

## Stainless Steel Bare Wire

Alloy:HIL347Class : ER347Conforms to Certification : AWS A5.9ASME SFA A5.9Alloy ER347 Welding data

Weld Process : Used for Mig, Tig &amp; Submerged arc

AWS Chemical Composition Requirements

C=0.08 max	P=0.030max
Si=0.30-0.65	S=0.030max
Mn=1.0-2.50	Mo=0.75max
Cr=19.0-21.50	Cu=0.75max
Ni=9.0-11.0	Nb=10XC(Min)-1.00max

Type of Filler wireGMAW " Mig Filler wire"Diameter Range

0.80-1.6mm

0.030"-1/16"

GTAW " Tig Process "Diameter Range

1.60-4.00mm

1/16"-5/32"

Deposited Chemical Composition % (Typical)

C = 0.041	Si = 0.41	Mn = 1.50
P = 0.010	S = 0.011	Cr = 19.80
Ni =9.55	Mo=0.28	Nb=0.42

Submerged Arc WeldingDiameter Range

1.60-4.00mm

1/16"-5/32"

Deposited All Weld Metal Properties

Data is typical for ER347 weld metal deposited by mig using Argon+2% oxygen and Tig using 100% Argon as the shielding gas. Data on Sub-arc is not presented, as sub-arc is dependent on the type of flux used.

Mechanical Properties (R.T.)

Yield strength	402 MPa	61.776
Tensile strength	620MPa	
Elongation	43%	
Reduction of area	70%	

Application

ER-347 is recommended for welding AISI-347 AND 321 . The weld metal has good resistance to general corrosion ER-347 is suitable for applications where welds are subjected to high temperature(+400°C)

