




# CEWELD Alloy 825

| TYPE  | Solid Nickel based welding wire for gas shielded arc welding  |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
|---|---|----------------|-------------------------|----------------------|---------------------------------|-------------------------|--------------------|----------|-------------------------|----|-----------|------|-----|-----|----|----|-----|---|----|---|-----|
| ANWENDUNGEN                                       | The excellent corrosion-resistant properties of CEWELD Alloy 825 make the alloy a suitable choice for a variety of difficult applications. Uses include fabricated equipment found in chemical and petro- chemical processing, pulp and paper manufacturing, flue gas desulphurization systems and metal pickling operations.   |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| EIGENSCHAFTEN                                     | Excelent weldability with fully austenitic weld metal with high resistance against stress corrosion cracking and pitting in media containing chloride ions. Good corrosion resistance against reducing acids due to the combination of Ni, Mo and Cu. Sufficient resistance against oxidizing acids. The weld metal is corrosion resistant in sea water.  |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| KLASSIFIKATION                                    | <table border="0"> <tr> <td>AWS</td> <td>A 5.14: ERNiFeCr-1</td> </tr> <tr> <td>EN ISO</td> <td>18274: S Ni 8065(NiFe30Cr21Mo3)</td> </tr> <tr> <td>W.Nr.</td> <td>2.4858</td> </tr> <tr> <td>F-nr</td> <td>43</td> </tr> <tr> <td>FM</td> <td>6</td> </tr> </table>  | AWS            | A 5.14: ERNiFeCr-1      | EN ISO               | 18274: S Ni 8065(NiFe30Cr21Mo3) | W.Nr.                   | 2.4858             | F-nr     | 43                      | FM | 6         |      |     |     |    |    |     |   |    |   |     |
| AWS   | A 5.14: ERNiFeCr-1  |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| EN ISO  | 18274: S Ni 8065(NiFe30Cr21Mo3)   |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| W.Nr.   | 2.4858  |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| F-nr  | 43  |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| FM  | 6   |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| GEEIGNET FÜR                                      | G-X7NiCrMoCuNb25-20, X1NiCrMoCuN25-20-6, X1NiCrMoCuN25-20-5, NiCr21Mo, X1NiCrMoCu31-27-4,<br>N08926, N08904, N08028, N08825 ALLOY 825<br>1.4500, 1.4529, 1.4539 (904L), 2.4858, 1.4563, 1.4465, 1.4577 (310Mo), 1.4133, 1.4500, 1.4503, 1.4505, 1.4506, 1.4531, 1.4536, 1.4585, 1.4586  |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| ZULASSUNGEN                                       |   |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| SCHWEISSPOSITIONEN                                |    |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) | <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>Ti</th> <th>Fe</th> <th>Cu</th> <th>Al</th> </tr> </thead> <tbody> <tr> <td>0.05</td> <td>0.3</td> <td>0.8</td> <td>22</td> <td>42</td> <td>3</td> <td>1</td> <td>30</td> <td>2</td> <td>0.1</td> </tr> </tbody> </table>  | C              | Si                      | Mn                   | Cr                              | Ni                      | Mo                 | Ti       | Fe                      | Cu | Al        | 0.05 | 0.3 | 0.8 | 22 | 42 | 3   | 1 | 30 | 2 | 0.1 |
| C   | Si  | Mn             | Cr                      | Ni                   | Mo                              | Ti                      | Fe                 | Cu       | Al                      |    |           |      |     |     |    |    |     |   |    |   |     |
| 0.05  | 0.3   | 0.8            | 22                      | 42                   | 3                               | 1                       | 30                 | 2        | 0.1                     |    |           |      |     |     |    |    |     |   |    |   |     |
| MECHANISCHE GÜTEWERTE                             | <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Heat Treatment</th> <th rowspan="2">R<sub>p0,2</sub> (MPa)</th> <th rowspan="2">R<sub>m</sub> (MPa)</th> <th rowspan="2">A<sub>5</sub> (%)</th> <th colspan="2">Impact Energy (J) ISO-V</th> <th rowspan="2">Hardness</th> </tr> <tr> <th colspan="2">-196°C</th> </tr> </thead> <tbody> <tr> <td>As Welded</td> <td>425</td> <td>630</td> <td>30</td> <td colspan="2">70</td> <td>HRc</td> </tr> </tbody> </table> | Heat Treatment | R <sub>p0,2</sub> (MPa) | R <sub>m</sub> (MPa) | A <sub>5</sub> (%)              | Impact Energy (J) ISO-V |                    | Hardness | -196°C                  |    | As Welded | 425  | 630 | 30  | 70 |    | HRc |   |    |   |     |
| Heat Treatment                                    | R <sub>p0,2</sub> (MPa)   |                |                         |                      |                                 | R <sub>m</sub> (MPa)    | A <sub>5</sub> (%) |          | Impact Energy (J) ISO-V |    | Hardness  |      |     |     |    |    |     |   |    |   |     |
|   |   | -196°C         |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| As Welded   | 425   | 630            | 30                      | 70                   |                                 | HRc                     |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| RÜCKTROCKNUNG                                     | Not required  |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |
| GAS ACC. EN ISO 14175                             | I1  |                |                         |                      |                                 |                         |                    |          |                         |    |           |      |     |     |    |    |     |   |    |   |     |



# CEWELD Alloy 825

ALLOY 825 1,2MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| BS-300    | 13,6    | 8720663419064 |
| BS-300    | 13,6    | 8720663419606 |