

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.	18.0 - 20.0	11.0 - 14.0	2.0 - 3.0	1.0 – 2.5
0.016	18.4	11.9	2.5	1.7

%Si	%Р	%S	%Cu	
0.65 - 1.00	0.03 max.	0.03 max.	0.75 max.	
0.84	0.02	0.01	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.

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