2 Spiral Fluted Tap Series for through hole

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

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JIS

ral Fluted Tap

Spiral Fluted Taps

Spiral Pointed Taps
(for through hole)

Hand Taps

Cemented bide Taps

(9) Roll Taps

Special Thread Tap

8) Pipe Tar

Thread Mills
Premium Thread Mills

ter Drills

(10)

Precision Machinery/

Spiral Fluted Taps for Carbo

MHSL-J

Medium Hardness

Spiral Fluted Taps for Carbon Steels of Medium Hardness, Through Hole Use (with LH Spiral Flutes) JIS

Specification











Tapping Speeds depending on Materials

m carbon steels 中炭素鋼 つ~20 m/min)

High carbon stee 高炭素鋼 10~20 (m/min) Alloy steels 合金綱 10~20 (m/min) Thermal refined steels 調質網 10~20 (m/min) 25~35HRC Tool steels 工具網 **5~15** (m/min)

Product Features

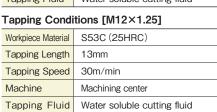
- ●Ideal for forged products and tempered S48C to S55C materials from 25 to 35 HRC.
- Produced from HSS-Co materials with a special coating for enhanced wear resistance and to improve long tool life.
- The original left hand spiral flute shape is used to produce a smooth chip discharge and increase performance in the medium tapping speed range. Also, the MHSL improves the internal threads surface finish.

Improved chip ejection!

Tapping Data

Tapping Conditions [M12×1.25]

Workpiece Material	S53C (forged) / Hub bearing						
Bored Hole Size	φ10.8						
Tapping Length	12mm through hole						
Tapping Speed	30m/min						
Machine	Horizontal machining center (fully synchronized feed)						
Tapping Fluid	Water soluble cutting fluid						



MHSL-J Competitors Spiral Point Tap 0 500 1000 1500 2000 2500 3000 (Number of holoes processed.)

Enhanced wear res	istance	Improved surface finish						
The previous model caused shorman noise after tapping 1,239 holes. Left-hard spiral With surface treatment 1,239 holes Will works well with surface treatment 1,239 holes will works well with surface treatment 1,239 holes will works well with surface treatment 1,239 holes will work well with surface treatment 1,239 holes will work well with surface treatment 1,239 holes will work well work with surface treatment 1,239 holes will work well work with surface treatment 1,239 holes will work with surface treatment 1,239 holes will work with surface treatment 1,239 holes with surface treatment 1,239 holes will work with surface treatment 1,239 holes will work with surface treatment 1,239 holes with surface treat		PO bright finite lapping internal three Left-hand spi With surface treatment in Initial tapping internal three internal three treatment in Initial tapping internal three.	al					

Tapping examples on the market

MHSL-J	Workpiece Material		Tap	Remarks					
Nominal Size	Material Symbol (Hardness)	Pilot Hole Size (mm)	Tapping Length (mm)*	Machine	Cutting Speed (m/min)	Feed Mechanism Cutting Oil		Lifetime (Holes or Pieces)	Previous State / Workpiece name
M6 × 1	S35C	5.1	12 (2D)	Horizontal MC	7.5	Synchronized	Non-water soluble	10,000	Bad surface finish * Workpiece name: Shafts
M8 × 1.25	S45C	6.8	8 (1D)	Vertical MC	40	Synchronized	Water soluble	9,120	Replaced after tapping 5,200 holes * Workpiece name: Shafts
M8 × 1.25	S55C (25HRC)	6.85	12 (1.5D)	Vertical MC	30	Synchronized	Water soluble	2,160	Unstable tool life * Workpiece name: Clutch parts
M10 × 1.25	S45C (23HRC)	8.8	20 (2D)	Vertical MC	8	Synchronized	Water soluble	2,450	Replaced after tapping 1,600 holes * Workpiece name: Arms
M12 × 1.75	S55C (27HRC)	10.4	12 (1D)	Vertical MC	19	Synchronized	Water soluble	2,840	Unstable tool life * Workpiece name: Hub bearings
M14 × 1.5	S53C (25HRC)	12.6	14 (1D)	Vertical MC	32	Synchronized	Water soluble	4,430	Replaced due to excessive torque after tapping 3,000 holes * Workpiece name: Hub bearings
M14 × 1.5	S55C (23HRC)	12.6	14 (1D)	Vertical MC	22	Synchronized	Water soluble	2,700	Replaced after tapping 2,000 holes * Workpiece name: Hub bearings

^{* (}D) indicates the ratio of the tapping length to the outside diameter.

Examples of machined parts

Excellent durability for tapping through holes in medium hard steels for such as hub bearings of bicycles.





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

Spiral Pointed Taps Spiral Fluted Taps Spiral Fluted Taps (for through hole) (for through hole) (for bind hole)

Hand Taps

4 Carbide Taps

Roll Taps 6

Pipe Taps | Special Thread Taps | Simple Inspection Tools |

Thread Mills | Oremium Thread Mills |

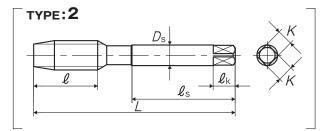
Dies

10

Center Drills
Centering Tools

Precision Machinery/ | Medical Surgical Instruments |

TYPE: 1				_
l l	D _s	······································	ℓ _k	**************************************



Segment: 1T

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	TYPE	MSRP
	For Metric Threads												
$M6 \times 1$	P3	MHSLR6.0M5	5P	62	15	26	33	6	4.5	7	3	1	¥ 3,280
M8 × 1.25	P4	MHSLS8.0N5	5P	70	19	-	36	6.2	5	8	3	2	¥ 4,270
$M10 \times 1.5$	P4	MHSLS010O5	5P	75	23	-	38	7	5.5	8	3	2	¥ 4,990
M10 × 1.25	P4	MHSLS010N5	5P	75	23	-	38	7	5.5	8	3	2	¥ 4,990
$M12 \times 1.75$	P5	MHSLT012P5	5P	82	26	-	42	8.5	6.5	9	4	2	¥ 6,530
$M12 \times 1.5$	P5	MHSLT012O5	5P	82	26	-	42	8.5	6.5	9	4	2	¥ 6,530
$M12 \times 1.25$	P5	MHSLT012N7	7P	82	26	-	42	8.5	6.5	9	4	2	¥ 6,530
$M14 \times 1.5$	P5	MHSLT01407	7P	88	26	-	45	10.5	8	11	4	2	¥ 9,100
$M16 \times 1.5$	P5	MHSLT016O7	7P	95	26	-	48	12.5	10	13	4	2	¥ 12,400