

OK Autrod 308LSi

GMAW

ER308LSi

Description

A continuous, solid, corrosion-resistant, chromium-nickel wire for welding austenitic chromium-nickel alloys of the 18 Cr-8% Ni type. OK Autrod 308LSi has good general corrosion resistance. The alloy has a low carbon content, making 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 for pipes, tubes and boilers.

Welding current

DC(+)

Classifications

SFA/AWS A5.9 ER308LSi
EN 12072 G 19 9 LSi
Werkstoffnummer ~1.4316

Typical chemical composition, aw (%)

C	Si	Mn	Cr	Ni	Mo	Cu
<0.03	0.8	1.8	20.3	10.0	<0.3	<0.3

Typical mech. properties all weld metal

Yield stress, MPa 370
Tensile strength, MPa 620
Elongation, % 36

Charpy V

Test temps, °C	Impact values, J
+20	110
-60	90
-196	60

Approvals

DB	43.039.01
DNV	308L MS (-60°C)
Sepros	UNA 485178
UDT	DIN 8556
VdTÜV	
Ü	43.039/1

Welding parameters

Diameter, mm	Wire feed, m/min	Welding current, A	Arc voltage, V	Deposition rate kg weld metal/hour
0.6				
0.8	4.0-17.0	55-160	15-24	1.0-4.2
0.9	3.5-18.0	65-220	15-28	1.1-5.4
1.0	4.0-16.0	80-240	15-28	1.5-6.0
1.2	3.0-14.0	100-300	15-29	1.6-7.5
1.6	5.5-9.0	230-375	23-29	5.2-8.6