

Oxford Alloy[®] 8018-B2

AWS E8018-B2 • Chrome Moly



Key Features

- ❖ Used for welding of ½% Cr - ½% Mo, 1% Cr - ½% Mo, and 1-¼% Cr - ½% Mo.
- ❖ Typical applications include power generation, pressure vessels, petrochemical, and process piping.

Conformances

AWS/ASME SFA 5.5
E8018-B2
UNS W52018

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	1.00-1.50	0.40-0.65

Mechanical Properties - As required by AWS 5.5

	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %
AWS Requirements	550 (80) min	460 (67) min	19 min
Typical Results - As welded	670 (97)	590 (97)	25

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.