

# Nickel-Alu Bronze

## Classification

AWS.A5.7 ERCuNiAl  
UNS C63280

## Description

Nickel Alu-Bronze is a nickel-aluminum bronze alloy used to weld cast and wrought nickel-aluminum bronze. It has excellent resistance to corrosion, erosion, and cavitation wear in salt or brackish water

## Application

Typical applications include the fabrication or repair of ship fittings and propellers, and other components exposed to salty and brackish water. Other uses are for the repair of power plant valves and joints in marine piping systems.

## Shielding Gas

Welding grade Argon or Argon/Helium mixtures

## Chemical Composition of Solid Wire

Cu	Zn	Mn	Fe	Si	Ni	Al	Pb	Total Others
Balance	0.10 Max.	0.60 – 3.50	3.0 – 5.0	0.10 Max.	4.0 – 5.5	8.5 – 9.5	0.02 Max.	0.50 Max.

## Typical Mechanical Properties of Weldmetal

Tensile strength	Yield strength	Elongation
570 MPa	360 MPa	24%

## Packaging and Machine Settings – GMAW

Diam. (mm)	1.2
Spool (300mm)	13.6 kg
Volts	21-29
Current, A	160-260

Diam.	13.6kg Spool
1.2mm	CMWNIAlBro12

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