

CARBO S-G Ni 2,5 CARBO T-G Ni 2,5

International standards

| | S = solid wire | T = bare rod |
|---------------|----------------|--------------|
| Werkstoff Nr. | | |
| EN 1668 | SG 2 Ni 2 | WSG 2 Ni 2 |
| AWS A 5.28 | ER80S-Ni2 | ER80S-Ni2 |

Approvals

Application notes Copper coated, Ni-alloyed solid wire for application in all positions

for welding low alloyed cryogenic steels useable down to – 80°C.

For thin sheets and root pass welding.

Operating temperature down to -80° C

Base materials Cryogenic constructional steels and Ni-steels, cryogenic steels for

ship building

S235NL2, S255NL2, 14Ni6, 12Ni14, X12Ni5, S255NL, S380NL,

S255NL1, S380NL1,

ASTM A633 Gr. E; A572 Gr.65; A203 Gr. D; A333 and A334 Gr.3;

A350 Gr. LF3

Mechanical properties of all-weld-metal with Gas: M 21 (typical values)

| Tensile | Yielding | Elongation A ₅ % | Impact strength |
|----------------------|-------------------------|-----------------------------|-----------------|
| strength | strength | | ISO – V J |
| R _m N/mm² | R _{p0,2} N/mm² | | at -80° C |
| > 610 | >510 | >22 | >47 |

Weld metal analysis (typical, wt %)

Rev. 001/13

| С | Si | Mn | Ni | | |
|------|-----|-----|-----|--|--|
| 0,09 | 0,5 | 1,0 | 2,5 | | |

| Gas types EN 439 | | S = solid wire M2, M3, C1 | | | T = bare rod I1 (Argon) | | | | | |
|--------------------------------------|----------------------------|------------------------------|--------------------------|--------------------------|----------------------------|-------|-----|-------------------|-----|-----|
| Current Diameter Welding amps | mm (A) min. (A) max. | 0,8 80 130 | 1,0 120 190 | 1,2 180 250 | 1,6 250 320 | 1,6 | 2,0 | = - 2,4 | 3,2 | 4,0 |
| coils. weight | | B300 | 15 ka. | | | 25 ka | | | | |

Statements on composition and application are just for the applier's information. Statements on mechanical properties always refer to the all-weld-metal according to valid standards. Carbo-Weld may change the characteristics of its products without notice. We recommend the applier to check our products for their special application autonomously.