



Product Data Sheet

G 'Gas-shielded metal-arc welding'

OK Autrod 308LSi

Signed by Mats Linde	Approved by Per-Åke Pettersson/Christos Skodras	Reg no EN004120	Cancelling EN003510	Reg date 2007-09-19	Page 1 (2)
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REASON FOR ISSUE

EN12072 replaced by EN ISO 14343.

GENERAL

A continuous solid corrosion resisting chromium-nickel wire for welding of austenitic chromium nickel alloys of 18% Cr - 8% Ni-type.

OK Autrod 308LSi has a good general corrosion resistance. The alloy has a low carbon content which makes this alloy 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 for pipes, tubes and boilers.

Shielding Gas: M12, M13 (EN439)

Alloy Type: Austenitic (with approx. 8 % ferrite) 19% Cr - 9% Ni - Low C - High Si

CLASSIFICATIONS Wire Electrode

EN ISO 14343 G 19 9 LSi
SFA/AWS A5.9 ER308LSi
Werkstoffnummer ~1.4316

APPROVALS

CE EN 13479
CWB AWS A5.9 (Item no
 ending with A)
DB 43.039.01
DNV 308L (-196 °C)
VdTÜV 04267

CHEMICAL COMPOSITION

	All Weld Metal (%)	Wire/Strip (%)	
		Min	Max
C	0.01		0.030
Si	0.8	0.65	1.00
Mn	1.8	1.4	2.1
P	0.015		0.030
S	0.015	0.005	0.020
Cr	20	19.5	21.0
Ni	10	9.0	11.0
Mo	0.1		0.3
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		SHT 1050°C 0.5h	Tested at 350°C.		Tested at 350°C.	
	Min	Typ	Typ	As welded	SHT 1050°C 0.5h	As welded	SHT 1050°C 0.5h
Rp0.2 (MPa)	320	370	340	370	240	370	240
Rm (MPa)	510	620	600	490	460	490	460
A4-A5 (%)	30	36	43	25	28	25	28
Charpy V at 20°C (J)		110	90				
Charpy V at -60°C (J)		90	80				
Charpy V at -196°C (J)		60	60				

ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)			η	H		Feed		U	
	Min	Max	Nom		Min	Max	Min	Max	Min	Max
\emptyset				Nom	Min	Max	Min	Max	Min	Max
0.6										
0.8	55	160	12		1.0	4.1	4.0	17.0	15	24
0.9	65	220	13		1.1	5.4	3.5	18.0	15	28
1.0	80	240	15		1.5	6.0	4.0	16.0	15	28
1.14										
1.2	100	300	18		1.6	7.5	3.0	14.0	15	29
1.6	230	375	22		5.2	8.6	5.5	9.0	23	29

W = Gas consumption (l / min)

η = Recovery, g weld metal / 100g wire (%)

H = Deposit rate (kg weld metal / hour arc time)

Feed = Feeding rate (m/min)

U = Arc voltage (V)