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.

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

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