HINDUSTAN INOX LTD

Technical Information

Stainless Steel Bare Wire

Alloy:HIL347Si
Class : ER347Si

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

Alloy ER347Si Welding data

Weld Process : Used for Mig, Tig & Submerged arc

AWS Chemical Composition Requirements

C=0.08 max	P=0.030max
Si=0.65-1.00	S-0.030max
Mn=1.0-2.50	Mo=0.75max
Cr=19.0-21.50	Cu=0.75max
Ni=9.0-11.0	Nb=10XC(Min)-1.00max

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=0.040	Si = 0.86	Mn = 1.50
P = 0.024	S = 0.013	Cr = 20.05
Ni =9.50	Mo=0.32	Nb=0.40

Deposited All Weld Metal Properties

Data is typical for ER347Si 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	410 MPa
Tensile strength	625MPa
Elongation	43%
Reduction of area	70%

Application

ER-347Si is columbium stabilized stainless steel welding wire used to weld type 321 & 347.
Addition of columbium reduces the possibility of chrominum carbide preciptation and consequent inter-granuler corrosion.
Recommended if the weld metal is to be subjected to high temprature above(+400°C)

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