# Chromet® 9MV-N

## TOP FEATURES

- Designed for corrosion resistance in elevated temperatures up to 600°C
- Moisture resistant coating provides low amounts of weld metal hydrogen levels for a superior weld
- Smooth arc performance in all positions

## CLASSIFICATION

| | |
|---|---|
| AWS A5.5 | E9015-B91 H4 |
| EN ISO 3580-A | E CrMo91 B 3 2 H5 |

## CURRENT TYPE

DC+/AC

## TYPICAL APPLICATIONS

- Oil Refineries
- Coal Liquefaction and Gasification Plants
- Main Steam Piping
- Valves and Turbine Casings
- Power Generation Plants

## WELDING POSITIONS

All position, except vertical down

## APPROVALS

| TÜV |
|---|
| + |

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

| | C | Mn* | Si | S | P | Cr | Ni** | Mo | Nb | V | N | Cu | Al |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Min. | 0.08 | 0.50 | not specified | not specified | not specified | 8.0 | 0.40 | 0.85 | 0.04 | 0.15 | 0.03 | not specified | not specified |
| Max. | 0.12 | 0.80 | 0.30 | 0.01 | 0.01 | 10.0 | 0.70 | 1.20 | 0.07 | 0.25 | 0.07 | 0.25 | 0.04 |
| Typical | 0.1 | 0.6 | 0.25 | 0.008 | 0.01 | 9.0 | 0.5 | 1.0 | 0.05 | 0.2 | 0.05 | 0.05 | 0.01 |

*Mn+Ni ≤ 1.2%

**Low Ni and low Mn+Ni variant is available : Chromet 9-B9.

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

| Properties after PWHT | | min.* | Typical ( 760°C / 2h) 20°C | 550°C | 600°C | 650°C |
|---|---|---|---|---|---|---|
| Tensile strength | (MPa) | 620 | 770 | >450 | >375 | >285 |
| 0.2% Proof strength | (MPa) | 530 | 640 | >360 | >255 | >175 |
| Elongation (%) | 4d | 17 | 22 | - | - | - |
| | 5d | 17 | 19 | >15 | >17 | >21 |
| Reduction of area (%) | | not specified | 60 | >68 | >75 | >80 |
| Impact ISO-V (J) | +20°C | 47 | 65 | - | - | - |
| Lateral expansion | +20°C | not specified | 1.00 | - | - | - |
| Hardness (HV) | PWHT | not specified | 250 | - | - | - |

*Minimum strength for parent material is lower than AWS requirement shown.

## OUTPUT RANGE

| Diameter x Length (mm) | Current range (A) |
|---|---|
| 3.2 x 350 | 80-140 |
| 4.0 x 450 | 100-180 |

## PACKAGING AND AVAILABLE SIZES

| Diameter x Length (mm) | Packaging | Electrodes/pack | Net weight/pack (kg) | Item number |
|---|---|---|---|---|
| 3.2 x 350 | CBOX | 125 | 4.4 | CH9MVN-32-2 |
| 4.0 x 450 | CBOX | 80 | 5.4 | CH9MVN-40-2 |
| 5.0 x 450 | CBOX | 50 | 5.2 | CH9MVN-50-2 |

### 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.