

GEN 2209 Welding Wire and Rod

GEN 2209 is designed to weld duplex stainless steel which contains approximately 22% chromium such as S32205, S31803 and S32304. The microstructure of the welds consists of austenite and ferrite. The welds exhibit high tensile strength as well as improved resistance to stress corrosion cracking and pitting.

CONFORMANCES

AWS A5.9/A5.9M	:	ER2209
ASME SFA-A5.9	:	ER2209
UNS	:	S39209

AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Mn
0.03 max 0.01	21.5 – 23.5 22.85	7.5 – 9.5 8.6	2.5 – 3.5 3.2	0.50 – 2.00 1.60
%Si	%P	%S	%Cu	%N
0.90 max 0.40	0.03 max 0.018	0.03 max 0.001	0.75 max 0.12	0.08 – 0.20 0.14

TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	100,000,psi	689 MPa
Yield Strength	:	80,000 psi	552 MPa
Elongation	:	22 %	

TYPICAL WELDING PARAMETERS*

Process	Diameter		Voltage	Amperage	Gas/Flux
TIG (GTAW)	1/16"	1.6 mm	10 – 12	80 – 150	100% Ar
	3/32"	2.4 mm	15 – 18	150 – 250	100% Ar
	1/8"	3.2 mm	16 – 20	200 – 375	100% Ar
MIG (GMAW)	.035"	0.9 mm	29 – 34	150 – 180	98% Ar – 2% O ₂
	.045"	1.1 mm	29 – 34	180 – 220	98% Ar – 2% O ₂
Sub Arc (SAW)	.093"	2.4 mm	28 – 32	300 – 450	
	.125"	3.2 mm	29 – 34	350 – 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</p> <p>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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