



# 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**

### Approvals

CE, UKCA

### 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 (+)

### Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
6011100197	1.00	250	Drum	4
6011100198	1.20	250	Drum	4
6011100397	0.80	15	D300 PLW	72
6011100398	1.00	15	D300 PLW	72
6011100400	1.20	15	D300 PLW	72
6011100401	1.60	15	D300 PLW	72



### 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 <sup>2</sup> )	Yield Strength (N/mm <sup>2</sup> )	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

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
6011100427	0.60	5	D200 PLW	
6011100428	0.80	5	D200 PLW	
6011100429	1.00	5	D200 PLW	
6011100461	0.60	1	D100 PLW	
6011100462	0.80	1	D100 PLW	