

Nickel Alloy TIG, MIG and SUB-ARC Wire

Oxford Alloy[®] 82

SPECIFICATIONS

AWS 5.14
ASME SFA 5.14

CLASSIFICATIONS

AWS ERNiCr-3
UNS N06082

DESCRIPTION / APPLICATION

Oxford Alloy 82 is used for the welding of Inconel[®] alloys 600, 601, and 690, Incoloy[®] alloys 800 and 800HT, and Inco[®] alloy 330. This filler metal is also used for surfacing of steel. Weld metal deposited by Oxford Alloy 82 has high strength and good corrosion resistance, including oxidation resistance and creep-rupture strength at elevated temperatures. Oxford Alloy 82 is used in dissimilar-welding such as joining Inconel[®] alloys, Incoloy[®] alloys, and Inco[®] alloy 330 to nickel, Monel[®] alloys, stainless steels, and carbon steels. This filler metal is also used to join stainless steels to nickel alloys and carbon steels.

AWS Chemical Composition						
Ni	C	Mn	Fe	S	Si	Cr
67.0 min	0.10 max	2.5- 3.5	3.0 max	0.015 max	0.50 max	18.0- 22.0
Ti	P	Cb+Ta	Cu	OET		
0.75 max	0.03 max	2.0- 3.0	0.50 max	0.50 max		

TYPICAL MECHANICAL PROPERTIES

Tensile strength: 86,000 psi 590 MPa
Yield strength: 52,000 psi 360 MPa
Elongation: 38%

INCONEL, INCOLOY, and MONEL are trademarks of the Special Metals Group of Companies

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

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