

Oxford Alloy[®] 308LSi

AWS ER308LSi • Stainless Steel



Key Features

- ❖ Primarily weld equipment made with 304 type stainless steel.
- ❖ Higher silicon content improves wetting of the weld metal, and potentially higher travel speeds compared to standard 308L products.

Conformances

AWS/ASME SFA 5.9
ER308LSi
UNS S30888

Chemical Composition - As required per AWS 5.9						
C	Cr	Ni	Mo	Mn	Si	P
0.03 max	19.5-22.0	9.0-11.0	0.75 max	1.0-2.5	0.65-1.00	0.03 max
S	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	580 (84)	400 (58)	41

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 ₂
.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.