

COATED ELECTRODES

Oxford Alloy® 347-16

AWS E347-16 • Stainless Steel

Key Features

- ❖ Electrodes are niobium stabilized stainless steel electrodes used for the welding of types 347 and 321 stainless and stainless clad steels.
- ❖ The addition of niobium reduces intergranular corrosion in severe operating conditions.

Conformances

AWS/ASME SFA 5.4
E347-16
UNS W34710



Chemical Composition - As required per AWS 5.4						
C	Cr	Ni	Nb+Ta	Mn	Si	P
0.08 max	18.0-21.0	9.0-11.0	8 x C min to 1.0 max	0.5-2.5	1.0 max	0.04 max
S	Mo	Cu				
0.03 max	0.75 max	0.75 max				

Mechanical Properties - As required by AWS 5.4			
	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %
AWS Requirements	520 (75) min	Not specified	30 min
Typical Results - As welded	590 (86)	420 (61)	42

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.