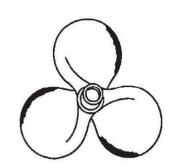
# MAGNUM



Very high strength nickel manganese 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.

INTERNATIONAL SPECIFICATIONS

AWS/ASME A 5.6: E CuMnNiAl DIN 1733: EL-CuMn14A1

## **APPLICATIONS:**

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

#### **MICROSTRUCTURE:**

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

# ALL WELD METAL ANALYSIS (Typical Weight %):

Mn	Si	Ni	Fe	Al	Cu
13.7	.6	2.9	3	5.6	bal

FLUX COLOR: Grey

# TYPICAL MECHANICAL PROPERTIES:

**Undiluted Weld Metal** 

Tensile Strength

Yield Strength

Elongation

Hardness

Maximum Value Up to:

98,000 PSI (650 N/mm<sup>2</sup>) 65,000 PSI (450 N/mm<sup>2</sup>)

20%

Brinell 155, Rockwell B87

**RECOMMENDED CURRENT:** DC Reverse (+)

## **RECOMMENDED AMPERAGE SETTINGS:**

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 POSITIONS: Flat

#### **DEPOSITION RATES:**

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

# WELDING TECHNIQUES:

Preheat is not required. Maintain a short arc gap. Clean slag thoroughly between passes.