

OK Autrod 347Si

GMAW
ER347Si

Description

A continuous, solid, corrosion-resistant, chromium-nickel wire for welding austenitic chromium-nickel alloys of the 18% Cr-8% Ni type. OK Autrod 347Si 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 the niobium content, this alloy is recommended for use at higher temperatures.

Welding current

DC(+)

Classifications

SFA/AWS A5.9	ER347Si
EN 12072	G 19 9 NbSi
Werkstoffnummer	~1.4551

Typical chemical composition, aw (%)

C	Si	Mn	Cr	Ni	Mo	Nb	Cu
<0.08	0.8	1.8	20.0	10.0	<0.3	<1.0	<0.3

Typical mech. properties all weld metal

Yield stress, MPa	440
Tensile strength, MPa	640
Elongation, %	37

Charpy V

Test temps, °C	Impact values, J
+20	110
-60	80

Approvals

DB	43.039.13
Sepros	UNA 046731
VdTUV	
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	3.5-18.0	80-240	15-28	1.3-6.7
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