Oxford Alloy® 187

AWS ECuNi • Nickel Alloys

Key Features

- Copper-nickel electrode for shielded metal are welding of wrought or cast alloys of similar composition as well as 80/20 and 90/10 Cu/Ni alloys.
- Used for the clad side of copper-nickel clad steels. This filler metal is widely used in marine applications because of its good resistance to the corrosive effects of sea water.

Conformances

AWS/ASME SFA 5.6
ECuNi
UNS W60715

Chemical Composition - As required per AWS 5.6						
Ni	**Pb**	**Mn**	**Fe**	**Si**	**Cu+Ag**	**Ti**
29.0-33.0	0.02 max	1.0-2.5	0.40-0.75	0.50 max	Bal	0.50 max
P	**OET**					
0.02 max	0.50 max					

Mechanical Properties - As required by AWS 5.6			
	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %
AWS Requirements	350 (50) min	Not Specified	20 min
Typical Results - As welded	380 (55)	260 (38)	28

Typical Welding Parameters					
Diameter		**Process**	**Volt**	**Amps (flat)**	**Amps (V/OH)**
in	**(mm)**				
3/32	(2.4)	SMAW	24-28	70-85	65-75
1/8	(3.2)	SMAW	26-30	85-110	80-90
5/32	(4.0)	SMAW	28-32	110-140	100-120
3/16	(4.8)	SMAW	28-32	120-160	110-130

Diameters & Packaging					
Oxford Alloys USA			**Oxford Alloys Asia Pacific**		
Diameter (in)	**Length (in)**	**Packaging (lbs)**	**Diameter (mm)**	**Length (mm)**	**Packaging (kgs)**
3/32"	12	10 lb tube | 30 lb carton	2.6	300	4 kg tube | 12 kg carton
1/8"	14	10 lb tube | 30 lb carton	3.2	350	5 kg tube | 15 kg carton
5/32"	14	10 lb tube | 30 lb carton	4.0	350	5 kg tube | 15 kg carton
3/16"	14	10 lb tube | 30 lb carton	5.0	350	5 kg tube | 15 kg carton

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