

**Lincolnweld® WTX™**

EN 760 SA AB 1

**Submerged Arc Flux for Welding Wind Towers**

Lincolnweld® WTX™ is a neutral submerged arc welding flux designed to meet the specific requirements of wind tower welding applications. It is recommended for use with Lincolnweld® L-61 electrode on both longitudinal and circumferential seam welds. The combination of Lincolnweld® L-61 and WTX™ is capable of exceeding the mechanical property requirements specified for cold weather wind tower applications.

**KEY FEATURES**

- ▶ **Excellent Twin and Multi-Arc AC and DC Operation** – Increased productivity when combined with the Power Wave® AC/DC 1000®.
- ▶ **Low Temperature Impact Properties** – Capable of producing Charpy V-Notch test results exceeding 20 ft•lbf (27 J) @ -80°F (-62°C).
- ▶ **Weld Circumferential and Longitudinal Butt and Fillet Welds** – Multi-purpose flux designed to achieve optimal results on multiple wind tower seam welding applications.
- ▶ **Smooth Bead Profile** – Achieve excellent toe angles, tie-in, and bead appearance on interior and exterior applications.

**TYPICAL APPLICATIONS**

- ▶ Wind Tower Base
- ▶ Wind Tower Door Frame

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## PRODUCT INFORMATION

- ▶ **Basicity Index:** 1.4
- ▶ **Density:** 1.2 g/cm<sup>3</sup>

## RECOMMENDED WIRES

Lincolnweld® L-61, L-70

## DIAMETERS/PACKAGING

50 lb (23 kg)  
Plastic Bag

ED032990

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

	%SiO <sub>2</sub>	%Mn <sub>x</sub> O <sub>y</sub>	%MgO	%CaF <sub>2</sub>	%NaO	%Al <sub>2</sub> O <sub>3</sub>	%CaO	%ZrO <sub>2</sub>	%FeO	%K <sub>2</sub> O	%TiO <sub>2</sub>
<b>Test Results</b> Lincolnweld® WTX™	21	9	23	13	2	25	5	1	2	1	1

## AWS TEST RESULTS<sup>(1)</sup>

Flux / Wire Combination	Weld Condition	Tensile Strength		Yield Strength <sup>(2)</sup>	Elongation	Charpy V-Notch		AWS Classification (A5.17 / A5.23)
		ksi (MPa)	ksi (MPa)	ksi (MPa)	(%)	ft•lbf (J)	@ °F (°C)	
Lincolnweld® L-61	As-welded	78 (540)	63 (430)	31	62 (84)	-80 (-62)	F7A8-EM12K-H8	
Lincolnweld® L-70	As-welded	88 (610)	73 (500)	25	34 (46)	-40 (-40)	F8A4-EA1-A3-H8	

<sup>(1)</sup> See test results disclaimer below. <sup>(2)</sup> Measured with 0.2% offset.

**For best welding results with Lincoln Electric consumables,  
always use Lincoln Electric equipment. Visit [www.lincolnelectric.com](http://www.lincolnelectric.com) for more details.**

*Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at [www.lincolnelectric.com](http://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 business of 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](http://www.lincolnelectric.com) for any updated information.

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