HINDUSTAN INOX LTD

Technical Information

Stainless Steel Bare Wire

Alloy:HIL410
Class : ER410

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

Alloy ER410 Welding data

Weld Process : Used for Mig, Tig & Submerged arc

AWS Chemical Composition Requirements

C=0.12 max	P=0.030max
Si=0.50 max	S-0.030max
Mn=0.60max	Mo=0.75max
Cr=11.50-13.50	Cu=0.75max
Ni=0.60max	

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=0.10	Si = 0.38	Mn = 0.47
P=0.013	S = 0.009	Cr = 12.80
Ni =0.36	Mo=0.09	

Deposited All Weld Metal Properties

Data is typical for ER410 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	530 MPa
Tensile strength	630MPa
Elongation	25%

Application

ER-410 is used for welding type 405,410,414 and 416. Also an overlay on carbon steels for corrosion, erosion and abrasion resistance.

it is recommended using 175°C preheat before welding.

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