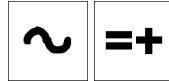


Coating type:

Rutile

Arc voltage: 50V

Current:



Tip colour:

-

Welding positions:



Printing:

Hilchrome 309R / E309L-17

Hilchrome 309R is our rutile coated electrode for welding corrosion resistant and heat resistant CrNi steels, joining dissimilar metals and buffering. Typical applications include joining high-strength steels, un- and low alloyed heat treatable steels, stainless, ferritic chromium and austenitic chrome-nickel steels, austenitic manganese steels. The electrode suitable for joining clad steels. The FN content (FN ~16) ensures good cracking resistance. Hilchrome 309R is a core wire alloyed all-current type (AC/DC).

Base materials to be welded:

- High strength, unalloyed and alloyed heat treatable steels; stainless, ferritic chromium and austenitic CrNi steels; austenitic manganese steels
- Chemically resistant weld claddings ranging from ferritic-pearlitic steels to fine grain steels, incl. high temperature fine grain steels
- Dissimilar joining

Applications:

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

Equivalent product in alternative welding process:

| SMAW | GMAW | FCAW | GTAW | SAW | Gas welding / brazing |
|------|------|------|------|-----|-----------------------|
| - | - | - | - | - | - |

Chemical composition, wt. % weld metal – typical:

| C | Mn | Si | S | P | Cr | Ni | Mo | Cu | Nb | V | Al |
|------|------|------|---------|---------|------|------|----|----|----|---|----|
| 0,02 | 0,70 | 0,70 | ≤ 0,030 | ≤ 0,030 | 22,7 | 12,5 | | | | | |

Mechanical properties, weld metal – typical:

| Condition | 0,2% Yield strength MPa | Tensile strength MPa | Elongation Lo=5d - % | Impact Values ISO-V J |
|-----------|----------------------------|-------------------------|-------------------------|--------------------------|
| As welded | ≥ 440 | ≥ 550 | ≥ 30 | +20°C ≥ 47 |

Packaging and welding data:

| Dia. mm. | Length mm. | Weight (kgs) 1000 pcs. | Current A |
|-------------|---------------|---------------------------|--------------|
| 2,5 | 300 | 18,0 | 60-90 |
| 3,2 | 350 | 33,8 | 80-120 |
| 4,0 | 350 | 51,1 | 100-160 |