

GEN 316LSi Welding Wire and Rod

GEN 316LSi shares the same characteristics as GEN 316L. The high silicon content allows better arc stability along with smoother bead appearance while the low carbon content offers excellent resistance against carbide precipitation.

CONFORMANCES

AWS A5.9/A5.9M	:	ER316LSi
ASME SFA-A5.9	:	ER316LSi
UNS	:	S31688

AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Mn
0.03 max. 0.016	18.0 – 20.0 18.4	11.0 – 14.0 11.9	2.0 – 3.0 2.5	1.0 – 2.5 1.7
%Si	%P	%S	%Cu	
0.65 – 1.00 0.84	0.03 max. 0.02	0.03 max. 0.01	0.75 max. 0.16	

TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	86,000 psi	593 MPa
Yield Strength	:	58,000 psi	400 MPa
Elongation	:	35 %	

TYPICAL WELDING PARAMETERS

Process	Diameter		Voltage	Amperage	Gas/Flux
TIG (GTAW)	1/16"	1.6 mm	14 – 17	80 – 150	100% Ar
	3/32"	2.4 mm	15 – 20	150 – 250	100% Ar
	1/8"	3.2 mm	16 – 20	200 – 375	100% Ar
MIG (GMAW)	.035"	0.9 mm	22 – 23	180 – 210	98%Ar – 2%O ₂
	.045"	1.1 mm	23 – 25	190 – 250	98%Ar – 2%O ₂
Sub Arc (SAW)	.093"	2.4 mm	28 – 32	250 – 450	
	.125"	3.2 mm	29 – 33	300 – 500	

*All parameters are suggested as basic guidelines only and will vary depending on joint design, number of passes and other factors.

IMPORTANT: SPECIAL VENTILATION AND/OR EXHAUST REQUIRED
BEFORE USE, READ AND UNDERSTAND THE SAFETY DATA SHEET (SDS) FOR THIS PRODUCT AND SPECIFIC INFORMATION PRINTED ON THE PRODUCT CONTAINER.

The contents of this document are presented for informational purposes only and while every effort has been made to ensure their accuracy, they are not to be construed as guarantees, express or implied, regarding the products or services described herein or their use or applicability. The user must fully evaluate every process and application in all aspects.