

# HELICOIL® machine taps

straight fluted | For through holes

Type 0141.1 HELICOIL® machine tap to create holding threads for HELICOIL® thread inserts with UNF threads as per NASM33537. The tap is suited for through holes and blind holes with a deeper tap hole.



**Properties:**

- Straight-fluted
- With spiral point
- 4-pitch chamfer
- 10 % cutting angle
- For materials with 850 N/mm<sup>2</sup> strength max.
- Tolerance class 2B

Technical information can be found on the last page.

Diameter (d)	Article number	Pitch (P)	Nominal length t <sub>2</sub>
UNF 1/4"-28	01411747104	0.91	6.4
UNF 5/16"-24	01411767104	1.05	19.8
UNF 3/8"-24	01411777104	1.05	9.5
UNF 7/16"-20	01411787104	1.27	11.1
UNF 1/2"-20	01411797104	1.27	12.7
UNF 4-48	01411657104	0.53	7.1
UNF 6-40	01411677104	0.63	7.0
UNF 8-36	01411687104	0.71	4.2
UNF 10-32	01411697104	0.79	4.8

All technical data refer to the measure mm



## HELICOIL® Plus thread inserts

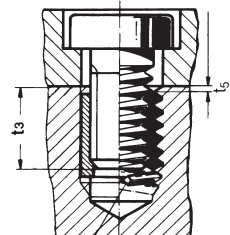
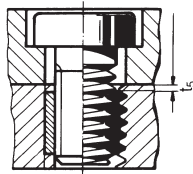


W and  $d_1$  are the control values for thread inserts (Free Running and Screwlock) before they have been installed. The length can only be measured for installed thread inserts.

### Holding thread



### Assembly



tang not broken off

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

- 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  $1 \times P$  to values  $t_1$  and  $t_2$ .

All technical data refer to the measure mm

