

## Stainless Steel Bare Wire

Alloy:HIL2209Class : ER2209Conforms to Certification : AWS A5.9ASME SFA A5.9Alloy ER2209 Welding data

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

AWS Chemical Composition Requirements

C=0.03max	P=0.030max
Si=0.90 max	S-0.030max
Mn=0.50-2.0	Mo=2.50-3.50
Cr=21.50-23.50	Cu=0.75max
Ni=7.50-3.5	N-0.08-0.20

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=0.015	Si = 0.43	Mn = 0.43
P=0.015	S = 0.012	Cr = 16.80
Ni =8.50	Mo=2.90	N=0.17

Submerged Arc WeldingDiameter Range

1.60-4.00mm

1/16"-5/32"

Deposited All Weld Metal Properties

Data is typical for ER2209 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	560MPa
Tensile strength	732MPa
Elongation	25%

Deposited charpy-V-Notch impactc properties %

Not Applicable

Application

ER-2209 is intended to weld duplex stainless steels . Exhibits high tensile strength and resistance to stress and corrosion cracking . Exhibits a low ferrite .

