

## Exaton 309LMo

309LMo is suitable for joining stainless chromium-nickel steels of the ASTM 309 type, chromium steels and dissimilar metals e.g. austenitic stainless steel to carbon or low-alloyed steel. It is used for MIG/MAG welding.

<b>Classifications Wire Electrode</b>	SFA/AWS A5.9 : ER309LSi EN ISO 14343-A : G 23 12 L Si
<b>Approvals</b>	CE EN 13479

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

<b>Alloy Type</b>	Austenitic (with approx. 9 % ferrite) 24 % Cr - 13 % Ni - Low C- High Si
<b>Shielding Gas</b>	M12, M13 (EN ISO 14175)

### Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C (68 °F)	130 J (96 ft-lb)
As Welded	-20 °C (-4 °F)	120 J (89 ft-lb)
As Welded	-40 °C (-40 °F)	115 J (85 ft-lb)
As Welded	-196 °C (-321 °F)	50 J (37 ft-lb)

### Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
0.02	1.6	0.8	0.01	0.02	13.7	23.3	0.1	0.1	0.1

### Typical Weld Metal Analysis %

Nb	Co	FN deLong	FN WRC-92
0.01	0.05	10	6

### Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
0.015	1.6	0.9	0.01	0.02	13.7	23.5	0.2	0.1	0.1

### Typical Wire Composition %

Nb	Co	FN deLong	FN WRC-92
0.01	0.06	11	7

### Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.9 mm (0.035 in.)	65-220 A	15-28 V	3.5-18.0 m/min (138-709 in./min)	1.1-5.4 kg/h (2.4-11. lb/h)

### Recommended Welding Parameters

Wire Diameter	Current	Voltage	Wire Feed Speed
0.8 mm (0.030 in.)	40-120 A	15-19 V	4.0-8.0 m/min (157-315 in./min)
1.0 mm (0.040 in.)	60-220 A	15-28 V	4.0-12.0 m/min (157-472 in./min)
1.2 mm (0.047 in.)	150-260 A	24-29 V	3.0-10.0 m/min (118-394 in./min)
1.6 mm (1/16 in.)	230-350 A	25-30 V	3.0-5.0 m/min (118-197 in./min)