

## **HILCO HILCHROME 309MoR**

Stick electrodes – stainless steel – special purpose

AWS A5.4: E309LMo-17

EN ISO 3581-A: E 23 12 2 L R 3 2

Werkstoffnr. 1.4459

Coating type:

Rutile



Welding positions:



Hilchrome 309MoR is our rutile coated electrode for joining similar and dissimilar steels, buffering, joining hardenable and difficult-to-weld steels. Typical applications include joining high strength steels, un- and low alloyed structural steels and heat treatable steels. The electrode is suitable for joining clad steels. The Mo-alloyed electrode has an increased FN content (FN ~20) ensuring maximum cracking resistance. Hilchrome 309MoR is a core wire alloyed all-current type (AC/DC).

## Base materials to be welded:

- Similar and dissimilar joining high strength, unalloyed and alloyed structural steels and heat treatable steels
- Un- and low alloyed boiler steels, CrNi(Mo) steels
- Combinations between ferritic and austenitic steels
- First layer in CrNiMo claddings AISI 316L and similar austenitic stainless steels
- Dissimilar joining

## Applications:

- **Power Generation**
- Repair & Maintenance
- Oil & Gas Industry
  - **Process Industry**

Chemical composition, wt. % weld metal – typical:

| С    | Mn  | Si  | Cr   | Ni   | Мо  |
|------|-----|-----|------|------|-----|
| 0,02 | 0,8 | 0,7 | 23,0 | 12,5 | 2,7 |

Mechanical properties, weld metal - typical:

| Condition | 0,2% Yield strength | Tensile strength | Elongation | Impact Values           |
|-----------|---------------------|------------------|------------|-------------------------|
|           | MPa                 | MPa              | Lo=5d - %  | ISO-V J                 |
| As welded | ≥ 490               | ≥ 630            | ≥ 25       | 20°C ≥ 47<br>-20°C ≥ 32 |

Packaging and welding data:

| Dia.<br>mm. | Length<br>mm. | Weight (kgs)<br>1000 pcs. | Current<br>A |
|-------------|---------------|---------------------------|--------------|
| 2,5         | 300           | 18,5                      | 60-80        |
| 3,2         | 350           | 36,8                      | 80-120       |
| 4,0         | 350           | 52,2                      | 100-160      |

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