

Self-Broaching Keenserts® Inserts & Studs Design & Features

AFS pioneered the design of permanent, wear-resistant, threaded inserts and studs which feature a positive mechanical lock against rotation. The high-performance, self-broaching Keenserts® inserts and studs shown in this catalog are designed to dramatically reduce time and labor required for installation into hard or tough aerospace parent materials. Precision-treated 400 series corrosion resistant steel locking KEES “self-broach” into parent materials, eliminating broaching tools, saving time, labor and considerable costs.

Standard Keenserts® inserts and studs install easily into soft materials, such as magnesium and aluminum. The KEES “self-broach” these materials, thus providing a positive lock against rotation. However, hard or tough materials such as 17-4 PH CRES, INCO-718 or titanium require an additional installation step of broaching the keyways using a broaching tool. This “prebroaching” procedure is time-consuming, expensive and sometimes frustrating.

Self-broaching Keenserts® insert and studs feature a KEE configuration and materials that broaches hard parent materials which previously required the “prebroaching” step. The result is a fast, efficient method for installing inserts or studs in parent materials with a Rockwell hardness up to 42 HRC.

The pre-positioned KEES automatically set the insert or stud at the proper depth below the surface of the parent material. Unlike conventional inserts, there is no need to maintain critical depth tolerances, and no chance of inadequate locking or deformation of internal threads due to miscalculations of depth.

Features:

- Positive mechanical lock against rotation.
- Hole prepared with standard taps and drills.
- Installs in seconds with AFS power installation tool.
- Available in many sizes in heavy duty and extra heavy duty configuration.
- Meet the following configuration specifications: MS51831, MS51832, NASM51833, and NASM51834 series.
- Internal thread locking feature meets the requirements of MIL-I-45914.
- Exclusive external thread design provides maximum pull-out strength with a minimum outside diameter.

