



# CEWELD SG3 NiMo1

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                              |                      |                    |                         |     |          |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------|--------------------|-------------------------|-----|----------|
| TYPE                                              | Solid welding wire for fine grain steels and cold-tough steels. ( 62 6, ER 90S )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                              |                      |                    |                         |     |          |
| APPLICATIONS                                      | CEWELD® SG3 NiMo1 is a 0.9% Ni-alloyed, high manganese containing, copper-coated, solid wire for the GMAW/GTAW of low-temperature, fine-grained steels suitable for NACE requirements. The Application is: Offshore drilling equipment, crane building, pipeline, platforms, Vessel, riser piping etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |                      |                    |                         |     |          |
| PROPERTIES                                        | CEWELD® SG3 NiMo1 deposit provides good impact toughness down to -50°C and is especially suitable for NACE requirements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |                      |                    |                         |     |          |
| CLASSIFICATION                                    | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | A 5.28: ER 90S-G             |                      |                    |                         |     |          |
|                                                   | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 16834-A: G 62 6 M21 Mn3Ni1Mo |                      |                    |                         |     |          |
|                                                   | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6                            |                      |                    |                         |     |          |
|                                                   | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2                            |                      |                    |                         |     |          |
| SUITABLE FOR                                      | <b>ReH ≤ 620 MPa ISO 15608: 1.3 (ReH &gt; 360 MPa &lt; 620 MPa), 2.2 ReH &gt; 460 MPa</b><br>1.0531,1.0984, 1.0986, 1.8900, 1.8901, 1.8902, 1.8903, 1.8904, 1.8905, 1.8907, 1.8910, 1.8912, 1.8915, 1.8917, 1.8926, 1.8930, 1.8932, 1.8935, 1.8937, 1.8986, 1.8970, 1.8971, 1.8972, 1.8973, 1.8975<br>TStE 550 WStE 380, WStE 420, WStE 460, WStE 500, WstE 550, StE 385.7, StE 385.7 TM, StE 415, L485ME, 25CrMo4, 42CrMo4<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<br>Oceanfit 52, Oceanfit 60, Oceanfit 65, Oceanfit 355, Oceanfit 420, Oceanfit 460, PAS 460-550, alform® 500 M, 550 M, aldur 500 Q, 500 QL, aldur 550 Q, 550 QL |                              |                      |                    |                         |     |          |
| APPROVALS                                         | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                              |                      |                    |                         |     |          |
| WELDING POSITIONS                                 |                                                                                                                                                                                                                                                                                                                                      |                              |                      |                    |                         |     |          |
| TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Si                           | Mn                   | P                  | S                       | Ni  | Mo       |
|                                                   | 0.12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0.5                          | 1.75                 | 0.01               | 0.01                    | 0.9 | 0.55     |
| 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 |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                              |                      |                    | -50°C                   |     |          |
|                                                   | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 640                          | 740                  | 20                 | 100                     |     | HRc      |
| REDRYING                                          | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                              |                      |                    |                         |     |          |
| GAS ACC. EN ISO 14175                             | M21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                              |                      |                    |                         |     |          |



# CEWELD SG3 NiMo1

SG3 NIM01 1,0MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| BS-300    | 15      | 8720663405661 |