

## GEN 308 Welding Wire and Rod

GEN 308 is used for welding a wide variety of unstabilized stainless steels such as type 301, 302, 304, 305 and 308. GEN 308 meets chemical requirements of both ER308 and ER308H. The higher carbon content, between .04% and .08%, in ER308H provide higher tensile and creep strength at elevated temperature.

### CONFORMANCES

AWS A5.9/A5.9M	:	ER308, ER308H
ASME SFA-A5.9	:	ER308, ER308H
UNS	:	S30880

### AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Mn
0.04 – 0.08	19.5 – 22.0	9.0 – 11.0	0.50 max	1.0 – 2.5
0.05	20.1	9.7	0.08	1.8
%Si	%P	%S	%Cu	
0.30 – 0.65	0.03 max	0.03 max	0.75 max	
0.43	0.02	0.01	0.11	

### TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	90,000 psi	620 MPa
Yield Strength	:	61,000 psi	420 MPa
Elongation	:	38 %	

### 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 <sub>2</sub>
	.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.

<b>IMPORTANT: SPECIAL VENTILATION AND/OR EXHAUST REQUIRED</b> 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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