

Manufacturers of Custom Welding Lines for Resale www.selectrode.com

SELECTRODE 6281 Pure Copper TIG

INTERNATIONAL CLASSIFICATIONS

AWS A5.7 ERCu ASME SFA A5.7 ErCu Din 1733 SG-CuSn/2.1006 BS EN ISO 24373 S Cu 1898A/CuSn/MnSi

FEATURES & APPLICATIONS

APPLICATIONS:

The 6281 is a deoxidized copper alloy developed to provide dense, high quality deposits with relatively high electrical conductivity for use in joining and overlay.

It is primarily used to fabricate deoxidized copper and repair weld copper castings with the gas tungsten-arc process. It may also be used to weld galvanized steel and deoxidized copper to mild steel where high strength joints are not required.

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

| Cu | Mn | Si | Р | Sn | Pb |
|------|-----|-----|------|-----|-------|
| Bal. | .16 | .23 | <.02 | .80 | <.016 |

TYPICAL MECHANICAL PROPERTIES

| Undiluted Weld Metal | Maximum Value Up to: | | |
|-----------------------------|----------------------|--|--|
| Tensile Strength | 29,000 PSI (200 MPa) | | |
| Yield Strength | 8,000 PSI (55 MPa) | | |
| Elongation | 29% | | |
| Hardness | 54 BHN | | |
| Electrical Conductivity | 40% IACS | | |

Recommended Current: DC- (Argon gas should be used to minimize burn-off of the tungsten electrode)

WELDING TECHNIQUES: Insure welding surface is free of contamination. Preheat thicker sections 750°-1100°F (400°-600°C)

Recommended Amperage Settings:

| Diameter Inches (mm) | Metal Thickness Inches (mm) | Tungsten Size Inches (mm) | Amps |
|-------------------------|--------------------------------|------------------------------|---------|
| 1/16 (1.6) | 1/16 (1.6) | 1/16 (1.6) | 110-150 |
| 3/32 (2.5) | 1/8 (3.2) | 3/32 (2.5) | 175-250 |
| 1/8 (3.2) | 3/16 (5.0) | 1/8 (3.2) | 250-325 |