OK Autrod 308LSi

A continuous solid corrosion resisting chroumium-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.

Specifications	
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 : NV 308 L UKCA : EN 13479 VdTÜV : 04267

Approvals are based on factory location. Please contact ESAB for more information.

Alloy Type	Austenitic (with approx. 8 % ferrite) 19% Cr - 9% Ni - Low C - High Si
Shielding Gas	M12, M13 (EN ISO 14175)

Typical Tensile Properties			
Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
EN ISO Tested at 350°C.			
As Welded	370 MPa	490 MPa	-
EN ISO			
As Welded	420 MPa	570 MPa	36 %

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

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

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**

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Typical Wire Composition %	
Nb	**FN WRC-92**
0.02	8

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
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