

MIG & TIG

Oxford Alloy® 60

AWS ERNiCu-7 • Nickel Alloys

Key Features

- ❖ Dissimilar welding applications include joining alloys to Nickel 200 and copper-nickel alloys.
- ❖ Widely used in marine applications because of its good resistance to the corrosive effects of seawater and brackish waters.
- ❖ Can be used for MIG overlay on steel after a first layer with nickel 208.

Conformances

AWS/ASME SFA 5.14

ERNiCu-7

UNS N04060



Chemical Composition - As required per AWS 5.14

Ni	C	Mn	Fe	Si	Cu	Al
62.0-69.0	0.15 max	4.0 max	2.5 max	1.25 max	Bal	1.25 max
Ti	P	S	OET			
1.5-3.0	0.02 max	0.015 max	0.50 max			

Mechanical Properties - As required by AWS 5.14

	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %
AWS Requirements	480 (70) typical	Not Specified	Not Specified
Typical Results - As welded	530 (77)	360 (53)	34

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	
1/16	1.6	GTAW	14-18	90-130	100% Argon
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.