

## **GEN 347 Welding Wire and Rod**

GEN 347 is generally used for welding Cr-Ni stainless steel base metals of similar chemical composition stabilized with either Ti or Nb (Cb). The presence of Nb (Cb) minimizes the possibility of intergranular carbide precipitation and thus susceptibility to intergranular corrosion.

# **CONFORMANCES**

AWS A5.9/A5.9M : ER 347 ASME SFA-A5.9 : ER 347 UNS : S34780

#### **AWS CHEMICAL COMPOSITION (TYPICAL)**

%C	%Cr	%Ni	%Мо	%Mn
0.08 max	19.0 – 21.5	9.0 - 11.0	0.75 max	1.0 - 2.5
0.05	19.5	9.1	0.21	1.7

%Si	%P	%S	%Cu	%Nb+Ta
0.30 - 0.65	0.03 max	0.03 max	0.75 max	10xC - 1.0
0.46	0.02	0.01	0.11	0.6

### **TYPICAL WELD METAL MECHANICAL PROPERTIES**

Tensile Strength : 88,000 psi 607 MPa Yield Strength : 58,000 psi 400 MPa

Elongation (min.) : 40 %

## **TYPICAL WELDING PARAMETERS**

Process	Diameter		Voltage	Amperage	Gas/Flux
TIG (GTAW) —	1/16"	1.6 mm	14 – 17	90 – 130	100% Ar
	3/32"	2.4 mm	15 – 20	120 – 175	100% Ar
MIG (GMAW) —	.035"	0.9 mm	28 – 32	160 – 190	98%Ar – 2%O <sub>2</sub>
	.045"	1.1 mm	29 – 33	180 – 220	98%Ar – 2%O <sub>2</sub>
Sub Arc (SAW) —	.093"	2.4 mm	28 – 32	250 – 450	
	.125"	3.2 mm	29 – 34	300 – 500	·

<sup>\*</sup>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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