# LINCOLNWELD® 812-SRC™

800 Series Neutral Flux • EN ISO 14174 - S A FB 1

# **KEY FEATURES**

- Carbon-neutral flux designed to provide excellent mechanical properties after extended stress-relief
- Industry leading low H4 diffusible hydrogen levels
- Smooth bead appearance and excellent slag release
- Excellent resistance to moisture pick up
- Actual (Type 3.1) certificates for each lot of flux showing chemical composition, particle size and moisture level are available in the certificate center of lincolnelectric.com

# **PACKAGING**

50 lb (22.7 kg) Plastic Bag ED034171

## **TYPICAL APPLICATIONS**

- Offshore applications with extended post-weld heat treatment (PWHT)
- Quench and tempered steels such as AISI 4130, 8620, and similar chemistries

## **RECOMMENDED WIRES**

Low Alloy Electrodes Lincolnweld® LA-84

# **PRODUCT INFORMATION**

Basicity Index: 2.2 Density: 1.3 g/cm³

# FLUX COMPOSITION(1)

	%SiO <sub>2</sub>	%MnO	%MgO	%CaF <sub>2</sub>
Lincolnweld® 812-SRC™	16	3	30	19
	%Na <sub>2</sub> O	%AI <sub>2</sub> O <sub>3</sub>	%CaO	% Metal Alloys
Lincolnweld® 812-SRC™	2	22	/,	3 max

## **AWS TEST RESULTS**(1)

Flux/Wire Combination	Weld Condition	Yield Strength <sup>(2)</sup> MPa (ksi)	Tensile Strength MPa (ksi)	Elongation (%)	Charpy J (ft•lbf)	V-Notch @°C (°F)	AWS Classification (A5.17/A5.23)
LA-82	Stress-relieved	630 (91)	710 (103)	27	54 (40)	-51° (-60°)	F10P6-EF2-F2-H4
LA-84	As-welded	680(98)	810(117)	21	81(60)	-51° (-60°)	F10A6-EF3-F3-H4
LA-84	As-welded	680(98)	810(117)	21	81(60)	-51° (-60°)	F10A6-EG-F3-H4
LA-84	Stress-relieved	650(94)	740(107)	25	73(54)	-51° (-60°)	F10P6-EF3-F3-H4
LA-84	Stress-relieved	650(94)	740(107)	25	73(54)	-51° (-60°)	F9P6-EF3-F3-H4
AK-10	Stress-relieved	660 (95)	750 (108)	25	55 (41)	-40° (-40°)	F10P4-EG-G-H4

<sup>(1)</sup> See test results disclaimer (2) Measured with 0.2% offset. NOTE 1: For the most up-to-date AWS certificates of conformances please visit www.lincolnelectric.com

Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at 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 for any updated information.

