



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

# SELECTRODE 1285

Aluminum Bronze Electrode

## INTERNATIONAL CLASSIFICATIONS

AWS/ASME A 5.6 E CuAl-A2  
DIN 1733: EL - CuAl9

## FEATURES & APPLICATIONS

Joining and surfacing parts subject to service in marine environments and seawater.

Very high strength aluminum bronze electrode with excellent wear resistance.

- Universal electrode safely repairs all grades of aluminum bronzes.
- Resists corrosion, cavitation, erosion, and metal to metal wear.
- Also excellent for overlays on cast irons, steels and copper.

## ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

**Microstructure:** Complex alpha matrix with kappa compound phases and some retained beta phase.

**Flux Color:** Grey

| Fe  | Si  | Al | Pb  | Cu  |
|-----|-----|----|-----|-----|
| 3.2 | 1.4 | 8  | .02 | Bal |

## TYPICAL MECHANICAL PROPERTIES

### Undiluted Weld Metal

Tensile Strength

Yield Strength

Elongation

Hardness

### Maximum Value Up to:

89,000 PSI (614 MPa)

59,000 PSI (407 MPa)

23%

Brinell 148, Rockwell B82

## WELDING CURRENT & INSTRUCTIONS

**Recommended Current:** DC Reverse (+)

| Diameter (mm)    | 1/8 (3.25) | 5/32 (4.0) | 3/16 (5.0) |
|------------------|------------|------------|------------|
| Minimum Amperage | 90         | 105        | 135        |
| Maximum Amperage | 130        | 155        | 210        |

**Welding Techniques:** Preheat is not required. Maintain a short arc gap. Clean slag thoroughly between passes.

**Welding Positions:** Flat, Horizontal

**Deposition Rates:**

| Diameter (mm) | Length (mm) | Weldmetal/<br>Electrode | Electrodes per<br>lb (kg) of<br>Weldmetal | Arc Time of<br>Deposition<br>min/lb (kg) | Amperage<br>Settings |
|---------------|-------------|-------------------------|---|--|----------------------|
| 1/8 (3.25)    | 14" (350)   | .8 oz (22g)             | 20 (45)                                   | 25 (54)                                  | 110                  |
| 5/32 (4.0)    | 14"(350)    | 1.1 oz (32g)            | 14 (31)                                   | 16 (36)                                  | 135                  |
| 3/16 (5.0)    | 14" (350)   | 1.6 oz (45g)            | 10 (22)                                   | 13 (28)                                  | 180                  |

## APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

| Diameter (mm)   | 1/8 (3.25) | 5/32 (4.0) | 3/16 (5.0) |
|-----------------|------------|------------|------------|
| Length (mm)     | 14" (350)  | 14" (350)  | 14" (350)  |
| Electrodes / lb | 13         | 9          | 6          |
| Electrodes / kg | 29         | 20         | 13         |