HINDUSTAN INOX LTD

Technical Information

Stainless Steel Bare Wire

Alloy:HIL430
Class : ER430

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

Alloy ER430 Welding data

Weld Process : Used for Mig, Tig & Submerged arc

AWS Chemical Composition Requirements

C=0.10max	P=0.030max
Si=0.50 max	S-0.030max
Mn=0.60max	Mo=0.75max
Cr=15.50-17.0	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=0.035	Si = 0.35	Mn = 0.43
P=0.013	S = 0.010	Cr = 16.80
Ni =0.20	Mo=0.11	

Deposited All Weld Metal Properties

Data is typical for ER430 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	401MPa
Tensile strength	545MPa
Elongation	25%

Application

ER-430 is ferritic stainless steel which offers good ductility in heat treated condition . In addition to the applications of welding similar alloys , it is also used for overlays and thermal spraying.

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