Technical Data Sheet
AMPCO-TRODE® 160

Description and Application

AMPCO-TRODE® 160 aluminum bronze coated electrodes produce a deposit of high strength and good ductility with a nominal hardness of 160 Brinell as applied by the shielded metal-arc process. AMPCO-TRODE® 160 is recommended for joining aluminum bronzes (AMPCO® 18), ferrous and dissimilar metals requiring higher strength than produced by AMPCO-TRODE® 10 filler metal. The deposit has excellent bearing characteristics and is suitable for overlaying bearing surfaces subject to normal wear and shock. The deposit has properties which make it resistant to "squashing out" in bearing service.

Typical Applications

Bronze castings	Strip mill guides
Bearing overlays	Crane contact shoes
Driving sprockets	Drop hammers
Manipulator slides	Gate valves
Sheaves	Pistons
Mill slippers	Turbine runners
Packing glands	Valve seat overlays

Limiting Chemical Composition,

% (deposited weld metal)

Copper*..... balance
Aluminum..... 9.5-11.5
Iron.....2.50-5.0
Silicon..... 1.5 max.
Others..... 0.50 max.
* including silver

Mechanical Properties

(nominal all-weld metal values)

Tensile Strength, ksi..... 89 (614 MPa)
Yield Strength, ksi..... 47 (324 MPa)
Elongation, % in 2" (51 mm)..... 15
Reduction of Area, %..... 17
BHN (3000kg.)
1/4" (6.4mm) deposit..... 160

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

Specifications

AWS A5.6 Class E CuAl-B