



Product Data Sheet

W 'Tungsten inert gas arc welding'

OK Tigrod 316L

Prepared by Mats Linde	Qualified by Tero Tolonen	Approved by Mikael Mimer	Reg no EN006309	Cancelling EN006098	Reg date 2013-11-29	Page 1 (2)
---------------------------	------------------------------	-----------------------------	--------------------	------------------------	------------------------	---------------

REASON FOR ISSUE

Min S changed from 0,0050 to 0,005

GENERAL

Bare corrosion resisting chromium-nickel-molybdenum welding rods for welding of austenitic stainless alloys of 18% Cr - 8% Ni and 18% Cr - 10% Ni - 3% Mo-types.

OK Tigrod 316L has a good general corrosion resistance, particularly against corrosion in acid and chlorinated environments. The alloy has a low carbon content which makes it particularly recommended where there is a risk of intergranular corrosion. The alloy is widely used in the chemical and food processing industries as well as in ship building and various types of architectural structures.

Shielding Gas: I1 (EN ISO 14175)

Alloy Type: Austenitic (with approx. 10 % ferrite) 19% Cr - 12% Ni - 3% Mo - Low C

CLASSIFICATIONS Wire Electrode

EN ISO 14343-A W 19 12 3 L
SFA/AWS A5.9 ER316L
Werkstoffnummer ~1.4430

APPROVALS

ABS ER 316L
BV 316L
CE EN 13479
CWB AWS A5.9
DNV 316L (-60 °C)
VdTÜV 04270

APPROVAL COMMENT

Valid for lotnumbers starting with PV

CHEMICAL COMPOSITION

	All Weld Metal (%)	Wire/Strip (%)	
	Nom	Min	Max
C	0.01		0.030
Si	0.4	0.30	0.65
Mn	1.8	1.3	2.0
P	0.02		0.030
S	0.01	0.005	0.020
Cr	19	18.0	20.0
Ni	12	11.0	13.0
Mo	2.6	2.5	3.0
Cu	0.1		0.5
N			0.080
Others tot			0.50



Product Data Sheet

W 'Tungsten inert gas arc welding'

OK Tigrod 316L

Prepared by Mats Linde	Qualified by Tero Tolonen	Approved by Mikael Mimer	Reg no EN006309	Cancelling EN006098	Reg date 2013-11-29	Page 2 (2)
---------------------------	------------------------------	-----------------------------	--------------------	------------------------	------------------------	---------------

MECHANICAL PROPERTIES OF WELD METAL

All Weld Metal

Properties	As welded	
	Min	Typ
Rp0.2 (MPa)	320	470
Rm (MPa)	510	600
A5 (%)	25	32
at 20°C (J)		175
at -60°C (J)		130
at -110°C (J)		120
at -196°C (J)		75