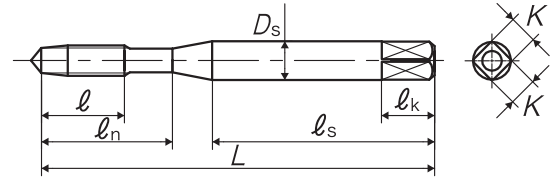
JIS

②-19

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	D_s	K	ℓ_k

TYPE: 1



Segment : 1S

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M3 × 0.5	P2	SUPQ3.0GL	5P	46	9	14	26	4	3.2	6	3	1	¥ 1,560
M4 × 0.7	P2	SUPQ4.0IL	5P	52	11	17	29	5	4	7	3	1	¥ 1,560
M5 × 0.8	P3	SUPR5.0KL	5P	60	13	22	33	5.5	4.5	7	3	1	¥ 1,590
M6 × 1	P2	SUPQ6.0ML	5P	62	15	26	33	6	4.5	7	3	1	¥ 1,840

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