

**Alcoa  
Fastening  
Systems**



The Recoil system consists of precision inserts, quality high speed taps, and easy-to-use installation tools which are used for repairing damaged screw threads or creating strong new threads. Recoil helically wound screw-thread inserts are generally manufactured from Type 304 (18-8) stainless steel wire cold rolled into a diamond shaped cross section. Recoil inserts can be supplied in other materials such as Inconel, Nimonic, Phosphor Bronze and Type 316 stainless steel.

Recoil inserts are available in either standard free running form or screw lock type which provides an internal locking feature. Inserts are manufactured for every thread form including UNC, UNF, BSC, BSW, BSP, BSF, BA, NPT and ISO Metric thread sizes. Inserts are available in 5 different standard lengths. 1D, 1.5D, 2D, 2.5D and 3D. Special lengths available on request.

**Phosphor Bronze (P)**

Designed for electrical applications, Recoil Phosphor Bronze inserts provide no outside interference of signals. This characteristic ensures their successful use in electrical bonding joints and related operations. These advanced inserts have been successfully employed in the manufacturing of a wide range of sensitive electrical equipment including circuit boards, telecommunications control boxes, and medical instrumentation and equipment.



**Inconel (X)**

Inconel X-750 is an alloy material with excellent high heat resistance and strength characteristics. Used in demanding applications like gas turbines and auto lambda sensor repairs, these inserts can withstand temperatures of 1020°F and can be certified to GE Power Generation standards. Inconel X-625 material possesses very high corrosion resistance and is used in sub-sea platforms and other critical salt water and marine applications.



**316 Stainless (Y)**

Often used in highly corrosive applications, Recoil 316 Stainless Steel inserts provide a high degree of reliable corrosion resistance. In freshwater, saltwater, even chlorine environments, the inserts are designed to deliver years of failure-proof threadholding performance.



**Nitronic 60 Inserts (N)**

Designed for applications where galling can be a problem, Recoil Nitronic 60 inserts' wear-resistant, anti-galling characteristics eliminate the need for additional lubrication. Based on the reduction in friction they provide, these inserts deliver more consistent clamping torque. In addition, Nitronic 60 inserts are suitable for use with stainless steel screws.



*Distributed by:*

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