

# Lincolnweld® P2007™ & 308/308L

**Stainless Steel • AWS ER308/ER308L**

## Key Features

- ▶ Versatile design to weld several types of austenitic stainless steels
- ▶ Produces sound welds with excellent slag removal and bead appearance
- ▶ Designed combination to recover nearly all of the wire chromium in the deposit
- ▶ Balanced ferrite level for high resistance to hot cracking
- ▶ Low carbon content to reduce risk of sensitization of the weld

## Typical Applications

- ▶ Nuclear reactor vessels and other components

## ASME IX Qualification

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

## DIAMETERS / PACKAGING - FLUX

<b>50 lb (22.7 kg) Plastic Bag</b>
ED033159

## DIAMETERS / PACKAGING - WIRE

Diameter in (mm)	60 lb (27.2 kg) Coil
5/64 (2.0)	ED033147
3/32 (2.4)	ED033148
1/8 (3.2)	ED033149
5/32 (4.0)	ED033150

## MECHANICAL PROPERTIES<sup>(1)</sup> – As Required per AWS A5.9/A5.9M: 2006

	Yield Strength <sup>(2)</sup> MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Ferrite Number
<b>Requirements</b> - AWS ER308, ER308L	Not Specified			
<b>Test Results<sup>(3,5)</sup></b> - As-Welded	380 (55)	565 (82)	42	15

## WIRE & DEPOSIT COMPOSITION<sup>(1)</sup>

	%C <sup>(4)</sup>	%Cr	%Ni	%Mo	%Mn	%Si
<b>Requirements</b> - AWS ER308L	0.03 max.	19.5 - 22.0	9.0 - 11.0	0.75 max.	1.0 - 2.5	0.30 - 0.65
<b>Typical Performance<sup>(3)</sup></b>						
Wire Composition	0.02	20.1	9.8	0.10	1.8	0.50
All Weld Metal Composition <sup>(5)</sup>	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

**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>Typical all weld metal. <sup>(2)</sup>Measured with 0.2% offset. <sup>(3)</sup>See test results disclaimer on pg. 12. <sup>(4)</sup>AWS Requirement for ER308 is 0.08% max. carbon.

<sup>(5)</sup>Results shown correspond with the recommended Lincolnweld® and Blue Max® fluxes listed above, but not required per AWS A5.9-93.