**PEM® System Solution:**
Collaboration Drives New Connector Design and Reduced Space Requirements

PEM® engineering and manufacturing expertise leads to patented connector design that significantly reduces space requirements and meets critical busbar electrical specifications.

**OVERVIEW**
Customer: Global Automotive OEM  
Application: Electric Vehicle Busbar Architecture  
Solution: System Solution with PEMSERTER® Press

**CHALLENGE**
Busbar Design with Space Constraints  
- New scalable electric architecture must accommodate all EV configurations  
- Tolerance – installation process is critical  
- No hydraulic installation systems allowed  
- High-volume price challenge  
- Support needed for multiple global locations  
- VDA 19 Part 1 cleanliness requirements

**SOLUTION**
System Solution  
- PEM® screw machine design solved technical challenge  
- Cold formed primary process developed with secondary machining operation  
- Force controlled installation  
- Servo electromechanical actual technology using PEMSERTER® Series 3000™ Press

**RESULTS**
Patented Connector Design Reduced Space Requirements by 80%  
- Tooling package developed clinch fastener installation after solder ring” assembly  
- Fastener/installation solution met both technical and commercial targets  
- Supported all of customer’s global manufacturing locations  
- Solution accommodated all vehicle configurations