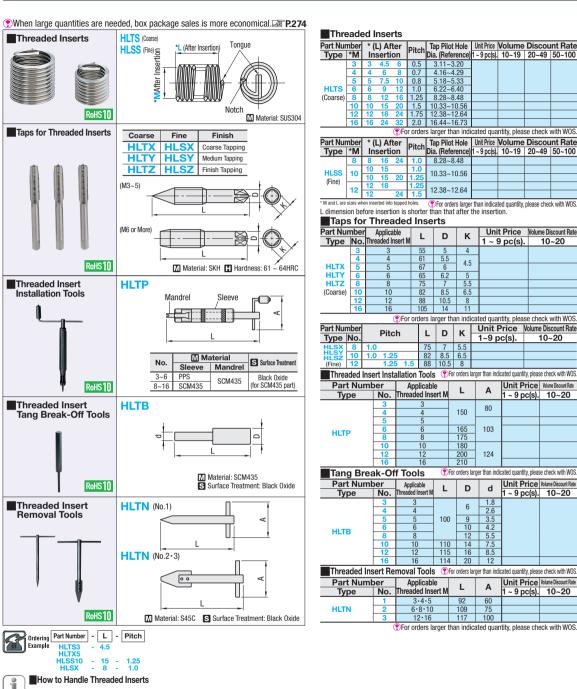
Threaded Inserts / Tools for Inserts

Tangless Inserts / Self-Tapping Inserts

Slotted



HLTN -

Tongue Threaded Insert Threaded Insert

HI TB V

(Fig. 3)

- Openina

Threaded Insert

(Fig. 2)

1. Drill a pilot hole in the workpiece within the appropriate limit of tap pilot hole diameters shown in the above table.

(Hole Depth > Length after Insertion +2.5xP (Pitch))

2. Tap with "Taps for Threaded Inserts" (Coarse, Medium, Finish Tapping in that order), and completely remove metal chips.

Completely remove metal crips.

A insert Threaded Inserts to tip of sleeve of the Insert Tool (with tang on the tip side), and clip on the tang at the mandrel slot (Fig. 1). Turn the handle and insert Threaded Insert into more than the sleeve tip (leaving 1 or 2 pitches).

4. Turn the handle to install Threaded Inserts by positioning the insert tool perpendicular to

the work (Fig. 2). Check the insertion condition from the opening of the sleeve tip. Remove

the work (19.2), order, the insertion is complete.

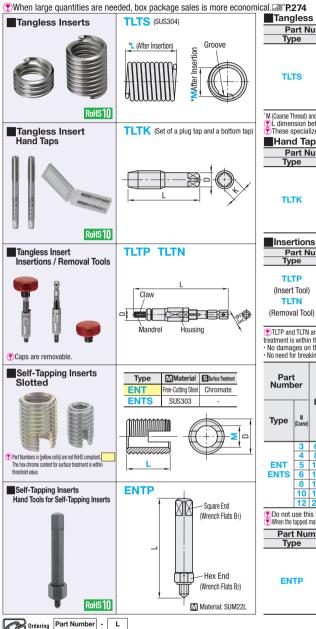
The tool from the work when insertion is complete.

Inserting while pressing the handle hard in the insertion direction causes damages such as skipped threads. Always turn the handle lightly in the horizontal direction. Do not reverse

skipped mreads. Always turn the nandle lightly in the nonzontal direction. Do not reverse the rotation during the insertion as that will cause damages.

5. After the insertion is complete, insert the tang break-off tool, and break off the tang from the notch by striking the head sharply with a hammer (Fig. 3).

6. When removing Threaded inserts, press an Insert Removal Tool onto the insert, and slowly turn counterclockwise to remove it (Fig. 4). When reinserting the Thread Insert into the removed hole, use special tap again before inserting.



Tangless Inserts Part Number ap Pilot Hole Dia. | Unit Price | Volume Discount Rate *(L)After Insertion 1 ~ 49 pc(s). 50~100 (Reference) Type 4.17~4.30 8 31~8 52 10.37~10.62 M (Coarse Thread) and L are the sizes after insertion. Pror orders larger than indicated quantity, please check with WOS. L dimension before insertion is shorter than that after insertion These specialized tools allow insertion and removal of tangless inserts, reducing working human hours. Hand Taps for Tangless Inserts Part Number Unit Price | Volume Discount Rate 1 ~ 3 pc(s). 4 pcs. Type 62 4.5 6.5 ■Insertions / Removal Tools

TLTP and TLTN are not RoHS compliant, but the content of hex chrome for surface For orders larger than indicated treatment is within threshold value.

104.4

No damages on the threads and bodies at removal.
 No need for breaking tangs off and looking for broken tangs, or checking gauge positions.

Tap Pilot Hole Dia. (Reference) Softer← Mating Material→ Harder **ENTS** Number Hard Plastic Cast Iron (Outer Screw Cast Iron ~ HB200 HB200 ~ Light Metal such as Aluminum Alloy Tensile Strength: Alloy Tensile Strength: Strength: 350N/mm2 | O.D. Pitch 7.2 7.3 7.5 7.6 8 1.0 10.8 11.0 11.2 11.4 12 1.5 12.8 13.0 13.2 13.4 14 1.5 14.8 15.0 15.2 15.4 16 1.5

When the tapped material has high hardness, drill a pilot hole of slightly larger diameter within the range

Part Number		Applicable	- 1	B ₁	B ₂	Unit Price	Volume Discount Rate
Type	No.	Threaded Insert M		DI	D2	1 ~ 9 pc(s).	10~20
ENTP	3	3	55	5	7		
	4	4	60	5	7	1	
	5	5	75	8	13	1	
	6	6	75	8	13		
	8	8	75	8	13		
	10	10	95	12.5	19		
	12	12	95	12.5	19		

For orders larger than indicated quantity, please check with WOS.



Features of Self-Tapping Inserts Slotted tap inserts with both external and internal threads.

This fastener components reinforce relatively-low mechanical thread strength and allow skipping of the pre-tapping.

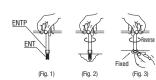
Machining Procedure and Precautions for Use

Drill a pillot hole in the workpiece within the appropriate limit of tap pilot hole diameters shown in the above table. When the tapped material has high hardness, drill a pilot hole of slightly larger diameter within

- 2. With the slot facing down, fit the self-tapping insert all the way onto the tip of the hand tool (Fig. 1). Put the insert vertically into the pilot hole by turning the tool handle. (Fig. 2)
- * If the pilot hole diameter is too small, it may cause a lag in pitch or looseness, and can damage tools.
- *At the start of tapping (1 to 2 pitches), check to see if the tools are aligned straight with the pilot hole. If the insert is opinig in slanted, stop turning the tool and re-align. Realignment after isserting almost halfway (1/3 to 1/2) is too late. Do not reverse the rotation during the insertion as that will cause damages.

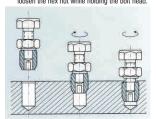
 3. When the insert has arrived at a predetermined depth, tighten the hex part of the tool with a wrench, and then turn the handle counterclockwise to separate the tool from the workpiece. (Fig. 3)
- * Further turning a tool when already in contact with the workpiece can damage the self-tapping part of the insert and result in a loose fit.

ENT3





double-nut arrangement as shown below with the bolt. After the insertion is complete. loosen the hex nut while holding the bolt head



2 -271

_Mandrel

2 -272