

## GEN 418 Welding Wire and Rod

GEN 418 is a nickel-copper welding wire used for welding of Monel® 400, 404 and K500. It can also be used in dissimilar joining applications include nickel-copper alloys, carbon as well as low alloy steel to Nickel 200. GEN 418 is commonly used in marine applications due to its excellent corrosion resistance against seawater.

### CONFORMANCES

AWS A5.14	:	ERNiCu-7
ASME SFA-5.14	:	ERNiCu-7
UNS	:	N04060

### AWS CHEMICAL COMPOSITION (TYPICAL)

%C	%Mn	%Ni	%Ti	%Fe	%Al
0.15 max 0.056	4.0 max 3.40	62.0 – 69.0 64.0	1.5 – 3.0 2.1	2.5 max 0.23	1.25 max 0.19
%Si	%P	%S	%Cu	Total Others	
1.25 max 0.40	0.02 max 0.002	0.015 max 0.001	Rem. 29.4	0.50 max	

### TYPICAL WELD METAL MECHANICAL PROPERTIES

Tensile Strength	:	76,000 psi	524 MPa
Yield Strength	:	50,000 psi	345 MPa
Elongation	:	34 %	

### 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 – 170	100% Ar
	1/8"	3.2 mm	15 – 20	150 – 220	100% Ar
MIG (GMAW)	.035"	0.9 mm	26 – 29	150 – 200	75% Ar – 25% He
	.045"	1.1 mm	28 – 32	180 – 220	75% Ar – 25% He
Sub Arc (SAW)	.093"	2.4 mm	32 – 35	300 – 350	
	.125"	3.2 mm	32 – 35	400 – 550	

\*All parameters are suggested as basic guidelines only and will vary depending on joint design, number of passes and other factors.

<p><b>IMPORTANT: SPECIAL VENTILATION AND/OR EXHAUST REQUIRED</b></p> <p>BEFORE USE, READ AND UNDERSTAND THE SAFETY DATA SHEET (SDS) FOR THIS PRODUCT AND SPECIFIC INFORMATION PRINTED ON THE PRODUCT CONTAINER.</p>
---

*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.*