

LINCOLN® ER70S-6

Mild Steel, Copper Coated · AWS ER70S-6

KEY FEATURES

- High manganese and silicon deoxidizer content helps tolerate medium-to-heavy mill scale and surface contaminants
- Enhanced puddle fluidity compared to ER70S-2 for smoother weld bead appearance
- Coined identification markings on both ends of each rod for reliable traceability
- Q2 Lot® certificates showing actual wire chemistry and mechanical properties available online

WELDING POSITIONS

All

SHIELDING GAS

100% Argon

CONFORMANCES

AWS A5: ER70S-6
CWB/CSA: B-G 49A 3 C1 S6
ISO: W 49 6

TYPICAL APPLICATIONS

- Repairs on a variety of mild and low alloy steel
- Small diameter pipe and tubing
- Sheet metal applications
- Root pass pipe welding

DIAMETERS / PACKAGING

| Diameter in (mm) | 10 lb (4.5 kg) Plastic Tube 30 lb (13.6 kg) Master Carton | 50 lb (22.7 kg) Carton |
|---------------------|--|---------------------------|
| 1/16 (1.6) | ED034337 | ED034340 |
| 3/32 (2.4) | ED034338 | ED034341 |
| 1/8 (3.2) | ED034339 | ED034342 |
| 5/32 (4.0) | ED034781 | |

WIRE COMPOSITION⁽¹⁾ – As Required per AWS A5.18

| | %C | %Mn | %S | %Si | %P |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|
| Requirements - AWS ER70S-6 | 0.06-0.15 | 1.40-1.85 | 0.035 max | 0.80-1.15 | 0.025 max |
| Typical Results⁽²⁾ | 0.09 | <1.60 | 0.007 | 0.90 | 0.007 |
| | %Cu | %Cr | %Ni | %Mo | %V |
| Requirements - AWS ER70S-6 | 0.50 max | (1) | (1) | (1) | (1) |
| Typical Results⁽²⁾ | 0.20 | 0.05 | 0.05 | 0.05 | 0.05 |

⁽¹⁾Total 0.50% maximum, combined. ⁽²⁾See test results disclaimer

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 business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, cutting equipment and EV charging systems. Our challenge is to meet the needs of our customers, who are experts in their fields, and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or technical information about their use of our products. Our employees respond to inquiries to the best of their ability based on information and specifications 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, or to provide engineering advice in relation to a specific situation or application. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or communications. Moreover, the provision of such information or technical information does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or technical information, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose or any other equivalent or similar warranty is specifically disclaimed.

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