



# CEWELD AA R500SR

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                     |                      |                    |                         |     |          |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------|--------------------|-------------------------|-----|----------|
| TYPE                                        | Seamless copper coated rutile flux-cored wire for M21. ( Type E 81 T1, T 50 6 )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                     |                      |                    |                         |     |          |
| APPLICATIONS                                | <p>CEWELD® AA R500 SR is a seamless rutile cored wire that is characterised by its excellent modelling properties. This means that constrained position welding is also possible in all positions. It is particularly suitable for welding on ceramics in all positions, with low spatter losses and easily removable slag.</p> <p>The main areas of application for CEWELD AA R500 SR include: Crane construction, heavy machinery, platforms, ships and lifting equipment in the offshore sector, pipelines and applications that must comply with NACE requirements (less than 1 % nickel) and PWHT is required.</p>                                                                                                                                                                                                                                                                  |                                                     |                      |                    |                         |     |          |
| PROPERTIES                                  | <p>CEWELD® AA R500 SR is characterised by its outstanding quality properties. Outstanding notched bar impact values are achieved at temperatures down to -60 °C and the PWHT results are also of the highest quality. It is particularly suitable for welding on ceramics in all positions. Low spatter losses and easily removable slag also characterise this cored wire.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                     |                      |                    |                         |     |          |
| CLASSIFICATION                              | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | A 5.29: E81T1-Ni1M-J H4, A 5.36: E81T1-M21A8-Ni1-H4 |                      |                    |                         |     |          |
|                                             | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 17632-A: T 50 6 1Ni P M21 1 H5                      |                      |                    |                         |     |          |
| SUITABLE FOR                                | <p><b>ReH ≤ 500 MPa ISO 15608: 1.1, 1.3, 2.1, 2.2 (ReH max. 500 MPa), 3.1 (ReH max. 500 MPa)</b></p> <p>1.0580 to 1.0070, 1.8900 to 1.8905, 1.8930 to 1.8935, 1.8910 to 1.8915, 1.6217, 1.6210, 1.0481, 1.0482, 1.0551, 1.0553.</p> <p>S275N-S460N, S275NL-S460NL, S275M-S460M, S275ML-S460ML, P355N, P355NH, P460N, P460NH, P275NL1-P460NL1, P275NL2- P460NL2, L360NB, L415NB, L360MB-L450MB, L360QB-L450QB</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, X70Q</p> <p>Oceanfit 52, Oceanfit 60, Oceanfit 65, Oceanfit 355, Oceanfit 420, Oceanfit 460, alform plate 460M; durostat 400, 450, 500, durostat B2, aldur 500Q, aldur 500QL, aldur 500QL1, N-A-XTRA 56</p> |                                                     |                      |                    |                         |     |          |
| APPROVALS                                   | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                     |                      |                    |                         |     |          |
| WELDING POSITIONS                           | <div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                     |                      |                    |                         |     |          |
| TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Si                                                  | Mn                   | P                  | S                       | Ni  |          |
|                                             | 0.08                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.5                                                 | 1.4                  | 0.015              | 0.015                   | 0.9 |          |
| MECHANICAL PROPERTIES                       | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | R <sub>P0.2</sub> (MPa)                             | R <sub>m</sub> (MPa) | A <sub>5</sub> (%) | Impact Energy (J) ISO-V |     | Hardness |
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                     |                      |                    | -60°C                   |     |          |
|                                             | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 550                                                 | 600                  | 22                 | 70                      |     |          |
|                                             | 570°C- 620°C 1h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 520                                                 | 580                  | 22                 | 50                      |     | HRc      |
| REDRYING                                    | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                     |                      |                    |                         |     |          |
| GAS ACC. EN ISO 14175                       | M21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                     |                      |                    |                         |     |          |



# CEWELD AA R500SR

AA R500SR 1,2MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| BS-300    | 16      | 8720663424563 |