


561_(AC) / **563**_(DC+)
COPPER ALLOY

DESCRIPTION

Specialty-formulated bronze electrode for welding and building up a wide range of ferrous (alloy steel, cast iron, stainless steel, etc.) and non-ferrous (copper, bronze, brass, etc.) metals.

CHARACTERISTICS

- **Excellent for parts subjected to compression and corrosion**
- Excellent weldability
- Good colour match on bronze
- Smooth, dense and porosity-free deposit
- Excellent machinability
- Stable arc and low spatter

TYPICAL APPLICATIONS

Ideal for dissimilar assemblies. Metal coating, repair of casting defects, bushings, pump rotors, gear wheels, guides, valve seats, turbines, boat propellers, augers, couplings, etc.

PROCEDURE

Remove any trace of oil, grease and/or dirt from the surface. Gouge the base metal over 3/16" (5.0 mm) thick. **Preheat copper and copper alloys between 400 - 600°C (752 – 1112°F), as applicable**, and use a bigger diameter to maintain the heat in the part. Maintain a short arc with a slight weaving motion. Cool before removing slag between passes.

MECHANICAL PROPERTIES

Tensile strength: 55 000 - 60 000 psi (378 - 413 MPa)
 Yield strength: 30 000 - 35 000 psi (206 - 240 MPa)
 Elongation: 30 - 40 %
 Hardness (as-welded): 100 - 120 BH

WELDING PARAMETERS

Polarity: Soudotec 561: AC / DC+ Soudotec 563: DC+
Diameter: 3.2 mm (1/8") (Other diameters available upon request)
Amperage: 80 - 130 A

Also available in solid wire: **Soudotec M8561** and TIG rods: **Soudotec T561**

Rév.: 21_08

Specialized welding alloys and technology. For technical assistance or for ordering :