

## Description

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.

## Welding current

DC(+)

## Classifications

EN 12072	G 19 12 3 NbSi
Werkstoffnummer	~1.4576

## Typical chemical composition, aw (%)

C	Si	Mn	Cr	Ni	Mo	Nb	Cu
<0.08	0.8	1.8	19.0	12.5	2.8	<1.0	<0.3

## Typical mech. properties all weld metal

Yield stress, MPa	460
Tensile strength, MPa	615
Elongation, %	35

## Charpy V

Test temps, °C	Impact values, J
+20	100
-60	70

## Approvals

DB	43.039.14
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
0.8	4.0-17.0	55-160	15-24	1.0-4.0
1.0	4.0-16.0	80-240	15-28	1.5-5.9
1.2	3.0-14.0	100-300	15-29	1.6-7.5
1.6	5.5-9.0	230-375	23-31	5.2-8.6