Case Study - Welding
WeldAssure™

e.g. Gas Tungsten Arc Welding (GTAW)

- Also known as tungsten inert gas (TIG) welding

- Arc welding process that uses a non-consumable tungsten electrode

- Energy is conducted across the arc in a plasma

- The weld area and electrode is protected from atmospheric contamination (including nitrogen) by an inert shielding gas
Aluminum 6061 T3 Welds

GTAW (TIG) With & Without WeldAssure™

Without Purification

(impurity content = 40 ppm)
Surface Oxides, Porosity,
Poor Cleaning Action,
Poor Wetting, Rough Weld Surface

With Purification

No Porosity, Clean X-Rays
Good Cleaning Action,
Excellent Wetting, and Ductility
Very Smooth Surface