HINDUSTAN INOX LTD

Technical Information

Stainless Steel Bare Wire

Alloy:HIL309L
Class : ER309L

Conforms to Certification : AWS A5.9
ASME SFA A5.9

Alloy ER309L Welding data

Weld Process : Used for Mig, Tig & Submerged arc

AWS Chemical Composition Requirements

C=0.030max	P=0.030max
Si=0.30-0.65	S-0.030max
Mn=1.0-2.50	Mo=0.75max
Cr=23.0-25.0	Cu=0.75max
Ni=12.0-14.0	

Type of Filler wire

GMAW " 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"

Submerged Arc Welding
Diameter Range
1.60-4.00mm
1/16"-5/32"

Deposited Chemical Composition % (Typical)

C = 0.018	Si = 0.37	Mn = 1.95
P = 0.014	S = 0.011	Cr = 23.60
Ni = 13.60		

Deposited All Weld Metal Properties

Data is typical for ER309L 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.

Mechnical Properties (R.T.)

Yield strength	389 MPa
Tensile strength	610 MPa
Elongation	41%
Reduction of area	62%

Application

ER-309L has the same qualities as ER-309 but with the lower carbon content deemed necessary in many chemical application
ER-309L preferred over ER-309 for cladding over carbon or low alloy steel, or dissimilar joints that are heat treated

Hindustan Inox Ltd.
Stainless Steel Bright Bars • Wires • Pipes • Tubes • Wire Rods

If additional information is needed contact Hindustan Inox Ltd . +912243401414, sales@hindustaninox.com