

GEN 385 Welding Wire and Rod

GEN 385 is mainly used for welding of ASTM B625, B673, and B677 (UNS N08904) materials for handling of sulfuric acid and many chloride containing media. It can also be used for joining UNS N08904 base metals to other grade of stainless steels.

CONFORMANCES

AWS A5.9/A5.9M	:	ER385
ASME SFA-A5.9	:	ER385
UNS	:	N08904

AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Mn
0.025 max 0.010	19.5 – 21.5 19.94	24.0 – 26.0 25.10	4.2 – 5.2 4.30	1.0 – 2.5 1.66
%Si	%P	%S	%Cu	
0.50 max 0.35	0.02 max 0.013	0.03 max 0.001	1.2 – 2.0 1.46	

TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	83,000 psi	572 MPa
Yield Strength	:	55,000 psi	379 MPa
Elongation	:	35 %	

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
	1/8"	3.2 mm	16 – 20	150 – 225	
MIG (GMAW)	.035"	0.9 mm	26 – 31	150 – 230	98%Ar – 2%O ₂
	.045"	1.1 mm	28 – 33	180 – 280	98%Ar – 2%O ₂
Sub Arc (SAW)	.093"	2.4 mm	28 – 31	270 – 350	
	.125"	3.2 mm	29 – 33	325 – 475	

*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.

The contents of this document are presented for informational purposes only and while every effort has been made to ensure their accuracy, they are not to be construed as guarantees, express or implied, regarding the products or services described herein or their use or applicability. The user must fully evaluate every process and application in all aspects.