

# LA490

Low Alloy Steel Submerged Arc Flux ■ BS ED ISO 14174 SA FB 155 AC H5

## KEY FEATURES

- Recommended for use with 9CrMoV-N & 9CrMoV solid wires
- Agglomerated fluoride-basic flux for P91 & P92 modified 9CrMo creep resistant steels
- Composition aids in producing crack resistant welds with high impact strength

## PACKAGING

25 kg (55.1 lb)  
Sahara ReadyBag™

FXLA490SA-25SRB

## CONFORMANCES

**AWS A5.23M:** F62P0-EB91-B91  
(FLUX-WIRE COMBINATION)

## TYPICAL APPLICATIONS

- Main Steam Piping
- Power Generation Plants
- Oil Refineries

## OPERATING PARAMETERS

AC or DC+; typical 420A, 28V,  
390mm/min (15.4 in/min)

## FLUX COMPOSITION<sup>(1)</sup>

	%SiO <sub>2</sub> + Al <sub>2</sub> O <sub>3</sub>	%CaO + MgO	%CaF <sub>2</sub>	Basicity Index (Boniszewski)
LA490	30	36	27	-3.0

## AWS TEST RESULTS<sup>(1)</sup>

Flux/Wire Combination	PWHT Condition	Yield Strength <sup>(2)</sup> MPa (ksi)	Tensile Strength MPa (ksi)	Elongation (%)		Charpy V-Notch		AWS Classification (A5.23M)
				4 d	5 d	J (ft·lbf)	@ °C (°F)	
9CrMoV-N	As-welded	610 (89)	720 (104)	25%	23%	45 (33)	20 (68)	F62P0-EB91-B91

<sup>(1)</sup>See test results disclaimer <sup>(2)</sup>Measured with 0.2% offset.

NOTE: If flux becomes damp, rebake at 300-350 °C (572-662 °F)/1-2 hours to restore to as-packed condition.

NOTE: For the most up-to-date AWS certificates of conformance please visit [www.lincolnelectric.com](http://www.lincolnelectric.com)

*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.