

GEN 410NiMo Welding Wire and Rod

GEN 410NiMo is primarily designed for welding ASTM CA6NM casting or similar materials. It may also be used for welding light gauge 410, 410S, and 405 base materials. Final post-weld heat treatment should not exceed 1150°F (620°C) as higher temperatures may result in re-hardening.

CONFORMANCES

AWS A5.9/A5.9M	:	ER410NiMo
ASME SFA-A5.9	:	ER410NiMo
UNS	:	S41086

AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Mn
0.06 max. 0.023	11.0 – 12.5 11.75	4.0 – 5.0 4.70	0.4 – 0.7 0.50	0.60 max. 0.46
%Si	%P	%S	%Cu	
0.50 max. 0.44	0.03 max. 0.013	0.03 max. 0.002	0.75 max. 0.04	

TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	117,000 psi	806 MPa
Yield Strength	:	92,000 psi	634 MPa
Elongation (min.)	:	20 %	

TYPICAL WELDING PARAMETERS

Process	Diameter	Voltage	Amperage	Gas/Flux
TIG (GTAW)	1/16"	14 – 16	90 – 130	100% Ar
	3/32"	15 – 20	120 – 180	100% Ar
MIG (GMAW)	.035"	24 – 29	150 – 220	98%Ar – 2%O ₂
	.045"	25 – 30	160 – 260	98%Ar – 2%O ₂
Sub Arc (SAW)	.093"	28 – 32	250 – 450	
	.125"	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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