

GEMET 717

MANGANESE-NICKEL-ALUMINIUM BRONZE ELECTRODE

IDENTIFICATION

Gemet 717, ECuMnNiAl

CLASSIFICATION

AWS/SFA 5.6: ECuMnNiAl, DIN 1733:E31-UM-150-CNR

DESCRIPTION

Medium coated basic type electrode depositing Porosity free weld metal with very good resistance to corrosion and wear.

WELD METAL ANALYSIS (RANGE) %

| Al | Mn | Fe | Ni | Cu |
|----------|----------|----------|----------|-----------|
| 7.00 max | 13.0 max | 2.50 max | 2.50 max | Remainder |

MECHANICAL PROPERTIES (RANGE)

| TS (MPa) | PS (MPa) | EL (%) (L=4D) | Hardness |
|-----------|----------|------------------|------------------|
| 520 - 650 | 380 min | 20% | 180 - 220 BHN |

TYPICAL APPLICATIONS

- Welded joints and surfacing on aluminium bronzes, multi-alloy aluminium bronzes and aluminium bronze castings.
- In shipbuilding, apparatus engineering, machine industry and fittings manufacture.
- Welding repairs on similar parent materials.
- Weld surfacing of corrosion resistant multi-alloy aluminium bronze armour coatings on unalloyed steels and cast iron.
- Suitable for welded joints on Wnr. 2.0916, 2.0920, 2.0928, 2.0932, 2.0936, 2.0940, 2.0962, 2.0966, 2.0970, 2.0978, 2.0980. Joint preparation should have 90° included angle. Preheating is only necessary when welding large castings. A fast welding speed is recommended in order to keep down the size of the weld pool.

PACKING PARAMETERS

| Size (mm) | Length (mm) | Current Condition DC (+) Amps | Packing / Packet (kg) | Packing / Box (kg) |
|-------------|-------------|-------------------------------|-----------------------|--------------------|
| 2.5 | 350 | 60 - 90 | 2 | 2 x 5 = 10 |
| 3.15 / 3.20 | 350 | 90 - 120 | 2 | 2 x 5 = 10 |
| 4 | 350 | 120 - 150 | 2 | 2 x 5 = 10 |