

INERTFIL 316LSi is a G 19 12 3 LSi/ER 316LSi type solid MAG welding wire, supplied precision layer wound, depositing a low C-19Cr12Ni2.5Mo weld metal. Suitable for use with Ar+2%O<sub>2</sub> or Ar+0.5...5%CO<sub>2</sub> mixed shielding gases.

INERTFIL 316LSi is used for welding of 316 and 316L grade stainless steels, in a wide range of applications including the fabrication of pipe and plate. The higher Si level results in a smooth weld bead shape and even appearance with excellent toe blending particularly in fillet welds. The weld metal has a high resistance to pitting and crevice corrosion by non-oxidising acids. Used for applications with service temperatures <400°C.

INERTFIL 316LSi also available in 200kgs drum.

Stainless solid wire like ER 316L with high silicon percentage. Excellent mechanical and chemical characteristics. Excellent weldability.

Classification	
EN ISO	14343-A: G 19 12 3 L Si
AWS	A5.9: ER 316LSi

Approvals	Grade
DB	●
TÜV	●

### Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Mo
0.020	1.4	0.85	≤ 0.025	≤ 0.020	19	12.5	2.6

### All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				+20 °C	-120 °C
As Welded	≥350	≥510	≥30	≥80	>32

Gas test: M13

**Shielding Gas** - EN ISO 14175 : M12, M13

### Materials

1.4401 (X4CrNiMo17-12-2), 1.4435 (X2CrNiMo18-14-3)

AISI 316L

1.4571 (X6CrNiMoTi17-12-2), 1.4583 (X10CrNiMoNb18-12)

### Storage

Keep dry and avoid condensation

### Current condition and welding position

DC+



MIG/MAG solid wires-TIG rods  
Stainless and Heat resistant steels

## Packaging data

Packaging Type	BS300	S200	S300
Diam(mm) / weight(kg)	15	5	15
0.6	W000283057	W000283055	W000283056
0.8	W000283060	W000283058	W000283059
1.0	W000283065	W000283063	W000283064
1.2	W000283070	W000283068	W000283069
1.6	W000283075	W000283073	W000283074