

# Lincoln® ER308/308L N

AWS ER308/ER308L • Stainless Steel

## Typical Applications

- ▶ Nuclear power plant components, maintenance and construction
- ▶ Sheet metal on the corresponding stainless steel base metals
- ▶ High pressure piping and tubing
- ▶ Pressure Vessels

## ASME IX Qualification

ASME IX Qualification: QW432 F-No 6,  
QW442 A-No 8

## Conformances

AWS A5.9/A5.9M: 2006: ER308, ER308L  
ASME SFA-A5.9: ER308, ER308L

## Welding Positions

All

## Key Features

- ▶ Q2 Lot® - Certificate showing actual wire composition and calculated ferrite number (FN) available online
- ▶ “N” Designator - cobalt restriction of 0.05% max
- ▶ Available as Batch Managed Inventory
- ▶ Use on base metals of similar composition
- ▶ Meets the low cobalt levels typically required in the nuclear industry
- ▶ Dual classification ensures the maximum carbon content is 0.03%
- ▶ 0.03% carbon content increases resistance to intergranular corrosion
- ▶ Prior to using this material for ASME Boiler and Pressure Vessel Code Section III applications, please contact the Lincoln Electric Specials Department to receive a Certified Material Test Report (CMTR) which meets all requirements of NCA-3860
- ▶ Product is marked every 4 in. (101.6 mm) with AWS classification and LOT number for easy identification

## DIAMETERS / PACKAGING

Diameter in (mm)	10 lb (4.5 kg) Plastic Tube
	30 lb (13.6 kg) Master
3/32 (2.4)	ED033854
1/8 (3.2)	ED033855

## WIRE COMPOSITION – As Required per AWS A5.9/A5.9M: 2006

	%C	%Cr	%Ni	%Mo	%Mn
Requirements - AWS ER308L	0.03 <sup>(2)</sup> max.	19.5 - 22.0	9.0 - 11.0	0.75 max.	1.0 - 2.5
Test Results <sup>(1)</sup>	0.02	20.2	9.2	0.03	1.6
	%Si	%P	%S	%Cu	Total Others
Requirements - AWS ER308L	0.30 - 0.65	0.03 max.	0.03 max.	0.75 max.	0.50 max.
Test Results <sup>(1)</sup>	0.44	0.02	0.02	0.11	0.03

### 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/m<sup>3</sup> maximum exposure guideline for general welding fume. BEFORE USE, READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET (MSDS) FOR THIS PRODUCT AND SPECIFIC INFORMATION PRINTED ON THE PRODUCT CONTAINER.

<sup>(1)</sup>See test results disclaimer on pg. 12. <sup>(2)</sup>Requirements for ER308 is 0.08% max. carbon.