



AMTEC 606 ALUMINUM BRONZE TIG WIRE

BARE TIG ROD

General Characteristics

Amtec 606 is the most versatile welding alloy of the aluminum bronze alloys. It contains an additive to inhibit against inter-granular stress corrosion cracking. This alloy will weld and join many ferrous and non-ferrous metals and combinations of dissimilar metals. These include cast iron, high and low alloy steel, copper, bronzes and copper-nickel alloys. Excellent for build-up on surfaces where long wear resistance is necessary, such as bearing surfaces.

Procedure

Clean the weld zone of all contaminants. For the TIG process, use DC Straight Polarity with a shielding gas of Argon or Helium. Use tungsten electrodes with 2% thorium. Preheat is necessary on copper of at least 1000°F. On other alloys, and especially thin sections, pre-heat is not necessary. On joining thin sections, the joint should be a square groove. (a space between edges). On thicker sections a single Vee up to 3/4" and a double Vee over 3/4" is advisable. Keep the weld puddle as small as possible to assure rapid solidification. If using oxy-acetylene, use a slightly oxidizing flame, and a bronze brazing flux.

Application

For build-up of bearing surfaces, joining and fabricating copper alloys, and overlaying for resistance to corrosion and erosion. This alloy can be used for repair and build-up of bushings, pump housings, hydraulic pistons, brake drums, tractor gear housings, idler pulleys, paper mill rolls, impellers, valve seats, gears, ship propellers and turbine runners.

Tensile Strength				100,000 PSI
Yield Strength				60,000 PSI
Elongation				28%
Hardness (HB)				140-150

Diameter (Inch)	1/16	3/32	1/8
(mm)	1.5	2.5	3.2

Amps (approx.)	30-60	50-75	80-110
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CONFIDENTIAL INFORMATION
Subject to change without notice

Tip Color – Plain
Bare Tig Rod