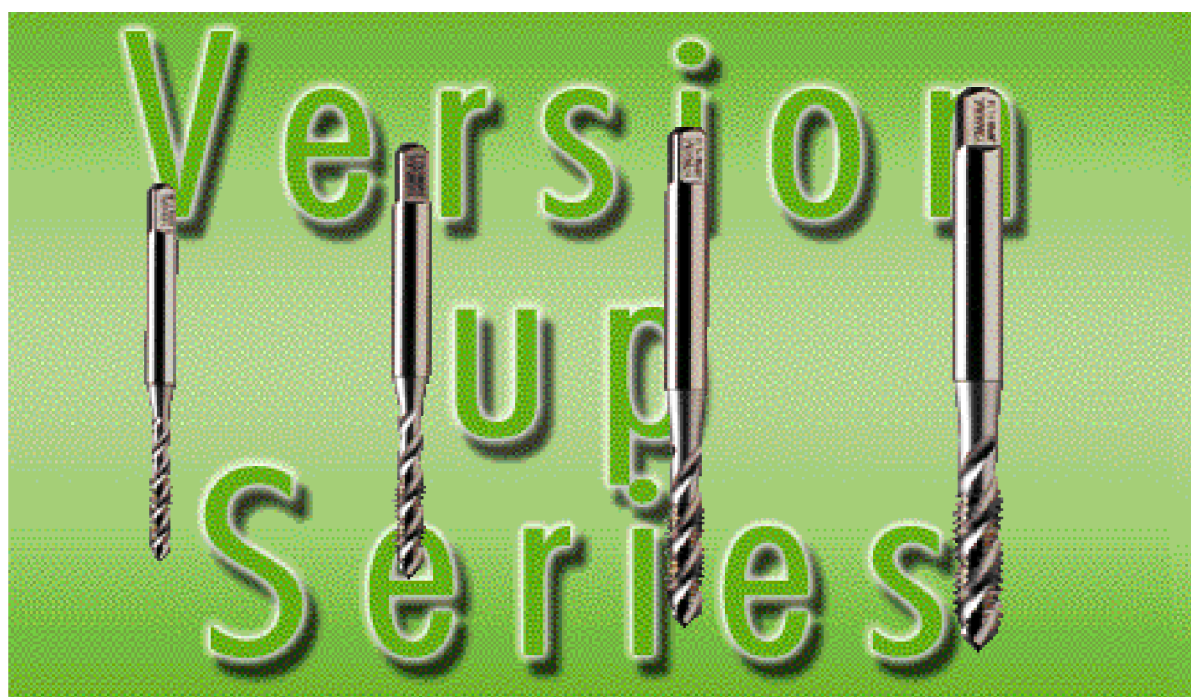


YAMAWA Version up Series

N+SP

Version up
Further evolutions of YAMAWA SP taps



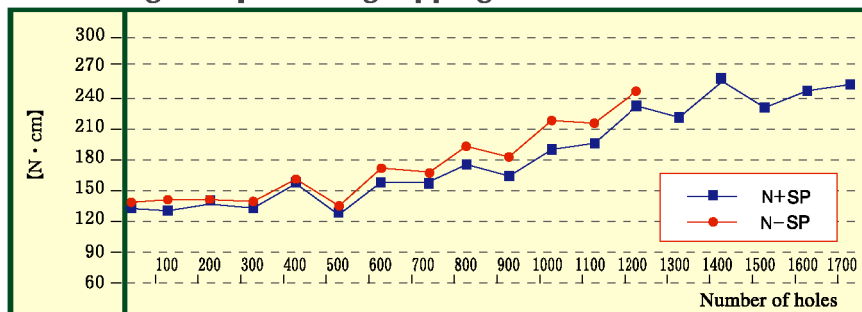
YAMAWA VERSION UP Spiral Fluted Taps (N+SP)

Now, high speed, high precision tapping and precision tool holders are widely applicable for thread tapping. Yamawa Version Up Spiral Fluted Taps (N+SP) are designed with a special Tap's blank and geometry of thread portion to achieve the extension of the tool life. The production range of N+SP is from M3 to M6.

The feature of Version Up Spiral Fluted Taps (N+SP)

- Taps are specially designed with lesser run-out of tap and new blank for high speed and high precision tapping.
- Chamfer portion of tap is specially designed to reduce the tapping load of each chamfer thread. It results in lesser tapping torque and improvement of wear resistance.

The average torque during tapping SCM440



Tapping condition data is on the backside.

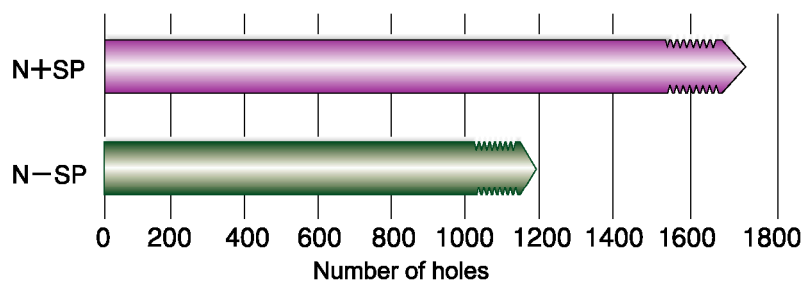


Version Up Spiral Fluted Taps

**Feel the performance of version up SP taps!!
Improvement of your operating efficiency!!**

N+SP is designed with various advanced geometries to enhance the tapping performance. Chart shows the result that the tool life of N+SP is 30% longer than that of N-SP comparing between N+SP and N-SP under following tapping conditions.

Comparison test of tool life between N+SP and N-SP.

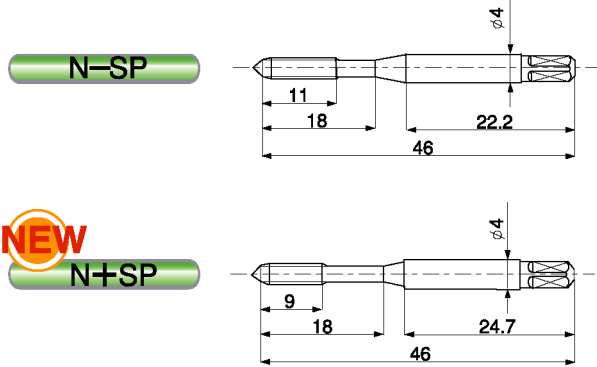


[Tapping condition]

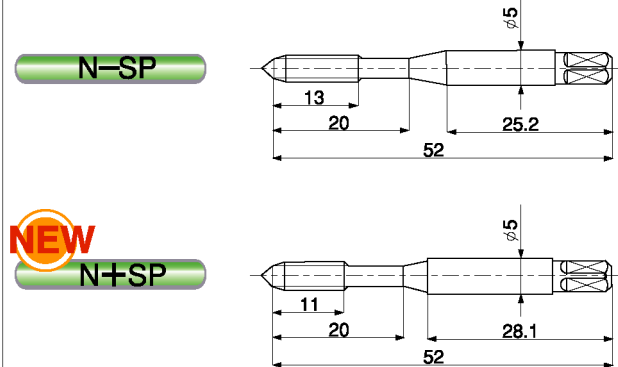
Tap: N+SP and N-SP
 Dimension: M5X0.8
 Hole size: 4.2mm
 Work material: SCM440(17 to 19HRC)
 Tapping length: 7.6mm Blind hole
 Machine: Vertical type Machining center
 (Full Synchronized tapping)
 Tapping speed: 15m/min (955min-1)
 Lubricant: Water soluble oil (5%)

Tap figures

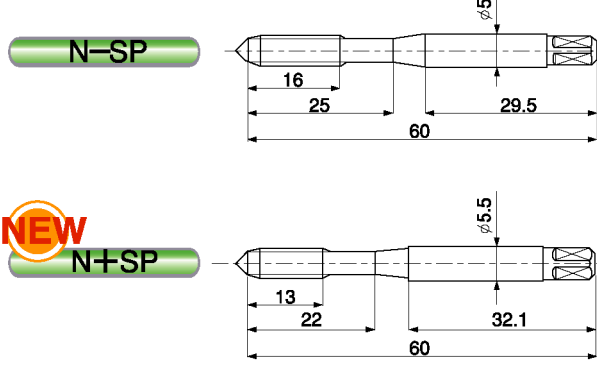
M3X0.5



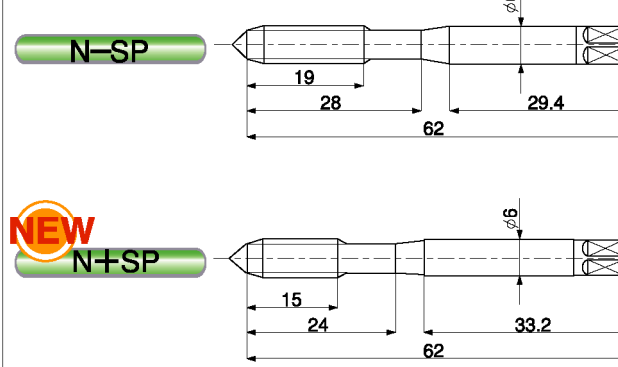
M4X0.7



M5X0.8



M6X1



YAMAWA MFG. CO., LTD.

NAKAJIMA GOLD BLDG. 8F
 13-10 KYOBASHI 3-CHOME,
 CHUO-KU, TOKYO 104-0031, JAPAN
 TEL: +81-3-3561-2717
 FAX: +81-3-3564-6838



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