HINDUSTAN INOX LTD

Technical Information

Stainless Steel Bare Wire

Alloy:HIL410NiMo
Class : ER410NiMo

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

Alloy ER410NiMo Welding data

Weld Process : Used for Mig, Tig & Submerged arc

AWS Chemical Composition Requirements

C=0.060 max	P=0.030max
Si=0.50 max	S-0.030max
Mn=0.60max	Mo=0.40-0.70
Cr=11.0-12.50	Cu=0.75max
Ni=4.00-5.00	

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=0.021	Si = 0.38	Mn = 0.46
P=0.012	S = 0.009	Cr = 11.90
Ni =4.50	Mo=0.52	

Deposited All Weld Metal Properties

Data is typical for ER410NiMo 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	645 MPa	64.584
Tensile strength	832MPa	82.836
Elongation	20%	

Application

ER-410NiMo wire used premarily to weld cast and wrought material of similar chemical composition. Recommend using preheat and inter-pass temprature of not less than 145°c. Post weld heat treatment should not exceed 620°C, higher temprature may result in hardening.

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