

OK Tigrod 316LSi

Bare corrosion resisting chromium-nickel-molybdenum rods for welding of austenitic stainless alloys of 18% Cr-8% Ni and 18% Cr-10% Ni-3% Mo types. OK Tigrod 316LSi has a good general corrosion resistance, in particular the alloy has very good resistance against corrosion in acid and chlorinated environments. The alloy has a low carbon content which makes 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 in ship building and various types of architectural structures.

Specifications

Classifications	EN ISO 14343-A : W 19 12 3 L Si SFA/AWS A5.9 : ER316LSi Werkstoffnummer : ~1.4430
Approvals	BV : 316L BT CE : EN 13479 DB : 43.039.06 DNV-GL : VL 316 L (I1) NAKS/HAKC : 1.6-2.4 mm UKCA : EN 13479 VdTÜV : 05336

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

Alloy Type	Austenitic (with approx. 8 % ferrite) 19% Cr - 12% Ni - 3% Mo - Low C- High Si
Shielding Gas	I1 (EN ISO 14175)

Typical Tensile Properties

Conditional Statement	Yield Strength	Tensile Strength	Elongation
As welded	500 MPa (72.5 ksi)	630 MPa (91 ksi)	33 %

Typical Charpy V-Notch Properties

Testing Temperature	Impact Value
20 °C (68 °F)	175 J (129 ft-lb)
-110 °C (-166 °F)	110 J (81 ft-lb)
-196 °C (-321 °F)	90 J (66 ft-lb)

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	Cu
0.01	1.8	0.9	12.2	18.4	2.60	0.12

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
0.01	1.8	0.8	0.01	0.02	12	18	2.8	0.1