

GEN 309LSi Welding Wire and Rod

GEN 309LSi has the same chemical composition as GEN 309L with higher silicon content to provide better arc stability and improve bead appearance. GEN 309LSi is suitable for joining stainless steel type 304, 321 and 347. It is also widely used for cladding over carbon or low alloy steels.

CONFORMANCES

AWS A5.9/A5.9M	:	ER309LSi
ASME SFA-A5.9	:	ER309LSi
UNS	:	S30988

AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Mn
0.03 max. 0.015	23.0 – 25.0 23.3	12.0 – 14.0 13.8	0.75 max. 0.08	1.0 – 2.5 1.9
%Si	%P	%S	%Cu	
0.65 – 1.00 0.83	0.03 max. 0.02	0.03 max. 0.01	0.75 max. 0.06	

TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	87,000 psi	600 MPa
Yield Strength	:	60,000 psi	413 MPa
Elongation	:	35 %	

TYPICAL WELDING PARAMETERS

Process	Diameter		Voltage	Amperage	Gas/Flux
TIG (GTAW)	1/16"	1.6 mm	14 – 17	90 – 130	100% Ar
	3/32"	2.4 mm	15 – 20	120 – 175	100% Ar
	1/8"	3.2 mm	16 – 20	200 – 330	100% Ar
MIG (GMAW)	.035"	0.9 mm	26 – 31	150 – 230	98%Ar – 2%O ₂
	.045"	1.1 mm	28 – 32	180 – 280	98%Ar – 2%O ₂
Sub Arc (SAW)	.093"	2.4 mm	28 – 32	300 – 400	
	.125"	3.2 mm	29 – 32	400 – 550	

*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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