

# HELICOIL® Plus Kit - Thread repair

UNF 4-48 - UNF1/2"-20 | 1 dimension in 3 lengths (1d, 1,5d and 2d)

**Delivery scope:**

- HELICOIL® Plus thread inserts of the same size and in three different lengths (1 d, 1.5 d, 2 d)
- Twist drill
- HSS HELICOIL® manual tap
- HELICOIL® Plus installation mandrel
- Tang break-off tool
- Practical case for storage and transport
- Operating instructions



Technical information can be found on the last page.

Diameter (d)	Article number	Pitch (P)	D <sub>HC</sub> min.	D <sub>1HC</sub>		B	d <sub>1</sub>	
				min.	max.		min.	max.
UNF 1/4"-28	41851747000	0.91	7.53	6.55	6.72	6.7	7.8	8.3
UNF 5/16"-24	41851767000	1.06	9.31	8.17	8.35	8.2	9.7	10.2
UNF 3/8"-24	41851777000	1.06	10.90	9.75	9.93	9.8	11.4	11.9
UNF 7/16"-20	41851787000	1.27	12.76	11.39	11.59	11.5	13.4	13.9
UNF 1/2"-20	41851797000	1.27	14.35	12.97	13.16	13.1	15.1	15.7
UNF 8-36	41851687000	0.71	5.08	4.32	4.47	4.4	5.3	5.7
UNF 10-32	41851697000	0.79	5.86	5.00	5.16	5.1	6.1	6.5

All technical data refer to the measure mm

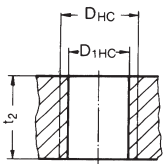


## HELICOIL® Plus thread inserts

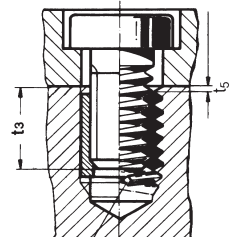
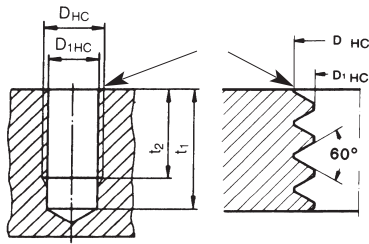


W and d<sub>1</sub> are the control values for thread inserts (Free Running and Screwlock) before they have been installed. The length can only be measured for installed thread inserts.

### 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

