



LINCOLNWELD WTX & WTX-TR

SUBMERGED ARC (SAW) WELDING FLUX







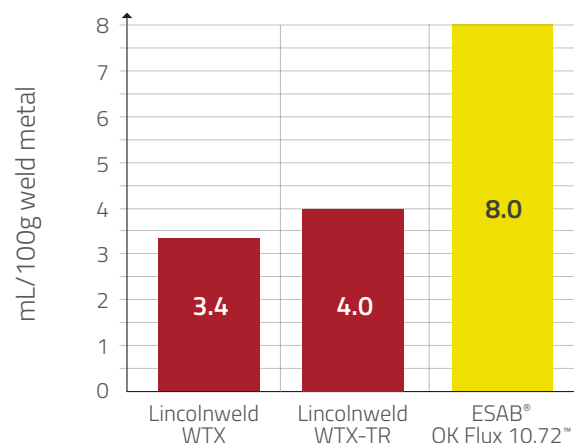
Accuracy and Consistency At a High Level

If you're building wind towers, precision is crucial. Get the most consistent and quantifiable welds – on time and on budget – with WTX™ fluxes. Designed for submerged-arc welding with Lincolnweld® L-61® wire, and engineered to pass a broad range of testing standards, WTX fluxes deliver a high level of quality and far surpass all mechanical properties requirements of the industry. WTX fluxes are low hydrogen, right out of the bag. No need for conditioning, which means less risk of hydrogen failures. Just open the bag and use it. Choose WTX for multi-pass welding and WTX-TR for extensive two-run work.

- Consistent bead shape and appearance results in better looking welds
- WTX optimized for multi-pass welding and excellent slag removal
- Two-run toughness with WTX-TR far exceeds competitive fluxes



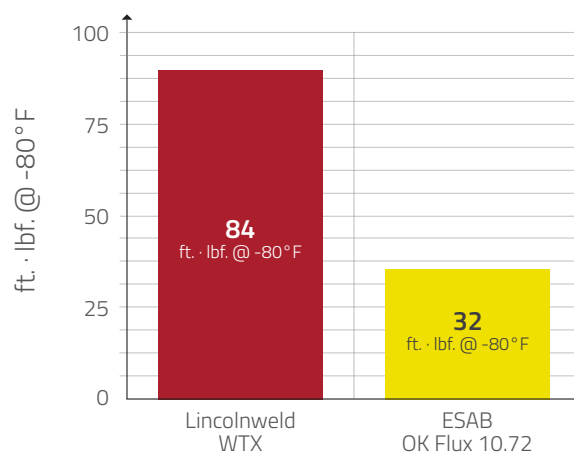
Diffusible Hydrogen Levels



Lower Diffusible Hydrogen

Diffusible hydrogen increases the risk of weld cracking and failure. Lincolnweld WTX-TR and WTX when used with Lincolnweld L-61 electrodes produce welds with an average of 3mL/100g weld metal of diffusible hydrogen. This is 50% less than our competitor's received flux, and Lincoln Electric does it with no baking required, saving you time and money.

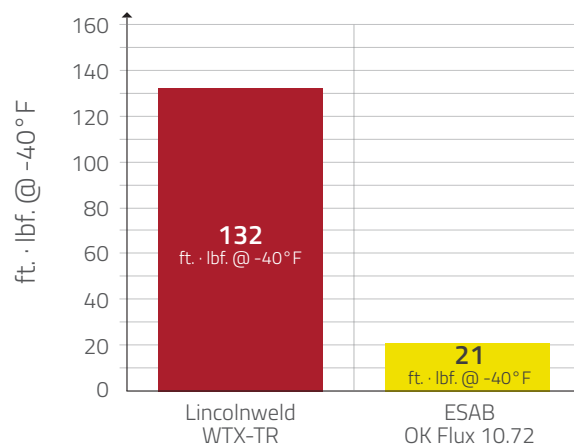
Multi-run Application

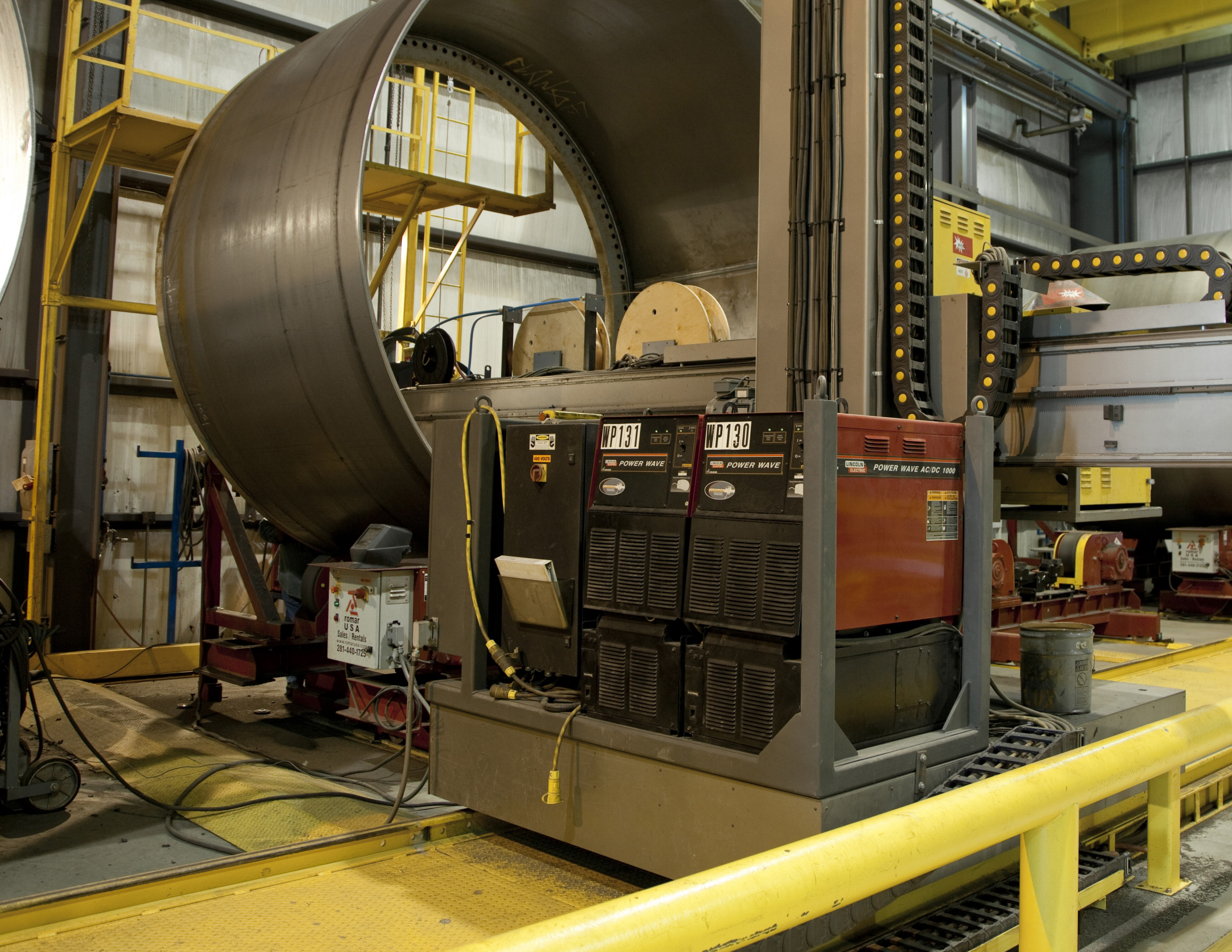


Better Toughness

Our wind tower fluxes are designed for optimal performance in both 2-run and multi-run applications. Choose WTX for multi-pass applications where toughness exceeds 80 ft-lb @ -80°F, and choose WTX-TR in two run applications where toughness exceeds 130 ft-lb @ -40°F.

Two-Run Application





WP131

POWER WAVE

WP130

POWER WAVE

LINCOLN ELECTRIC POWER WAVE AC/DC 1000

romar
USA
Sales / Rentals
281-440-1725

PACKAGING

Product Name	50 lb (22.7 kg) Plastic Bag	2200 lb (998 kg) Bulk Bag
Lincolnweld WTX	ED032990	ED033903
Lincolnweld WTX-TR	ED035463	ED035845

MECHANICAL PROPERTIES FLUX⁽¹⁾/ WIRE COMBINATION

Multi-Pass	AWS Classification	Yield Strength MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch	
					J (ft•lbf)	@ °C (°F)
Lincolnweld WTX/ L-61	F7A8-EM12K-H8	400 (58)	510 (74)	29	143 (106)	-62 (-80)
Lincolnweld WTX/L-70	F8A4-EA1-A3-H8	470 (68)	570 (83)	25	58 (43)	-40 (-40)

MECHANICAL PROPERTIES FLUX⁽¹⁾/ WIRE COMBINATION

Two-Run	AWS Classification	Yield Strength MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch	
					J (ft•lbf)	@ °C (°F)
Lincolnweld WTX-TR/L-61	F7TA4-EM12K-H8	560 (81)	640 (93)	23	160 (118)	-40 (-40)

FLUX COMPOSITION

	%SiO ₂	%MnO	%MgO	%CaF ₂	%Na ₂ O	%Al ₂ O ₃	%CaO	%ZrO ₂	%FeO	%K ₂ O	%TiO ₂
Lincolnweld WTX	21	9	23	13	2	25	5	1	2	1	1
Lincolnweld WTX-TR	17	18	22	13	2	25	4	2	3	1	3

PRODUCT INFORMATION

Product Name	Basicity Index	Density
Lincolnweld WTX	1.4	1.2
Lincolnweld WTX-TR	1.5	1.2

⁽¹⁾ See test results disclaimer on back page. ESAB® and ATOM ARC™ are registered trademarks of ESAB Welding & Cutting Products.

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 for any updated information.