



Supplier of Welding Alloys

## Nickel Alloy Coated Electrodes

### Oxford Alloy® 112

**SPECIFICATIONS**

AWS 5.11  
ASME SFA 5.11

**CLASSIFICATIONS**

AWS ENiCrMo-3  
UNS W86112

**DESCRIPTION / APPLICATION**

Oxford Alloy 112 is used for shielded-metal-arc welding of Inconel® alloy 625, Incoloy® alloy 825, Inco® alloy 25-6MO, and other molybdenum-containing stainless steels. This electrode is also used for surfacing of steel and for welding various corrosion-resistant alloys such as alloy 20. The weld metal has high strength at room and elevated temperatures and has exceptional corrosion resistance, including resistance to pitting, crevice corrosion, and polyphonic acid stress-corrosion cracking. Oxford Alloy 112 is useful for many dissimilar joints involving Inconel® alloys, Incoloy® alloys, stainless steels, low-alloy steels, and carbon steels. This electrode can be operated in all welding positions. The power supply is direct current, electrode positive.

AWS Chemical Composition						
Ni	C	Mn	Fe	S	Cu	Si
55.0 min	0.10 max	1.0 max	7.0 max	0.02 max	0.50 max	0.75 max
Cr	Cb+Ta	Mo	P	OET		
20.0- 23.0	3.15- 4.15	8.0- 10.0	0.03 max	0.50 max		

**TYPICAL MECHANICAL PROPERTIES**

Tensile strength: 114,500 psi 790 MPa  
Yield strength: 89,500 psi 620 MPa  
Elongation: 34%

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

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