

## 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
UNS	:	N06625

### AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Ti	%Fe	%Mn
0.10 max 0.01	20.0 – 23.0 22.3	58.0 min 64.5	8.0 – 10.0 8.8	0.40 max 0.22	5.0 max 0.34	0.50 max 0.03
%Si	%P	%S	%Cu	%Nb + Ta	%Al	Total Others
0.50 max 0.05	0.02 max 0.01	0.015 max 0.008	0.50 max 0.01	3.15 – 4.15 3.56	0.40 max 0.19	0.50 max

### TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	110,000 psi	758 MPa
Yield Strength	:	65,000 psi	448 MPa
Elongation	:	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.

<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.
--

*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.*