

Welding Aluminum to Steel in Trucks & Trailers

TRANSITION JOINT OVERVIEW

To permanently join metals without fasteners, NobelClad's structural transition joints enable welding aluminum to steel. Clad transition joints used in truck trailer designs can reliably secure:

- Increased strength, stiffness and total lifetime of aluminum to steel assemblies
- Corrosion resistance at the joint between aluminum and steel
- Reduction of risk and maintenance cost
- Hybrid design

For over 50 years, marine, train and defense industries benefited from welded solutions for corrosion-resistance and fatigue strength. There is a clear opportunity for truck and trailer manufacturers to do the same. Contact us today.

STRUCTURAL TRANSITION JOINTS

- Aluminum trailer cross members to steel frame rails
- Aluminum trailer decks to steel chassis
- Welding thin walls and aluminium extruded panels to the chassis



Hauling excess structural weight increases operating costs. Hybrid transition joints to **lightweight** structural trailer components lead to a **lifetime of cost savings**.

TUBULAR TRANSITION JOINTS

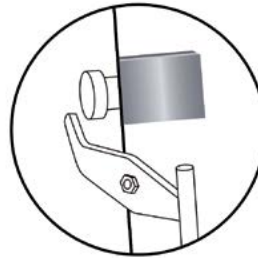
- Tubular interfaces for low weight universal joints and drive lines
- Tubular piping



Tap into the strength of steel and the lightweight properties of premium aluminum alloys, design engineers will **increase efficiency**.

OTHER TRANSITION JOINTS

- Wear-resistant clad surfaces to lightweight materials
- High strength aluminum interfaces to steel hardware



Eliminate the risk of corrosion and **eliminate the need for fasteners in design**, while providing better lifetime durability and strength.

CUSTOM PRODUCTS FOR YOUR NEEDS

AL ALLOYS	STEEL	AVAILABLE THICKNESS	QUANTITY	CERTIFICATION	TYPICAL TENSILE STRENGTH
3xxx	Mild steel	2 - 50 mm	1 - 10,000+	EN ISO 3834	100 Mpa minimum*
5xxx	High strength steel	.7 - 2 in		AWS	
6xxx	Stainless steel				

*Depending on aluminum grade and tensiles specimen