Aufhauser
Corporation
39 West Mall
Plainview, NY 11803
Telephone:
516-694-8696
800-645-9486
Fax:
516-694-8690

Copper Nickel Electrode

♦ INTRODUCTION

Aufhauser Copper Nickel Electrode is a 70% copper – 30% nickel electrode that offers excellent resistance to the corrosive effects of salt water.

♦ APPLICATIONS

- Shielded metal arc welding of wrought or cast 70/30, 80/20, and 90/10 copper nickels to themselves or to each other.
- Welding clad side of copper-nickel clad steel.
- May also be used for joining copper-nickel Alloy 400, R-405 and K500 or high nickel Alloy 200 to the copper-nickel alloys.

♦ CHEMICAL COMPOSITION

Copper	Zinc	Tin	Manganese	Iron	Silicon	Nickel	Phosphorus	Titanium
Remainder	*	*	1.00-2.50	.40-.75	0.50	29.0-33.0	.020	.50

Note: Copper contains Silver. All values are maximum percentage, unless shown in range. Total other elements = .50
***** These elements must be included in total of other elements.

♦ PHYSICAL and MECHANICAL PROPERTIES

Current Used	DC Reverse
Position(s)	All Position
Tensile Strength	50,000 psi, min.
Yield Strength	20,000 psi, min.
Elongation, in 2 in.	30%
Brinell Hardness	60-80

♦ SPECIFICATIONS MEET or EXCEED

- AWS/SFA5.6 Class ECuNi
- MIL-E-22200/4, Type MIL-CuNi (70/30)

♦ STANDARD SIZES AND DIAMETERS

Diameters	Lengths
3/32	12″
1/8	14″
5/32	14″
3/16	14″

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. 20151201