

OK Tigrod 316L

Bare corrosion resisting chromium-nickel-molybdenum welding rods for welding of austenitic stainless alloys of 18% Cr - 8% Ni and 18% Cr - 10% Ni - 3% Mo-types. OK Tigrod 316L has a good general corrosion resistance, particularly 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 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 SFA/AWS A5.9 : ER316L Werkstoffnummer : ~1.4430
Approvals	ABS : 1.6-3.2mm BV : 1.6-3.2mm CE : EN 13479 CWB : 1.0-4.0mm DNV-GL : 1.0-4.0mm NAKS/HAKC : 1.6 - 3.2 mm UKCA : EN 13479 VdTÜV : 1.0-4.0mm

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

Alloy Type	Austenitic (with approx. 10 % ferrite) 19% Cr - 12% Ni - 3% Mo - Low C
Shielding Gas	11 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	470 MPa (68 ksi)	600 MPa (87 ksi)	32 %

Typical Charpy V-Notch Properties

Testing Temperature	Impact Value
20 °C (68 °F)	175 J (129 ft-lb)
-60 °C (-76 °F)	130 J (96 ft-lb)
-110 °C (-166 °F)	120 J (88.5 ft-lb)
-196 °C (-321 °F)	75 J (55 ft-lb)

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	N	FN WRC-92
0.01	1.7	0.4	12.0	18.2	2.6	0.04	7

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
0.01	1.8	0.4	0.01	0.02	12	19	2.6	0.1