

OK Autrod 318Si

A continuous, solid, corrosion-resistant, stabilised, chromium-nickel-molybdenum wire for welding Cr-Ni-Mo and Cr-Ni stabilised or non-stabilised steels. OK Autrod 318Si has good general corrosion resistance. The alloy is stabilised with niobium to improve resistance to the intergranular corrosion of the weld metal. The higher silicon content improves the welding properties such as wetting. Due to stabilisation by niobium, this alloy is recommended for service temperatures up to 400°C.

Classifications Wire Electrode:	EN ISO 14343-A:G 19 12 3 Nb Si, Werkstoffnummer :~1.4576
Approvals:	CE EN 13479, NAKS/HAKC 1.2MM, DB 43.039.14, VdTÜV 09735

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

Alloy Type:	Austenitic (with approx. 7 % ferrite) 19% Cr - 12% Ni - 3 % Mo - Nb
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Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As welded	460 MPa	615 MPa	35 %
Tested at 400\00B0C.			
As welded	360 MPa	480 MPa	35 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As welded	20 °C	100 J
As welded	-60 °C	70 J

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	Cu	Nb	Ferrite FN
0.05	1.7	0.8	11.9	18.8	2.60	0.10	0.50	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
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