



# CEWELD AA M550

| TYPE                                        | Gas shielded seamless metal-cored wire for M21.(Typ T 55 6 Mn2,5Ni, E91T15)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |                         |                      |                    |                         |                    |          |                         |       |           |       |     |    |    |    |     |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------|----------------------|--------------------|-------------------------|--------------------|----------|-------------------------|-------|-----------|-------|-----|----|----|----|-----|
| APPLICATIONS                                | CEWELD®AA M550 is used for welding steels up to a yield strength of 550 MPa.<br>The areas of application are in:<br>Crane, steel, ship (submarine) and apparatus construction, offshore, hoists, drilling rigs, etc.                                                                                                                                                                                                                                                                                                                                                                                                   |                |                         |                      |                    |                         |                    |          |                         |       |           |       |     |    |    |    |     |
| PROPERTIES                                  | CEWELD®AA M550 is a seamless metal flux cored wire with remarkable arc stability and virtually no spatter. Excellent for automated welding applications such as orbital mag or robotic welding. This wire offers a unique weld metal with more than 2 % nickel, which ensures reliable impact strength down to -60 °C. Due to the continuous production process, the hydrogen content is below 3 ml/100 g of weld metal even after long storage in an unconditioned state.                                                                                                                                             |                |                         |                      |                    |                         |                    |          |                         |       |           |       |     |    |    |    |     |
| CLASSIFICATION                              | AWS    A 5.36: E91T15-M21A8-K7-H4<br>EN ISO 18276-A: T 55 6 Mn2,5Ni M M21 1 H5, 18276-A: T 55 6 1NiMo M M21 1 H5<br>F-nr    6<br>FM      2                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                |                         |                      |                    |                         |                    |          |                         |       |           |       |     |    |    |    |     |
| SUITABLE FOR                                | <b>Reh ≤ 550 MPa ISO 15608: 1.3, ~3.1, ~2.2, 2.1, 1.6780</b><br><b>EStE 550, S550QL</b><br><b>HY 80</b><br>15NiCrMo10-6, G19NiCrMo 12-6<br>A 543M, A 537M<br>API 5 L X52, X60, X65, X52Q, X60Q, X65Q, X80                                                                                                                                                                                                                                                                                                                                                                                                              |                |                         |                      |                    |                         |                    |          |                         |       |           |       |     |    |    |    |     |
| APPROVALS                                   | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                |                         |                      |                    |                         |                    |          |                         |       |           |       |     |    |    |    |     |
| WELDING POSITIONS                           | <div>      </div> |                |                         |                      |                    |                         |                    |          |                         |       |           |       |     |    |    |    |     |
| TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%) | <table><tr><td>C</td><td>Si</td><td>Mn</td><td>P</td><td>S</td><td>Ni</td></tr><tr><td>0.05</td><td>0.7</td><td>1.3</td><td>0.015</td><td>0.015</td><td>2.2</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                          | C              | Si                      | Mn                   | P                  | S                       | Ni                 | 0.05     | 0.7                     | 1.3   | 0.015     | 0.015 | 2.2 |    |    |    |     |
| C                                           | Si                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Mn             | P                       | S                    | Ni                 |                         |                    |          |                         |       |           |       |     |    |    |    |     |
| 0.05                                        | 0.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1.3            | 0.015                   | 0.015                | 2.2                |                         |                    |          |                         |       |           |       |     |    |    |    |     |
| MECHANICAL PROPERTIES                       | <table><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>-40°C</th><th>-60°C</th></tr><tr><td>As Welded</td><td>600</td><td>740</td><td>22</td><td>75</td><td>70</td><td>HRc</td></tr></table>                                                                                                                                                                                                                     | Heat Treatment | R <sub>p0,2</sub> (MPa) | R <sub>m</sub> (MPa) | A <sub>5</sub> (%) | Impact Energy (J) ISO-V |                    | Hardness | -40°C                   | -60°C | As Welded | 600   | 740 | 22 | 75 | 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  |       |     |    |    |    |     |
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -40°C          | -60°C                   |                      |                    |                         |                    |          |                         |       |           |       |     |    |    |    |     |
| As Welded                                   | 600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 740            | 22                      | 75                   | 70                 | HRc                     |                    |          |                         |       |           |       |     |    |    |    |     |
| REDRYING                                    | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |                         |                      |                    |                         |                    |          |                         |       |           |       |     |    |    |    |     |
| GAS ACC. EN ISO 14175                       | M21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                |                         |                      |                    |                         |                    |          |                         |       |           |       |     |    |    |    |     |



# CEWELD AA M550

AA M550 1,2MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| K-300     | 16      | 8720663405418 |