

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 : ER 316L BV : 316L BT CE : EN 13479 CWB : ER316L DNV-GL : VL 316 L (I1) NAKS/HAKC : 1.6 - 3.2 mm VdTÜV : 04270

Alloy Type	Austenitic (with approx. 10 % ferrite) 19% Cr - 12% Ni - 3% Mo - Low C
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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