

## INTRODUCTION

Aufhauser Aluminum Bronze A-2 Electrode has weld metal of higher tensile strength, yield strength, and hardness with a correspondingly lower ductility than the Aluminum Bronze A-1 (EC614). Used in ship-building, sea water applications, desalination plants, chemical industry, pump parts that are attacked by salt water (propellers, bearings, etc.).

## APPLICATIONS

- Repairing aluminum bronze and other copper alloy castings.
- High strength surfacing of wear- and corrosion-resistant bearing surfaces.

### CHEMICAL COMPOSITION

<u>Copper</u>	<u>Aluminum</u>	Iron	Lead	<u>Silicon</u>	<u>Other</u>
Remainder	6.50 - 9.0	0.50 - 5.0	0.02	1.50	*

Note: Copper contains Silver. All values are maximum percentage, unless shown in range. \*Total Other elements (include Manganese, Nickel, Tin, Zinc) = 0.50 max

# PHYSICAL and MECHANICAL PROPERTIES

Tensile Strength	77,000 psi
Yield Strength	35,000 psi
Elongation, in 2 in.	27%
Brinell Hardness	110-130
Hardness will vary depending on	
weld quality and welder expertise	
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## ♦ SPECIFICATIONS MEET or EXCEED

- AWS A5.6 Class E CuAl-A2
- ASME SFA 5.6 Class E CuAl-A2

### STANDARD SIZES AND DIAMETERS

<b>Diameters</b>	<u>Lengths</u>	<u>Amperage</u>
3/32	12″	80-100
1/8	14″	90-120
5/32	14″	120-140
3/16	14″	120-140

Copper and its alloys require a relatively high heat input with shortened welding time. Higher preheat temperatures and faster welding rates than for steel are necessary.