

High-quality dissimilar material joining of steel and aluminum



Solid-State Resistance Spot Joining: Cold Spot Joining

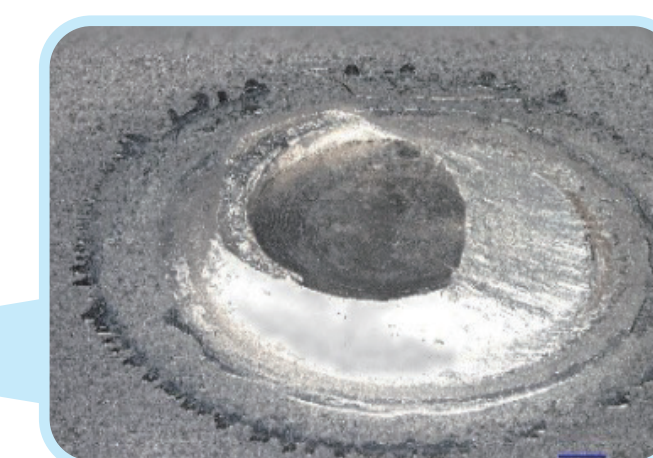
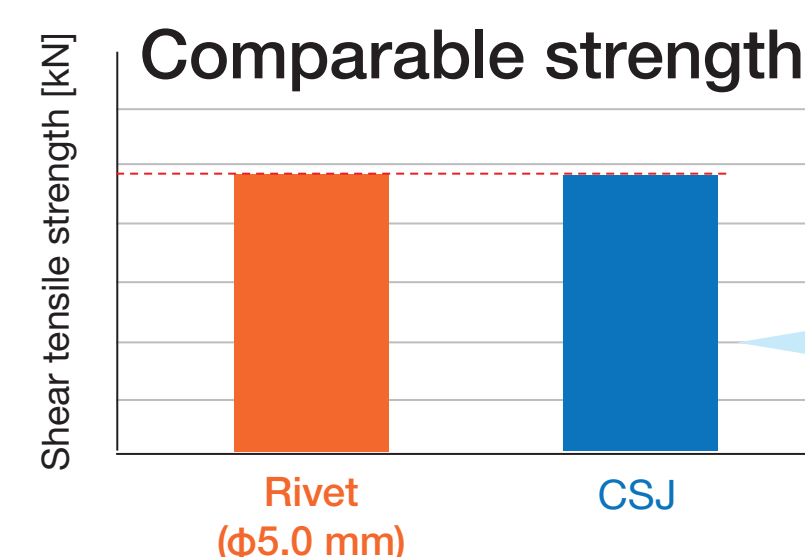
Dissimilar material joining for steel and aluminum based on new technology

- **High-quality joining ensured by expelling impurities** via plastic flow generated by high load



High quality and stability

- **Strength up to plug fracture** is comparable to conventional methods (riveting).
- Minimizes electrode wear for consistent quality. Spot welding: Requires electrode polishing after just a few welds.
CSJ: Requires no electrode polishing even after 50 or more welds.



→ Results in plug fracture

