



# 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**

| Materials         | DIN                        | EN                  | ASTM          |
|-------------------|----------------------------|---------------------|---------------|
| shipbuilding      | A, B, D, E, AH 32 - EH 36  | same                | Typical       |
| Unalloyed steels  | St 33, St 37-2 - St 52-3   | S185 - S355-S460    | A 258 / A 516 |
| boiler steels     | H I, H III, 17Mn4, 19Mn5   | P235GH, P355GH      | A 662 / A 387 |
| pipe steels       | St 35.8, St 45.8           | P235T1/T2, P460NL2  | A 738 / A 612 |
| -                 | StE 210.7 TM, StE 480.7 TM | L210 - L480MB       | A 299         |
| Fine grain steels | StE 255 to StE 460         | S255 - S500 (NL1,2) | -             |
| API-standard      | X 42, X65                  | X 42, X65           | -             |

**AGRÉMENTS** CE



**TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)**

| C    | Si  | Mn  | Ni  |
|------|-----|-----|-----|
| 0.08 | 0.5 | 1.1 | 0.9 |

**PROPRIÉTÉS MÉCANIQUES**

| 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                   | -60°C |          |
| As Welded      | 510                     | 580                  | 22                 | 70                      | 50    | HRc      |
| 620°C±15°C 2h  | 430                     | 540                  | 31                 | 110                     | HRc   |          |

**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 |