

OK Autrod 316LMn

OK Autrod 316LMn is a corrosion resistant non-magnetic chromium-nickel-molybdenum wire for welding of stabilized and non-stabilized austenitic stainless steels of the same type as well as non magnetic steels. The alloy is corrosion resistant in seawater environment and has very good corrosion resistance to acids, such as nitric acid. Excellent impact properties at low temperatures which makes it suitable for cryogenic applications.

Specifications

Classifications	EN ISO 14343-A : G 20 16 3 Mn N L SFA/AWS A5.9 : ER316LMn
Approvals	CE : EN 13479 UKCA : EN 13479

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

Alloy Type	Austenitic (7 % Mn - 20 % Cr - 16 % Ni - 3 % Mo)
Shielding Gas	M12, M13 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	400 MPa	600 MPa	40 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	-60 °C	90 J
As Welded	-110 °C	70 J
As Welded	-196 °C	40 J

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	N
0.01	6.9	0.4	15.6	19.9	3.0	0.18

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
0.02	7	0.3	0.01	0.01	16	20	3	0.05	0.15

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
1.0 mm	80-190 A	16-24 V	2.9-8.4 m/min	1.1-3.1 kg/h
1.2 mm	180-280 A	20-28 V	4.9-8.5 m/min	2.6-4.5 kg/h