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.

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.