

OK Autrod 308LSi

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.

Classifications	EN ISO 14343-A : G 19 9 L Si SFA/AWS A5.9 : ER308LSi Werkstoffnummer : ~1.4316
Approvals	BV : 308L SA BT (M12) CE : EN 13479 CWB : ER308LSi DB : 43.039.01 DNV-GL : VL 308 L (M13) NAKS/HAKC : 0.8-1.2 mm VdTÜV : 04267

Alloy Type	Austenitic (with approx. 8 % ferrite) 19% Cr - 9% Ni - Low C - High Si
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Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
As Welded	420 MPa	570 MPa	36 %
Tested at 350°C.			
As Welded	370 MPa	490 MPa	

Typical Charpy V-Notch Properties		
Condition	Testing Temperature	Impact Value
As Welded	20 °C	105 J
As Welded	-60 °C	70 J
As Welded	-196 °C	40 J

Typical Wire Composition %									
C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
0.01	1.8	0.8	0.012	0.013	10.0	20.0	0.1	0.10	0.06

Typical Wire Composition %	
Nb	FN WRC-92
0.02	8

Typical Weld Metal Analysis %									
C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
0.03	1.8	0.7	0.009	0.020	10.0	19.5	0.03	0.1	0.04

Typical Weld Metal Analysis %	
Nb	FN WRC-92
0.01	6

Deposition Data				
Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.8 mm	55-160 A	15-24 V	4.0-17.0 m/min	1.0-4.1 kg/h
0.9 mm	65-220 A	15-28 V	3.5-18.0 m/min	1.1-5.4 kg/h



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Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
1.0 mm	80-240 A	15-28 V	4.0-16.0 m/min	1.5-6.0 kg/h
1.2 mm	100-300 A	15-29 V	3.0-14.0 m/min	1.6-7.5 kg/h
1.6 mm	230-375 A	23-29 V	5.5-9.0 m/min	5.2-8.6 kg/h

Recommended Welding Parameters

	Current	Voltage
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