Oxford Alloy® Deox Copper

AWS ERCu • Bronze Alloys

Key Features

- Developed to provide dense, high quality deposits with relatively high electrical conductivity for use in joining and overlay with the inert-gas processes.
- Primarily used to fabricate deoxidized copper and to weld repair copper castings. It may also be used to weld galvanized steel and deoxidized copper to mild steel where high strength joints are not required.

Conformances

AWS/ASME SFA 5.7
ERCu
UNS C18980

Chemical Composition - As required per AWS 5.7						
Cu+Ag	**P**	**Sn**	**Pb**	**Mn**	**Si**	**Al**
98.0 min	0.15 max	1.0 max	0.02 max	0.50 max	0.50 max	0.01 max
OET						
0.50 max						

Mechanical Properties - As required by AWS 5.7			
	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %
AWS Requirements	170 (25) min	Not Specified	Not Specified
Typical Results - As welded	200 (29)	55 (8)	29

Typical Welding Parameters					
Diameter		**Process**	**Volt**	**Amps**	**Shielding Gas**
in	**(mm)**				
.035	0.9	GMAW	20-26	100-200	100% Argon
.045	1.2	GMAW	22-28	100-250	
1/16	1.6	GMAW	29-32	250-400	
1/16	1.6	GTAW		70-120	100% Helium
3/32	2.4	GTAW		120-160	
1/8	3.2	GTAW		170-230	

Diameters & Packaging					
Oxford Alloys USA			**Oxford Alloys Asia Pacific**		
Diameter (in)	**Form**	**Packaging (lbs)**	**Diameter (mm)**	**Form**	**Packaging (kgs)**
.035	GMAW	33 lb spool | 1980 lb pallet	0.9	GMAW	15 kg spool | 900 kg pallet
.045	GMAW	33 lb spool | 1980 lb pallet	1.2	GMAW	15 kg spool | 900 kg pallet
1/16	GMAW	33 lb spool | 1980 lb pallet	1.6	GMAW	15 kg spool | 900 kg pallet
1/16	GTAW	10 lb tube | 40 lb carton	1.6	GTAW	5 kg tube | 20 kg carton
3/32	GTAW	10 lb tube | 40 lb carton	2.4	GTAW	5 kg tube | 20 kg carton
1/8	GTAW	10 lb tube | 40 lb carton	3.2	GTAW	5 kg tube | 20 kg carton

Actual test results may vary. Refer test result disclaimer on page 160.