

LINCOLN® ER80S-D2

Low Alloy Steel ■ AWS ER80S-D2

KEY FEATURES

- Capable of producing weld deposits with 550 MPA (80 KSI) tensile strength
- Contains 0.50% molybdenum for strength after stress valves
- Q2 Lot® - Certificates showing actual wire chemistry available online

WELDING POSITIONS

All

CONFORMANCES

AWS A5.28/A5.28M: ER80S-D2
ASME SFA-5.28: ER80S-D2

TYPICAL APPLICATIONS

- Requirements for strengths after stress relieving
- ASTM A182, A217, A234 and A335 - High temperature service pipe, fittings, flanges and valves
- ASTM A336 pressure vessel forgings

DIAMETERS / PACKAGING

Diameter in (mm)	10 lb (4.5 kg) Plastic Tube 30 lb (13.6 kg) Master Carton
1/16 (1.6)	ED034219
3/32 (2.4)	ED034220
1/8 (3.2)	ED034221

WIRE COMPOSITION – As Required per AWS A5.28/A5.28M

	%C	%Mn	%Si	%S
Requirements - AWS ER80S-D2	0.07-0.12	1.60-2.10	0.50-0.80	0.025 max
	%P	%Cu ⁽⁴⁾	%Ni	%Mo
Requirements - AWS ER80S-D2	0.025 max	0.50 max	0.15 max	0.40 max

⁽⁴⁾Copper due to any coating on the electrode plus the copper content of the filler metal itself, shall not exceed the stated 0.50% max.

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.

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 for any updated information.