

## GEN 418 Welding Wire and Rod

GEN 418 is a nickel-copper welding wire used for welding of Monel<sup>®</sup> 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.

<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.
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