

Stainless Steel Bare Wire

Alloy: HIL308LSiClass : ER308LSiConforms to Certification : AWS A5.9ASME SFA A5.9Alloy ER308LSi Welding data

Weld Process : Used for Mig, Tig & Submerged arc

AWS Chemical Composition Requirements

C=0.030max	P=0.030max
Si=0.65-1.00	S=0.030max
Mn=1.0-2.50	Mo=0.75max
Cr=19.50-22.0	Cu=0.75max
Ni=9.0-11.0	

Type of Filler wireGMAW " 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"

Deposited Chemical Composition % (Typical)

C = 0.018	Si = 0.86	Mn = 1.68
P = 0.016	S = 0.007	Cr = 20.20
Ni = 10.10		

Submerged Arc WeldingDiameter Range

1.60-4.00mm

1/16"-5/32"

Deposited All Weld Metal Properties

Data is typical for ER308LSi weld metal deposited by mig using Argon+2% oxygen and Tig using Argon as the shielding gas. Data on Sub-arc is not presented, as sub-arc is dependent on the type of flux used.

Mechanical Properties (R.T.)

Yield strength	380 MPa
Tensile strength	610 MPa
Elongation	39%
Reduction of area	65%

Application

ER308Si is suitable for joining stainless steel of the 304 type and 308 types. welding speed is higher than 308 or 308L due to improved weldability of the weld metal.

