



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. | | |
| PROPERTIES | 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 | |

| | | | | |
|---------------------|-------------------|----------------------------|---------------------|---------------|
| SUITABLE FOR | 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 | - | |

APPROVALS CE

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

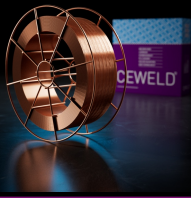
| C | Si | Mn | Ni |
|------|-----|-----|-----|
| 0.08 | 0.5 | 1.1 | 0.9 |

MECHANICAL PROPERTIES

| Heat Treatment | R _{P0,2} (MPa) | R _m (MPa) | A ₅ (%) | 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 | |

REDRYING 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 |