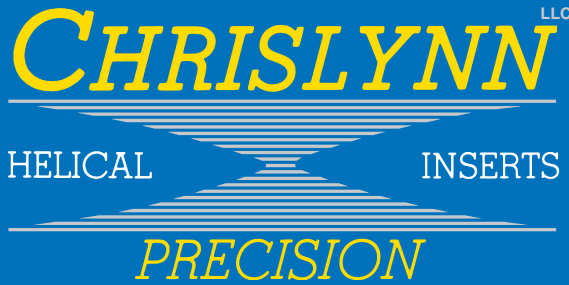


Materials Available

- 18-8 Stainless (Standard)
- Phosphor Bronze
- X 750 Inconel
- 316 Stainless



Precision thread helical inserts meet or exceed most applicable specifications, including: MS 122076 series, 124651 series, 21208, 21209, 33537, Mil-1-8846 and Mil-F-5577.

Precision Thread Helical Inserts

The Precision insert system was devised as a simple method of repairing stripped or damaged threads in any metal or valuable parts. Inserts are also used in new products such as die castings or plastics, where excessive stress on threads could cause damage or failure.

Precision inserts are helical coils of diamond shaped 18-8 stainless steel wire which meets or exceeds AMS-7245 specification. Inserts are sized to provide a precisely controlled interference fit in an oversized tapped hole. The tap used

for this purpose is the same pitch as the original thread, but has a larger diameter. When the insert is installed, the hole is returned to its original size.

Because the insert provides an enlarged bearing area, the restored fastening is stronger than the original. It is also more durable, since the stainless steel thread is generally tougher than the original material. Precision inserts are corrosion resistant and their 22-microinch or better surface finish provides a smooth-running, wear-resistant fastening.



Why Precision Thread Helical Inserts?

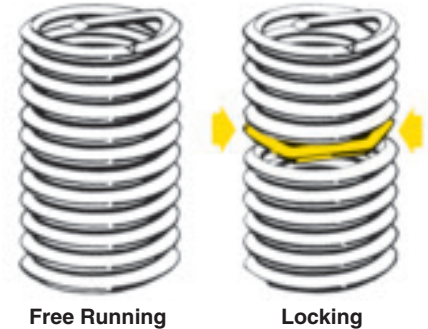
Precision inserts are used when alternate methods of repairing a threaded hole are inconvenient, impractical or impossible. The Precision system is much easier than plugging a damaged hole with weld bead, redrilling and tapping. It's usually more practical than using an oversized bolt.



Replacement of the entire damaged part could well be impossible as well as costly and time-consuming.

While the Precision insert offers an expedient solution to an immediate problem, its benefits don't end there. Almost all threaded fasteners contain minor errors in pitch of threaded form which tend to concentrate the load on some threads. The free coils of the helical thread insert can flex to accommodate form and pitch variations, thus distributing the load most efficiently over all threads.

Precision inserts are made in all standard thread sizes and in two basic types...free-running and locking. The locking type features a crimped turn which provides an exceptionally strong grip on the mating bolt. Locking inserts can be used to eliminate the need for lock washers or other locking devices.



The design is particularly recommended for applications which require a constant locking torque.

The Precision system is supplied with easy-to-use tooling which facilitates installation in almost any location. The taps, inserts and tools are interchangeable with other helical insert systems.

Simple Installation

The first step in creating a new, stronger thread is cleaning up the original, damaged threads. This is done with a standard drill, the size of which is indicated on the Precision package. The hole is then tapped with an oversize (STI)* tap provided in each kit. Kits do not include drills. Drills are available through your Precision Helical Thread Insert distributor. The free diameter of the Precision insert is larger than the new threaded hole, but it is easily "wound" into place with the inserting tool provided.

Once in place, the insert tends to spring back to its original diameter, giving it a

very strong grip in the hole. Finally, the driving tang is broken off by tapping downward with the end of the inserting

tool. If necessary, inserts can be removed, using one of the extracting tools shown on page eight of this brochure.

