



Supplier of Welding Alloys

## Nickel Alloy Coated Electrodes

### Oxford Alloy® 182

**SPECIFICATIONS**

AWS 5.11  
ASME SFA 5.11

**CLASSIFICATIONS**

AWS ENiCrFe-3  
UNS W86182

**DESCRIPTION / APPLICATION**

Oxford Alloy 182 is used for shielded-metal-arc welding of Inconel® alloys 600, 601, and 690. The weld metal of this electrode has excellent high-temperature strength and oxidation resistance and can meet stringent radiographic requirements. Oxford Alloy 182 is also used in dissimilar welds such as Inconel® alloys and Incoloy® alloys joined to carbon steels, stainless steels, nickel and Monel® alloys; Monel® alloys joined to carbon steels; nickel joined to stainless steels; and stainless steels joined to carbon steels. This electrode can be operated in all welding positions. The power supply is direct current, electrode positive.

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AWS Chemical Composition						
Ni	C	Mn	Fe	S	Si	Cu
59.0 min	0.10 max	5.0- 9.5	10.0 max	0.015 max	1.0 max	0.50 max
Cr	Ti	Cb+Ta	P	OET		
13.0- 17.0	1.0 max	1.0- 2.5	0.03 max	0.50 max		

**TYPICAL MECHANICAL PROPERTIES**

Tensile strength: 84,500 psi 580 MPa  
Yield strength: 53,500 psi 370 MPa  
Elongation: 36%

Please contact our sales department for more information at 800-562-3355 or 225-273-4800.

**Data contained in this publication are typical of the products and properties described, but are not suitable for specifications. OXFORD ALLOYS is a registered trademark of Oxford Alloys, Inc.**