

NST TIG 309LMo

AWS: A5.9 ER 309LMo*

EN ISO 14343: 2009 23 12 2 L



TIG-rod for stainless steel welding.

General description:

NST TIG 309LMo is used for welding of stainless materials against carbon steel and for cladding of carbon steel. Normally, Argon or Argon/Helium mix is used as the shielding gas.

The wire is used for manual welding of both pipes and plates.

Level of gas flow will depend upon diameter and specific application.

NST TIG 309LMo gives a ductile and crack resistant weld metal.

The TIG-rods are supplied colour coded in orange, 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.

When cladding carbon steel, the analysis of the weld metal is the equivalent of AISI 304 in the first layer.

Welding of pipes require use of purge gas in order to ensure a corrosion resistant root face of the weld.

Inter-pass temperature should not exceed 150 °C, and heat input should not exceed 2.0kJ/mm.

*Cr can be lower and Ni higher than the AWS standard.

Welding positions:



Welding current:

DC-

Gas flow:

8-20 l/min.

Chemical composition of welding rod:

C	Si	Mn	P	S	Cu	Ni	Cr	Mo	
Max 0.03	Max 0.65	1.0-2.5	Max 0.03	Max 0.02	Max 0.30	11.0-15.5	21.0-25.0	2.0-3.0	

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 %		
430	625	43		

Ferrite content:

WRC	De Long	Schaeffler	
8.2FN	10.6%	7.0%	

Packaging information:

1,6mm x 500mm x 2,5kg
2,0mm x 500mm x 2,5kg
2,4mm x 500mm x 2,5kg

Colour coding: Orange

Approvals:

Reference / date:

NST TIG 309LMo,
English, 02.06.2020.