

MMA Electrodes Chromium-Molybdenum steels

OE-KV3L is a basic coated low hydrogen MMA electrode for the all positional welding of 2.25% Cr 1% Mo creep resisting steels. The low carbon content reduces the risk of cracking. In order to achieve the desired level of heat affected zone properties it is recommended that preheat and interpass temperatures of between 200-250°C be used. Efficiency 100%.

| Classification | |
|----------------|------------------------|
| AWS | A5.5: E 8015-B3L |
| EN | 1599: E CrMo2L B 22 H5 |

| Approvals | Grades |
|-----------|--------|
| RINA | |
| TÜV | |

see Appendix, Classification Society Approvals, for details pag. 521

Analysis of all-weld metal (Typical values in %)

| C | Mn | Si | P | S | Cr | Ni | Mo | Nb | V | N | Cu |
|------|------|------|---------|---------|------|----|------|----|---|---|----|
| 0.04 | 0.73 | 0.46 | ≤ 0.020 | ≤ 0.015 | 2.25 | - | 0.90 | - | - | - | - |

All-weld metal Mechanical Properties

| Heat Treatment | Yield Strength N/mm ² | Tensile Strength N/mm ² | Elongation A5 (%) | Impact Energy ISO - V (J) -20°C | Hardness |
|-----------------|-------------------------------------|---------------------------------------|----------------------|---------------------------------------|----------|
| PWHT 700°C x 1h | ≥ 460 | 630-720 | ≥ 18 | ≥ 47 | - |

Materials

10CrMo9-10, 12CrMo9-10; A 387 Gr.22, Cl 1 and 2, A 182 Gr.F 22, A 336 Gr.F22

Storage and redrying

Keep dry and avoid condensation.

HD ≤ 5: Re-dry at 400-420 °C for 1 hour, 5 times max.

Current condition and welding position

DC+



Packaging data

| Diameter (mm) | Length (mm) | Current (A) | Electrode average weight (g) | Weld metal weight per electrode (g) |
|------------------|----------------|----------------|---------------------------------|--|
| 2,5 | 300 | 65-95 | 19,3 | 11,9 |
| 3,2 | 350 | 90-130 | 35,0 | 21,0 |
| 4,0 | 350 | 125-165 | 51,4 | 30,8 |
| 5,0 | 450 | 170-220 | 98,2 | 56,6 |
| 6,0 | 450 | 240-290 | 134,5 | 80,7 |