

MMA Electrodes Chromium-Molybdenum steels

OE-KV3HR is a basic coated MMA electrode for the all-positional welding of creep resisting steels alloyed with 2.25%Cr 1.0%Mo. The chemical composition of the weld metal ensures a low sensitivity to solidification cracking. Preheat and interpass temperatures 200-250°C are recommended. Efficiency 120%. X Factor <15ppm and J Factor <150ppm.

| Classification | |
|----------------|------------------------|
| EN | 1599: E CrMo2 B 3 2 H5 |
| AWS | A5.5: E 9018-B3 H4R |
| GOST | 9467-75: ?09X2M1 |

| Approvals | Grade |
|-----------|-------|
| TÜV | ● |

CE

Chemical analysis (Typical values in %)

| C | Mn | Si | P | S | Cr | Mo |
|-----|------|-----|--------|--------|------|----|
| 0.1 | 0.75 | 0.3 | ≤ 0.01 | ≤ 0.01 | 2.25 | 1 |

All-weld metal Mechanical Properties

| Heat Treatment | Yield Strength (MPa) | Tensile Strength (MPa) | Elongation A5 (%) | Impact Energy ISO - V (J) |
|-------------------------|----------------------|------------------------|-------------------|---------------------------|
| | | | | -30 °C |
| 690 °C x 17 h/air | ≥ 400 | 550-650 | ≥ 22 | ≥ 100 |
| 690 °C x 17 h/air + STC | ≥ 400 | 550-650 | ≥ 22 | ≥ 70 |
| 700 °C x 1h | ≥ 530 | 630-720 | ≥ 18 | ≥ 47 |

Materials

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

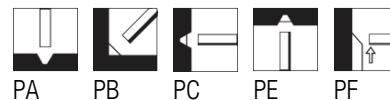
Storage

Keep dry and avoid condensation.

HD = 5: Re-dry at 340-360 °C for 2 hours, 5 times max.

Current condition and welding position

AC; DC+



Packaging data

| Diam. (mm) | Length (mm) | Current (A) | Approx. weight (kg/1000) | CBOX | | VPMD | |
|------------|-------------|-------------|--------------------------|------|------|------|------|
| | | | | PC | Code | PC | Code |
| 2.5 | 300 | 65-95 | 19.7 | 165 | ● | 80 | ● |
| 3.2 | 350 | 90-130 | 37.5 | 115 | ● | 55 | ● |
| 4.0 | 350 | 125-165 | 53.0 | 80 | ● | 40 | ● |
| 5.0 | 450 | 170-220 | 109.7 | 50 | ● | 20 | ● |