

MIG & TIG

Oxford Alloy® 67

AWS ERCuNi • Nickel Alloys

Key Features

- ❖ For welding of 70/30, 80/20 and 90/10 copper-nickel alloys.
- ❖ Can be used for MIG overlay on steel after a first layer with Nickel 208.
- ❖ Dissimilar welding applications include joining copper-nickel alloys to Nickel 200 or nickel-copper alloys.

Conformances

AWS/ASME SFA 5.7

ERCuNi

UNS C71581

Chemical Composition - As required per AWS 5.7

Ni+Co	Mn	Fe	Si	Cu+Ag	Ti	Pb
29.0-32.0	1.0 max	0.40-0.75	0.25 max	Bal	0.20-0.50	0.02 max
OET	P					
0.50 max	0.02 max					

Mechanical Properties - As required by AWS 5.7

	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %
AWS Requirements	345 (50) min	Not Specified	Not Specified
Typical Results - As welded	360 (53)	140 (21)	32



Typical Welding Parameters

Diameter		Process	Volt	Amps	Shielding Gas
in	(mm)				
.035	0.9	GMAW	26-29	150-190	Spray Transfer 100% Argon
.045	1.2	GMAW	28-32	180-220	
1/16	1.6	GMAW	29-33	200-250	100% Argon
1/16	1.6	GTAW	14-18	90-130	
3/32	2.4	GTAW	15-20	120-175	100% Argon
1/8	3.2	GTAW	15-20	150-220	100% Argon

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.