

# MG 300

## UNIVERSAL BRONZE ELECTRODE FOR JOINING AND SURFACING

DC REVERSE (ELECTRODE +)

### GENERAL CHARACTERISTICS:

High alloyed bronze electrode contains aluminum, nickel, and manganese. The unique formula with the special coating makes this electrode outstanding for a wide range of applications.

### APPLICATIONS:

Structural joining, repair, and surfacing of high manganese steel, nickel and iron-containing aluminum bronzes, steel, tin bronzes (phosphor bronze), brass and copper. Also for cast iron surfacing when the first layer is applied with MG-200. Commonly used on ship propellers, turbines, valves, thrust bearings, stirrer blades, guides, suction rolls, and parts of hydraulic equipment. Construction of machines, fittings, instruments, and pumps for the chemical and paper industries. Dissimilar metals are also often joined with this electrode.

### TECHNICAL DATA:

Tensile Strength.....	up to 100,000 psi (689 N/mm <sup>2</sup> )	
Yield Strength .....	up to 63,000 psi (435 N/mm <sup>2</sup> )	
Elongation .....	approx. 20%	
Hardness (HB).....	200	
Corrosion Resistance .....	very good	
Current .....	DC reverse polarity (electrode+)	
Amperage	90-125	120-150
(in)	1/8	5/32
(mm)	3.2	4.0

### PROCEDURE:

Preheat copper base metals to 570°F (300°C); do not heat other materials. Maintain a short arc. Apply thin layers using either stringer beads or weave beads. Remove slag between passes. Allow part to cool slowly. In most applications it will not be necessary to machine the surface after welding.