



# CEWELD SG Ni1

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                         |                       |                                       |          |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|-----------------------|---------------------------------------|----------|
| TYPE                                                 | Filler metal for fine grain steels and cold-tough steels.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                            |                         |                       |                                       |          |
| APPLICATIONS                                         | Offshore requirements at working temperatures down to -60 °C such as crane, vessel, rigs, platforms, pipelines for NACE requirements, boiler, tubing etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                            |                         |                       |                                       |          |
| PROPRIÉTÉS                                           | Excellent impact properties at low temperatures due to the addition of Nickel and increased yield strenght above 460 MPa.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                            |                         |                       |                                       |          |
| CLASSIFICATION                                       | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | A 5.28: ER 80S-Ni1         |                         |                       |                                       |          |
|                                                      | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 14341-A: G 50 6 M21 3Ni1   |                         |                       |                                       |          |
|                                                      | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6                          |                         |                       |                                       |          |
|                                                      | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1                          |                         |                       |                                       |          |
| CONVIENT POUR                                        | <b>Reh ≤ 500 MPa ISO 15608: 1.2 (275 &lt; ReH &lt; 360 MPa), 1.3 (ReH &gt; 360 MPa &lt; 500 MPa)</b><br>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, 1.8973, 1.8975<br>S460N, S420N, S460NL, P460N, StE 420, StE 460, StE 500, TStE 380, S420NL, P460NL1, P420NH, P460NH, TStE 420, TStE 460, TStE 500, WStE 380, WStE 420, WStE 460, WStE 500, StE 385.7, StE 385.7 TM, StE 415, L485ME, 11MnNi5-3, 13MnNi6-3<br>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 |                            |                         |                       |                                       |          |
| AGRÉMENTS                                            | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                            |                         |                       |                                       |          |
| POSITIONS DE SOUDAGE                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                            |                         |                       |                                       |          |
| ANALYSE CHIMIQUE<br>TYPIQUE DU MÉTAL<br>D'APPORT (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Si                         | Mn                      | Ni                    |                                       |          |
|                                                      | 0.08                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.5                        | 1.1                     | 0.9                   |                                       |          |
| PROPRIÉTÉS MÉCANIQUES                                | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | R <sub>P0,2</sub><br>(MPa) | R <sub>m</sub><br>(MPa) | A <sub>5</sub><br>(%) | Impact Energy (J) ISO-V<br>-40°C-60°C | Hardness |
|                                                      | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 510                        | 580                     | 22                    | 7050                                  | HRc      |
|                                                      | 620°C±15°C 2h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 430                        | 540                     | 31                    | 110HRc                                |          |
| ETUVAGE                                              | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                         |                       |                                       |          |
| GAS ACC. EN ISO 14175                                | M21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                            |                         |                       |                                       |          |



# CEWELD SG Ni1

|              |           |         |               |
|--------------|-----------|---------|---------------|
| SG NI1 0,8MM | Packaging | KG/unit | EanCode       |
|              | BS-300    | 15      | 8720663405685 |
| SG NI1 1,0MM | Packaging | KG/unit | EanCode       |
|              | BS-300    | 15      | 8720663405678 |
| SG NI1 1,2MM | Packaging | KG/unit | EanCode       |
|              | BS-300    | 15      | 8720663416728 |