HINDUSTAN INOX LTD

Technical Information

Stainless Steel Bare Wire

Alloy:HIL317L
Class : ER317L

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

Alloy ER317L Welding data

Weld Process : Used for Mig, Tig & Submerged arc

AWS Chemical Composition Requirements

C=0.03 max	P=0.030max
Si=0.30-0.65	S-0.030max
Mn=1.0-2.50	Mo=3.00-4.00
Cr=18.50-20.50	Cu=0.75max
Ni=13.0-15.0	

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 = 0.39	Mn = 1.72
P = 0.010	S = 0.011	Cr = 18.60
Ni =13.50	Mo=3.30	

Deposited All Weld Metal Properties

Data is typical for ER317L 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	398 MPa
Tensile strength	612MPa
Elongation	45%
Reduction of area	72%

Application

ER-317L is used for welding stainless steel with similar composition . Due to its higher molybdenum content, offers high resistance to pitting and crevice corrosion . Lower carbon makes the weld metal less suscepible to inter-granular corrosion.

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