



Supplier of Welding Alloys

## Stainless Steel TIG, MIG and SUB-ARC Wire

### Oxford Alloy® 316/316L

**SPECIFICATIONS**

AWS 5.9  
ASME SFA 5.9

**CLASSIFICATIONS**

AWS ER316/316L  
UNS S31683

**DESCRIPTION / APPLICATION**

Oxford Alloy ER316L is primarily used for welding low carbon molybdenum-bearing austenitic alloys. This filler metal has the same analysis as Oxford Alloy ER316, except that the carbon content is limited to a maximum of 0.03% in order to reduce the possibility of formation of intergranular carbide precipitation. This low carbon alloy is not as strong at elevated temperatures as ER316H.

AWS Chemical Composition						
C	Mn	Si	Cr	Ni	Mo	S
0.03 max	1.0-2.5	0.30-0.65	18.0-20.0	11.0-14.0	2.0-3.0	0.03 max
P	Cu					
0.30 max	0.75 max					

**TYPICAL MECHANICAL PROPERTIES**

Tensile strength: 79,750 psi 550 MPa

Yield strength: 55,100 psi 380 MPa

Elongation: 40%

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.