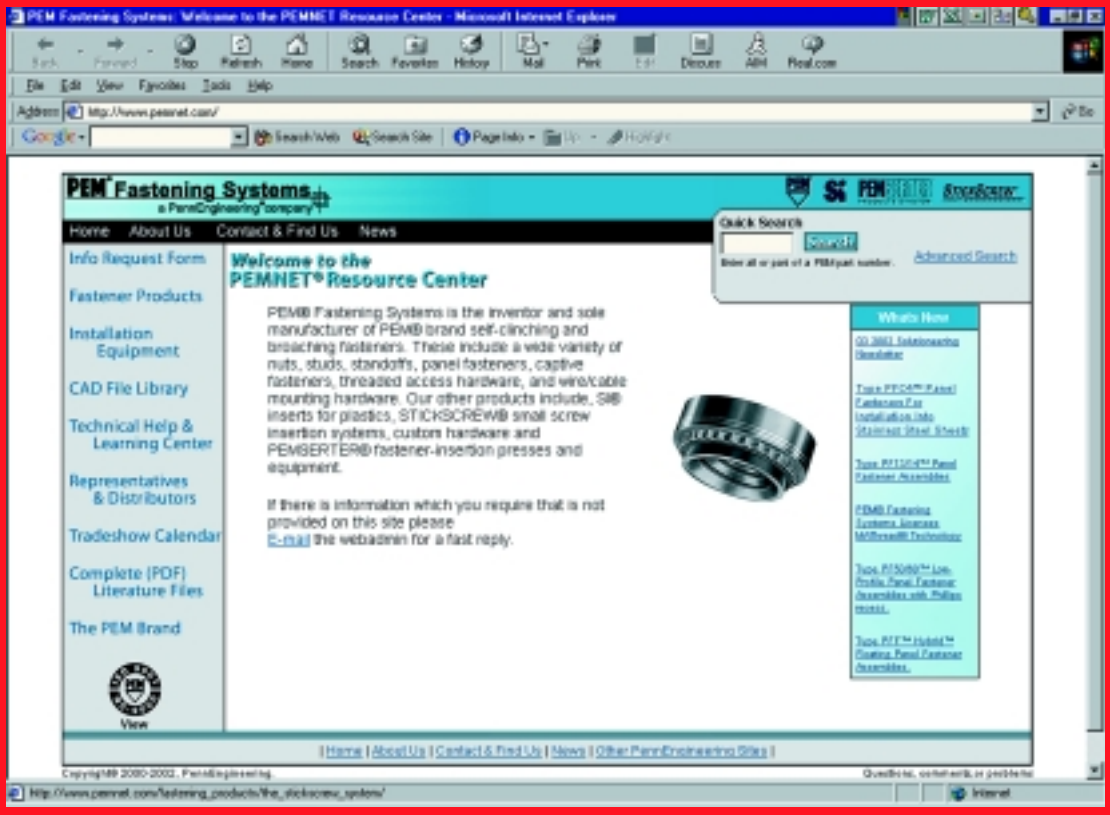
FASTENING SYSTEMS

# SOLUTIONEERING

NEWSLETTER

Product and Application News from PennEngineering® Fastener Divisions




## www.pemnet.com

*Visit our newly upgraded "PEMNET® Resource Center" on the Web:*

- Immediate access to part number search from the Home Page and every page
- Keyword-embedded Home Page for easier search engine recognition
- Complete "PDF Literature Files" for product bulletins...same order as our catalog
- "CAD File Library" for drawings
- Latest news about products and services
- Links to other PennEngineering® sites

*You may require help in arriving at a fastening solution or determine that the solution already exists. Regardless, our hope is that you turn to us as a full-service resource offering the products and expertise to meet every challenge.*

Kenneth A. Swanstrom,
*Chairman and CEO*
*PennEngineering*

***PEM Type PFC4 Self-Clinching Panel Fasteners***

## *Installation Requirements for Stainless*

- Sheet hardness less than 88 on the Rockwell "B" scale
- Keep hole punch sharp to minimize work hardening around the hole
- Install fastener on the punch side of the hole
- Avoid installation near bends or other highly cold-worked areas where sheet hardness may be too great

# New Patented Panel Fastener for Stainless

Our new patented PEM® Type PFC4™ panel fastener is the first PEM self-clinching panel fastener designed to install flush (on one side) into thin stainless-steel sheets.

The panel fastener (made from 400 Series stainless steel) installs permanently in stainless sheets up to HRB 88 hardness on the Rockwell "B" scale. The side opposite installation will remain flush.

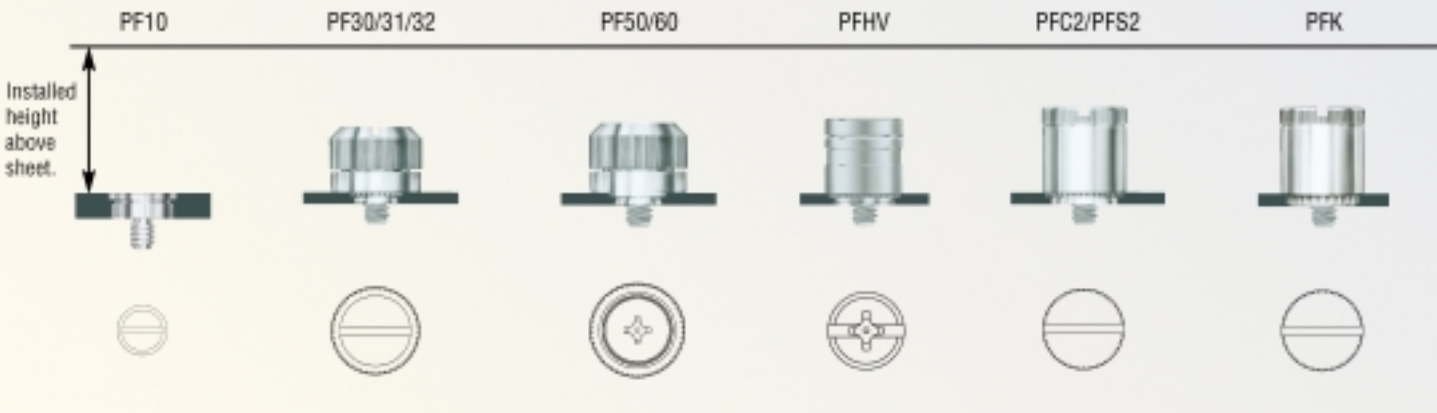
Type PFC4 panel fasteners meet UL 1950 "service area access" requirements to enable subsequent access to an assembly.

Ideal for use in stainless sheets as thin as .060"/1.53mm and where high corrosion resistance is required, they feature a captive-screw design as part of a complete spring-loaded assembly. This keeps hardware to a minimum; promotes quick installation; and eliminates risks associated with loose parts.

Type PFC4 panel fasteners are available in assorted screw lengths and in thread sizes #4-40 through #10-32 and M3 through M5. A Phillips recess is standard.

These fasteners join the growing family of PEM self-clinching nuts, studs, and standoffs for stainless applications.

## HEIGHT COMPARISON GUIDE AND STANDARD RECESS FOR SAME THREAD SIZE PANEL FASTENERS



# Tips on Choosing Head Styles for Studs

*The wide variety of PEM® self-clinching studs assures that particular application requirements will be met. Styles (shown at right) include flush-head, thin-sheet, low-displacement head, and high-strength studs.*

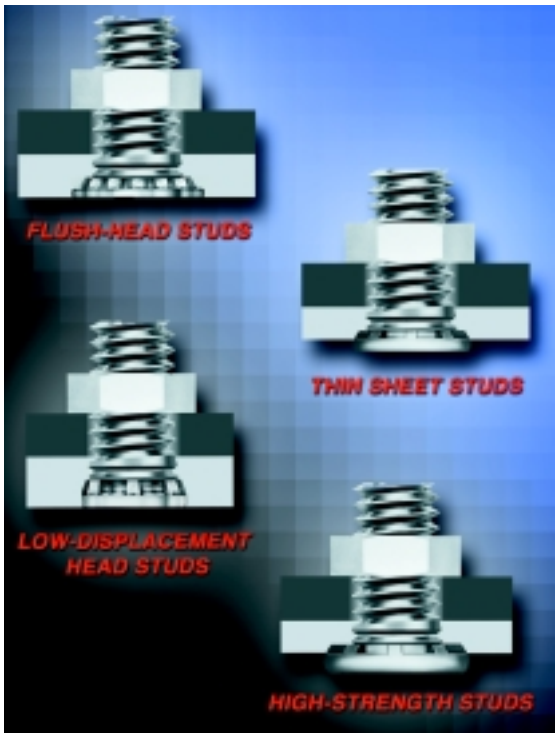
*All types (including Atlas studs profiled below) are available with MAThread® self-aligning threads, which prevent cross-threading and jamming and can correct off-angle installations. (MAThread is a registered trademark of MAThread Inc.) Guidelines for selection:*

• Type FH (Flush-Head) Studs. For installation in sheets as thin as .040"/1mm. Offer a smooth, flush surface on one side of the sheet for space or cosmetic benefits.

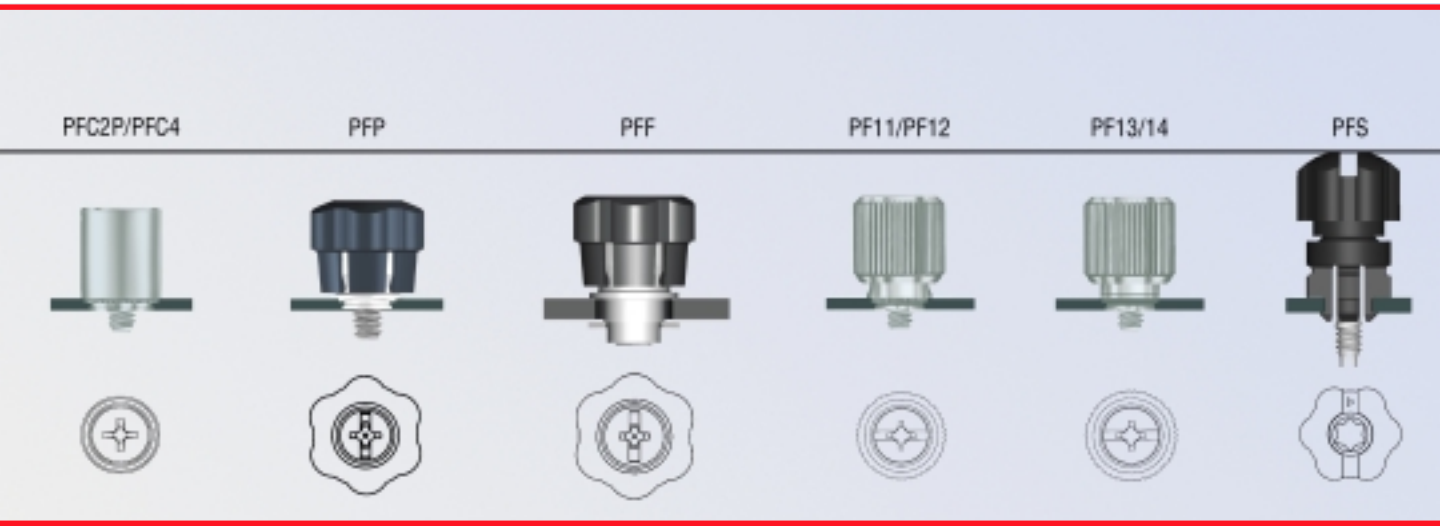
• Type TFH (Thin-Sheet) Studs. These non-flush studs are designed for use in sheets as thin as .020"/0.51mm.

• Type FHL (Low-Displacement Head) Studs. Install 25% to 50% closer to the edge of a sheet than standard studs without causing that edge to bulge. For installation in sheets as thin as .040"/1mm.

• Types HFH and HFE (High-Strength) Studs. Enlarged heads project above sheet material and distribute axial tightening force over a wider area for improved pull-through resistance. High-strength alternatives to weld studs for use in sheets as thin as .050"/1.3mm.





# New PlusTite® Threaded Steel Inserts

A unique pre-bulbed slotted body provides increased pullout resistance when these inserts are installed in sheets (metal or non-metal) as thin as .020"/0.51mm.

When installed, all four sides of the body "fold down" to securely grip the backside of the sheet *(shown at right)*. A self-locating shoulder prevents radial "play."

Atlas PlusTite® threaded steel inserts for "blind" attachment applications are available with internal formed threads in sizes 1/4-20 through 5/16-18 and M6 through M8.

Threads are compatible with unified grade 5 and metric class 9.8 screws.

**www.atlas-eng.com**

***Atlas PlusTite Threaded Steel Inserts***

# Software Update

## *'FLM' Checks Length*

Our PEMSERTER® Series 2000® automatic fastener-installation press system *(shown at left)* can now be enhanced with new software-operating features to promote improved job productivity.

PEMSERTER® PRODUCTS DIVISION

These include "Fastener Length Monitoring" (FLM), which flags parts identified as too short or long and rejects them before they can be installed.

Under software control and using optional hardware components, FLM checks every self-clinching stud or standoff to deliver increased quality control and reduced returns and rework.

***Learn more about this and all our press options by contacting the PEMSERTER Products Division.***

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**PEM® Fastening Systems develops and manufactures PEM self-clinching and broaching fasteners and SI® inserts for plastics. The PEMSERTER® Products Division manufactures and sells automatic and manual precision fastener-installation presses and the StickScrew® System for small-screw insertion. *www.pemnet.com***

**Atlas Engineering® manufactures SpinTite® and MaxTite® blind threaded rivet nuts and installation tools. *www.atlas-eng.com***

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