

ER 307Si

Stainless Steel WIRE/GTAW

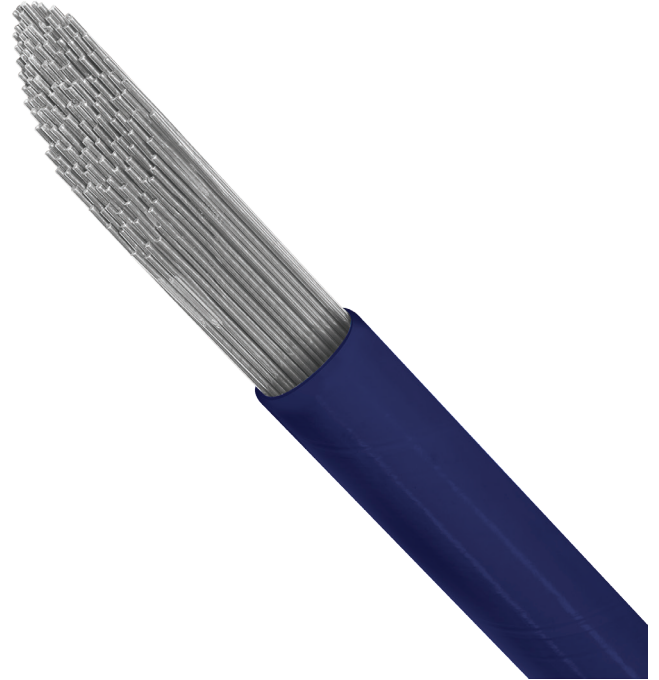
Standards

EN/ISO-Standard - 14343-A
EN/ISO-Classification - W 18 8 Mn

AWS-Standard - A5.9
AWS-Classification - ER 307Si

Features and Applications

- Austenitic stainless steel wire with a significant amount of manganese, making the all weld metal in most cases fully austenitic.
- High mechanical strength and excellent crack resistance.
- Increased silicon content promotes weld pool fluidity to give a smooth deposit appearance.
- Ideal for dissimilar welding between steel and stainless steel, armour plate and exhaust systems etc.
- Suitable for depositing stress relaxing buffer layers on crack sensitive base metals including hardfacing.
- Typically used on applications subject to atmospheric and corrosive media's.
- **Test Certificates can be found online @wilkinsonstar247.com**



Typical Base Materials

Armour plate, exhaust systems (type 409, 304), high Manganese austenitic steel, difficult to weld steels such as 42CrMo4, C45, 42MnV7, tool steels, 1.3401, X120Mn12 etc.*

* Illustrative, not exhaustive list

Welding Positions

EN ISO 6947 - PA, PB, PC, PD, PE, PF

Shielding Gases

EN ISO 14175 - TIG: I1 (Argon)

Polarity

DC (-)

Mechanical Properties

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Impact Strength (J)
≥500	≥350	≥25	≥50

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

Chemical Composition % (Typical)

C %	Mn %	Si %	S %	P %	Ni %	Cr %	Mo %	Cu %
0.045	6.06	0.82	0.005	0.029	8.02	18.35	0.05	0.030

Packaging Data

Part No.	Diameter Ø (mm)	Package Length (mm)	Package Weight (Kg)	Package Type
6011100113	1.60	1000	5	Cardboard Tube
6011100316	2.40	1000	5	Cardboard Tube
6011100317	3.20	1000	5	Cardboard Tube

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