

# Technical Data Sheet **AMPCO-TRODE® 300**

## Description and Application

AMPCO-TRODE® 300 aluminum bronze bare filler rod is available for use with the gas tungsten arc welding process. The weld deposit has the highest yield strength and hardness (nominal 300 Brinell) of the AMPCO-TRODE® series. In addition to high hardness, the deposit also has excellent bearing and wear-resistance qualities.

These characteristics make this deposit adaptable for use in extreme bearing applications where very high pressures are encountered.

These characteristics – hardness, bearing properties and wear resistance all combine to make AMPCO-TRODE® 300 ideal for surfacing iron and copper-base materials. Dies overlaid with AMPCO-TRODE® 300 have surprising freedom from scratching and galling; die marks are almost completely eliminated.

## Limiting Chemical Composition,

*% (filler metal)*

Copper*	Balance
Aluminum	14.0 - 15.0
Iron	3.0 - 5.0
Silicon	0.04 max.
Others	0.50 max.

\* including silver

## Mechanical Properties

*(Nominal all-weld metal values)*

Tensile Strength, ksi (MPa)	81 (558)
Yield Strength, ksi (MPa)	69 (476)
Elongation, % in 2" (51 mm)	0
BHN (3000 kg) 1/4" (6.4mm) deposit	370

## Specifications

AWS Class RCuAl-E

*\*Hardness will vary depending on quality of the weld and experience and knowhow of the welder.*

## Typical Applications

Draw dies	Wear shoes
Wear strips	Slides
Forming dies	Wear plates
Cams	Welding AMPCO® 25

