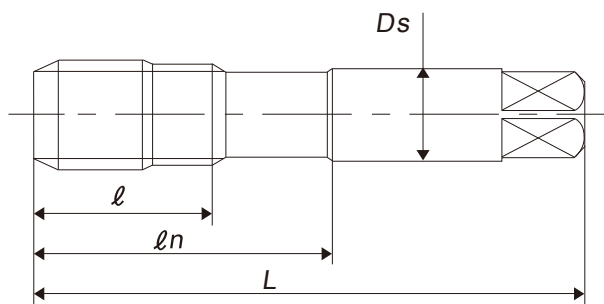


FHVSF

Spiral fluted taps
for forged parts
in the heavy
metalworking
industry



Dimension



Total length (L) lengthened for better chip ejection.

Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	Ds (mm)	No. of flutes
M12×1.75	P4	SY012PSEEXJ	2.5P	110	26	56	8.5	3
M14×2	P4	SY014QSEEXJ	2.5P	110	26	56	10.5	3
M16×2	P4	SY016QSEEXJ	2.5P	110	26	56	12.5	3
M18×2.5	P5	SY018RTEEXJ	2.5P	125	33	64	14	4
M20×2.5	P5	SY020RTEEXJ	2.5P	140	33	71	15	4
M22×2.5	P5	SY022RTEEXJ	2.5P	140	33	71	17	4
M24×3	P5	SY024STEEXJ	2.5P	160	37	82	19	4
M27×3	P5	SY027STEEXJ	2.5P	160	37	82	20	4
M30×3.5	P6	SY030TUEEXJ	2.5P	180	44	92	23	4
M30×3	P6	SY030SUEEXJ	2.5P	180	44	92	23	4
M33×3.5	P6	SY033TUEEXJ	2.5P	180	46	92	25	4
M33×3	P6	SY033SUEEXJ	2.5P	180	46	92	25	4
M36×4	P6	SY036UUEEXJ	2.5P	200	52	102	28	4
M36×3	P6	SY036SUEEXJ	2.5P	200	52	102	28	4
M39×4	P6	SY039UUEEXJ	2.5P	200	52	102	30	4
M39×3	P6	SY039SUEEXJ	2.5P	200	52	102	30	4
M42×4.5	P6	SY042VUEEXJ	2.5P	200	59	102	32	4
M42×3	P6	SY042SUEEXJ	2.5P	200	59	102	32	4
M48×5	P6	SY048WUEEXJ	2.5P	250	65	128	38	4
M48×3	P6	SY048SUEEXJ	2.5P	250	65	128	38	4

Application range for various materials.

Recommended tapping conditions for the HVSP tap series.

Workpiece material	Recommended tapping speed (m/min)
Stainless steels SUS303/SUS304/SUS316	3~8
Alloy steels SCM/SCr	3~8
High carbon steels S45C~	3~8
Medium carbon steels S25C~S45C	3~8
Low carbon steels ~S20C/SS400	3~8

The HVSP solves chipping problems in the taps thread and on the cutting chamfer of the tap.

Recommended tapping conditions for a HVSP: M36X4

Workpiece material	SS400
Tapping speed	3m/min
Thread Depth	50mm
Machining	Radial drilling machine
Tapping oil	Water insoluble

• Full thread portion

Chipping problems caused with a conventional tap.



No chipping occurs with a HVSP tap after tapping 250 holes.



• Chamfer thread portion

Chipping problems caused with a conventional tap.



No chipping occurs with a HVSP tap after tapping 250 holes.



Chipping problems are reduced significantly from a unique flute design and a BLF (Special crest design).

Improvements in chip ejection occur from the unique flute design and the advanced cutting angle.

An improved heel cut on the tap produces excellent cutting performance and results in the prevention of flute chipping problems.

Preventing chipping problems on the taps threads and cutting chamfer during the taps reversal significantly improves tool life.

The HVSP taps are specially designed to have several full height threads in the beginning of the tap and the balance of the threads are at half height. This results in high performance and the prevention of chipping on the full thread portion of the tap.

Warning

- ◆Tools may shatter. Wear cover or eye glass 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.

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