

# Lincolnweld® ER316/316LCF

Stainless • AWS ER316/316L

## Key Features

- ▶ Controlled Low Ferrite (Range 3-5)
- ▶ Charpy V-Notch test results capable of exceeding 27 J (20 ft•lbf) @ -196°C (-320°F)
- ▶ Exceeds 15 mils (0.38 mm) of lateral expansion @ -196°C (-320°F)
- ▶ Q2 Lot® - Certificates showing actual wire chemistry available online
- ▶ Batch Managed Inventory

## Typical Applications

- ▶ LNG Storage
- ▶ Cryogenic Vessels and Piping

## Conformances

**AWS A5.9:** ER316/316L  
**ASME SFA-A5.9:** ER316/316L

## Welding Positions

- ▶ Flat and Horizontal

## Recommended Flux

- ▶ Lincolnweld® P2007

## Typical Base Metals

- ▶ 316L stainless steels

## DIAMETERS / PACKAGING

Diameter in (mm)	55 lb (25 kg) Steel Coil
5/64 (2.0)	ED034930
3/32 (2.4)	ED034931
1/8 (3.2)	ED034932

## MECHANICAL PROPERTIES<sup>(1)</sup>

	Yield Strength <sup>(2)</sup> MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft•lbf) -196°C (-320°F)	Lateral Expansion mils (mm) -196°C (-320°F)
<b>Requirements</b> AWS A5.9: ER316/316L As-Welded with Lincolnweld P2007	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
<b>Typical Performance<sup>(3)</sup></b> As-Welded with Lincolnweld P2007	420 (61)	610 (89)	43	53 (39)	20 (0.51)

<sup>(1)</sup>Typical all weld metal <sup>(2)</sup>Measured with 0.2% offset <sup>(3)</sup>See test results disclaimer below

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*Material Safety Data Sheets (MSDS) are available upon request.*

**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.

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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.

