

OK Autrod 309MoL

A continuous solid corrosion resisting wire of "309LMo" type. OK Autrod 309MoL is used for overlay welding of unalloyed and low alloyed steels and for welding of dissimilar steels such as 316L to unalloyed and low alloyed steels when Mo is essential.

Specifications

Classifications	EN ISO 14343-A : G 23 12 2 L SFA/AWS A5.9 : ER309LMo (mod)
Approvals	CE : EN 13479 UKCA : EN 13479 VdTÜV : 07352

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

Alloy Type	Austenitic (with approx. 8 % ferrite) "309LMo" 22 % Cr - 15 % Ni - 3 % Mo - Low C
Shielding Gas	M12, M13 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	400 MPa (58 ksi)	600 MPa (87 ksi)	31 %

Typical Charpy V-Notch Properties

Testing Temperature	Impact Value
20 °C (68 °F)	110 J (81 ft-lb)
-60 °C (-76 °F)	65 J (58 ft-lb)

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo
0.01	1.5	0.4	14.6	21.4	2.5

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
0.02	1.3	0.3	0.002	0.02	14.5	21	2.6	0.1	0.07

Typical Weld Metal Analysis %

Nb	FN WRC-92
0.01	8

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 lbs/h)
1.0 mm (0.040 in.)	80-190 A	16-24 V	2.9-8.4 m/min (114-331 in./min)	1.1-3.1 kg/h (2.4-6.8 lbs/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 lbs/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. lbs/h)