LINCOLNWELD® 308/308L

Stainless ▪ AWS ER308, ER308L

KEY FEATURES

- Designed to be used primarily with basic fluxes
- Versatile electrode designed to weld several types of austenitic steels
- Q2 Lot® - Certificate showing actual wire composition and calculated ferrite number (FN) available online
- Balanced chromium and nickel levels provide enough ferrite in the weld metal for high resistance to hot cracking
- Give a weld deposit with reduced carbon levels (0.03% max) that offers increased resistance to inter-granular corrosion

RECOMMENDED FLUXES

Lincolnweld® 801, 802, 880, 880M, 882, P2007, ST-100, P2000

CONFORMANCES

AWS A5.9/A5.9M:	ER308, ER308L
ASME SFA-A5.9:	ER308, ER308L
ABS:	ER308, ER308L
CWB/CSA W48-06:	ER308L
EN ISO 14343-B:	SS308L
ISO 14343:2009:	(19 9 L)
MIL-E-19933E (SH)	MIL 308L, MIL 308

TYPICAL APPLICATIONS

- ASTM A743, A744 Types CF-8 and CF-3
- ASTM A240 Types 302, 304, 304L
- For joining the more common austenitic stainless steel grades referred to as "18-8" steels
- Type 308L is ideal for welding Type 304L stainless steels

DIAMETERS / PACKAGING

Diameter in (mm)	55 lb (25 kg) Steel Spool	500 lb (227 kg) Speed Feed® Drum	750 lb (340 kg) Speed Feed® Drum	500 lb (227 kg) Speed Feed® Reel	600 lb (272 kg) Speed Feed® Reel
1/16 (1.6)	ED035160				
5/64 (2.0)	ED033147				
3/32 (2.4)	ED035162	ED036446	ED036540	ED035161	ED034478
1/8 (3.2)	ED035163	ED036440	ED036604		
5/32 (4.0)	ED035165	ED036441*			

**Available upon request*

MECHANICAL PROPERTIES[1] – *As Required per AWS A5.9/A5.9M*

	Yield Strength[2] MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Ferrite Number
Test Results[3, 5] - As-Welded	380 (55)	565 (82)	42	15

WIRE COMPOSITION[1]

	%C[4]	%Cr	%Ni	%Mo	%Mn	%Si
Requirements - AWS ER308, ER308L	0.03 max	19.5-22.0	9.0-11.0	0.75 max	1.0 - 2.5	0.30 - 0.65
Typical Results[3]						
Wire Composition	0.02	20.1	9.8	0.10	1.8	0.50
All Weld Metal Composition[5]	0.02	19.0 - 19.5	9.8	0.10	1.5 - 1.9	0.50 - 0.80

TYPICAL OPERATING PROCEDURES

Diameter in (mm)	Wire Feed Speed m/min (in/min)	Voltage (volts)	Current (amps)
5/64 (2.0)	2.0-6.1 (80-240)	24-30	190-500
3/32 (2.4)	1.5-5.3 (60-210)	26-32	195-575
1/8 (3.2)	0.9-2.8 (35-110)	28-34	200-700
5/32 (4.0)	0.8-1.9 (30-75)	30-36	320-775

[1]Typical all weld metal. [2]Measured with 0.2% offset. [3]See test results disclaimer [4]AWS Requirement for ER308 is 0.08% max. carbon.
[5]Results shown correspond with the recommended Lincolnweld® and Blue Max® fluxes listed above, but not required per AWS A5.9-93.

IMPORTANT: SPECIAL VENTILATION AND/OR EXHAUST REQUIRED

Fumes from the normal use of some welding products can contain significant quantities of components - such as chromium and manganese - which can lower the 5.0 mg/m³ maximum exposure guideline for general welding fume.

BEFORE USE, READ AND UNDERSTAND THE SAFETY DATA SHEET (SDS) FOR THIS PRODUCT AND SPECIFIC INFORMATION PRINTED ON THE PRODUCT CONTAINER.

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.

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