

Cutter dia.	Overall length	Thread length	Shank dia.
Dc	L	ℓ	Ds

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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MC-CSLC

Carbide Thread Mills for Metric Internal Threads



Specification



Tapping Speeds depending on Materials

High carbon steels 高炭素鋼 50~120 (m/min)	Alloy steels 合金鋼 30~80 (m/min)	Thermal refined steels 調質鋼 30~60 (m/min)	Stainless steels ステンレス鋼 30~100 (m/min)	Tool steels 工具鋼 30~60 (m/min)	Cast irons 鑄鉄 50~120 (m/min)	Brass 黄銅 50~120 (m/min)	Aluminum alloy castings アルミ合金鋳物 60~150 (m/min)
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25~35HRC

Product Features

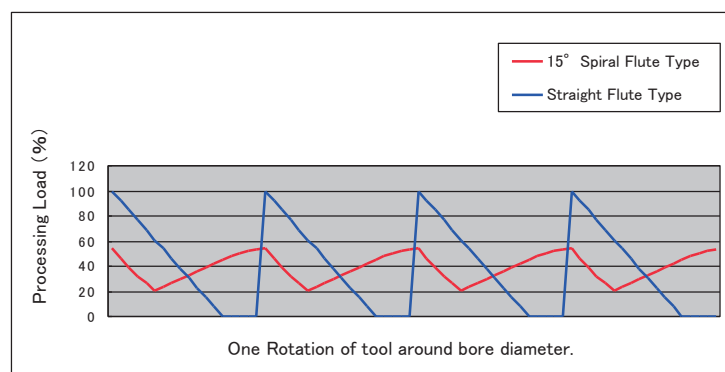
- The same MC-CSLC can process right and left hand internal threads by using the helical interpolating process. The MC-CSLC can process different diameters of internal threads with one tool if they have the same pitch.
- The MC-CSLC can be used for a wide range of work piece materials such as aluminum, aluminum alloy, copper, copper alloy, cast iron, stainless steel, tool steel, alloy steel, carbon steel, thermal refined steel.
- The tool is produced from an ultrafine grain cemented carbide material that offers high wear resistance. It has a special coating to gain additional tool life.
- Blind hole internal thread machining with a few incomplete threads is possible.
- The MC-CSLC is a spiral fluted thread mill that reduces processing torque when compared to straight flute type.

Cutting data

Cutting Conditions [M14×1.5]

Cutter Diameter	φ10
Cutting length	20mm
Number of Flutes	4
Bored Hole Size	φ12.5
Flute type	Straight and spiral

Comparison of cutting torques



* The graph above is simulation figures, not an actual measurement value.

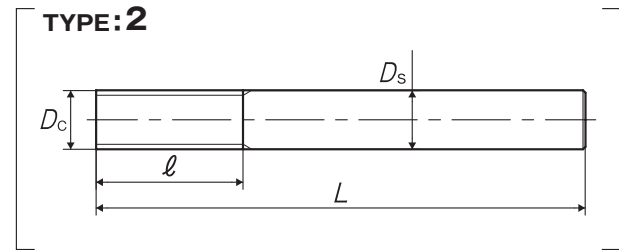
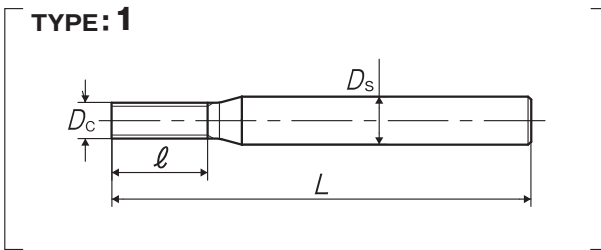
The graph on the upper right is a diagram of the machining torque change of a straight flute thread mill compared to a spiral flute thread mill. The spiral flute thread mill reduces torque by 40% and has a lower fluctuation rate than a straight flute thread mill.

• For the details of how to use thread mills, please refer to Technical information P.72 to P.78.

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Segment : 1L

Tool No.	Code	Cutter diameter Dc (mm)	Pitch (mm)	L (mm)	ℓ (mm)	Ds (mm)	No. of flutes	Min.size	TYPE	MSRP
For Metric Threads										
035083N080M	CSLCN3.5K	3.5	0.8	50	8	6	3	5	1	¥ 48,300*
035083N075M	CSLCN3.5J	3.5	0.75	50	8	6	3	5	1	¥ 48,300*
040123N100M	CSLCN4.0M	4	1	60	12	6	3	6	1	¥ 50,800*
060163N125M	CSLCN6.0N	6	1.25	70	16	8	3	8	1	¥ 51,900
060163N100M	CSLCN6.0M	6	1	70	16	8	3	8	1	¥ 51,900
060163N050M	CSLCN6.0G	6	0.5	70	16	8	3	8	1	¥ 51,900
075203N150M	CSLCN7.5O	7.5	1.5	70	20	8	3	10	2	¥ 64,000
075203N125M	CSLCN7.5N	7.5	1.25	70	20	8	3	10	2	¥ 64,000*
080203N100M	CSLCN8.0M	8	1	70	20	8	3	12	2	¥ 65,800*
080203N050M	CSLCN8.0G	8	0.5	70	20	8	3	12	2	¥ 65,800*
090244N175M	CSLCN9.0P	9	1.75	90	24	10	4	12	2	¥ 71,500
090244N125M	CSLCN9.0N	9	1.25	90	24	10	4	12	2	¥ 71,500
100254N200M	CSLCN10.0Q	10	2	90	25	10	4	14	2	¥ 84,900
100254N150M	CSLCN10.0O	10	1.5	90	25	10	4	14	2	¥ 84,900
100254N100M	CSLCN10.0M	10	1	90	25	10	4	14	2	¥ 84,900
100254N050M	CSLCN10.0G	10	0.5	90	25	10	4	14	2	¥ 84,900
120304N200M	CSLCN12.0Q	12	2	100	30	12	4	17	2	¥103,000
120304N150M	CSLCN12.0O	12	1.5	100	30	12	4	17	2	¥103,000
120304N100M	CSLCN12.0M	12	1	100	30	12	4	17	2	¥103,000
160404N250M	CSLCN16.0R	16	2.5	110	40	16	4	23	2	¥148,000
160404N200M	CSLCN16.0Q	16	2	110	40	16	4	23	2	¥148,000
160404N150M	CSLCN16.0O	16	1.5	110	40	16	4	23	2	¥148,000
200505N300M	CSLCN20.0S	20	3	140	50	20	5	28	2	¥216,000
200505N200M	CSLCN20.0Q	20	2	140	50	20	5	28	2	¥216,000
200505N150M	CSLCN20.0O	20	1.5	140	50	20	5	28	2	¥216,000

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※ = Specified Distribution Items. Made to order products.

 Think threads with
YAMAWA