

SAFER NF 510A

TOP FEATURES

- Very low hydrogen content after re-drying
- Excellent mechanical properties
- Deposit free from porosity, excellent slag detachability

CLASSIFICATION

AWS A5.1 E7018 H4
EN ISO 2560-A E 42 4 B 32 H5

CURRENT TYPE

AC, DC+

WELDING POSITIONS

All positions

APPROVALS

ABS, LR, BV, DNV, RINA, TÜV, CE

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

| C | Mn | Si | P | S |
|------|-----|-----|--------|--------|
| 0.05 | 1.2 | 0.4 | ≤0.020 | ≤0.015 |

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

| Required | Condition | Yield strength (MPa) | Tensile strength (MPa) | Elongation (%) | Impact ISO-V (J) | | |
|----------------|-----------|----------------------|------------------------|----------------|------------------|-------|-------|
| | | | | | -30°C | -40°C | -50°C |
| AWS A5.1 | AW | ≥400 | ≥490 | ≥22 | ≥27 | - | - |
| EN ISO 2560-A | AW | ≥420 | 500-640 | ≥20 | - | ≥47 | - |
| Typical values | AW | ≥420 | 510-640 | ≥24 | ≥27 | ≥47 | ≥70 |

AW: As-welded

- = not specified

OPERATING CURRENT RANGE

| Diameter x Length (mm) | Current range (A) |
|------------------------|-------------------|
| 2.5 x 350 | 65-95 |
| 3.2 x 350 | 100-135 |
| 3.2 x 450 | 100-135 |
| 4.0 x 350 | 110-210 |
| 4.0 x 450 | 110-210 |
| 5.0 x 450 | 170-240 |

AVAILABLE SIZES AND PACKAGING INFORMATION

| Diameter x Length (mm) | Packaging | Electrodes/pack | Net weight/pack (kg) | Item number |
|------------------------|-----------|-----------------|----------------------|-------------|
| 2.5 x 350 | VPMC | 28 | 0.6 | W000385538 |
| | VPMD | 90 | 1.9 | W000258592 |
| | CBOX | 195 | 4.2 | W000258598 |
| 3.2 x 350 | VPMD | 54 | 1.9 | W000258593 |
| | CBOX | 119 | 4.2 | W000258599 |
| 3.2 x 450 | VPMD | 54 | 2.4 | W000258594 |
| | CBOX | 119 | 5.3 | W000258600 |
| 4.0 x 350 | VPMD | 40 | 2.1 | W000258595 |
| | CBOX | 85 | 4.5 | W000258601 |
| 4.0 x 450 | VPMD | 40 | 2.7 | W000258596 |
| | CBOX | 85 | 5.7 | W000258602 |
| 5.0 x 450 | CBOX | 55 | 5.7 | W000258603 |

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.