



AMTEC 604 UNIVERSAL BRONZE TIG WIRE

BARE TIG ROD

General Characteristics

Amtec 604 is an outstanding alloy that will join and build up on many types of parent metals. It does this without having to melt the base metals, which cause excessive heat and distortion. Deposits are dense and porosity free. This product is generally used with the TIG process, however, great results can be achieved with oxy-acetylene welding, with the use of a bronze brazing flux. Normally, preheating is not required.

Procedure

Clean the weld zone of all contaminants. For the TIG process, use DC Straight Polarity with a shielding gas of Argon or Helium. No preheat is necessary. On joining thin sections, the joint should be a square groove. (a space between edges). On thicker sections a single Vee up to $\frac{3}{4}$ " and a double Vee over $\frac{3}{4}$ " 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 joining and building up on a wide variety of copper base alloys such as brass, bronze and copper to themselves and to steel and cast iron. Ideal for light gauge sheet metals, including galvanized steel or terneplated steel. Amtec 604 Tig is also good for repairing cast iron or joining it to other metals. Ideal for truck body work, machine guards, valve seats, and brass or bronze sections. Excellent color match to phosphor bronze, red brasses, and silicon bronze.

Tensile Strength	50,000 PSI
Yield Strength	30,000 PSI
Elongation	18%
Hardness (HB)	80-100

Diameter (Inch)	1/16	3/32	1/8
(mm)	1.5	2.5	3.2
Amps (approx.)	30-60	50-75	80-110

CONFIDENTIAL INFORMATION
Subject to change without notice

Tip Color – Plain
Bare Tig Rod