

# ENERGOMAG 2-S



## Solid wire GMAW

|                        |                        |                                             |                               |
|------------------------|------------------------|---------------------------------------------|-------------------------------|
| <b>Classifications</b> | <u>DIN 8559</u><br>SG2 | <u>EN ISO 14341-A</u><br>G42 4 C1/M21 3 Si1 | <u>AWS A 5.18</u><br>ER 70S-6 |
|------------------------|------------------------|---------------------------------------------|-------------------------------|

**Description** Copper-coated solid wire for welding unalloyed and low alloy steels with CO<sub>2</sub> or gas mixture prepared from selected wire rod. Provided on BS300 spool is suitable for welding low-carbon structural steels, boiler steels, ship steels and fine grain carbon-manganese steels. Used for welding both at high currents (spray arc) and at low currents (short-circuit arc). Allows to increase the weld metal strength and sensitivity to surface impurities. Provides a stable arc and low spatter.

**Base materials** Steels with a yield strength < 420 MPa  
S235JR-S355JR, S235J0-S355J0, S235J2-S355J2, S275N-S420N, S275M-S420M, P235GH-P355GH, P275NL1-P355NL1, P215NL, P265NL, P355N, P285NH-P420NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L245MB-L415MB, GE200-GE240, ship building steels: A, B, D, E, A 32-E 36

|                                              |           |         |         |        |        |       |
|----------------------------------------------|-----------|---------|---------|--------|--------|-------|
| <b>Typical composition of solid wire (%)</b> | C         | Si      | Mn      | S      | P      | Cu    |
|                                              | 0,06-0,14 | 0,7-1,0 | 1,3-1,6 | ≤0,025 | ≤0,025 | ≤0,35 |

|                                                                                           |                                          |                                       |                                                        |                                     |
|-------------------------------------------------------------------------------------------|------------------------------------------|---------------------------------------|--------------------------------------------------------|-------------------------------------|
| <b>Mechanical properties of all-weld metal</b><br>(acc. to EN 15792-1, shielding gas M21) | Yield strength<br>0,2% N/mm <sup>2</sup> | Tensile strength<br>N/mm <sup>2</sup> | Elongation<br>(L <sub>0</sub> = 5d <sub>0</sub> )<br>% | Impact values<br>in J CVN<br>-40 °C |
|                                                                                           | ≥ 420                                    | 500-640                               | ≥ 20                                                   | ≥ 47                                |

## Welding positions



Polarity = +

Shielding gases: (EN ISO 14175: M2, M3, C1)

**Dimensions (mm)** 0,8-1,6

**Spool /packing** 15kg spools BS300 / 250kg drum

**Certificates** CE, TÜV, DB

