HINDUSTAN INOX LTD

Technical Information

Stainless Steel Bare Wire

Alloy:HIL310
Class : ER310

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

Alloy ER310 Welding data

Weld Process : Used for Mig, Tig & Submerged arc

AWS Chemical Composition Requirements

C=0.08-0.15	P=0.030max
Si=0.30-0.65	S-0.030max
Mn=1.0-2.50	Mo=0.75max
Cr=25.0-28.0	Cu=0.75max
Ni=20.0-22.50	

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 = 0.11	Si = 0.48	Mn = 1.72
P = 0.012	S = 0.009	Cr = 26.20
Ni =21.20		

Deposited All Weld Metal Properties

Data is typical for ER310 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	385 MPa
Tensile strength	608MPa
Elongation	44%
Reduction of area	68%

Application

ER-310 is used for the welding of stainless steels of similar composition in wrought or cat form. The weld deposit is fully austenitic and calls for low heat during welding . This filler metal can also be used for dissimilar welding.

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