

GEN 308L Welding Wire and Rod

GEN 308L has the same chemical composition as GEN 308, except the carbon content has been held to 0.03% maximum to reduce the possibility of intergranular chromium carbide precipitation. It is commonly used to weld stainless steel type 304L, 321 and 347. Depending on temperature range and flux selection, GEN 308L is a suitable filler metal for applications at cryogenic temperature.

CONFORMANCES

AWS A5.9/A5.9M	:	ER308L
ASME SFA-A5.9	:	ER308L
UNS	:	S30883

AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Mn
0.03 max 0.014	19.5 – 22.0 19.8	9.0 – 11.0 10.0	0.75 max 0.17	1.0 – 2.5 1.8
%Si	%P	%S	%Cu	
0.30 – 0.65 0.39	0.03 max 0.02	0.03 max 0.01	0.75 max 0.13	

TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	86,500 psi	596 MPa
Yield Strength	:	57,000 psi	393 MPa
Elongation	:	35 %	

TYPICAL WELDING PARAMETERS

Process	Diameter		Voltage	Amperage	Gas/Flux
TIG (GTAW)	1/16"	1.6 mm	14 – 18	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	29 – 33	160 – 180	98%Ar – 2%O ₂
	.045"	1.1 mm	29 – 33	180 – 220	
	.063"	1.6 mm	29 – 33	210 – 250	
Sub Arc (SAW)	.093"	2.4 mm	29 – 32	300 – 350	
	.125"	3.2 mm	29 – 32	400 – 550	
	.156"	4.0 mm	29 – 32	500 – 650	

*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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