



Nevatia Steel & Alloys Pvt. Ltd.  
Office : 904,Lodha Supremus,9<sup>th</sup> floor  
Worli, Mumbai ,India - 400018.  
Web:<http://www.nevatiasteel.com>



TD-Stainless Welding wire  
Revision No.: 02  
Date of Issue : 01.11.2019

IATF 16949 , ISO 9001, ISO 14000 and ISO 45001 Certified Company

## **Stainless steel welding wire -Technical data**

**Product Name :** nevinox<sup>®</sup>TIG316L

**Product Specifications :** ER 316L

Grade	Equivalent Standards		
	AWS A5.9/5.9M	EN ISO 14343 A	EN ISO 14343 B
ER 316L	ER 316L	(19 12 3 L)	316L

**Characteristics :** ER316L is austenitic Stainless steel low carbon welding wire of 18 Cr%, 12 Ni% and 2 Mo%. The weld metal contains ferrite and resistance to crack is extremely good. Low carbon assists austenitic arc stability and improves corrosion resistance such as intergranular type. The mechanical properties of the weld metal are good.

**Application :** ER 316L molybdenum type grade of similar type stainless steels. The molybdenum vastly improves the resistance of pitting corrosion, particularly in chloride solutions and the low carbon grades further improves resistance to intergranular corrosion. Suitable for welding SS 316L, SS 318 grades. The alloy is widely used in the chemical and food processing industries as well as in shipbuilding and various types of architectural structures.

### **Chemical Composition % (Solid wire)**

C	Mn	P	S	Si	Cr	Ni	Mo	Cu
0.03	1.30 - 2.10	0.030	0.020	0.30 - 0.65	18.00 - 20.00	11.00 - 13.00	2.00-3.00	0.30

**Remarks:** Single values shown in the table are maximum values. Two values shown indicate minimum and maximum limits for a range.

### **Typical All weld Mechanical properties**

Product	Grade	Shielding Gas	N/mm <sup>2</sup>		% EL (GL=50mm)	Impact Value (Joules)			
			YS (0.2% PT)	TS		-20°C	-60°C	-101°C	-196°C
TIG	ER 316L	I1	457	615	42	-	-	-	112

**Current Conditions:-** DC (-)



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## Welding position:-



## Dimension & Packing Data

Size(mm)	Size(inch)	Length (mm)	Length (inch)	Tube packing 5 kg/10lb	Box packing 20/25 kg / 50 lb
0.90	0.035	1000	36"	√	√
1.00	0.040	1000	36"	√	√
1.20	0.045	1000	36"	√	√
1.60	1/ 16"	1000	36"	√	√
2.00	5/ 64"	1000	36"	√	√
2.40/2.50	3/ 32"	1000	36"	√	√
3.15/3.20	1/ 8"	1000	36"	√	√
4.00	5/ 32"	1000	36"	√	√
5.00	3/ 16"	1000	36"	√	√

## Diameter tolerance and ovality

- As per AWS A5.9 and ISO 544

## Inspection & certification

- As per EN 10204 type 3.1

For more details please contact : [sales@nevatiasteel.com](mailto:sales@nevatiasteel.com).