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| <b>Standards:</b><br>DIN EN ISO 14172: E Ni 6059 (NiCr23Mo16)<br>(DIN 1736): EL-NiCr 23 Mo 16<br>(DIN 8555): E: 23-UM-200 CPRTZ<br>AWS A5.14: E NiCrMo-13<br>Mat.-No.: 2.4609<br><br><b>Recovery:</b> <b>150%</b> | <b>capilla<sup>®</sup> Alloy C</b> |
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| <b>Product description:</b><br><br>The weld metal of this rutile-basic coated stick electrode is corrosion resistant in reducing and especially oxidising media. Due to the high Cr-content this alloy is heat and scaling resistant.<br><br>The weld deposit is work hardening. | <b>Applications:</b><br><br>Claddings and fusion welds of similar alloyed materials used in the chemical plant engineering. Also suitable for corrosion resistant claddings on mild steels.<br>Also used for wear resistant weldings on hot forming tools<br><br>base materials:<br><br>NiCr21Mo14W (2.4602),<br>NiCr23 Mo16Al (2.4605),<br>NiMo16Cr16Ti (2.4610),<br>NiMo16Cr15W (2.4819). |
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|                                                     |
|-----------------------------------------------------|
| <b>Typical weld metal composition:</b><br>[wt. - %] |
|-----------------------------------------------------|

|      | C    | Si  | Cr | Mo | Fe  | Mn  | Ni   |
|------|------|-----|----|----|-----|-----|------|
| Min. |      |     | 22 | 15 |     |     |      |
| Max. | 0,01 | 0,1 | 24 | 16 | 1,5 | 0,5 | Bal. |

|                                                                                                  |           |
|--------------------------------------------------------------------------------------------------|-----------|
| <b>Mechanical properties:</b><br>(without heat treatment; minimum values at ambient temperature) |           |
| Tensile strength R <sub>m</sub> :                                                                | 700 [MPa] |
| Yield strength R <sub>p0.2</sub> :                                                               | 420 [MPa] |
| Yield strength R <sub>p1.0</sub> :                                                               | - [MPa]   |
| Elongation (L=5d):                                                                               | 30 [%]    |
| Impact strength (ISO-V):                                                                         | 60 [J]    |

|            |          |
|------------|----------|
| Positions: | -        |
| Redrying:  | 320°C/2h |

|            |        |             |                     |                   |
|------------|--------|-------------|---------------------|-------------------|
| Dimension: | Ø [mm] | Length [mm] | Welding current [A] | Polarity<br>= (+) |
|            | 2,5    | 300         | 60 – 90             |                   |
|            | 3,25   | 350         | 80 – 110            |                   |
|            | 4,0    | 350         | 100 – 150           |                   |
|            | 5,0    | 350         | 150 – 200           |                   |

|                                                    |                                            |
|----------------------------------------------------|--------------------------------------------|
| <b>also available:</b><br>find in table of content | Capilla Alloy C MAG<br>Capilla Alloy C WIG |
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