

LINCOLN® ER70S-2

Mild Steel, Copper Coated ▪ AWS ER70S-2

KEY FEATURES

- Contains zirconium, titanium, and aluminum in addition to silicon and manganese
- Produces x-ray quality welds over most surface conditions
- Recommended for TIG welding on all grades of steel
- Ink jet printing identification on entire length of electrode
- Q2 Lot® - Certificates showing actual wire chemistry available online

WELDING POSITIONS

All

CONFORMANCES

AWS A5.18:	ER70S-2
ASME SFA-A5.18:	ER70S-2
CSA W48 CLASSIFICATION	B-G 49A 3 CG2 (ER495-2)

TYPICAL APPLICATIONS

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

Diameter in (mm)	10 lb (4.5 kg) Carton	5 lb (2.3 kg) Plastic Tube 20 lb (9.1 kg) Master Carton	10 lb (4.5 kg) Plastic Tube 30 lb (13.6 kg) Master Carton	50 lb (22.7 kg) Carton
1/16 (1.6)	ED033952*	ED034325	ED034328	ED034331
3/32 (2.4)	ED033953*	ED034326	ED034329	ED034332
1/8 (3.2)	ED033954*	ED034327	ED034330	ED034333
5/32 (4.0)			ED034810	

* Nuclear Tested Product

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

	%C	%Mn	%S	%Si	%P	%Cu	%Cr
Requirements - AWS ER70S-2	0.07 max	0.90-1.40	0.035 max	0.40-0.70	0.0025 max	0.50 max	(1)
Typical Results⁽²⁾	0.04	1.08	0.005	0.55	0.0003	0.20	0.08
	%Ni	%Mo	%V	%Al	%Ti	%Zr	
Requirements - AWS ER70S-2	(1)	(1)	(1)	0.05-0.15	0.05-0.15	0.02-0.12	
Typical Results⁽²⁾	0.08	0.08	< 0.002	0.08	0.10	0.07	

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

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.

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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.