

## Oxford Alloy® 316LSi

AWS ER316LSi • Stainless Steel



### Key Features

- ❖ Similar to 316L, with higher silicon content for optimum ease and speed in MIG welding and smooth bead appearance.
- ❖ This alloy is intended for joining 316 type stainless steels.

### Conformances

AWS/ASME SFA 5.9  
ER316LSi  
UNS S31688

Chemical Composition - As required per AWS 5.9						
C	Mn	Si	Cr	Ni	Mo	S
0.03 max	1.0-2.5	0.65-1.00	18.0-20.0	11.0-14.0	2.0-3.0	0.03 max
P	Cu					
0.03 max	0.75 max					

Mechanical Properties - As required by AWS 5.9			
	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %
AWS Requirements	Not Specified		
Typical Results - As welded	550 (80)	380 (55)	39

Typical Welding Parameters					
Diameter		Process	Volt	Amps	Shielding Gas
in	(mm)				
.035	0.9	GMAW	22-23	180-210	Spray Transfer 98% Argon / 2% Oxygen
.045	1.2	GMAW	23-25	195-260	
1/16	1.6	GMAW	25-28	260-390	
.035	0.9	GMAW	19-23	55-170	Short Circuiting Transfer 90% Helium / 7 1/2 % Argon / 2 1/2 CO <sub>2</sub>
.045	1.2	GMAW	19-23	100-185	
1/16	1.6	GMAW			

Diameters & Packaging					
Oxford Alloys USA			Oxford Alloys Asia Pacific		
Diameter (in)	Form	Packaging (lbs)	Diameter (mm)	Form	Packaging (kgs)
.035	GMAW	33 lb spool   1980 lb pallet	0.9	GMAW	15 kg spool   900 kg pallet
.045	GMAW	33 lb spool   1980 lb pallet	1.2	GMAW	15 kg spool   900 kg pallet
1/16	GMAW	33 lb spool   1980 lb pallet	1.6	GMAW	15 kg spool   900 kg pallet

Actual test results may vary. Refer test result disclaimer on page 160.