GEN 825 Welding Wire and Rod

GEN 825 is used for welding of nickel-iron-chromium-molybdenum-copper alloys. It can also be used for overlay cladding where similar chemical composition is required.

CONFORMANCES

AWS A5.14	:	ERNiFeCr-1
ASME SFA-5.14	:	ERNiFeCr-1
UNS	:	N08065

AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Cr	%Ni	%Mo	%Ti	%Fe	%Mn
0.05 max.	19.5 – 23.5	38.0 – 46.0	2.5 – 3.5	0.60 – 1.20	22.0 min.	1.0 max.
0.01	21.5	39.5	3.10	0.85	32.7	0.50

%Si	%P	%S	%Cu	%Al	Total Others
0.50 max.	0.03 max.	0.03 max.	1.5 – 3.0	0.20 max.	0.50 max.
0.25	0.015	0.002	1.9	0.14	

TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	88,000 psi	607 MPa
Yield Strength	:	61,000 psi	420 MPa
Elongation	:	34 %	

TYPICAL WELDING PARAMETERS*

Process	Diameter		Voltage	Amperage	Gas/Flux
TIG (GTAW)	.093”	2.4 mm	Direct Current		100% Ar
MIG (GMAW)	.035”	0.9 mm	29 – 33	160 – 190	75% Ar – 25% He
	.045”	1.1 mm	29 – 33	180 – 220	75% Ar – 25% He
	.062”	1.6 mm	29 – 33	210 – 250	75% Ar – 25% He
Sub Arc (SAW)	.093”	2.4 mm	29 – 32	300 – 350	
	.125”	3.2 mm	29 – 32	400 – 550	

*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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