# HELICOIL® manual taps

**Type 0140.2 | UNF**



Finishing tap (product type 0140.2)

Manual tap for through holes and blind holes to create holding threads (acc. to NASM33537) for HELICOIL® coil thread inserts. A manual tap, a taper tap (product type 0140.1), is required in addition.

**Properties:**

- 2-pitch chamfer
- Machining of materials with 700 N/mm² strength max.

**Note:**

The taper tap (product type 0140.1) must be ordered as a separate item.

Technical information can be found on the last page.

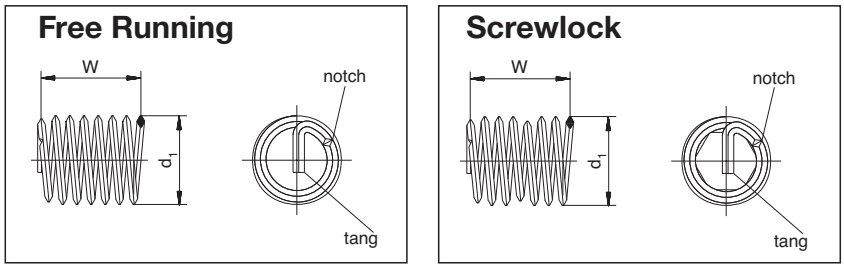
| Diameter (d) | Article number | Pitch (P) |
|---|---|---|
| UNF 1/4"-28 | 01402747102 | 0.91 |
| UNF 5/16"-24 | 01402767102 | 1.05 |
| UNF 3/8"-24 | 01402777102 | 1.05 |
| UNF 7/16"-20 | 01402787102 | 1.27 |
| UNF 1/2"-20 | 01402797102 | 1.27 |
| UNF 9/16"-18 | 01402807102 | 1.41 |
| UNF 5/8"-18 | 01402817102 | 1.41 |
| UNF 3/4"-16 | 01402837102 | 1.59 |
| UNF 7/8"-14 | 01402857102 | 1.81 |
| UNF 1"-12 | 01402867102 | 2.12 |
| UNF 1 1/8"-12 | 01402877102 | 2.12 |
| UNF 1 1/4"-12 | 01402887102 | 2.12 |
| UNF 1 1/2"-12 | 01402907102 | 2.12 |
| UNF 4-48 | 01402657102 | 0.53 |
| UNF 6-40 | 01402677102 | 0.63 |
| UNF 8-36 | 01402687102 | 0.71 |
| UNF 10-32 | 01402697102 | 0.79 |

All technical data refer to the measure mm



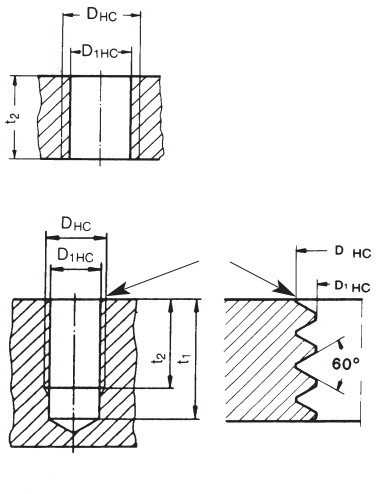
All technical data without obligation. Subject to technical changes and errors.

# **HELICOIL® Plus** thread inserts

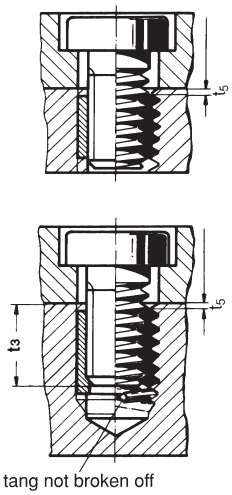



W and $d_1$ are the control values for thread inserts (Free Running and Screwlock) before they have been installed. The length can only be measured for installed thread inserts.

**Holding thread**




**Assembly**




Prior to tapping, counter-bore 90° and deburr.
Outside diameter of **countersink = $D_{HC}$ + 0.1 mm**.

d = Nominal thread diameter
P = Thread pitch
$d_1$ = Outside diameter of thread insert prior to installation
W = Number of threads prior to installation
$D_{HC}$ = Outside diameter of the parent thread
$D_{1HC}$ = Crest diameter
B = Suitable twist drill diameter. Please note: $D_{1HC}$ is critical for selecting the correct twist drill diameter.
$t_1$ = Minimum depth of tapped hole according to DIN 76 – Part 1 (guide value)
$t_2$ = The nominal length of the thread insert corresponds to the minimum length of the full parent thread for blind holes or the minimum plate thickness for a through hole.
$t_3$ = Maximum screw-in depth when the tang is not removed
$t_5$ = Distance of the thread insert from the joint face = 0.25 to 0.5 P, if $t_2$ corresponds to the above-mentioned minimum value

When you use HELICOIL® Plus thread inserts for volume production, we recommend to add at least 1 x P to values $t_1$ and $t_2$.

All technical data refer to the measure mm


All technical data without obligation. Subject to technical changes and errors.