

CLEAROSTA F 316L

TOP FEATURES

- The weld metal is resistant to intergranular corrosion up to 400°C, and non-scaling up to 800°C.
- Exhibits outstanding, almost spatter-free, welding properties with very easy slag removal from fillet welds, even in acute angles
- The reduced welding fume (up to -40%) and the lower hexavalent Cr content (up to -60%) of the fume contribute to an improved working environment in the workshop, for all workers. Advantageous in confined spaces and with limited fume extraction systems.
- CLEARINOX F 316 L-PF is used for welding in the horizontal (PD), overhead (PE) and vertical-up (PF) positions.

TYPICAL APPLICATIONS

- Chemical industry
- Steel construction
- Food processing and brewery

CLASSIFICATION

| | |
|----------------|---------------------|
| AWS A5.22 | E316LT1-1/-4 |
| EN ISO 17633-A | T 19 12 3 L P C/M 1 |

CURRENT TYPE

DC+

SHIELDING GASES (ACC. EN ISO 14175)

| | |
|----------|---|
| M21 | Mixed gas Ar+ (>15-25%) CO ₂ |
| C1 | Active gas 100% CO ₂ |
| Gas flow | 15-25 l/min |

APPROVALS

| LR | BV | DNV | TÜV | DB |
|----|----|-----|-----|----|
| + | + | + | + | + |

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

| Shielding gas | C | Mn | Si | Cr | Ni | FN (acc.WRC 1992) |
|---------------|------|-----|-----|------|------|-------------------|
| M21/C1 | 0.04 | 1.4 | 0.6 | 19.0 | 12.0 | 5-10 |

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

| | Shielding gas | Condition* | Yield strength (MPa) | Tensile strength (MPa) | Elongation (%) | Impact ISO-V (J) | |
|----------------|---------------|------------|----------------------|------------------------|----------------|------------------|--------|
| | | | | | | -20°C | -196°C |
| Typical values | M21/C1 | AW | ≥320 | ≥510 | ≥30 | ≥47 | ≥27 |

* AW = As welded

PACKAGING AND AVAILABLE SIZES

| Wire diameter (mm) | Packaging | Weight (kg) | Item number |
|--------------------|---------------|-------------|-------------|
| 1.2 | SPOOL (BS300) | 15.0 | 710015 |

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 www.lincolnelectric.eu for any updated information.