

COATED ELECTRODES

Oxford Alloy® 9018-B3

AWS E9018-B3 • Chrome Moly



Key Features

- ❖ Used for welding 2-1/4% Cr - 1% Mo steels.
- ❖ Typical applications include power generation, pressure vessels, petrochemical, and process piping.

Conformances

AWS ASME SFA 5.5
E9018-B3
UNS W53018

Chemical Composition - As required per AWS 5.5						
C	Mn	Si	P	S	Cr	Mo
0.05-0.12	0.90 max	0.80 max	0.03 max	0.03 max	2.00-2.50	0.90-1.20

Mechanical Properties - As required by AWS 5.5			
	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %
AWS Requirements	620 (90) min	530 (77) min	17 min
Typical Results - As welded	750 (109)	680 (99)	21

Typical Welding Parameters

Diameter		Process	Volt	Amps (flat)	Amps (V/OH)
in	(mm)				
3/32	(2.4)	SMAW	21-25	65-80	65-75
1/8	(3.2)	SMAW	21-25	90-110	80-95
5/32	(4.0)	SMAW	21-26	135-160	120-140
3/16	(4.8)	SMAW	22-26	160-210	140-160

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.