



Product Data Sheet

W 'Tungsten inert gas arc welding'

OK Tigrod 316LSi

Signed by MALI	Approved by Per-Åke Pettersson/Christos Skodras	Reg no EN004669	Cancelling EN004104	Reg date 2008-12-19	Page 1 (2)
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REASON FOR ISSUE

GL added

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 439)

Alloy Type: Austenitic (with approx. 8 % ferrite) 19% Cr - 12% Ni - 3% Mo - Low C- High Si

CLASSIFICATIONS Wire Electrode

EN ISO 14343 W 19 12 3 LSi
SFA/AWS A5.9 ER316LSi
Werkstoffnummer ~1.4430

APPROVALS

CE EN 13479
DB 43.039.06
DNV 316L
GL 4429
VdTÜV 05336

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		0.3
N			0.08
Others tot			0.50



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MECHANICAL PROPERTIES OF WELD METAL

All Weld Metal

Properties	As welded	
	Min	Typ
Rp0.2 (MPa)	320	480
Rm (MPa)	510	630
A4-A5 (%)	25	33
Charpy V at 20°C (J)		175
Charpy V at -110°C (J)		150
Charpy V at -196°C (J)		110