

LINCORE® 32-S

Metal-to-Metal, Build-Up

KEY FEATURES

- Designed for build-up on 4140 drill stems in the deep hole drilling industry
- For automatic and semiautomatic operation on mild and low alloy steels
- Good resistance to cross checking
- Unlimited deposit thickness with proper preheat and interpass temperatures and procedures

TYPICAL APPLICATIONS

- Drill stems

RECOMMENDED FLUX

Primary Flux ⁽¹⁾	Secondary Flux
802	860

⁽¹⁾ 802 and 860 standard flux are not sized for semiautomatic applications; however, they can be ordered in special sizing by contacting your Lincoln Electric representative.

DIAMETERS / PACKAGING

Diameter in (mm)	300 lb (136 kg) Speed-Feed® Drum	600 lb (272 kg) Speed-Feed® Drum
3/32 (2.4)	ED025656	ED025131
1/8 (3.2)		

MECHANICAL PROPERTIES⁽¹⁾

Rockwell Hardness (R _c)	
2 Layers Under 802 Flux	2 Layers on 4140 Steel Under 802 Flux
28	33

DEPOSIT COMPOSITION⁽¹⁾

	%C	%Mn	%Si	%Cr	%Mo	%Ni
2 Layers w/ 802	0.05	2.20	0.60	1.80	0.33	0.07
On 4140 Steel						
2 Layers w/ 802	0.13	2.11	0.51	1.63	0.30	0.09

TYPICAL OPERATING PROCEDURES

Diameter, Polarity ESO - in (mm)	Wire Feed Speed m/min (in/min)	Voltage (Volts)	Approx. Current (Amps)	Deposition Rate kg/hr (lb/hr)
3/32 in (2.4 mm), DC+ 1 1/2 (38)	1.9 (75)	25	350	3.4 (7.5)
	2.5 (100)	25	400	4.5 (10.0)
	3.3 (130)	25	460	5.9 (13.0)
	4.2 (165)	25	510	7.5 (16.5)
1/8 in (3.2 mm), DC+ 1 5/8 (40)	1.3 (50)	28	370	3.9 (8.5)
	2.5 (100)	28	540	7.9 (17.5)
	3.2 (125)	28	630	9.6 (21.1)
	3.8 (150)	28	720	11.8 (26.0)

⁽¹⁾ Composition and properties depend upon dilution. Single layer deposit properties depend upon base metal and/or build-up material.

Safety Data Sheets (SDS) and Certificates of Conformance are available on our website at www.lincolnelectric.com

FUMES AND GASES can be hazardous to your health.

- Fumes from the normal use of this product contain significant quantities of potentially hazardous compounds. See consumable product label/insert.
- Keep your head out of the fumes.
- Use enough ventilation and local exhaust to keep fumes and gases from your breathing zone and the general area.
- An approved respirator should be used unless exposure assessments are below applicable exposure limits.

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.

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