

GEN 625 Welding Wire and Rod

GEN 625 is used for MIG, TIG and SAW for nickel-chromium-molybdenum alloys, such as 601, 690, 800 and 825. It may also be used for cladding and welding dissimilar base metals such as Ni-Cr-Mo alloys to stainless, carbon and low alloy steels. GEN 625 offers excellent corrosion and oxidation resistance against organic and phosphoric acids as well as seawater.

CONFORMANCES

AWS A5.14 : ERNiCrMo-3 ASME SFA-5.14 : ERNiCrMo-3 ISO 18274 : SNi 6625

AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Ti	%Fe	%Mn
0.10 max	20.0 - 23.0	58.0 min	8.0 - 10.0	0.40 max	5.0 max	0.50 max
0.01	22.3	64.5	8.8	0.22	0.34	0.03
%Si	%P	%S	%Cu	%Nb+Ta	%Al	Total Others
%Si 0.50 max	%P 0.02 max	% S 0.015 max	%Cu 0.50 max	%Nb+Ta 3.15 – 4.15	%Al 0.40 max	Total Others 0.50 max

TYPICAL WELD METAL MECHANICAL PROPERTIES

Yield Strength: 65,000 psiTensile Strength: 110,000 psiElongation: 30 %

TYPICAL WELDING PARAMETERS*

Process	Diameter		Voltage	Amperage	Gas/Flux
TIG (GTAW)	1/16"	1.6 mm	14 – 18	90 – 150	100% Ar
	3/32"	2.4 mm	15 – 20	125 – 180	100% Ar
	1/8"	3.2 mm	15 – 20	175 – 230	100% Ar
MIG (GMAW)	.035"	0.9 mm	26 – 32	180 – 290	75% Ar – 25% He
	.045"	1.1 mm	26 – 32	200 – 310	75% Ar – 25% He
Sub Arc (SAW)	.093"	2.4 mm	25 – 29	220 – 275	
	.125"	3.2 mm	29 – 33	300 – 360	

^{*}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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