



Aluminum Bronze A4

Unibrazed Aluminum Bronze A4 is a nickel-aluminum bronze alloy used to weld cast and wrought nickel-aluminum bronze. It has excellent resistance to corrosion, erosion, and cavitations in salt or brackish water. Unibrazed Aluminum Bronze A4 applications include, ship fittings, ship propellers, power plant valves, piping systems, intake screens, oil recovery pumps, and propeller gear housings.

Bare (ERCuNiAl)

Typical Chemical Composition

Copper*	Balance
Aluminum	8.5 – 11.0
Iron	3.0 – 5.0
Nickel	4.0 – 6.0
Manganese	0.60 – 3.50
Silicon	.10 max.
Others	0.50 max.

*includes Silver

Typical Mechanical Properties

Tensile Strength, ksi	104 (718 MPa)
Yield Strength, ksi	59 (407 MPa)
Elongation, in 2 in.	23%
Reduction of area	22%
BHN (3000 kg)	
1/4" (6.4 mm) deposit	196

Specifications

AWS A5.7 / ASME SFA 5.7 Class ERCuNiAl

Available Sizes

MIG: .035" (.9mm), .045" (1.2mm), .062" (1.6mm)
TIG: 1/16" (1.6mm), 3/32" (2.4mm),
1/8" (3.2mm), 5/32" (4.0mm)

Coated (ECuNiAl)

Typical Chemical Composition

Copper*	Balance
Aluminum	8.5 – 9.5
Iron	3.0 – 5.0
Nickel	4.0 – 6.0
Manganese	0.50 - 3.50
Silicon	1.50 max.
Others	0.50 max.

*includes Silver

Typical Mechanical Properties

Tensile Strength, ksi	99 (683 MPa)
Yield Strength, ksi	58 (400 MPa)
Elongation, in 2 in.	25%
Reduction of area	22%
BHN (3000 kg)	
1/4" (6.4 mm) deposit	187

Specifications

AWS A5.6 / ASME SFA 5.6 Class ECuNiAl

Available Sizes

1/8" (3.2mm), 5/32" (4.0mm)