

# HELICOIL® machine taps

spiral fluted 40° | For blind holes

Type 0141.5 HELICOIL® machine tap to create holding threads for HELICOIL® thread inserts with UNF threads as per NASM33527. The tap is suited for blind holes and blind holes with a deeper tap hole.



**Properties:**

- Spiral flute 40° right-hand spiral
- 2-pitch chamfer
- 10 % cutting angle
- For steels with 500–850 N/mm<sup>2</sup> strength
- Also for cast aluminium alloys with an Si content up to 10 %
- 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	01415747102	0.91	6.4
UNF 5/16"-24	01415767102	1.05	19.8
UNF 3/8"-24	01415777102	1.05	9.5
UNF 7/16"-20	01415787102	1.27	11.1
UNF 1/2"-20	01415797102	1.27	12.7
UNF 4-48	01415657102	0.53	7.1
UNF 6-40	01415677102	0.63	7.0
UNF 8-36	01415687102	0.71	4.2
UNF 10-32	01415697102	0.79	4.8

All technical data refer to the measure mm



## HELICOIL® Plus thread inserts

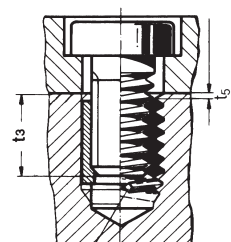
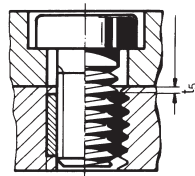


W and d<sub>1</sub> are the control values for thread inserts (Free Running and Screwlock) before they have been installed. The length can only be measured for installed thread inserts.

### 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<sub>1</sub> = Outside diameter of thread insert prior to installation
- W = Number of threads prior to installation
- D<sub>HC</sub> = Outside diameter of the parent thread
- D<sub>1HC</sub> = Crest diameter
- B = Suitable twist drill diameter. Please note: D<sub>1HC</sub> is critical for selecting the correct twist drill diameter.
- t<sub>1</sub> = Minimum depth of tapped hole according to DIN 76 – Part 1 (guide value)
- t<sub>2</sub> = 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<sub>3</sub> = Maximum screw-in depth when the tang is not removed
- t<sub>5</sub> = Distance of the thread insert from the joint face = 0.25 to 0.5 P, if t<sub>2</sub> 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<sub>1</sub> and t<sub>2</sub>.

All technical data refer to the measure mm

