



# CEWELD AA R620

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                    |                      |                    |                         |       |          |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------|--------------------|-------------------------|-------|----------|
| TYPE                                               | Seamless micro alloyed rutile cored wire with slag for M21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                    |                      |                    |                         |       |          |
| ANWENDUNGEN                                        | Offshore, Shipbuilding, pressure vessels, orbital pipe work, riser pipes, pipe lines, fine grain steels with yield strength up to 620 MPa (90 ksi).                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                    |                      |                    |                         |       |          |
| EIGENSCHAFTEN                                      | Excelent weld puddle manipulation and overal welding properties with extreme low hydrogen content (below 3 ml/100 gr. weld metal). Due to the addition of molybdenum suitable for post weld heat treatment respecting the impact properties.                                                                                                                                                                                                                                                                                                                                                                    |                                    |                      |                    |                         |       |          |
| KLASSIFIKATION                                     | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A 5.29: E101T1-K3M H4              |                      |                    |                         |       |          |
|                                                    | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 18276-A: T 62 4 1,5NiMo P M21 1 H5 |                      |                    |                         |       |          |
|                                                    | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 6                                  |                      |                    |                         |       |          |
|                                                    | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2                                  |                      |                    |                         |       |          |
| GEEIGNET FÜR                                       | <b>Reh ≤ 620 MPa ISO 15608: ~3.1, 2.2</b><br>1.8864, 1.8873, 1.8881, 1.8928, 1.8977, 1.8924, 1.8909, 1.8984, 1.8926, 1.8904, 1.8986<br>S500Q-S620Q, S500QL-S620QL, L485MB-L555MB, L485QB-L555QB, 620 M, PAS 460-550<br>ASTM A 572 Gr. 65; A 633 Gr. E; A 738 Gr. A; A 852;<br>API 5 L X70, X80, X70Q, X80Q<br>alform 500 M, 550 M, 600 M, aldur 550 Q, Dillimax 550, Dillimax 500, Domex 500, Domex 550                                                                                                                                                                                                         |                                    |                      |                    |                         |       |          |
| ZULASSUNGEN                                        | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                    |                      |                    |                         |       |          |
| SCHWEISSPOSITIONEN                                 | <div>      </div> |                                    |                      |                    |                         |       |          |
| TYPISCHE CHEMISCHE ANALYSE DES SCHWEISSMETALLS (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Mn                                 | Si                   | P                  | S                       | Ni    | Mo       |
|                                                    | 0.08                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1.4                                | 0.5                  | 0.015              | 0.015                   | 1.7   | 0.3      |
| MECHANISCHE GÜTEWERTE                              | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | R <sub>P0,2</sub> (MPa)            | R <sub>m</sub> (MPa) | A <sub>5</sub> (%) | Impact Energy (J) ISO-V |       | Hardness |
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                    |                      |                    | -20°C                   | -40°C |          |
|                                                    | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 645                                | 735                  | 20                 | 70                      | 55    | HRc      |
| RÜCKTROCKNUNG                                      | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                    |                      |                    |                         |       |          |
| GAS ACC. EN ISO 14175                              | M21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                    |                      |                    |                         |       |          |