HINDUSTAN INOX LTD

Technical Information

Stainless Steel Bare Wire

Alloy:HIL309LSi
Class : ER309LSi

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

Alloy ER309LSi Welding data

Weld Process : Used for Mig, Tig & Submerged arc

AWS Chemical Composition Requirements

C=0.030max	P=0.030max
Si=0.65-1.00	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 = 0.017	Si = 0.85	Mn = 1.87
P = 0.013	S = 0.010	Cr = 23.65
Ni = 12.80		

Deposited All Weld Metal Properties

Data is typical for ER309LSi 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	395 MPa
Tensile strength	613 MPa
Elongation	38%
Reduction of area	60%

Application

ER-309LSi is suitable for joining Stainless steels of the 304 type and 347 type. The higher silicon gives are stability and exceptinally smooth bead appearance.

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