# Arosta® 307

## TOP FEATURES

- Especially developed for steels difficult to weld, such as armour plates and austenitic high Mn-steels
- Often used as a buffer layer in hardfacing applications
- Weldable on AC and DC+ polarity

## CLASSIFICATION

| | |
|---|---|
| AWS A5.4 | E307-16* |
| EN ISO 3581-A | E 18 8 Mn R 12 |

(*: Nearest classification)

## CURRENT TYPE

AC/DC+

## WELDING POSITIONS

All positions, except vertical down

## APPROVALS

TÜV

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

| C | Mn | Si | Cr | Ni | FN (acc. WRC-1992) |
|---|---|---|---|---|---|
| 0.09 | 5.0 | 0.6 | 18.5 | 8.5 | 0 |

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

| | Condition | 0.2% Proof strength (MPa) | Tensile strength (MPa) | Elongation (%) | Impact ISO-V (J) +20°C | Impact ISO-V (J) -60°C |
|---|---|---|---|---|---|---|
| Required: AWS A5.4 | | - | min. 590 | min. 30 | - | - |
| EN ISO | | min. 350 | min. 500 | min. 25 | - | - |
| Typical values | AW | 450 | 650 | 35 | 110 | 75 |

AW: As-welded

- = not specified

## OPERATING CURRENT RANGE

| Diameter x Length (mm) | Current range (A) |
|---|---|
| 2.5 x 300 | 70-80 |
| 3.2 x 300 | 90-120 |
| 4.0 x 350 | 110-140 |

## AVAILABLE SIZES AND PACKAGING INFORMATION

| Diameter x Length (mm) | Packaging | Electrodes/pack | Net weight/pack (kg) | Item number |
|---|---|---|---|---|
| 2.5 x 300 | CBOH | 110 | 1.7 | 527391-2 |
| 3.2 x 300 | CBOX | 139 | 3.7 | 527407-2 |
| 4.0 x 350 | CBOX | 86 | 4.5 | 527414-1 |

## 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.