

PEM® Heavy Duty Clinch Studs

capabilities and design guide

PEM® heavy duty self-clinching studs are typically used when high torque out and pushout and, if necessary, high tensile/shear strength are required. These studs are easy to install, have a low installed cost, and have consistent performance characteristics.



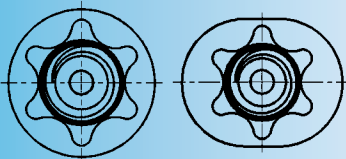
Available Features and Benefits

- Head strength is adequate to develop full thread strength.
- Specially heat-treated for greater tensile and shear strength.
- Large head diameter reduces compressive stress on panel.
- Can be used in material as thin as .036" / .91mm.
- Easy to install. No welding.
- Can be installed with automated equipment.
- RoHS compliant materials and finishes.
- Installs into panels up to HRB 85 / HB 165.

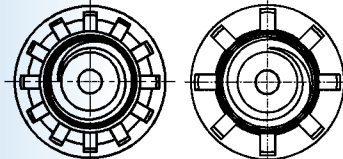


Capabilities (not all combinations available)

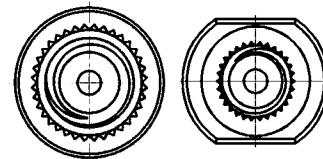
- Thread Strength: Grade 5 through 8 and property class 8.8 to 10.9
- Assorted head and clinch styles:



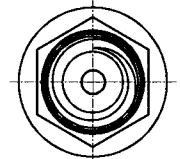
Six-lobe



Multi-Lug



Knurl



Hexagonal

- Thread types and sizes:
 - Thread sizes up to 1/2" and M14
 - Available with dog point
 - Available with MAThread®/MATpoint® anti cross-threading feature ⁽¹⁾
- Lengths: Up to 6" and 152mm
- Materials: Carbon steel & Alloy steel
- Finishes:
 - Zinc (black, yellow, clear), Nickel, Black Oxide, Waxing, Geomet®, Phosphate, and other specified ⁽²⁾

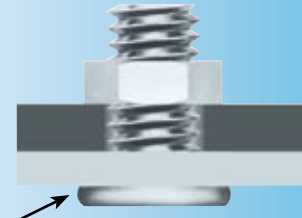
⁽¹⁾ PennEngineering is a licensee for MAThread®/MATpoint® technology, a registered trademark of MAThread Inc.

⁽²⁾ Geomet® coating is a registered trademark of Geomet.

PEM® Heavy Duty Clinch Studs

Installation

PEM® heavy duty studs are installed by placing them in properly sized holes in the sheet or metal section and squeezing them into place using any parallel acting press. The metal displaced by the head flows smoothly and evenly around the anti-rotational feature, and into the annular groove, locking the fastener securely in place.



Stud embeds permanently into sheet. Head strength is adequate to develop full thread strength.

Typical Industries

- Agricultural
- Automotive
- Construction
- Electrical
- HVAC
- Industrial Machinery
- Material handling
- Military
- Railroad

Other Notes

Some combinations available on special order only. For standard offering of heavy duty clinch stud types and sizes see PEM Bulletin FH.

Products are manufactured in ISO9001 / TS16949 certified facilities and if required can also meet stringent industry specific certifications.

For quotations or questions regarding this product, please contact one of the locations below or your nearest PEM® engineering representative.

For the complete line of PEM® standard self-clinching fasteners and installation equipment, request our catalog or go to www.pemnet.com.



To meet your preferences and needs we offer studs with many different sizes, materials and coatings.

To be sure that you are getting genuine PEM® brand self-clinching studs, look for the "dimple" trademark.

The Trademark
for Quality



*Specifications subject to change without notice.
Check our website for the most current version of this bulletin.*

© 2009 PennEngineering.

PennEngineering®



HDS-2

North America: Danboro, PA USA • E-mail: info@pemnet.com • Tel: +1-215-766-8853 • Fax: +1-215-766-0143 • 800-237-4736 (USA Only)
Europe: Galway, Ireland • E-mail: europe@pemnet.com • Tel: +353-91-751714 • Fax: +353-91-753541
Asia/Pacific: Singapore • E-mail: singapore@pemnet.com • Tel: +65-6-745-0660 • Fax: +65-6-745-2400
Shanghai, China • E-mail: china@pemnet.com • Tel: +86-21-5868-3688 • Fax: +86-21-5868-3988

Visit our PEMNET™ Resource Center at www.pemnet.com