

PennEngineering®

PEM LINE

Fastening Products, Systems, and Applications from the Industry Pioneer



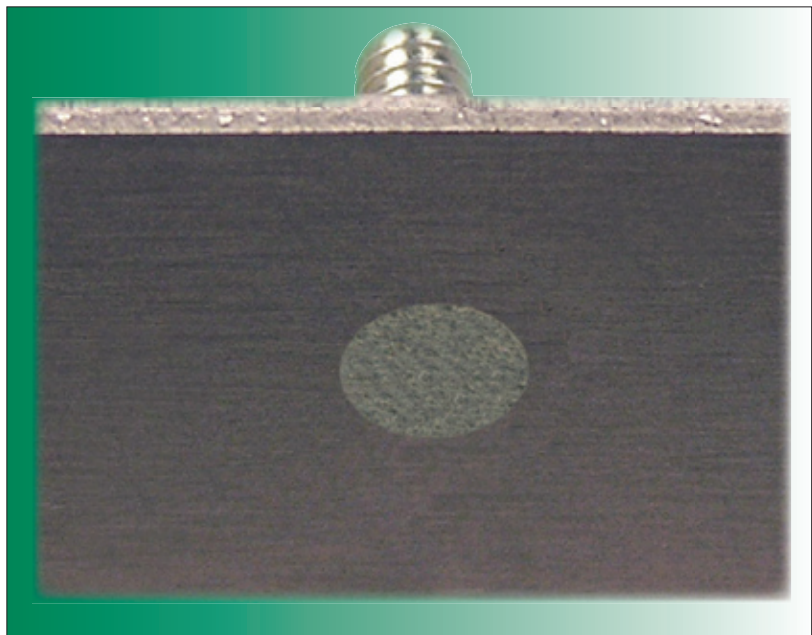
NEW PRODUCT

Type FHP™ Flush-Head Studs for Stainless Sheets

*High hardness for
proper installation
into stainless*

*High corrosion-
resistance
for demanding
environments*

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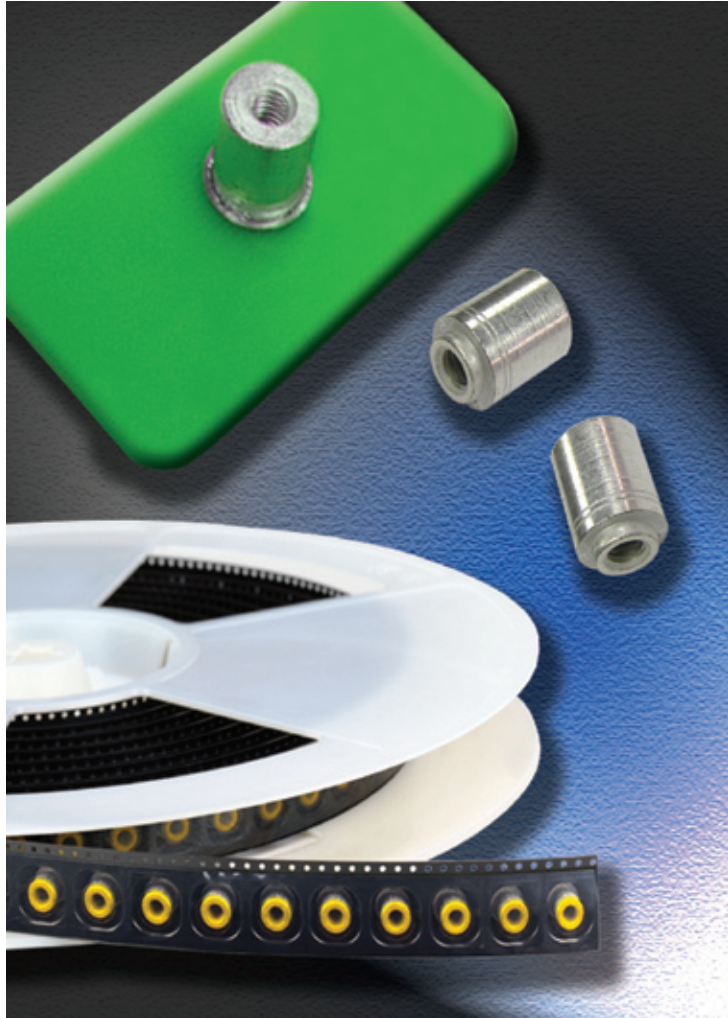


Installed stud's head is flush on back side of sheet

www.pemnet.com

NEW ON THE WEB

Surface Mount Cost Savings Calculator



ReelFast spacers/nuts (above) and panel fasteners (right)

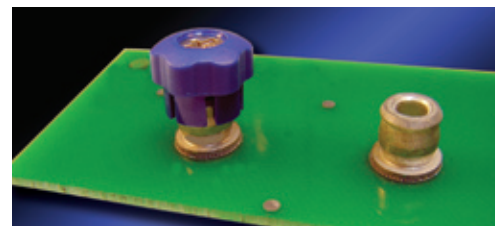
This new tool can show you the real deal on real savings from using PEM® ReelFast® SMT fasteners and their surface-mount technology.

Simply visit this link at our Web site:

http://www.pemnet.com/fastening_products/cost-savings.php

The tool will enable you to calculate total installed cost for fastening and then determine costs (and savings) using the PEM ReelFast solution.

Total labor and fastener-related board scrap rate cost savings also can be tallied to deliver the big picture.



CLINCH FASTENER INSTALLATION TROUBLESHOOTING

PROBLEM: Poor holding power of standoffs or studs in panel.

POSSIBLE CAUSE:

- Hole in anvil is too large or chamfered.

SOLUTIONS:

- Use an anvil with hole per recommended dimensions ...and follow proper installation procedures.



NEW STUDS FOR STAINLESS

Features and Benefits

- ▶ Permanent installation into stainless steel sheets as thin as .040" / 1mm and greater.
- ▶ High corrosion resistance.
- ▶ High torque-out and pushout resistance.
- ▶ Replace weld studs with easier installation at lower costs.
- ▶ Ideal for medical, foodservice, and marine applications.
- ▶ For use in sheet hardness of 92 or less on the Rockwell "B" scale.
- ▶ RoHS compliant.



Type FHP clinch fasteners provide ideal attachment solutions where demanding requirements for corrosion resistance and thinner, lighter stainless designs must be satisfied.



Compare PEM Stainless Stud Types

PEM Type	Stainless Type	Installs Into HRB	Corrosion Resistance
FH4	400 Series	92 or less	Limited
FHP	Precipitation Hardening	92 or less	High
FHS	300 Series	70 or less	High

ADVANCES IN AUTOMATION

Linking Presses with Robotic Work Cells

Our Automation Signals Software and Hardware Package introduced for the PEMSERTER® Series 2000® automatic fastener-installation press fulfills increasing industry requirements for systems that will link fastener-installation presses with automation or robotic work cells.

Presses equipped with the new capability incorporate expanded outputs, special software, signal collector, and all necessary software and hardware modifications to start the process of robotic or automation integration.



PEMSERTER Series 2000 Press with Robotics

PEMSERTER®

This process can then be completed with assistance from a customer's integrators to establish ideal fastener insertion work cells.

PEMSERTER Series 2000 presses are engineered to promote streamlined job productivity and quality while installing self-clinching fasteners permanently in thin-metal sheets.

Noteworthy features include programmable logic controller and touch screen controls to minimize operator training and greatly simplify use; self-diagnostic system to allow an operator to work with increased speed, accuracy, and confidence; and enhanced programming for quicker start-up and faster cycling.

Presses are CE certified to comply with applicable European standards and offer 24"/61 cm throat depth, cycle rates ranging from

2,750 strokes/hour to 3,600 strokes/hour, and ram force of 400 lbs. to 16,000 lbs./2.7 to 71.2 kN.

PennEngineering® develops and manufactures PEM® self-clinching, broaching, weld, and surface mount fasteners, SI® inserts for plastics, and Atlas® SpinTite®, MaxTite®, and Plus+Tite® blind threaded inserts.

Fastener installation equipment includes PEMSERTER® automatic and manual precision presses, In-Die and robotics capabilities, the StickScrew® System for small-screw insertion, and Atlas tools.

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