

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓ ₁	ℓ ₂	Ds	K	ℓ _k



SU+SP SU-SP

Mũi Taro Xoắn Dành Cho Inox (Spiral Fluted Taps for Stainless Steels)

Thông Số Kỹ Thuật



• Tên Sản Phẩm Và Size

SU+SP	M2 ~ M6 (Ren thô)
SU-SP	~ M1.7, M2 ~ M6 (ren tinh), M8 ~ , tất cả ren thông nhất U, tất cả ren anh W

Khuyến Nghị Tốc Độ Cắt Dựa Trên Vật Liệu Phôi

Thép Carbon Trung Bình (Medium carbon steels) 中炭素鋼 ~10 (m/min)	Thép Carbon Cao (High carbon steels) 高炭素鋼 ~10 (m/min)	Thép Hợp Kim (Alloy steels) 合金鋼 ~10 (m/min)	INOX (Stainless steels) ステンレス鋼 ~10 (m/min)
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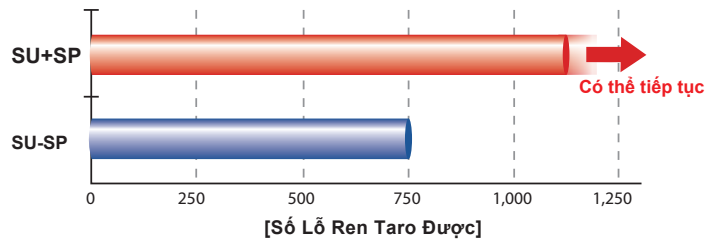
Các Tính Năng Sản Phẩm

- Rãnh xoắn lý tưởng cho gia công lỗ bít, được thiết kế chuyên dụng cho INOX, thép Crôm, Thép molybdenum. Những vật liệu này có đặc tính cứng và dai, rất khó cắt.
- Thiết kế phần ren tối ưu giúp giảm gánh nặng xử lý lên mỗi lưỡi cắt của mũi taro.
- Giảm khả năng kháng cắt và tăng tuổi thọ của mũi taro..
- Phoi thoát ra ổn định và đạt được bề mặt hoàn thiện tốt
- Cải thiện sức mạnh và tuổi thọ trung bình là đạt được.
- Sử dụng trên các máy có bước tiến (feed) đồng bộ như trung tâm gia công CNC hay các máy có feed không đồng bộ như máy khoan taro.

DỮ LIỆU TARO

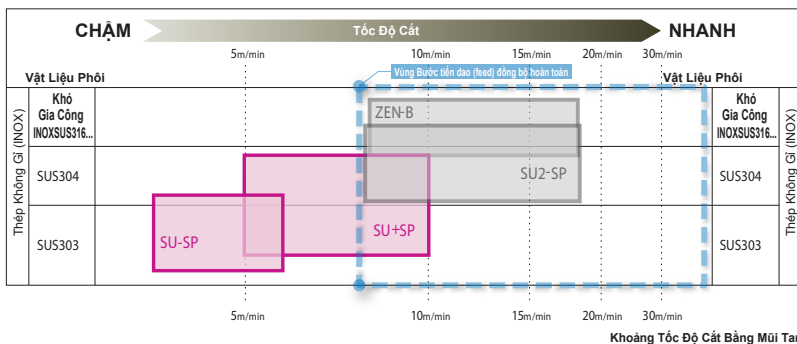
Điều Kiện Gia Công [M6x 1]

Vật liệu phôi	SUS304 (90HRB)
Kt. Lỗ khoan	φ5.0
Chiều dài ren	9mm, lỗ bít
Loại máy	8m/min
Tốc độ taro	Trung tâm gia công đứng (bước tiến dao (feed) đồng bộ hoàn hảo)
Dầu tưới nguội	Dầu cắt gọt không hòa tan (không chứa clo)

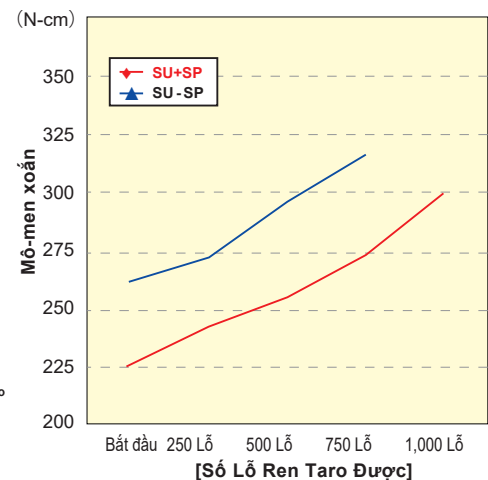


Biểu đồ tốc độ

Mũi taro Inox dành cho lỗ bít



Thay đổi mô-men xoắn



■ GHI CHÚ

- Khi taro vật liệu SS400 và các vật liệu thép mềm bằng SU+SP, nên sử dụng máy có bước tiến (feed) đồng bộ hoàn toàn (ví dụ như trung tâm gia công CNC).
- Nếu chúng được taro bằng máy có bước tiến không đồng bộ như máy khoan hoặc tương tự, thì lỗ ren có thể bị rộng ra.

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

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented
Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills

⑨

Dies

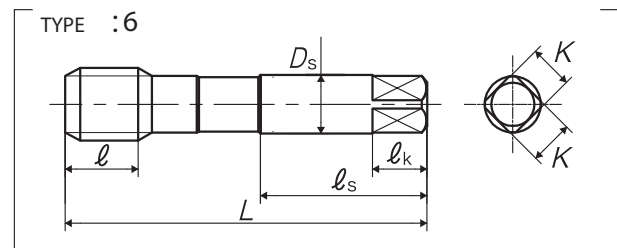
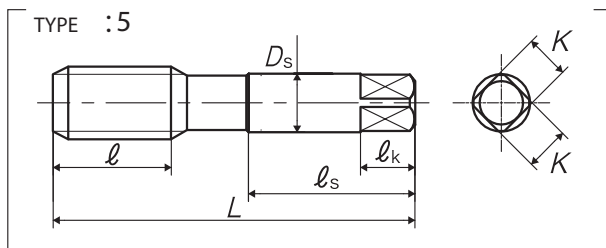
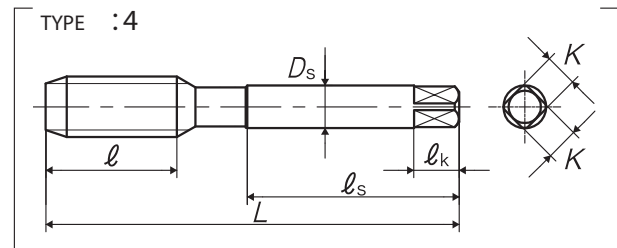
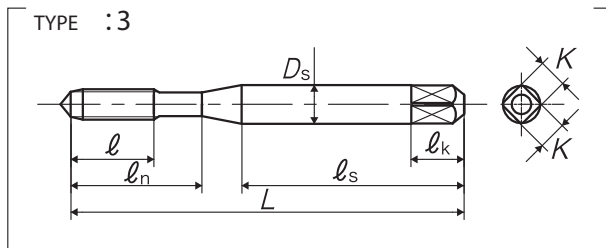
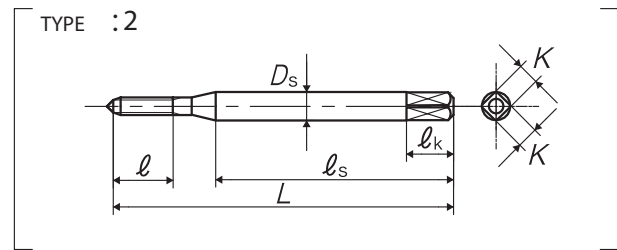
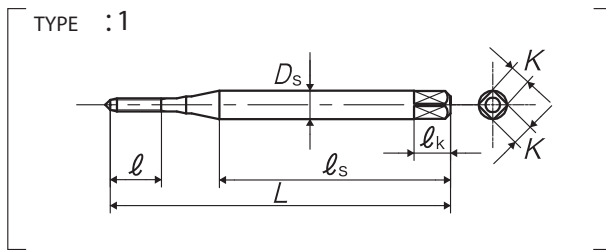
⑩

Center Drills
Centering Tools

⑪

JIS

①-88



SU+SP Mũi taro xoắn dành cho Inox

Dung Sai Lớn (Oversize)

Segment : 1C

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	TYPE	MSRP
Dành Cho Ren Hệ Mét													
M2× 0.4	P1	SUPP2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,480
M2× 0.4	P2	SUPQ2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,480
M2× 0.4	P3	SUPR2.0E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,480
M2.3× 0.4	P1	SUPP2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,260
M2.3× 0.4	P2	SUPQ2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,260
M2.3× 0.4	P3	SUPR2.3E	2.5P	42	7.2	12	27	3	2.5	5	2	3	¥ 2,260
M2.5× 0.45	P1	SUPP2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 1,900
M2.5× 0.45	P2	SUPQ2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 1,900
M2.5× 0.45	P3	SUPR2.5F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 1,900
M2.6× 0.45	P1	SUPP2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 1,900
M2.6× 0.45	P2	SUPQ2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 1,900
M2.6× 0.45	P3	SUPR2.6F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 1,900
M3× 0.5	P1	SUPP3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,330
M3× 0.5	P2	SUPQ3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,330
M3× 0.5	P3	SUPR3.0G	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,330
3M0.6	P1	SUPP3.0H	2.5P	46	9	14	26	4	3.2	6	3	3	¥ 1,330
M3.5× 0.6	P1	SUPP3.5H	2.5P	52	11	16	29	5	4	7	3	3	¥ 1,330
M3.5× 0.6	P3	SUPR3.5H	2.5P	52	11	16	29	5	4	7	3	3	¥ 1,330
M4× 0.7	P2	SUPQ4.0I	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,330
M4× 0.7	P3	SUPR4.0I	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,330
M4× 0.7	P4	SUPS4.0I	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,330
4M0.75	P2	SUPQ4.0J	2.5P	52	11	17	29	5	4	7	3	3	¥ 1,330
M5× 0.8	P2	SUPQ5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,340
M5× 0.8	P3	SUPR5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,340

= Specified Distribution Items. Made to order products.
For improvement, spec may change without advance notice.

Think threads with
YAMAWA

Overall length	Thread length	Thread + Neck length	Shank length	Shank dia.	Size of square	Length of square
L	ℓ	ℓ _h	ℓ _s	D _s	K	ℓ _k

SU+SP Mũi taro xoắn dành cho Inox

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _h (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
M5× 0.8	P4	SUP5.0K	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,340
5M0.9	P2	SUPQ5.0L	2.5P	60	13	22	33	5.5	4.5	7	3	3	¥ 1,340
M6× 1	P2	SUPQ6.0M	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,480
M6× 1	P3	SUPR6.0M	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,480
M6× 1	P4	SUPS6.0M	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,480

SU-SP Mũi taro xoắn dành cho Inox

Dung Sai Lớn (Oversize)

Segment : 1C

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓ _h (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads													
M1.4× 0.3	P1	SUMP1.4C	2.5P	36	5.4	-	24	3	2.5	5	2	1	¥ 3,250
M1.6× 0.35	P1	SUMP1.6D	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,100
M1.7× 0.35	P1	SUMP1.7D	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,100
M1.7× 0.35	P2	SUMQ1.7D	2.5P	36	6.3	-	24	3	2.5	5	2	2	¥ 3,100
M6× 0.75	P2	SUMQ6.0J	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 2,070
M8× 1.25	P2	SUMQ8.0N	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,060
M8× 1.25	P3	SUMR8.0N	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,060
M8× 1.25	P4	SUMS8.0N	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,060
M8× 1	P2	SUMQ8.0M	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,340
M8× 0.75	P2	SUMQ8.0J	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,650
M10× 1.5	P2	SUMQ010O	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 2,630
M10× 1.5	P3	SUMR010O	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 2,630
M10× 1.5	P4	SUMS010O	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 2,630
M10× 1.25	P2	SUMQ010N	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 2,630
M10× 1.25	P3	SUMR010N	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 2,630
M10× 1.25	P4	SUMS010N	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 2,630
M10× 1	P2	SUMQ010M	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,120
M10× 1	P4	SUMS010M	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,120
M12× 1.75	P2	SUMQ012P	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 3,720
M12× 1.75	P3	SUMR012P	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 3,720
M12× 1.75	P4	SUMS012P	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 3,720
M12× 1.5	P2	SUMQ012O	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 3,720
M12× 1.5	P3	SUMR012O	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 3,720
M12× 1.5	P4	SUMS012O	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 3,720
M12× 1.25	P2	SUMQ012N	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 3,720
M12× 1.25	P3	SUMR012N	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 3,720
M12× 1	P2	SUMQ012M	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,370
M14× 2	P2	SUMQ014Q	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 5,080
M14× 2	P3	SUMR014Q	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 5,080
M14× 2	P4	SUMS014Q	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 5,080
M14× 1.5	P2	SUMQ014O	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 5,080
M14× 1.5	P4	SUMS014O	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 5,080
M14× 1	P2	SUMQ014M	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 5,890
M16× 2	P2	SUMQ016Q	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 6,780
M16× 2	P3	SUMR016Q	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 6,780
M16× 2	P4	SUMS016Q	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 6,780
M16× 1.5	P2	SUMQ016O	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 6,780
M16× 1.5	P4	SUMS016O	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 6,780

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

SU-SP Mũi taro xoắn dành cho Inox

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
M18× 2.5	P3	SUMR018R	2.5P	100	33	-	51	14	11	14	4	4	¥ 9,060
M18× 2.5	P4	SUMS018R	2.5P	100	33	-	51	14	11	14	4	4	¥ 9,060
M18× 1.5	P2	SUMQ018O	2.5P	100	33	-	51	14	11	14	4	4	¥ 9,060
M18× 1.5	P4	SUMS018O	2.5P	100	33	-	51	14	11	14	4	4	¥ 9,060
M20× 2.5	P3	SUMR020R	2.5P	105	33	-	50	15	12	15	4	5	¥ 12,400
M20× 2.5	P4	SUMS020R	2.5P	105	33	-	50	15	12	15	4	5	¥ 12,400
M20× 1.5	P3	SUMR020O	2.5P	105	33	-	50	15	12	15	4	5	¥ 12,400
M20× 1.5	P4	SUMS020O	2.5P	105	33	-	50	15	12	15	4	5	¥ 12,400
M22× 2.5	P3	SUMR022R	2.5P	115	33	-	55	17	13	16	4	5	¥ 15,800
M22× 2.5	P4	SUMS022R	2.5P	115	33	-	55	17	13	16	4	5	¥ 15,800
M22× 2.5	P5	SUMT022R	2.5P	115	33	-	55	17	13	16	4	5	¥ 15,800
M22× 1.5	P3	SUMR022O	2.5P	115	33	-	55	17	13	16	4	5	¥ 15,800
M22× 1.5	P4	SUMS022O	2.5P	115	33	-	55	17	13	16	4	5	¥ 15,800
M24× 3	P3	SUMR024S	2.5P	120	39	-	55	19	15	18	4	5	¥ 19,700
M24× 3	P4	SUMS024S	2.5P	120	39	-	55	19	15	18	4	5	¥ 19,700
M24× 3	P5	SUMT024S	2.5P	120	39	-	55	19	15	18	4	5	¥ 19,700
M24× 2	P3	SUMR024Q	2.5P	120	39	-	55	19	15	18	4	5	¥ 19,700
M24× 1.5	P3	SUMR024O	2.5P	120	39	-	55	19	15	18	4	5	¥ 19,700
M24× 1.5	P4	SUMS024O	2.5P	120	39	-	55	19	15	18	4	5	¥ 19,700
M27× 3	P3	SUMR027S	2.5P	130	39	-	60	20	15	18	4	5	¥ 27,900
M27× 1.5	P3	SUMR027O	2.5P	130	39	-	60	20	15	18	4	5	¥ 27,900
M30× 3.5	P4	SUMS030T	2.5P	135	46	-	62	23	17	20	4	5	¥ 35,600
M30× 1.5	P3	SUMR030O	2.5P	135	46	-	62	23	17	20	4	5	¥ 35,600
M33× 3.5	P4	SUMS033T	2.5P	145	46	-	67	25	19	22	4	5	¥ 41,400
M36× 4	P4	SUMS036U	2.5P	155	52	-	71	28	21	24	4	5	¥ 48,000
M39× 4	P4	SUMS039U	2.5P	165	52	-	76	30	23	26	4	5	¥ 55,000
M42× 4.5	P4	SUMS042V	2.5P	175	59	-	81	32	26	30	4	5	¥ 66,900
M42× 1.5	P3	SUMR042O	2.5P	175	27	-	81	32	26	30	4	6	¥ 66,900
M45× 4.5	P4	SUMS045V	2.5P	180	59	-	83	35	26	30	4	5	¥ 77,400
M48× 5	P4	SUMS048W	2.5P	185	65	-	85	38	29	32	4	5	¥ 96,800
Dành Cho Ren Thống Nhất (Unified Threads)													
No.2-56UNC	P1	SUMPUN2E	2.5P	42	8.1	12	27	3	2.5	5	2	3	¥ 2,590
No.3-48UNC	P1	SUMPUN3F	2.5P	46	8.1	14	29	3	2.5	5	2	3	¥ 2,190
No.4-40UNC	P1	SUMPUN4H	2.5P	46	9	14	25	4	3.2	6	2	3	¥ 1,670
No.4-48UNF	P1	SUMPUN4F	2.5P	46	9	14	25	4	3.2	6	2	3	¥ 1,670
No.5-40UNC	P1	SUMPUN5H	2.5P	52	11	16	28	5	4	7	3	3	¥ 1,560
No.5-44UNF	P1	SUMPUN5G	2.5P	52	11	16	28	5	4	7	3	3	¥ 1,560
No.6-32UNC	P2	SUMQUN6J	2.5P	52	11	17	27	5	4	7	3	3	¥ 1,560
No.6-40UNF	P1	SUMPUN6H	2.5P	52	11	17	27	5	4	7	3	3	¥ 1,560
No.8-32UNC	P2	SUMQUN8J	2.5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,570
No.8-36UNF	P2	SUMQUN8I	2.5P	60	13	22	31	5.5	4.5	7	3	3	¥ 1,600
No.10-24UNC	P2	SUMQUNAM	2.5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,600
No.10-32UNF	P2	SUMQUNAJ	2.5P	60	13	22	32	5.5	4.5	7	3	3	¥ 1,600
1/4-20UNC	P2	SUMQU04N	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,700
1/4-28UNF	P2	SUMQU04K	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,700
5/16-18UNC	P2	SUMQU05O	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,370
5/16-24UNF	P2	SUMQU05M	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,370
3/8-16UNC	P2	SUMQU06P	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,040
3/8-24UNF	P2	SUMQU06M	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,040

= Specified Distribution Items. Made to order products.
For improvement, spec may change without advance notice.

Think threads with
YAMAWA

1

JIS

Spiral Fluted Taps
(for blind hole)

①

Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

Hand Taps

④

Cemented Carbide Taps

⑤

Roll Taps

⑥

Special Thread Taps
Simple Inspection Tools

⑦

Pipe Taps

⑧

Thread Mills

⑨

Dies

⑩

Center Drills
Centering Tools

⑪

JIS

①-90

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

SU-SP Mũi taro xoắn dành cho Inox

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

⑩ Dies

⑪ Center Drills Centering Tools

JIS

①-91

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
7/16-14UNC	P3	SUMRU07Q	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,280
7/16-20UNF	P2	SUMQU07N	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,280
1/2-13UNC	P3	SUMRU08R	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 4,550
1/2-20UNF	P2	SUMQU08N	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 4,550
5/8-11UNC	P3	SUMRU10U	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 6,780
5/8-18UNF	P2	SUMQU10O	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 6,780
3/4-10UNC	P3	SUMRU12V	2.5P	105	33	-	50	15	12	15	4	5	¥ 12,400
3/4-16UNF	P3	SUMRU12P	2.5P	105	33	-	50	15	12	15	4	5	¥ 12,400
7/8-9UNC	P3	SUMRU14W	2.5P	115	33	-	55	17	13	16	4	5	¥ 17,400
7/8-14UNF	P3	SUMRU14Q	2.5P	115	33	-	55	17	13	16	4	5	¥ 17,400
1-8UNC	P3	SUMRU16X	2.5P	125	39	-	58	19	15	18	4	5	¥ 25,900
1-12UNF	P3	SUMRU16S	2.5P	125	39	-	58	19	15	18	4	5	¥ 25,900
Dành Cho Ren Anh (Whitworth Threads)													
3/16W24	P2	SUMQW03M	2.5P	60	13	21	32	5.5	4.5	7	3	3	¥ 1,570
1/4W20	P2	SUMQW04N	2.5P	62	15	26	33	6	4.5	7	3	3	¥ 1,680
5/16W18	P2	SUMQW05O	2.5P	70	19	-	36	6.2	5	8	3	4	¥ 2,370
3/8W16	P2	SUMQW06P	2.5P	75	23	-	38	7	5.5	8	3	4	¥ 3,040
7/16W14	P3	SUMRW07Q	2.5P	82	26	-	42	8.5	6.5	9	3	4	¥ 4,280
1/2W12	P3	SUMRW08S	2.5P	88	26	-	45	10.5	8	11	3	4	¥ 4,550
9/16W12	P3	SUMRW09S	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 6,780
5/8W11	P3	SUMRW10U	2.5P	95	26	-	48	12.5	10	13	3	4	¥ 6,780
3/4W10	P3	SUMRW12V	2.5P	105	33	-	50	15	12	15	4	5	¥ 12,400
7/8W9	P3	SUMRW14W	2.5P	115	33	-	55	17	13	16	4	5	¥ 17,400
1 W8	P3	SUMRW16X	2.5P	125	39	-	58	19	15	18	4	5	¥ 25,900