CROMO E91

TOP FEATURES

- Excellent tensile strength in creep regime.
- Good impact toughness down to -20°C.
- Low diffusible hydrogen (HD<4ml/100g).

CLASSIFICATION

AWS A5.5 E9015-B91 H4 EN ISO 3580-A E (CrMo91) B 2 2 H5

CURRENT TYPE

DC+

WELDING POSITIONS

All position, except vertical down

APPROVALS

ΤÜV

+

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

| С | Mn | Si | Р | S | Cr | Ni | Мо | V | N | X-Factor |
|------|-----|------|--------|--------|-----|-----|-------|-----|-------|----------|
| 0.11 | 0.8 | ≤0.3 | ≤0.010 | ≤0.010 | 8.5 | 0.4 | 0.050 | 0.2 | 0.050 | <15 |

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

| | C | Yield strength | Tensile strength | Elongation (%) | Impact ISO-V (J) | |
|----------------|------------|----------------|------------------|-------------------|------------------|---------------|
| | Condition* | (MPa) | (MPa) | | +20°C | 0°C |
| AWS A5.5 | PWHT | ≥530 | ≥620 | ≥17 | not specified | not specified |
| EN ISO 3580-A | PWHT | ≥530 | ≥620 | ≥15 | ≥47 | not specified |
| Typical values | 760°C x 2h | 610 | 730 | 20 | 85 | 27 |

PWHT: Postweld Heat Treatment 745-755°C / min 2h (heating rate in the furnace shell be 85°C/h to 275°C/h)

OUTPUT RANGE

| Diameter x Length (mm) | Current range (A) | | |
|---------------------------|----------------------|--|--|
| 2.5 x 300 | 70-85 | | |
| 3.2 x 350 | 95-110 | | |
| 4.0 x 350 | 125-155 | | |

PACKAGING AND AVAILABLE SIZES

| Diameter x Length (mm) | Packaging | Electrodes/pack | Net weight/pack (kg) | Item number | |
|---------------------------|-----------|-----------------|-------------------------|-------------|--|
| 2.5 x 350 | CBOX | 190 | 3.9 | W100386546 | |
| 3.2 x 350 | CBOX | 119 | 3.9 | W100386547 | |
| 4.0 x 350 | CBOX | 85 | 4.1 | W100386548 | |



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.

