



# CEWELD AA M400

| TYPE                                        | Seamless metal cored wire without slag for M21.(E 70C-6M, T 42/46 4 M)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |                         |                      |                    |                         |                    |          |                         |       |           |     |     |    |    |     |     |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------|----------------------|--------------------|-------------------------|--------------------|----------|-------------------------|-------|-----------|-----|-----|----|----|-----|-----|
| APPLICATIONS                                | <p>CEWELD® AA M400 is ideal for automated welding applications such as MAG orbital or robot welding.</p> <p>For example in steel construction, shipbuilding, pressure vessel construction, mechanical engineering, pipeline construction, offshore, bridge construction, heavy machinery construction, etc.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                |                         |                      |                    |                         |                    |          |                         |       |           |     |     |    |    |     |     |
| PROPERTIES                                  | <p>CEWELD® AA M400 is a seamless metal powder wire with remarkable arc stability and virtually no spatter. The wire offers improved performance and therefore productivity. CEWELD® AA M400 can be used in a wide range of parameters, from short arc at 14 volts for root pass or thin plate welding up to 32 volts for high deposition rates. Due to the seamless manufacturing process, the hydrogen content is less than 3 ml/100 g of weld metal even after long unconditioned storage.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |                         |                      |                    |                         |                    |          |                         |       |           |     |     |    |    |     |     |
| CLASSIFICATION                              | <p>AWS        A 5.18: E70C-6M H4, A 5.36: E71T15-M21A8-CS1-H4</p> <p>EN ISO    17632-A: T 46 4 M M21 1 H5, 17632-A: T 42 4 M M21 1 H5</p> <p>F-nr      6</p> <p>FM        1</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                |                         |                      |                    |                         |                    |          |                         |       |           |     |     |    |    |     |     |
| SUITABLE FOR                                | <p><b>ReH ≤ 460 MPa (67 ksi) ISO 15608: 1.2 (275 &lt; ReH &lt; 360 MPa), 1.3 (ReH &gt; 360 MPa &lt; 460 MPa)</b></p> <p>1.0409, 1.0421, 1.0426, 1.0429, 1.0430, 1.0436, 1.0473, 1.0481, 1.0482, 1.0484, 1.0505, 1.0545, 1.0546, 1.0562, 1.0566, 1.0570, 1.0578, 1.0581, 1.0582, 1.1138, 1.5419, 1.8948, 1.8900, 1.8901, 1.8902, 1.8903, 1.8905, 1.8907, 1.8910, 1.8912, 1.8915, 1.8917, 1.8930, 1.8932, 1.8935, 1.8937, 1.8970, 1.8971, 1.8972</p> <p>10Ni14, 12Ni14, 13MnNi6-3, 15NiMn6,</p> <p>S235JR-S355JR, S235JO-S355JO, S450JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GH- P355GH, P275NL1-P460NL1, P215NL, P265NL, P355N, P285NH-P460NH, P195TR1-P265TR1, P195TR2- P265TR2, P195GH-P265GH, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE240</p> <p>AH32, AH36, AH40; DH32, DH36, DH40; EH32, EH36, EH40; FH32, FH36, FH40</p> <p>ASTM A 203 Gr. D, E; A 350 Gr. LF1, LF2, LF3; A 420 Gr. WPL3, WPL6; A 516 Gr. 60, 65, 70; A 572 Gr. 42, 50, 55, 60, 65; A 633 Gr. A, D, E; A 662 Gr. A, B, C; A 707 Gr. L1, L2, L3; A 738 Gr. A; A 841 A, B, C; API 5 L X52, X60, X65, X52Q, X60Q, X65Q</p> <p>Oceanfit 52, Oceanfit 60, Oceanfit 65, Oceanfit 355, Oceanfit 420, Oceanfit 460, alform plate 460M; durostat 400, 450, durostat B2</p> |                |                         |                      |                    |                         |                    |          |                         |       |           |     |     |    |    |     |     |
| APPROVALS                                   | TÜV: 19711, CE, Lloyds, DNV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |                         |                      |                    |                         |                    |          |                         |       |           |     |     |    |    |     |     |
| 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></tr><tr><td>0.08</td><td>0.5</td><td>1.3</td><td>0.015</td><td>0.015</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | C              | Si                      | Mn                   | P                  | S                       | 0.08               | 0.5      | 1.3                     | 0.015 | 0.015     |     |     |    |    |     |     |
| C                                           | Si                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Mn             | P                       | S                    |                    |                         |                    |          |                         |       |           |     |     |    |    |     |     |
| 0.08                                        | 0.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1.3            | 0.015                   | 0.015                |                    |                         |                    |          |                         |       |           |     |     |    |    |     |     |
| 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>-20°C</th></tr><tr><td>As Welded</td><td>510</td><td>610</td><td>25</td><td>70</td><td>100</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                   | -20°C | As Welded | 510 | 610 | 25 | 70 | 100 | 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          | -20°C                   |                      |                    |                         |                    |          |                         |       |           |     |     |    |    |     |     |
| As Welded                                   | 510                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 610            | 25                      | 70                   | 100                | HRc                     |                    |          |                         |       |           |     |     |    |    |     |     |
| REDRYING                                    | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                |                         |                      |                    |                         |                    |          |                         |       |           |     |     |    |    |     |     |
| GAS ACC. EN ISO 14175                       | M21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                |                         |                      |                    |                         |                    |          |                         |       |           |     |     |    |    |     |     |



# CEWELD AA M400

## AA M400 1,0MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| BS-300    | 16      | 8720663423283 |

## AA M400 1,2MM

| Packaging | KG/unit  | EanCode       |
|-----------|----------|---------------|
| BS-300    | 16       | 8720663423276 |
| BS-300    | 15       | 8720663423290 |
| D-200     | 20 (4x5) | 8720663423245 |
| Drum      | 250      | 8720663423252 |

## AA M400 1,4MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| K-300     | 16      | 8720663423306 |

## AA M400 1,6MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Drum      | 250     | 8720663423269 |