

Ultramet™ 2205 (Arosta® 4462)

TOP FEATURES

- Rutile-basic all positions MMA electrode for duplex stainless steel welding
- Excellent weldability for filling as well as for root runs
- Applicable up to a service temperature of 250°C
- High resistance to general corrosion, pitting and stress corrosion (PREN ~35)
- High yield strength > 500 N/mm²
- Weldable on AC and DC

CLASSIFICATION

AWS A5.4 E2209-16
EN ISO 3581-A E 22 9 3 N L R 3 2

CURRENT TYPE

AC / DC+

WELDING POSITIONS

All positions, except vertical down

APPROVALS

BV, DNV, TÜV

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

| | C | Mn | Si | S | P | Cr | Ni | Mo | Cu | N | PREN |
|---------|------|----|-----|------|------|----|-----|-----|-----|------|------|
| Typical | 0.02 | 1 | 0.7 | 0.01 | 0.02 | 25 | 9.5 | 3.4 | 0.1 | 0.17 | 38 |

PREN = Cr + 3.3Mo + 16N

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

| | Condition | 0.2% Proof strength (MPa) | Tensile strength (MPa) | Elongation (%) | | Impact ISO-V (J) | | | | |
|--------------------|-----------------|---------------------------|------------------------|----------------|----|------------------|-------|-------|-------|-------|
| | | | | 4d | 5d | +20°C | -20°C | -30°C | -40°C | -50°C |
| Required: AWS A5.4 | | 480 | 690 | 20 | - | - | - | - | - | - |
| Typical values | AW | 650 | 850 | 30 | 40 | 60-73 | 45-55 | 40-52 | 35-47 | 30-40 |
| | Pipe butt weld | 752 | 867 | 25 | 35 | - | 45-50 | 42-46 | 38-43 | 35-40 |
| | 1120°C/ 3h + WQ | 480 | 800 | 32 | - | - | - | 90 | 70 | 35 |

AW = As welded

- = not specified

OPERATING CURRENT RANGE

| Diameter x Length (mm) | Current range (A) |
|------------------------|-------------------|
| 2.5 x 350 | 50-90 |
| 3.2 x 350 | 65-120 |
| 4.0 x 350 | 100-160 |

AVAILABLE SIZES AND PACKAGING INFORMATION

| Diameter x Length (mm) | Packaging | Electrodes/pack | Net weight/pack (kg) | Item number |
|------------------------|-----------|-----------------|----------------------|---------------|
| 2.5 x 350 | VPMD | 95 | 1.9 | UM2205SP-25-2 |
| 3.2 x 350 | VPMD | 55 | 1.9 | UM2205SP-32-2 |
| 4.0 x 350 | VPMD | 40 | 2.0 | UM2205SP-40-2 |

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.