NST TIG 316LSi

AWS: A5.9 ER 316LSi

EN ISO 14343: 2009 19 12 3 LSi

TIG-rod for stainless steel welding.

General description:

NST TIG 316LSi is used for welding of "stainless" materials as AISI 316L, EN 14404 and similar.
Argon or Argon/Helium mix is used as the shielding gas.
The TIG-rod is used for manual welding of both pipes and plates.
Level of gas flow depends upon diameter and specific application. The filler rod ensures a crack resistant Austenitic weld metal with some Ferrite content (typical 4-10%). The rod is also suitable for welding Ni and Titanium stabilized steels with operating temperatures up to 400 °C.

The TIG-rods are supplied colour coded in blue with the AWS designation embossed, according to the requirement of the NORSOK standard.
"Purity" is the keyword when welding high alloyed materials. Impurities in the weld, will cause porosity. Welding of pipes require use of purge gas in order to ensure a stainless root face of the weld.
Inter-pass temperature should not exceed 150 °C, and heat input should not exceed 2.5kJ/mm.

Welding positions:

Welding current:

DC-

Gas flow:

10-20 l/min.

Chemical composition of welding rod:

C	Si	Mn	P	S	Cu	Ni	Cr	Mo	
Max 0.03	0.65-1.0	1.0-2.5	Max 0.03	Max 0.02	Max 0.30	11.0-14.0	18.0-20.0	2.5-3.0	

Shielding gas:

Shielding gas: Ar, Ar+He.
Root gas/purge gas: Ar.

Typical mechanical properties of all-weld-metal:

Yield and Tensile Strengths				
Yield Mpa(Rp0.2)	Tensile Mpa(Rm)	Elongation %		
414	592	40		

Ferrite content:

WRC	De Long	Schaeffler	
8.4FN	11.2%	10.1%	

Packaging information:

1,0mm x 1000mm x 5kg
1,2mm x 1000mm x 5kg
1,6mm x 1000mm x 5kg / 1,6mm x 500mm x 2,5kg
2,0mm x 1000mm x 5kg / 2,0mm x 500mm x 2,5kg
2,4mm x 1000mm x 5kg / 2,4mm x 500mm x 2,5kg
3,2mm x 1000mm x 5kg
4,0mm x 1000mm x 5kg

Colour coding: Blue

Approvals:

TÜV, DB, CE

Reference / date:

NST TIG 316LSi,
English, 06.08.2018.