

OK Autrod 308L

A continuous solid corrosion resisting chromium-nickel wire. The alloy has a low carbon content which makes this alloy 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 for pipes, tubes and boilers.

For joining of stainless steels of 18% Cr - 8% Ni-type and Nb-stabilized steels of the same type if the service temperature will not exceed 350°C.

Classifications Wire Electrode	SFA/AWS A5.9 : ER308L EN ISO 14343-A : G 19 9 L Werkstoffnummer : ~1.4316
Approvals	ABS ER308/308L CE EN 13479 NAKS/HAKC 1.0 mm

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

Alloy Type	Austenitic (with approx. 8 % ferrite) 19% Cr - 9% Ni - Low C
Shielding Gas	M12, M13 (EN ISO 14175)

Typical Tensile Properties

Yield Strength	Tensile Strength	Elongation
Tested at 350°C (662°F).		
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Typical Charpy V-Notch Properties

Testing Temperature	Impact Value
20 °C (68 °F)	110 J (81 ft-lb)
-60 °C (-76 °F)	90 J (66 ft-lb)
-196 °C (-321 °F)	60 J (44 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
0.020	1.6	0.4	0.015	0.015	10.0	20.0	0.05	0.05

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	Cu	N	FN WRC-92
0.02	1.9	0.4	9.8	19.8	0.20	0.15	0.05	9

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.8 mm (0.030 in.)	55-160 A	15-24 V	4.0-17.0 m/min (157-669 in./min)	0.9-4.1 kg/h (2.0-9.0 lb/h)
0.9 mm (0.035 in.)	55-160 A	15-24 V	4.0-17.0 m/min (157-669 in./min)	0.9-4.1 kg/h (2.0-9.0 lb/h)
1.0 mm (0.040 in.)	80-240 A	15-28 V	4.0-16.0 m/min (157-630 in./min)	1.5-6.0 kg/h (3.3-13. lb/h)
1.14 mm (0.045 in.)	80-240 A	15-28 V	4.0-16.0 m/min (157-630 in./min)	1.5-6.0 kg/h (3.3-13. lb/h)
1.2 mm (0.047 in.)	100-300 A	14-28.5 V	3.0-14.0 m/min (118-551 in./min)	1.6-7.5 kg/h (3.5-16. lb/h)
1.6 mm (1/16 in.)	230-375 A	23-29 V	5.5-9.0 m/min (217-354 in./min)	5.2-8.6 kg/h (11.5-19. lb/h)