

GEN 310 Welding Wire and Rod

GEN 310 is most often used to weld base metals of similar chemical composition in wrought or cast form. The weld deposit is fully austenitic. Low heat input is recommended during welding.

CONFORMANCES

AWS A5.9/A5.9M	:	ER310
ASME SFA-A5.9	:	ER310
UNS	:	S31080

AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Mn
0.08 – 0.15	25.0 – 28.0	20.0 – 22.5	0.75 max	1.0 – 2.5
0.12	25.9	20.7	0.09	1.65

%Si	%P	%S	%Cu
0.30 – 0.65	0.03 max	0.03 max	0.75 max
0.40	0.012	0.001	0.063

TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	87,000 psi	600 MPa
Yield Strength	:	57,000 psi	393 MPa
Elongation	:	42 %	

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.

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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