HELICOIL® manual taps

Type 0140.0 | UNC



Short machine tap to create a holding thread (acc. to NASM33537) for HELICOIL® coil thread inserts.

Properties:

- For through holes
- For blind holes (only if sufficient chip space is provided)
- Machining of materials with 700 N/mm² strength max.
- Tolerance class 6H mod. corresponds with 5H

Note:

Only suited for blind holes if sufficient chip space is provided. Minimum requirement: 1 d deeper than the full thread length.

The short machine tap can also be used as a machine tap.

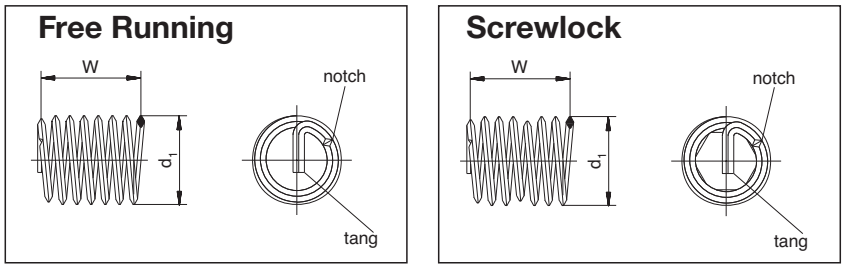
Technical information can be found on the last page.

Diameter (d)	Article number	Pitch (P)
UNC 1/4"-20	01400746104	1.27
UNC 5/16"-18	01400766104	1.41
UNC 3/8"-16	01400776104	1.58
UNC 7/16"-14	01400786104	1.81
UNC 1/2"-13	01400796104	1.95
UNC 9/16"-12	01400806104	2.12
UNC 5/8"-11	01400816104	2.31
UNC 3/4"-10	01400836104	2.54
UNC 7/8"-9	01400856104	2.82
UNC 1"-8	01400866104	3.18
UNC 1 1/8"-7	01400876104	3.63
UNC 1 1/4"-7	01400886104	3.63
UNC 1 3/8"-6	01400896104	4.23
UNC 1 1/2"-6	01400906104	4.23
UNC 2-56	01400636104	0.43
UNC 4-40	01400656104	0.63
UNC 5-40	01400666104	0.63
UNC 6-32	01400676104	0.79
UNC 8-32	01400686104	0.79
UNC 10-24	01400696104	1.05
UNC 12-24	01400706104	1.05

All technical data refer to the measure mm

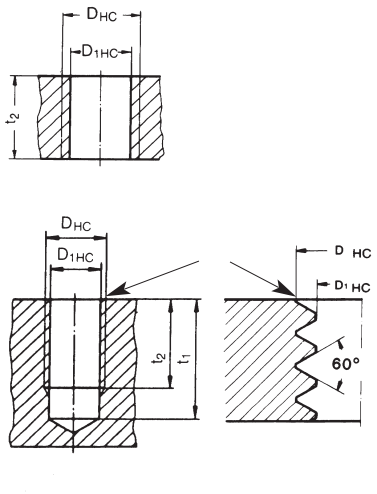
All technical data without obligation. Subject to technical changes and errors.

HELICOIL® Plus thread inserts

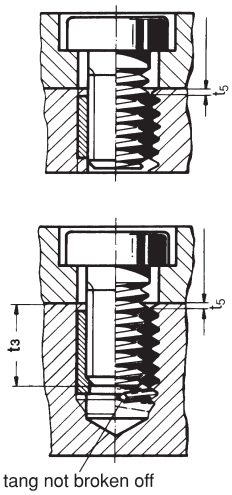


W and d_1 are the control values for thread inserts (Free Running and Screwlock) before they have been installed. The length can only be measured for installed thread inserts.

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.