




# CEWELD E NiCrMo 686 CPT

| TYPE  | Nickel based electrode for NiCrMo welding. (Type ENiCrMo-14, Alloy 686, 2.4606)  |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
|---|--|-----------------------|--------------------------|-----------------------|---------------------------------|-------------|-----|------|----|-------|----------|------|-----|----|----|----|---|-----|------|
| APPLICATIONS                                      | <b>CEWELD® E NiCrMo 686 CPT</b> is designed to weld alloy 686. She is also suitable to overmatching 625, C276, C4, C22, 59 alloys. Also suitable to weld superduplex and superaustenitic steels.<br>Chemical and petrochemical industry, application of corrosion-resistant overlays and valve seat inserts, exhaust gas desulphurization plants   |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| PROPERTIES  | <b>CEWELD® E NiCrMo 686 CPT</b> weld metal is exceptionally resistant to pitting, crevice corrosion and general corrosion. It is suitable for butt and fillet welds in all positions with diameters of 2.4 and 3.2 mm.   |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| CLASSIFICATION                                    | <table border="0"> <tr> <td>AWS</td> <td>A 5.11: E NiCrMo-14</td> </tr> <tr> <td>EN ISO</td> <td>14172: E Ni 6686 (NiCr21Mo16W4)</td> </tr> <tr> <td>F-nr</td> <td>43</td> </tr> <tr> <td>FM</td> <td>6</td> </tr> <tr> <td>W.Nr.</td> <td>~ 2.4606</td> </tr> </table>  | AWS                   | A 5.11: E NiCrMo-14      | EN ISO                | 14172: E Ni 6686 (NiCr21Mo16W4) | F-nr        | 43  | FM   | 6  | W.Nr. | ~ 2.4606 |      |     |    |    |    |   |     |      |
| AWS   | A 5.11: E NiCrMo-14  |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| EN ISO  | 14172: E Ni 6686 (NiCr21Mo16W4)  |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| F-nr  | 43   |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| FM  | 6  |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| W.Nr.   | ~ 2.4606   |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| SUITABLE FOR                                      | <p><b>ENiCrMo-14, E Ni 6686 NiCr21Mo16W4</b><br/>           2.4602, 2.4605, 2.4607, 2.4610, 2.4819, 2.4656, 1.4529, 1.4547, 1.4565<br/>           NiCr23Mo16, NiCr23Mo16Al, NiMo16Cr15Ti, NiMo16Cr16Ti, NiCr21Mo14W, NiMo16Cr15W,<br/>           NiCr22Mo9Nb, Alloy 59, Alloy C4, Alloy 276, X1NiCrMoCuN25-20-7, X1CrNiMoCuN20-18-7<br/> <b>ASTM:</b> C-4, C-276, C-22, 625, 904hMo<br/> <b>UNS:</b> N06059, N06455, N10276, N06022, N06625, N08925, S31254<br/>           Duplex, Superduplex, super austenitic stainless steel, Nickel Alloys, N06059, N06022, Hastelloy<br/>           C276, Alloy C22, Inconel 622, 625, 686, Outokumpu 654 SMO,</p> |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| APPROVALS   | No Approvals Found   |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| WELDING POSITIONS                                 |   |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| TYPICAL CHEMICAL<br>ANALYSIS OF WELD METAL<br>(%) | <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>C</th> <th>Si</th> <th>Mn</th> <th>Cr</th> <th>Ni</th> <th>Mo</th> <th>Fe</th> <th>W</th> <th>Cu</th> </tr> </thead> <tbody> <tr> <td>0.01</td> <td>0.18</td> <td>0.8</td> <td>22</td> <td>55</td> <td>16</td> <td>4</td> <td>3.8</td> <td>0.35</td> </tr> </tbody> </table>   | C                     | Si                       | Mn                    | Cr                              | Ni          | Mo  | Fe   | W  | Cu    | 0.01     | 0.18 | 0.8 | 22 | 55 | 16 | 4 | 3.8 | 0.35 |
| C   | Si   | Mn                    | Cr                       | Ni                    | Mo                              | Fe          | W   | Cu   |    |       |          |      |     |    |    |    |   |     |      |
| 0.01  | 0.18   | 0.8                   | 22                       | 55                    | 16                              | 4           | 3.8 | 0.35 |    |       |          |      |     |    |    |    |   |     |      |
| ALL WELD MECHANICAL<br>PROPERTIES                 | <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Heat Treatment</th> <th>R<sub>P0,2</sub><br/>MPa</th> <th>R<sub>m</sub><br/>MPa</th> <th>A<sub>5</sub><br/>(%)</th> </tr> </thead> <tbody> <tr> <td>As Welded /</td> <td>380</td> <td>740</td> <td>34</td> </tr> </tbody> </table>   | Heat Treatment        | R <sub>P0,2</sub><br>MPa | R <sub>m</sub><br>MPa | A <sub>5</sub><br>(%)           | As Welded / | 380 | 740  | 34 |       |          |      |     |    |    |    |   |     |      |
| Heat Treatment                                    | R <sub>P0,2</sub><br>MPa   | R <sub>m</sub><br>MPa | A <sub>5</sub><br>(%)    |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| As Welded /                                       | 380  | 740                   | 34                       |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| REDRYING TEMPERATURE                              | 300°C / 2 hr   |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |
| GAS ACCORDING EN 14175                            |  |                       |                          |                       |                                 |             |     |      |    |       |          |      |     |    |    |    |   |     |      |



# CEWELD E NiCrMo 686 CPT

E NICKRMO 686 CPT 2,4 X  
229MM

| Type | KG/unit | EANCode       |
|------|---------|---------------|
| Can  | 2,27    | 8720663419453 |

E NICKRMO 686 CPT 3,2 X  
356MM

| Type | KG/unit | EANCode       |
|------|---------|---------------|
| Can  | 2,27    | 8720663419460 |

E NICKRMO 686 CPT 4,0 X  
356MM

| Type | KG/unit | EANCode       |
|------|---------|---------------|
| Can  | 2,27    | 8720663419477 |