

Think threads with  
**YAMAWA**

**X SERIES**

# PT-X SP-PT-X

New pipe taps specific for tapping on machine operation.

■ Taps for pipe taper threads ■

Straight flute type

**PT-X**

Spiral flute type

**SP-PT-X**



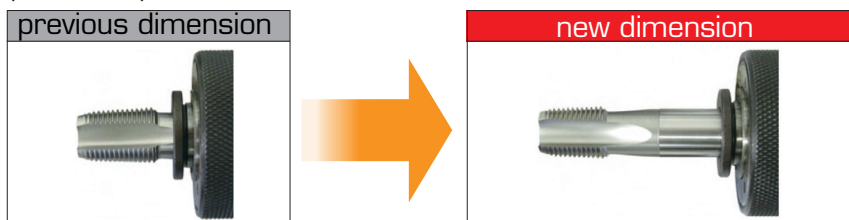
**PT-X**

**SP-PT-X**

## Product features

- By adopting new blank dimension, X series ensure the proper ejecting length.
- With short thread length type, X series are suitable for tapping such machine components that have limit in their width.
- X series can run 2 times faster than previous taps.

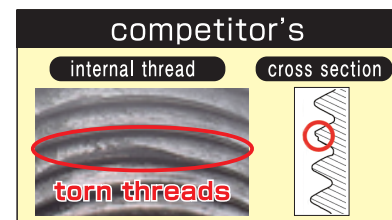
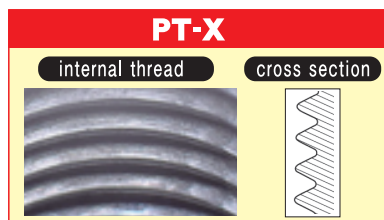
Adopting new geometry,  
PT-X and SP-PT-X can  
ensure properly long  
ejecting length of tap.



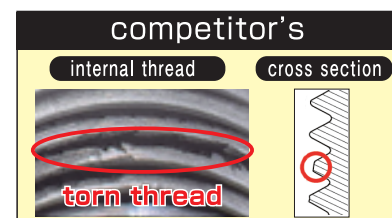
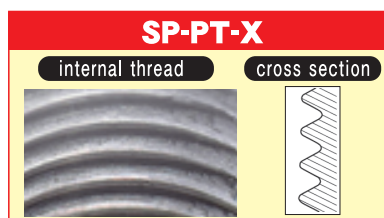
## Tapping performance

Suitable design of cutting edge and proper ejecting length of X series guarantee the reliable internal thread tapping.

size	1/8-28
material	S45C
tapping speed	3 m/min
bored hole size	φ8.2 mm
threaded length	10.5 mm
machine	vertical machining center (non-rigid)
lubricant	water soluble oil (without chlorine, x20)



size	1/8-28
material	SS400
tapping speed	5 m/min
bored hole size	φ8.2 mm
threaded length	10.5 mm
machine	vertical machining center (non-rigid)
lubricant	water soluble oil (no chlorine, x20)

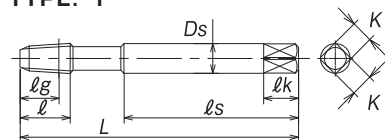


## Table of dimensions and sizes

straight flute type

**PT-X** HSS

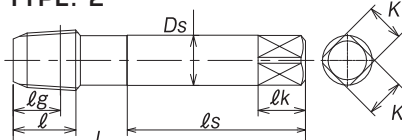
TYPE: 1



spiral flute type

**SP-PT-X** HSS

TYPE: 2



## Tapping data

material	tapping speed (m/min.)	
	PT-X	SP-PT-X
low carbon steel ~S25C	~3	~7
high carbon steel S45C~	~5	~7
alloy steel SCM	-	~5
cast iron FC250	~10	-
aluminum cast iron ADC12	~10	~10

recommendation

※When there is collapsed thread trouble, please use tappers.

size	OD basic size	overall length L	thread length lg	distance to basic diameter lg	shank length (ls)	shank diameter Ds	Size of square K	Length of square lk	Type	code	
										PT-X	SP-PT-X
PT 1/16-28	7.723	75	13.5	10.5	(47)	8	6	9	1	THX2T01K-8	SHX2T01K-8
PT 1/8-28	9.728	75	13.5	10.5	(48)	8	6	9	2	THX2T02K	SHX2T02K
PT 1/4-19	13.157	85	16.5	12.5	(54)	11	9	12	2	THX2T04-	SHX2T04-
PT 3/8-19	16.662	95	18	14	(60)	14	11	14	2	THX2T06-	SHX2T06-
PT 1/2-14	20.955	105	22.5	17	(64)	18	14	17	2	THX2T08Q	SHX2T08Q

※Class is 2nd class. Distance to basic diameter is that for short pipe thread type.

## 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.

Please note that specification may change without advance notice.