



AWS A5.9: ER316LSi  
ISO 14343-A-2009 19 12 3 LSi

## Stainless Steel Solid Wire MIG/TIG Welding

### SW-316LSi

#### DESCRIPTION & APPLICATION

Solid MIG/TIG Filler wire for the joining and overlay of Stainless Steels of similar composition, (Moly-bearing) such as found in the Food/Drink Industry. Essentially Austenitic, with up to 13% Ferrite, making the deposit slightly magnetic. Increased silicon content for more fluid deposit over 316L.

#### BASE MATERIALS

All 300 series Austenitic Stainless Steel, particularly 316 and 316L, Railway and Crane Tracking, Wear Plates, Buffer layer on Austenitic Manganese or high carbon/high manganese steel prior to hard facing.

#### MECHANICAL PROPERTIES

~600

UTS n/mm

~470

YIELD 0.2%

~35

ELONG A5%

140

CV (J) 20°C

#### METAL WELD COMPOSITION %

C

0.01

Si

0.85

Mn

1.95

Cr

18.5

Ni

12

Mo

2.50

S

0.01

P

0.015

Fe

BAL

#### PACKAGING

15kg Spools (MIG)  
5kg Tubes (TIG)

#### DIAMETERS

0.8, 1.0, 1.2, 1.6mm (MIG)  
1.6, 2.4, 3.2mm (TIG)

#### WELDING INSTRUCTIONS

Shielding gas 5% or 20% CO<sub>2</sub> in Argon, or 2% Argon-Ox, TIG 100% Argon  
Do not allow the base material to overheat.

**For more details on welding of Stainless steel, please see our Information Sheets.**  
**Visit:** [www.westbrookwelding.co.uk/downloads](http://www.westbrookwelding.co.uk/downloads)