ER 316LSi

Stainless Steel **WIRE/GMAW**

Standards

EN/ISO-Standard - 14343-A
EN/ISO-Classification - G 19 12 3 L Si

AWS-Standard - A5.9
AWS-Classification - ER 316LSi

Features and Applications

- Austenitic stainless steel wire that has a low carbon content, which reduces the possibilities of intergranular carbide precipitation, while increasing the resistance to intergranular corrosion without the use of stabilisers such as niobium or titanium.
- Increased silicon content promotes weld pool fluidity to give a smooth deposit appearance.
- The presence of molybdenum provides creep resistance in a halide atmosphere.
- ER 316LSi is slightly magnetic and offers good corrosion resistance.
- Ideal for welding low-carbon molybdenum-bearing austenitic alloys, including joining and surfacing of stainless steels type 316, 316L and 316Ti.
- High temperature resistance up to 400°C.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on applications where good corrosion resistance is required, such as in acid media a/o in chlorinated solutions, hot water tanks, architectural and roofing, food processing and chemical industries etc.
- **Test Certificates can be found online @wilkinsonstar247.com**

Typical Base Materials

All 300 series austenitic stainless steel, particularly 316 and 316L*

* Illustrative, not exhaustive list

Welding Positions

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

Shielding Gases

EN ISO 14175 - M12, M13

Polarity

DC (+)

Welding Parameters - M12

Ø mm	0.80	1.00	1.20
Current (A)	40-120	80-160	100-210
Voltage (V)	15-20	16-22	17-23

Welding Parameters - M13

Ø mm	0.80	1.00	1.20
Current (A)	160-210	180-280	200-300
Voltage (V)	24-28	25-30	26-32

Mechanical Properties

Tensile Strength (N/mm^2)	Yield Strength (N/mm^2)	Elongation (%)	Impact Strength (J)
≥510	≥320	≥25	≥80

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%
0.017	1.79	0.90	0.002	0.027	11.15	18.55	2.550	0.42

Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
6011100378	0.60	12.5	D300 PLW	72
6011100397	0.80	15	D300 PLW	72
6011100398	1.00	15	D300 PLW	72
6011100400	1.20	15	D300 PLW	72

1kg, 5kg & Drums also available.