



Contact Clamp - Electric Arc Furnace

## Non-ferrous electrode for welding all grades of copper

### Typical Applications:

Electrical bus bars, switch gear, transformers, generators, evaporator shells, distillation columns, cooling pans, heat exchanger, boilers, steam coils, high pressure conduits.

### Outstanding Features:

- Compatible with many copper alloys with excellent colour match.
- Deposits can be electro-plated with nickel & chromium.
- Weld metal exhibits higher thermal & electrical conductivities.
- Suitable for copper-cladding of ferrous materials & for joining copper to steels.
- Excellent resistance to atmospheric & marine corrosion.

### Recommendation:

For arc welding applications requiring high purity copper deposits. Recommended for welding of all copper grades (oxygen-free, phosphorus deoxidised, refined, high conductivity etc.)

### Procedure:

Ensure the surfaces to be welded are free from oxides, corrosion and contamination. The high thermal conductivity of copper dissipates heat from the weld area rapidly, causing lack of fusion or porosity in the welds. Therefore, preheating of large parts to 400-600°C is recommended. Use DC positive polarity for the electrode. Weld with short arc & weaving technique. Chip slag between passes and wire brush deposit. Peen welds in red - hot condition to minimise residual stresses.

### Recommended Amperages:

Size (mm)	Amperage
3.15	80 - 130
4.00	130 - 170

**Tensile Strength:** 8 - 14 Kg/mm<sup>2</sup>

**Conductivity:** 80% IACS