



# PEM® BUSBAR FASTENERS FOR AUTOMOTIVE ELECTRONICS

World-class automotive electrical systems require reliable and secure performance from their internal components. PEM® busbar fastening solutions are designed, developed and proven to perform across many busbar-to-busbar applications.

## Safety Critical Performance. Certified Clean. Application Tested.

### Reliable Clamp Load and No Galvanic Corrosion

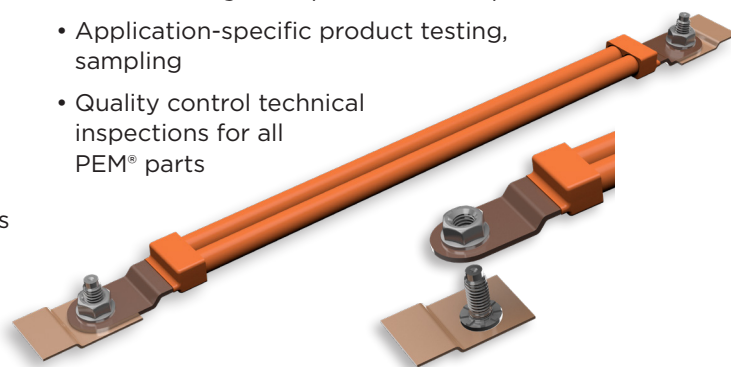
- Reliable clamp load to all joints throughout busbar and busbar-to-busbar connections
- Plastic integrity is uncompromised by the applied load
- Variety of material/plating combinations available

### Technical Cleanliness with PEM® Clean Lab

- Per customer specifications, ISO 16232, VDA 19 standards
- Processing: extraction, filtration, drying/weighing
- Clean Analysis: fully automatic, high sampling rate, precise particle detection

### Application Engineering and Certified Testing

- Custom design and product development
- Application-specific product testing, sampling
- Quality control technical inspections for all PEM® parts



## PEM® Busbar Fasteners

### THFE™ Heavy Duty Studs

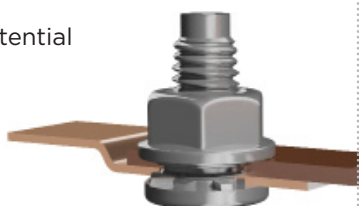
For installation into busbars as thin as .031"/0.8 mm

- Clinch design for high-strength, permanent installation
  - Ideal for installation into copper, aluminum, steel
- Enlarged head diameter/thickness provides enhanced contact area

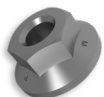
[Download Data Sheet](#)

The use of PEM® THFE™ Heavy Duty Studs and Captivated Spinning Nuts in this busbar application provides many benefits:

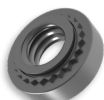
- Reduced electric arcing potential
- Reduced fire potential
- Minimal gap
- Better contact area
- Higher current flow



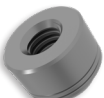
**B™ Self-Clinching Blind Nuts**  
[Download Product Bulletin](#)



**Captivated Spinning Nuts**  
[Download Product Bulletin](#)



**S™ Self-Clinching Nuts**  
[Download Product Bulletin](#)



**Reelfast® SMTSO™ Standoffs**  
[Download Product Bulletin](#)



**SI® Molded-In Inserts for Plastics**  
[Learn More](#)



**PEM® Grooved Self-Clinching Pin for RADSOK® Connectors**

## SI® Threaded Inserts — Proven Performance in Plastics for Auto Electronics

### Installation Methods

SI® inserts are manufactured for all common installation methods:

#### Ultrasonic

Great for: Thermoplastics  
High overall performance  
VIDEO: [Ultrasonic Animation](#)

#### Heat Staking

Great for: Thermoplastics  
High overall performance with low installation cost  
VIDEO: [Heat Staking Animation](#)

#### Mold-In

Great for: Thermosets & Thermoplastics  
Best pull-out and torque performance  
VIDEO: [Molded-In Animation](#)

#### Press-In

Great for: Thermosets  
Easy, simple press installation at lowest cost  
VIDEO: [Press-In Animation](#)

### Materials and Finishes

#### Brass

- Industry standard
- Lowest cost

#### Stainless Steel & Aluminum

- SI® is the industry leader for stainless steel and aluminum inserts
- Only insert manufacturer to offer aluminum as a catalog standard (lead-free and 70% lighter than brass)
- Stainless Steel offers better protection from certain types of corrosive agents
- Smart alternatives to leaded brass that support sustainable manufacturing

### Get PEM® and SI® Support Anytime, Anywhere

No matter where you are in the world, our value-add services are there. With locations throughout North America, Asia and Europe you'll get complete global support at the local level.

#### Application Engineering Services

- Application Review
- Custom Design/Product Development
- 3D Models
- Teardown Services

#### Technical Lab Services

- Product Testing worldwide
- State-of-the-art Clean Lab capabilities



#### SI® Prototype Kit

- 1,000+ ultrasonic, mold-in, press-in inserts
- Various types/sizes for your specific design requirements



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