

## CWR-55 Welding Wire and Rod

Like CWR-99, CWR-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

### AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Mn	%Ni	%Cu	%Al
2.0 max	2.5 max	45 – 60	2.5 max	1.0
%Si	%Fe	%S	Total Others	
4.0 max	Rem.	0.03max	1.0 max	

### TYPICAL WELD METAL MECHANICAL PROPERTIES

Yield Strength : 59,500 psi  
Tensile Strength : 84,000 psi  
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.

*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.*