

GEN 317L Welding Wire and Rod

GEN 317L is mainly used for welding base metals with similar chemical composition. It is utilized in severely corrosive environments where pitting and crevice corrosion are of concern. Low carbon content in GEN 317L filler metal reduces the possibility of intergranular carbide precipitation; which in turn increases the resistance to intergranular corrosion.

CONFORMANCES

AWS A5.9/A5.9M	:	ER317L
ASME SFA-A5.9	:	ER317L
UNS	:	S31783

AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Mn
0.08 max 0.018	18.5 – 20.5 18.91	13.0 – 15.0 13.63	3.0 – 4.0 3.5	1.0 – 2.5 1.41
%Si	%P	%S	%Cu	
0.30 – 0.65 0.42	0.03 max 0.02	0.03 max 0.011	0.75 max 0.13	

TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	87,000 psi	600 MPa
Yield Strength	:	55,000 psi	379 MPa
Elongation	:	45 %	

TYPICAL WELDING PARAMETERS

Process	Diameter		Voltage	Amperage	Gas/Flux
TIG (GTAW)	1/16"	1.6 mm	14 – 17	80 – 125	100% Ar
	3/32"	2.4 mm	15 – 20	125 – 200	100% Ar
MIG (GMAW)	.035"	0.9 mm	23 – 29	150 – 250	98%Ar – 2%O ₂
	.045"	1.1 mm	24 – 30	160 – 270	98%Ar – 2%O ₂
Sub Arc (SAW)	.093"	2.4 mm	28 – 32	250 – 450	
	.125"	3.2 mm	29 – 34	300 – 500	

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

<p>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.</p>
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