



**WILLIAMS METALS
AND WELDING ALLOYS INC.**

**1-877-435-6543
Call us today!
sales@wmwa.net**

Deoxidized Copper Filler Metals

De-ox welding wire is used exclusively for copper to copper welded joints. Applications include, but are not limited to: bus bar; other conductive components, structural in terms of items used in steel-making and molds. Weld area is characterized by a large HAZ, and high ductility. Fumes are hazardous and precaution should be taken when welding.

Copper Welding Filler Metals

AWS A5.7

Grade	Cu	Sn	Mn	Si	P	Other
De-ox	98 Min	1.0 Max	.50 Max	.50 Max	.15 Max	.50 Max

Diameter	WFS	I	V	(GMAW) Applications
.035	360 in/min	360 amps	24 Volts	Pipe and plate
.045	280 in/min	250 amps	25 Volts	Molds
.062	160 in/min	330 amps	27 Volts	Steel mill applications
Diameter	W Diam	I	Gas	(GTAW) Applications
.062 (1/16)	.04 inches	60 amps	Ar	Thin sheet
.093 (3/32)	.125 inches	370 amps	Ar + He	Repair
.125 (1/8)	.188 inches	475 amps	He	Repair and fab of t = >.5 inches

Other Considerations

GMAW	GTAW
Argon and Helium for t (inches) >.25 inches	Argon for Lap and T joints in sheet (t = <.062)
Preheat Schedule	Argon + Helium for up to .5 inches
t = <.25 inches 200° F for T or Lap	Helium (t = >.50 inches)
t = <.50 inches 600° F for Groove	Preheat depends on sheet thickness
	**Call for Welding Procedure Specification (WPS)

Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) forms are available upon request.

We offer tech support for applications regarding joint design and repairs, as well.

Williams Metals & Welding Alloys proudly carries a full range of De-Ox Copper products.

Materials are available in spooled wire, and straight lengths.

Available for immediate shipment from stock.

• Birmingham, AL • Concord, NC • Garrettsville, OH • Mansfield, OH • Pittsburgh, PA • St. Louis, MO • Wayne, PA Corporate

