

OK Autrod 317L

A continuous solid corrosion resisting chromium-nickel-molybdenum wire for welding of austenitic stainless alloys of 19% Cr 13% Ni 3% Mo types. OK Autrod 317L has a good resistance to general corrosion and pitting due to its high content of molybdenum. The alloy has a low carbon content which makes this alloy particularly recommended where there is a risk of intergranular corrosion. The alloy is used in severe corrosion conditions such as in the petrochemical, pulp and paper industries.

Specifications

Classifications	EN ISO 14343-A : G 18 15 3 L SFA/AWS A5.9 : ER317L
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Alloy Type	Austenitic (with approx. 8 % ferrite)
Shielding Gas	M12, M13 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	390 MPa	600 MPa	45 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C	135 J
As Welded	-196 °C	55 J

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	N	FN WRC-92
0.01	1.4	0.4	13.6	18.9	3.6	0.05	7

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.8 mm	50-140 A	16-22 V	3.4-11.0 m/min	0.8-2.7 kg/h
1.0 mm	80-190 A	16-24 V	2.6-7.1 m/min	0.9-2.7 kg/h
1.2 mm	180-280 A	20-28 V	4.9-8.5 m/min	2.6-4.5 kg/h
1.6 mm	230-350 A	24-28 V	3.2-5.5 m/min	3.0-5.2 kg/h