

GEN 55 Welding Wire and Rod

Like GEN 99, GEN 55 is used for GMAW and GTAW welding of cast iron. It is also employed to weld cast irons to mild steels. The weld metals are moderately hard however can be machined by using carbide tipped tools. To avoid cracking, a pre-heat and minimum inter-pass temperature of 350°F (175°C) is recommended during welding.

CONFORMANCES

AWS A5.15	:	ENiFe-CI
ASME SFA-5.15	:	ENiFe-CI
UNS	:	W82002

AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Mn	%Ni	%Cu	%Al
2.0 max. 0.635	2.5 max. 0.44	45 – 60 55.2	2.5 max. 0.60	1.0 0.003
%Si	%Fe	%S	Total Others	
4.0 max. 0.14	Rem. 42.89	0.03 max. 0.002	1.0 max.	

TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	84,000 psi	579 MPa
Yield Strength	:	59,500 psi	410 MPa
Elongation	:	30%	

TYPICAL WELDING PARAMETERS*

Process	Diameter		Voltage	Amperage	Gas/Flux
TIG (GTAW)	1/16"	1.6 mm	14 – 18	90 – 130	100% Ar
	3/32"	2.4 mm	15 – 20	120 – 175	100% Ar
	1/8"	3.2 mm	15 – 20	150 – 220	100% Ar
MIG (GMAW)	.035"	0.9 mm	26 – 30	160 – 190	75% Ar – 25% He
	.045"	1.1 mm	28 – 32	180 – 220	75% Ar – 25% He

*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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