HELICOIL® machine taps

spiral fluted 45° | For blind holes

Type 0141.4 HELICOIL® machine tap to create holding threads for HELICOIL® thread inserts with UNC threads as per NASM33527. The tap is suited for blind holes.



Properties:

- Spiral flute 45° right-hand spiral
- 2-pitch chamfer
- 15 % cutting angle
- For wrought aluminium alloys with 500 N/mm² strength max.
- Also for cast aluminium alloys with very low Si content (≤ 2 %)
- Tolerance class 2B

Note:

- Up to UNC 8-32 2-flute
- From UNC 10-24 3-flute and additionally for soft steels with 450 N/mm² strength max.

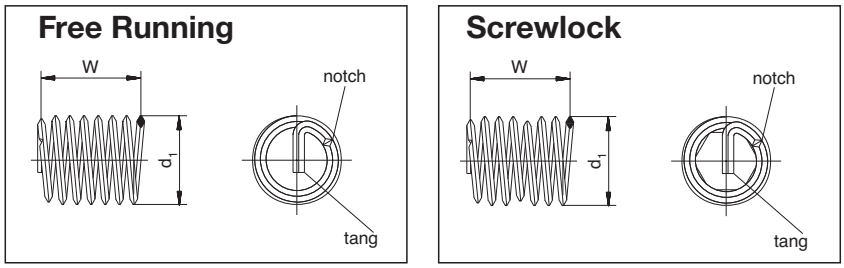
Technical information can be found on the last page.

Diameter (d)	Article number	Pitch (P)	Nominal length t_2
UNC 1/4"-20	01414746152	1.27	6.4
UNC 5/16"-18	01414766152	1.41	7.9
UNC 3/8"-16	01414776152	1.58	9.5
UNC 1/2"-13	01414796152	1.95	25.4
UNC 2-56	01414636152	0.43	2.2
UNC 4-40	01414656152	0.63	2.2
UNC 6-32	01414676152	0.79	8.8
UNC 8-32	01414686152	0.79	4.2
UNC 10-24	01414696152	1.05	5.5

All technical data refer to the measure mm

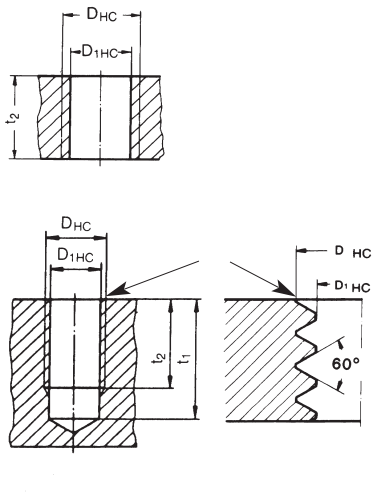
All technical data without obligation. Subject to technical changes and errors.

HELICOIL® Plus thread inserts

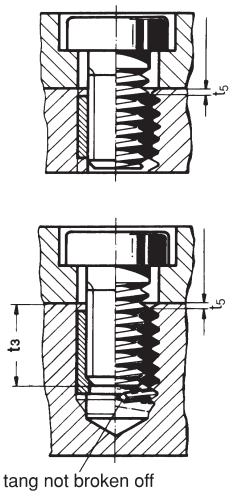


W and d_1 are the control values for thread inserts (Free Running and Screwlock) before they have been installed. The length can only be measured for installed thread inserts.

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.