

FIGURE 6-14. Heli-coil insert.

## Helicoils

Helicoils are precision formed screw thread coils of 18-8 stainless steel wire having a diamond shaped cross-section (figure 6-14). They form unified coarse or unified fine thread classes 2 - band 3B when assembled into (helicoil) threaded holes. The assembled insert accommodates UNJ (controlled radius root) male threaded members. Each insert has a driving tang with a notch to facilitate removal of the tang after the insert is screwed into a helicoil tapped hole.

They are used as screw thread bushings. In addition to being used to restore damaged threads, they are used in the original design of missiles, aircraft engines, and all types of mechanical equipment and accessories to protect and strengthen tapped threads in light materials, metals, and plastics, particularly in locations which require frequent assembly and disassembly, and/or where a screw locking action is desired.

**Helicoil Installation** The following steps are for instructional purposes only. The manufacturer's instructions should be followed during installation.

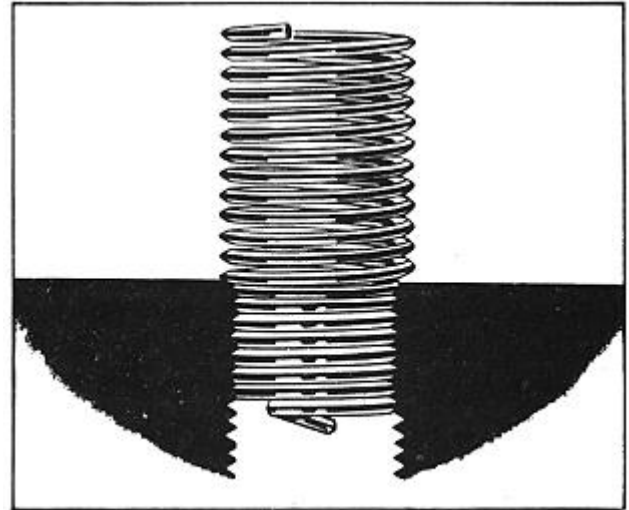


FIGURE 6-14. Heli-coil insert.

**Step 1: Insert Assembly.** Using proper tool, install insert to a depth that puts end of top coil 1/4 to 1/2 turn below the top surface of the tapped hole.

**Step 2: Tang breakoff.** Select proper breakoff tool; a small punch is sufficient. Tangs should be removed from all drilled through holes. In blind holes the tangs may be removed when necessary if enough hole depth is provided below the tang of the installed insert.

STIDD Systems uses Tef-Gel on the helicoil prior to installation. It is recommended the installer does likewise.

These are not to be considered specific instructions on helicoil installation. The manufacturer's instruction must be followed when making an installation.

If you have any questions, please contact Jac Citera at 631 477-2400, ext. 135