Lincolnweld® 980®

EN 760 - S A AB 1; EN 760 - S A AR 1 • Special Neutral Flux

Recommended Wires

For Mild Steel Lincolnweld® L-50®, L-61®, LC-72 For Low Alloy Steel Lincolnweld® LA-75, LAC-Ni2

Product Information

Basicity Index: 0.6

Density: 1.4 g/cm³

Packaging

50 lb (22.7 kg) Bag

ED027861

Key Features

- Combines many of the features of the 700 and 800 series fluxes and is ideal for semiautomatic submerged arc welding
- Exceptional resistance to flash-through and porosity caused by arc blow in a variety of applications
- Especially high productivity when used with Lincolnweld® LC-72 wire

Typical Applications

- Semiautomatic, single and multiple pass submerged arc welding
- General purpose fabrication
- Fillet welds

FLUX COMPOSITION(1)

	%SiO ₂	%Mn0	%Mg0	%CaF ₂	%Na ₂ 0	%Al ₂ O ₃	%TiO ₂	% Metal Alloys
Lincolnweld® 980™	11	14	2	12	2	47	7	4 max.

AWS TEST RESULTS(1)

Weld Condition	Yield Strength ⁽²⁾ MPa (ksi)	Tensile Strength MPa (ksi)	Elongation (%)	Charpy ' J (ft•lbf)	V-Notch @ °C (°F)	AWS Classification (A5.17/A5.23)
As-welded	430 (63)	540 (78)	31	43 (32)	-29 (-20)	F7A2-EM13K-H8
As-welded	430 (63)	530 (77)	31	37 (27)	-29 (-20)	F7A2-EM12K-H8
As-welded	450 (65)	540 (78)	28	43 (32)	-29 (-20)	F7A2-EC1-H8
As-welded	510 (74)	600 (87)	28	61 (45)	-29 (-20)	F7A2-ENi1K-Ni1-H8
As-welded	540 (79)	630 (91)	25	110 (81)	-29 (-20)	F8A2-ECNi2-Ni2-H8
	As-welded As-welded As-welded As-welded	Condition MPa (ksi) As-welded 430 (63) As-welded 430 (63) As-welded 450 (65) As-welded 510 (74)	Condition MPa (ksi) MPa (ksi) As-welded 430 (63) 540 (78) As-welded 430 (63) 530 (77) As-welded 450 (65) 540 (78) As-welded 510 (74) 600 (87)	Condition MPa (ksi) MPa (ksi) (%) As-welded 430 (63) 540 (78) 31 As-welded 430 (63) 530 (77) 31 As-welded 450 (65) 540 (78) 28 As-welded 510 (74) 600 (87) 28	Condition MPa (ksi) MPa (ksi) (%) J (ft•lbf) As-welded 430 (63) 540 (78) 31 43 (32) As-welded 430 (63) 530 (77) 31 37 (27) As-welded 450 (65) 540 (78) 28 43 (32) As-welded 510 (74) 600 (87) 28 61 (45)	Condition MPa (ksi) MPa (ksi) (%) J (ft•lbf) @ °C (°F) As-welded 430 (63) 540 (78) 31 43 (32) -29 (-20) As-welded 430 (63) 530 (77) 31 37 (27) -29 (-20) As-welded 450 (65) 540 (78) 28 43 (32) -29 (-20) As-welded 510 (74) 600 (87) 28 61 (45) -29 (-20)

⁽¹⁾See test results disclaimer below. (2)Measured with 0.2% offset

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.

