

5 Cemented Carbide Tap Series

Overall length	Thread length	Shank dia.	Size of square	Length of square
L	ℓ	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

JIS

⑤-23

JIS

EH-CT

Carbide Taps for Hard Materials



Specification



Tapping Speeds depending on Materials

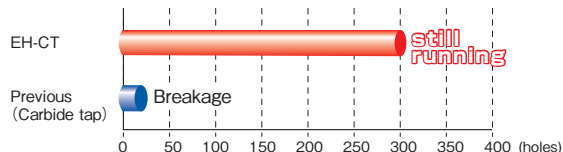
Thermal refined steels
調質鋼
~5
(m/min)
45~55HRC

Product Features

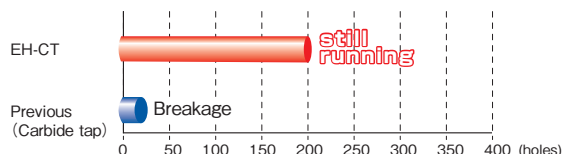
- Ideal for high hardness steel tapping from 45 to 55 HRC. For hot mold SKS 3 and SKD 11.
- The ultra fine grain cemented carbide is superior in abrasion resistance and impact resistance.
- Better concentricity improves the accuracy of the entire tap and roundness of the shank.
- Recommended tapping length is "Major diameter size x 1.5" or less 5P chamfer for better tool life.
- For the bored hole diameter, the maximum minor diameter of a 6H internal thread diameter maximum value is recommended.

Tapping Data [M8×1.25]

Tapping Data

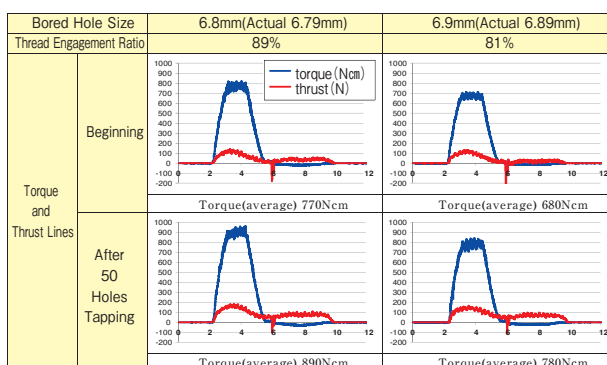


Work Material	Type	Hot forged die steel (SKD61)
	Hardness	50HRC
Tapping Speed		6m/min
Feed		Full rigid
Tapping Fluid		Non-water soluble cutting oil



Work Material	Type	Stainless steel for plastic die (SUS420J2)
	Hardness	52HRC
Tapping Speed		6m/min
Feed		Full rigid
Tapping Fluid		Non-water soluble cutting oil

(Torque line in the different bored hole size)



Tapping condition

Work Material	DAC (equivalent to SKD61) 50HRC
Tapping Speed	6m/min
Feed	Rigid
Tapping Fluid	Non-water soluble cutting oil

Bored hole size enlarged by 0.1mm can reduce the tapping resistance torque by 10%.

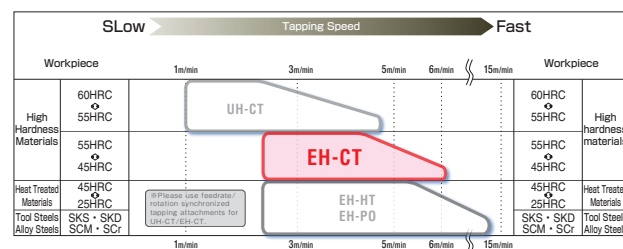
In tapping the material of high hardness, it is recommendable to make the bored hole size as large as possible.

Recommended bored hole size (for reference)

unit : mm

Size	Recommended Bored Hole Size	Minor Dia. of JIS 6H Class Internal Screw Thread	
		Max. Tolerance	Min. Tolerance
M3 × 0.5	2.56	2.599	2.459
M4 × 0.7	3.40	3.422	3.242
M5 × 0.8	4.30	4.334	4.134
M6 × 1	5.10	5.153	4.917
M8 × 1.25	6.90	6.912	6.647
M10 × 1.5	8.60	8.676	8.376
M12 × 1.75	10.4	10.441	10.106

Application



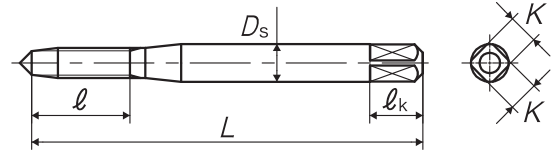
Think threads with
YAMAWA

Overall length	Thread length	Shank dia.	Size of square	Length of square
L	ℓ	Ds	K	ℓ_k

5

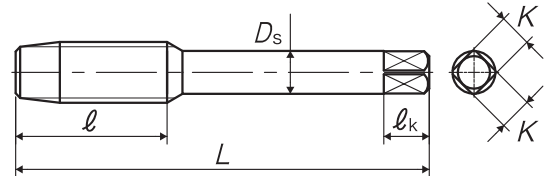
JIS

TYPE: 1

Spiral Fluted Taps
(for blind hole)

①

TYPE: 3

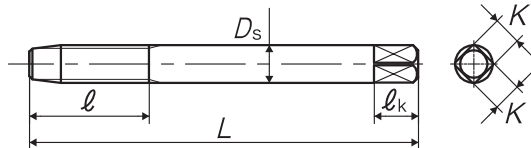
Spiral Fluted Taps
(for through hole)

②

Spiral Pointed Taps
(for through hole)

③

TYPE: 2



Hand Taps

④

Segment : 1L

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	No. of flutes	TYPE	MSRP
For Metric Threads											
M3 × 0.5	P3	EHCR3.0G5	5P	46	11	4	3.2	6	4	1	¥ 15,800
M4 × 0.7	P3	EHCR4.0I5	5P	52	13	5	4	7	4	1	¥ 16,700
M5 × 0.8	P3	EHCR5.0K5	5P	60	16	5.5	4.5	7	4	1	¥ 17,400
M6 × 1	P3	EHCR6.0M5	5P	62	19	6	4.5	7	5	2	¥ 18,900
M8 × 1.25	P4	EHCS8.0N5	5P	70	22	6.2	5	8	5	3	¥ 23,400
M10 × 1.5	P4	EHCS010O5	5P	75	24	7	5.5	8	5	3	¥ 31,600
M12 × 1.75	P4	EHCS012P5	5P	82	30	8.5	6.5	9	5	3	¥ 41,600

Cemented
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