

Technical Data Sheet

COPR-TRODE®

Description and Application

COPR-TRODE is a deoxidized copper alloy developed to provide dense, high quality deposits with relatively high electrical conductivity for use in joining and overlay with the inert-gas processes. COPR-TRODE spooled wire and filler metal rod are used primarily to fabricate deoxidized copper and repair weld copper castings with the gas metal-arc and gas tungsten-arc processes. It may also be used to weld galvanized steel and deoxidized copper to mild steel where high strength joints are not required. COPR-TRODE spooled wire and filler metal rod are used to overlay surfaces to resist corrosion.

Limiting Chemical Composition,

% (filler metal)

Copper*	98.0 min.
Tin.....	1.0 max.
Manganese.....	0.50 max.
Silicon.....	0.50 max.
Phosphorus.....	0.15 max.
Others	0.50 max.

* including silver

Mechanical Properties

(nominal all-weld metal values)

Tensile Strength, ksi.....	29 (200 MPa)
Yield Strength, ksi.....	8 (55 MPa)
Elongation, % in 2" (51 mm).....	29
Reduction of Area, %.....	45
BHN(500kg.)	
1/4" (6.4 mm) deposit.....	54
Electrical Conductivity, % IACS.....	40

Specifications

AWS A5.7 Class ERCu



Typical Applications

billet molds
conductor rolls
heater elements
copper sculptures
steel mill electrode holders
bus bars
copper connectors

