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Outstanding performance in tapping Aluminium Alloy Diecasting materials and others.



#### Features of products

## **AXE-HT** AXE Hand Taps



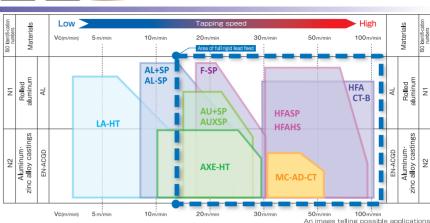




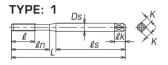


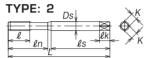
YAMAWA

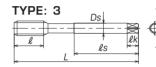
- Long tool life ... Special cutting edge design results in little damage on the cutting edge. Combination of premium powder HSS (featuring high wear resistance and heat resistance) and TiN coating brings out 5 times longer tool life than previous taps designed for aluminium.
- Reliable screw threads ... Cutting edge with little damage restricts both the size change of internal threads and the reduction of surface roughness.
- Wider range of application, from middle speed tapping to high speed tapping ... Most preferable combination of negative rake angle and eccentric relief enables AXE taps to be applicable in wider range, from middle speed to high speed.

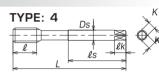


### Table of dimensions and sizes







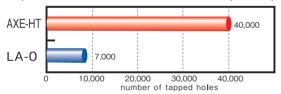


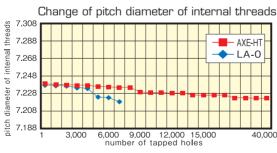
size	class	code	Chamfer		L (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	K (mm)	ℓk (mm)	No. of flutes	Туре
M 6×1	IS02X	TD6.0MBLPVA	1.5P	80	15	30	45	6	4.9	8	3	1
M 8×1.25	IS02X	TD8.0NBLPVA	1.5P	90	19	35	47	8	6.2	9	4	2
M10×1.5	ISO2X	TD0100BLPVA	1.5P	100	23	39	52	10	8	11	4	2
M10×1.25	IS02X	TM010NBLPVA	1.5P	100	23	-	51	7	5.5	8	4	4
M10×1	ISO2X	TM010MBLPVA	1.5P	90	19	-	46	7	5.5	8	4	4
M12×1.75	ISO2X	TG012PBLPVA	1.5P	110	26	-	56	12	9	12	4	3
M12×1.5	ISO2X	TM0120BLPVA	1.5P	100	21	-	51	9	7	10	4	4
M12×1.25	ISO2X	TM012NBLPVA	1.5P	100	21	-	51	9	7	10	4	4

Tap's accuracy classes do not always ensure the accuracy of internal screws.

## **Tapping data**

Comparison of tool life between AXE-HT and LA-O (previous product)





Tap M8 1.25

AXE-HT: HSS-P Special coating

LA-O: HSS-E NI

■Work material: AC4A-T6 treated

■Tapping length: 13 mm (blind hole)

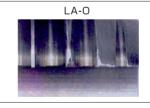
■Tapping speed: 10 m/min

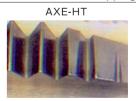
■Machine: Transfer machine

■Feed: Lead screw feed ■Bored hole: \$\phi 6.8

■Tapping fluid: Water soluble oil (x30)

Damage at cutting edge after 7,000 holes tapping





#### **W**arning

- ◆ Tools may shatter. Wear cover or eye glasses to avoid injury during tapping.
- ◆ Tools may be shatter. Use tools under the proper tapping condition.
- Never wear gloves during turning operations as the gloves may get caught with the tools.
- ♦ Wear safety shoes to avoid injuring yourself by the falling tools.
- On attaching tools to the machine, fasten firmly to avoid chattering and run-out.
- Fasten the workpieces firmly so that they never move during operation. Never use worn tools or damaged tools with chipping.
- ◆ Take a special care to fire trouble. High temperature during machining may cause fire.

Please note that specification may change without advance notice.









