

# ORBITAL

## FABRICATIONS

Specialist in Orbital & Manual TIG Welding  
World Class Engineering & Manufacturing Solutions

# ANALYSIS OF A QUALITY THICK WALL ORBITALLY WELDED TUBE JOINT FOR HIGH PRESSURE HYDROGEN

**Sample material: 316L stainless steel tube, 0.25”  
OD with 0.065” wall thickness**



Clean, oxide-free, high  
purity finish on the  
internal surface  
(external surface  
cleaned post weld)

Full weld penetration  
around the entire  
circumference of the  
joint

No collapse or concave  
finish of the weld bead  
on the external surface.