

# Blue Max® Orbital TIG 316/316L N

Stainless Steel • AWS ER316, ER316L

## Key Features

- ▶ Ultra clean wire
- ▶ Q2 Lot® - Certificate showing actual wire composition and calculated ferrite number (FN) available online
- ▶ Available as Batch Managed Inventory
- ▶ “N” Designate - design modified to meet special chemistry requirements
- ▶ 0.05% max Cobalt
- ▶ 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

## Typical Applications

- ▶ Nuclear Energy
- ▶ Petroleum Processing
- ▶ Thermal Energy
- ▶ Process Piping

## Conformances

AWS A5.9/A5.9M: 2006 ER316, ER316L  
 ASME SFA-A5.9: ER316, ER316L

## Welding Positions

All

## Shielding Gas

100% Argon

## DIAMETERS / PACKAGING

Diameter in (mm)	2 lb (0.9 kg) Spool 8 lb (3.6 kg) Carton	10 lb (4.5 kg) Spool
0.035 (0.9)	ED034149	ED034151

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(AWS ER316, ER316L)

**DEPOSIT COMPOSITION<sup>(1)</sup> – As Required per AWS A5.9/A5.9M: 2006**

	%C	%Mn	%Si	%S	%P	%Cr
<b>Requirements</b>						
AWS ER316; ER316L N	0.03 max.	1.0-2.5	0.30-0.65	0.03 max.	0.03 max.	18.0-20.0
<b>Test Results<sup>(2)</sup></b>	0.02	1.70	0.36	<0.01	0.01	19.70
	%Ni	%Mo	%Cu	%N	%Co	FN
<b>Requirements</b>						
AWS ER316; ER316L N	11.0-14.0	2.0-3.0	0.75 max	Not Specified	0.05 max.	Not Required
<b>Test Results<sup>(2)</sup></b>	11.60	2.10	0.03	0.02	0.04	Not Required

<sup>(1)</sup> Typical all weld metal. <sup>(2)</sup> See test results disclaimer below.

**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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