

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.

Classifications Wire Electrode	SFA/AWS A5.9 : ER317L EN ISO 14343-A : G 18 15 3 L
---------------------------------------	---

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 (57 ksi)	600 MPa (87 ksi)	45 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C (68 °F)	135 J (100 ft-lb)
As Welded	-196 °C (-321 °F)	55 J (41 ft-lb)

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 (0.030 in.)	50-140 A	16-22 V	3.4-11.0 m/min (134-433 in./min)	0.8-2.7 kg/h (1.8-6.0 lb/h)
1.0 mm (0.040 in.)	80-190 A	16-24 V	2.6-7.1 m/min (102-280 in./min)	0.9-2.7 kg/h (2.0-6.0 lb/h)
1.2 mm (0.047 in.)	180-280 A	20-28 V	4.9-8.5 m/min (193-335 in./min)	2.6-4.5 kg/h (5.7-9.9 lb/h)
1.6 mm (1/16 in.)	230-350 A	24-28 V	3.2-5.5 m/min (126-217 in./min)	3.0-5.2 kg/h (6.6-11. lb/h)