

# Lincolnweld® LA-81

Low Alloy Solid Electrode • AWS EG

## Key Features

- ▶ A low carbon, medium manganese, low silicon, 1/2% molybdenum wire containing small additions of titanium and boron for improved fracture toughness
- ▶ Generally used in two run applications for arctic grade line pipe
- ▶ It can be used to weld up to API X90 grade pipe

## Conformances

AWS A5.23/A5.23M: 2007 EG  
EN ISO 26304-A: SZ

## Recommended Fluxes

Lincolnweld® 995N™, SPX80™

## DIAMETERS / PACKAGING

Diameter in (mm)	60 lb (27.2 kg) Coil	1000 lb (453 kg) Speed Feed® Drum	2200 lb (998 kg) Speed Feed® Stem
1/8 (3.2)	ED023163	EDS31060	ED032993
5/32 (4.0)			ED032992
3/16 (4.8)			ED032995

## WIRE COMPOSITION - As Required per AWS A5.23/A5.23M:2007

	%C	%Mn	%Si	%Mo	%Ti	%B	%Cu
Lincolnweld® LA-81 <sup>(1)</sup>	0.05	1.2	0.2	0.50	0.1	0.01	0.20

# Lincolnweld® LA-82

Low Alloy Solid Electrode • AWS EF2

## Key Features

- ▶ Designed especially for high strength applications
- ▶ Recommended when over 620 MPa (90 ksi) tensile strength is required in the as-welded condition or when low temperature impact toughness is required in the stress-relieved condition

## Conformances

AWS A5.23/A5.23M: 2007 EF2  
EN ISO 26304-A: SZ

## Recommended Fluxes

Lincolnweld® 860®, 882™, 888™, 8500™, MIL800-H™

## DIAMETERS / PACKAGING

Diameter in (mm)	60 lb (27.2 kg) Coil
3/32 (2.4)	EDS30785
1/8 (3.2)	ED026958
5/32 (4.0)	ED026959

## WIRE COMPOSITION<sup>(2)</sup> - As Required per AWS A5.23/A5.23M:2007

	%C	%Mn	%Si	%Ni	%Mo	%S	%P	%Cu
Lincolnweld® LA-82	0.10-0.18	1.70-2.40	0.2	0.40-0.80	0.40-0.65	0.025	0.025	0.35

<sup>(1)</sup>No AWS limits. Values are typical. <sup>(2)</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.

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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.