

# LINCORE® 70-0

## Severe Abrasion

### KEY FEATURES

- Exceptional wear resistance with deposits that last approximately 2-3 times longer than most chrome carbide and complex carbide alloys, especially in wet abrasion applications
- Maintains high hardness after exposure to elevated temperatures up to 1000°F (538°C)
- Best suited for carbon and low alloy steels. Not compatible for austenitic stainless or austenitic manganese steels). Limited to a maximum of two layers
- Great for high value applications where downtime is costly or replacement parts are expensive

### WELDING POSITIONS

Flat & Horizontal Only

### TYPICAL APPLICATIONS

- Wearplate
- Crusher Rolls
- Ore Chutes
- Screw Augers

### DIAMETERS / PACKAGING

Diameter in (mm)	10 lb (4.5 kg) Spool	33 lb (15 kg) Spool	50 lb (22.7 kg) Coil
0.045 (1.1)	ED037264	ED037265	-
1/16 (1.6)	ED037266	ED037267	-
5/64 (2.0)	-	ED037268	-
7/64 (2.8)	-	-	ED037269

### MECHANICAL PROPERTIES<sup>(1)</sup>

Rockwell Hardness (R <sub>c</sub> )	Wear Resistance (ASTM G65-04 Procedure A)
67-70	0.13 g mass loss

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

% Fe	% C	% Cr%	% B	% Nb	% Al	% Mn	% Si
Balance	<3	<18	<6	<10	<5	<2	<2

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

## TYPICAL OPERATING PROCEDURES

Diameter, Polarity ESO – in (mm)	Current (Amps)	Voltage (Volts)	Wire Feed Speed m/min (ipm)	Deposition Rate lb/hr
0.045 in (1.1 mm), DC+ 3/4-1 (20) FCAW-S	~ 135	24	7.0 (275)	6.5
1/16 in (1.6 mm), DC+ 3/4-1 (20) FCAW-S	~ 220	24	7.0 (275)	10.5
5/64 in (2.0 mm) DC+ 3/4-1 (20) FCAW-S	~ 300	25	7.0 (275)	–
7/64 in (2.8 mm) DC+ 3/4-1.75 (40) FCAW-S	~ 450	26	5.7 (225)	–

*Safety Data Sheets (SDS) and Certificates of Conformance are available on our website at [www.lincolnelectric.com](http://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.

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