Product Data Sheet

W 'Tungsten inert gas arc welding'

OK Tigrod 316LSi

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
Mats Linde	Tero Borg	Jay A Coubrough	EN007219	EN006310	2016-05-05	1 (2)

REASON FOR ISSUE

Adjustment of N for PDS, PR and PS to match

GENERAL

Bare corrosion resisting chroumium-nickel-molybdenium 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 risc 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	316L (-196°C)
GL	4429 (I1)
NAKS/HAKC	2.0MM-2.4MM
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
Ferrite FN			
Others tot			0.50

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MECHANICAL PROPERTIES OF WELD METAL

All Weld Metal

	As welded	
Properties	**Min**	**Typ**
Rp0.2 (MPa)	320	500
Rm (MPa)	510	630
A4-A5 (%)	25	33
Charpy V at 20°C (J)		175
Charpy V at -110°C (J)		110
Charpy V at -196°C (J)		90