

# Lincolnweld® LA-93

AWS EB3R • Low Alloy Solid Electrode

## Conformances

AWS A5.23/A5.23M: 2007 EB3R  
EN ISO 24598-A: S CrMo2

## Recommended Fluxes

Lincolnweld® 880M®, 882™, MIL800-H™, 960®

## Key Features

- ▶ Designed for high temperature applications such as pressure vessels and piping for 2 1/4% chromium, 1% molybdenum steels
- ▶ The AWS R designator denotes ultra low residuals which will result in a low Bruscato factor (X-factor)

## DIAMETERS / PACKAGING

Diameter in (mm)	60 lb (27.2 kg) Coil	1000 lb (453 kg) Speed Feed® Drum
3/32 (2.4)	EDS30784	ED032185
1/8 (3.2)	EDS26962	
5/32 (4.0)	EDS26963	

## WIRE COMPOSITION<sup>(1)</sup> - As Required per AWS A5.23/A5.23M:2007

	%C	%Mn	%Si	%Cr	%Mo	%S	%P	%Cu
Lincolnweld® LA-93	0.05 - 0.15	0.40 - 0.80	0.05 - 0.30	2.25 - 3.00	0.90 - 1.10	0.025	0.025	0.35

# Lincolnweld® LA-100

AWS EM2 &amp; ER100S-G &amp; ER110S-G • Low Alloy Solid Electrode

## Conformances

AWS A5.23/A5.23M: 2007 EM2  
MIL-E-23765/2D & /2E:\* MIL-100S-1 or MIL-100S-2  
(with MIL800-H)  
EN ISO 26304-A: SZ

\*NAVSEA Technical Publication T9074-BC-GIB-010/0200

## Recommended Fluxes

Lincolnweld® 880™, 880M®, 888™, MIL800-H™, MIL800-HPNi™, 960®

## Key Features

- ▶ A low carbon, high manganese wire with nickel and molybdenum designed to weld high strength steels such as HY-80 and HSLA-80
- ▶ Delivers yield strength greater than 690 MPa (100 ksi)
- ▶ Low H2 hydrogen levels can be achieved when used with MIL800-H™ flux

## DIAMETERS / PACKAGING

Diameter in (mm)	60 lb (27.2 kg) Coil
1/16 (1.6)	ED010996
5/64 (2.0)	ED011002
3/32 (2.4)	ED010999
1/8 (3.2)	ED010998
5/32 (4.0)	EDS11001

## WIRE COMPOSITION<sup>(1)</sup> - As Required per AWS A5.23/A5.23M:2007

	%C	%Mn	%Si	%Cr	%Ni	%Mo	%Ti	%Zr	%Al	%V	%S	%P	%Cu
Lincolnweld® LA-100	0.10	1.25-1.80	0.20-0.60	0.30	1.40-2.10	0.25-0.55	0.10	0.10	0.10	0.05	0.015	0.010	0.25

<sup>(1)</sup>Single values are maximums.

*Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at [www.lincolnelectric.com](http://www.lincolnelectric.com)*

### TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

### CUSTOMER ASSISTANCE POLICY

The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to [www.lincolnelectric.com](http://www.lincolnelectric.com) for any updated information.