Joining Processes of Hybrid Parts

NobelClad transition joints are made from two or more metals with significantly different physical or chemical properties which offer better capabilities when combined. These composite inserts make it possible to permanently join dissimilar metals in structural, electrical and piping designs. Transition joint applications can be seen across construction equipment and transportation industries. There are two ways to join a transition joint from dissimilar metals: explosion welding and roll bonding.

**EXPLOSION WELDING**

Structural transition joints made from explosion welding can be made from these metals:
- Aluminium
- Aluminium Alloys
- Carbon Steel
- Stainless Steel
- Titanium
- Copper

**STRONG METALLURGICAL BOND**

Our bi-metallic plates deliver high shear strength and high tensile strength across 260 metal combinations.

**Aluminium to Steel profile used in trains**

CONTACT NOBELCLAD TODAY TO LEARN HOW THESE PARTS SOLVE CHALLENGES THAT POWER OUR GLOBAL INFRASTRUCTURE.
Roll bonding allows for high quality transition joints for welding Aluminium to:
- Carbon Steel
- Stainless Steels
- Titanium
- Copper

**Bond Precision**
- Extreme performance for precision work and vacuum applications.

**Welding Technique Guarantee**
- Metallurgical bond
- High bond strength
- Electrical conductivity
- Thermal conductivity
- Prevention of corrosion

Finished products come in a wide range of metal sizes and combinations