

# TECH-ROD® 330-16

Stainless · AWS E330-16

## KEY FEATURES

- Offers good heat and scale resistance to 1800°F (980°C)
- Low heat input welding procedures should be used to prevent solidification cracking
- Q2 Lot® - Certificate showing actual deposit composition

## WELDING POSITIONS

All, except vertical down

## CONFORMANCES

|                |         |
|----------------|---------|
| AWS A5.4:      | E330-16 |
| ASME SFA-A5.4: | E330-16 |

## TYPICAL APPLICATIONS

- Heat Treatment
- Furnace Components
- Welding 330 stainless and similar materials
- High Temperature Environments

## DIAMETERS / PACKAGING

| Diameter<br>in (mm) | Length<br>in (mm) | 10 lb (4.5 kg) Easy Open Can<br>30 lb (13.5 kg) Master Carton |
|---------------------|-------------------|---|
| 1/8 (3.2)           | 14 (355)          | EL33016125634   |

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

|                                      | %C <sup>(2)</sup> | %Cr         | %Ni         | %Mo       | %Mn          |
|--------------------------------------|-------------------|-------------|-------------|-----------|--------------|
| <b>Requirements</b><br>AWS E330-16   | 0.18 - 0.25       | 14.0 - 17.0 | 33.0 - 37.0 | 0.75 max  | 1.0 - 2.5    |
| <b>Typical Results<sup>(2)</sup></b> | 0.13-0.18         | 15.6-16.3   | 33.1-34.2   | 0.14-0.16 | 2.1-2.4      |
|                                      | %Si               | %P          | %S          | %Cu       | FN           |
| <b>Requirements</b><br>AWS E330-16   | 1.00 max          | 0.04 max    | 0.03 max    | 0.75 max  | Not Required |
| <b>Typical Results<sup>(2)</sup></b> | 0.58-0.80         | 0.02-0.03   | ≤.01        | 0.13-0.17 | -            |

## TYPICAL OPERATING PROCEDURES

| Polarity <sup>(4)</sup> | Current (Amps)   |                 |                  |                  |
|-------------------------|------------------|-----------------|------------------|------------------|
|                         | 3/32 in (2.4 mm) | 1/8 in (3.2 mm) | 5/32 in (4.0 mm) | 3/16 in (4.8 mm) |
| DC+                     | 40-80            | 75-110          | 95-150           | 130-200          |
| AC                      | 40-80            | 75-110          | 95-150           | 130-200          |

<sup>(1)</sup>Typical all weld metal. <sup>(2)</sup>See test results disclaimer <sup>(3)</sup>AWS Requirement for E316-17 is 0.08% max. carbon. <sup>(4)</sup>Preferred polarity is listed first.

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 SAFETY DATA SHEET (SDS) FOR THIS PRODUCT AND SPECIFIC INFORMATION PRINTED ON THE PRODUCT CONTAINER.

*Safety Data Sheets (SDS) and Certificates of Conformance are available on our website at [www.lincolnelectric.com](http://www.lincolnelectric.com)*

FUMES AND GASES can be hazardous to your health.

- Fumes from the normal use of this product contain significant quantities of potentially hazardous compounds. See consumable product label/insert.
- Keep your head out of the fumes.
- Use enough ventilation and local exhaust to keep fumes and gases from your breathing zone and the general area.
- An approved respirator should be used unless exposure assessments are below applicable exposure limits.

#### 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 business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, and cutting equipment. Our challenge is to meet the needs of our customers, who are experts in their fields, and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or technical information about their use of our products. Our employees respond to inquiries to the best of their ability based on information and specifications 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, or to provide engineering advice in relation to a specific situation. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or communications. Moreover, the provision of such information or technical information does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or technical information, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose or any other equivalent or similar warranty is specifically disclaimed.

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