



Product Data Sheet

W 'Tungsten inert gas arc welding'

OK Tigrod 316LSi

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
Per Ake Bjornstedt	P-O Oskarsson	Per Ake Bjornstedt	EN011215	EN010539	2024-03-17	1 (2)

REASON FOR ISSUE

Removal of Society NAKS/HAKC

GENERAL

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

OK Tigrod 316LSi has a good general corrosion resistance, in particularly the alloy has very good resistance 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 higher silicon content improves the welding properties, such as wetting. 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. 8 % ferrite) 19% Cr - 12% Ni - 3% Mo - Low C- High Si

CLASSIFICATIONS Wire Electrode

EN ISO 14343-A W 19 12 3 L Si
SFA/AWS A5.9 ER316LSi
Werkstoffnummer ~1.4430

APPROVALS

BV 316L BT
CE EN 13479
DB 43.039.06
DNV-GL VL 316 L (I1)
UKCA EN 13479
VdTÜV 05336

APPROVAL COMMENT

Valid for lot numbers starting with PV

CHEMICAL COMPOSITION

All Weld Metal (%) Wire/Strip (%)

	Shielding gas;Ar		
	Nom	Min	Max
C	0.01		0.030
Si	0.8	0.65	1.00
Mn	1.8	1.5	2.3
P	0.02		0.030
S	0.01	0.005	0.020
Cr	18	18.0	20.0
Ni	12	11.0	13.0
Mo	2.8	2.5	3.0
Cu	0.1		0.5
N			0.110
FN WRC-92		4	12
Others tot			0.50

MECHANICAL PROPERTIES OF WELD METAL

All Weld Metal

Condition	Rp0.2 [MPa/ksi]		Rm [MPa/ksi]			A5 [%]	
	Min	Typ	Min	Max	Typ	Min	Typ
As welded	320/46	500/73	510/74		630/91	25	33

Comments:



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MECHANICAL PROPERTIES OF WELD METAL

Condition	Temp [°C/°F]	Charpy V [J/ft-lb]	
		Min	Typ
As welded	20/68 -110/-166 -196/-321		175/130 110/81 90/67

Comments: