STARINOX 316L

TOP FEATURES

- Semi-basic stick electrode suitable for the welding of austenitic steels Cr-Ni steels or cast steels containing 16-20%Cr, 10-14%Ni and 2-3%Mo
- Can also be used for welding of stainless steels of the same type, whether stabilized or not, for services temperatures up to +400 $^{\circ}{\rm C}$
- Easy arc striking and restriking
- Efficiency 100%
- Weldable on AC and DC+ polarity

TYPICAL APPLICATIONS

- Offshore
- Chemical industry
- Hydro power plants
- General construction applications

APPROVALS

| ABS | LR | BV | DNV | RINA | TÜV | CE |
|-----|----|----|-----|------|-----|----|
| + | + | + | + | + | + | + |

CLASSIFICATION

EN ISO 3581-A

CURRENT TYPE

All positions

WELDING POSITIONS

E316L-16

E 19 12 3 L R 12

AWS A5.4

AC, DC+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, ALL WELD METAL

| С | Mn | Si | Р | S | Cr | Ni | Мо | Ferrite |
|-------|-----|-----|--------|--------|------|------|-----|---------|
| 0.035 | 0.9 | 0.8 | ≤0.025 | ≤0.025 | 19.0 | 12.0 | 2.6 | 5-10 |

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

| Required | Condition* | 0.2% Proof strength (MPa) | Tensile strength (MPa) | Elongation (%) | Impact ISO-V (J) +20°C |
|----------------|------------|------------------------------|---------------------------|-------------------|---------------------------|
| AWS A5.4 | AW | not specified | ≥490 | ≥30 | not specified |
| EN ISO 3581-A | AW | ≥320 | ≥510 | ≥25 | not specified |
| Typical values | AW | ≥350 | ≥510 | ≥30 | ≥50 |

* AW: As-welded

OUTPUT RANGE

| Diameter x Length (mm) | Current range (A) |
|---------------------------|----------------------|
| 2.0 x 300 | 30-60 |
| 2.5 x 350 | 55-80 |
| 3.2 x 350 | 70-110 |
| 4.0 x 450 | 120-140 |

PACKAGING AND AVAILABLE SIZES

| Diameter x Length (mm) | Packaging | Electrodes/pack | Net weight/pack (kg) | Item number |
|---------------------------|-----------|-----------------|-------------------------|-------------|
| 2.0 x 300 | VPMD | 150 | 1.7 | W100288785 |
| 2.5 x 350 | VPMD | 90 | 2.0 | W100288786 |
| 3.2 x 350 | VPMD | 55 | 1.9 | W100288788 |
| 4.0 x 450 | VPMD | 37 | 2.5 | W100288789 |



STARINOX 316L-EN-11/03/25

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

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing. Please refer to <u>www.lincolnelectric.eu</u> for any updated information.

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