

## Solid Wire Electrode for Submerged Arc Welding

**Classification:**

ISO 24598-A -  
SFA 5.23 / AWS A5.23 -

**S S CrMo1**  
**EB2(R)**

**Characteristics:**

CrMo-alloyed low impurity wire electrode for submerged arc welding of quenched and tempered steels and heat-resistant steels in boiler and pressure vessel construction as well as pipe manufacture.

**Typical analysis and chemical composition acc. to EN ISO 24598-A and AWS A5.23:**

| Wire electrode                   | C         | Si        | Mn        | Mo        | Ni   | Cr       | P     | S     | Others                      |
|----------------------------------|-----------|-----------|-----------|-----------|------|----------|-------|-------|-----------------------------|
| Typical analysis<br>BA-S2CrMo1   | 0.10      | 0.17      | 0.98      | 0.52      | 0.03 | 1.20     | 0.008 | 0.009 | CU total<br>0.10            |
| S S CrMo1 acc. to<br>ISO 24589-A | 0.08-0.15 | 0.05-0.25 | 0.60-1.00 | 0.40-0.65 | 0.3  | 0.9-1.3  | 0.020 | 0.020 | V 0.03<br>Nb 0.01<br>Cu 0.3 |
| EB2 acc. to AWS A5.23            | 0.07-0.15 | 0.05-0.30 | 0.45-1.00 | 0.45-0.65 |      | 1.0-1.75 | 0.025 | 0.025 | Cu 0.35                     |
| EB2R: AS / Sn / Sb 0,005         |           |           |           |           |      |          | 0.010 | 0.010 | Cu 0.15                     |

**Base Materials:**

- Quenched and tempered steels acc. to EN 10025, EN 10028 and ASTM: such as 25CrMo4/AISI 4130  
Suitable fluxes: BF 8.1 and BF 10
- Heat-resistant steels acc. to EN 10028 and ASTM: 13CrMo4-5/A182-F12/A213 grade T12/A387 grade 12  
Suitable fluxes: BF 1, BF 5.1, BF 6.5, BF 8.1 and BF 10

Flux type suitability is strongly dependent on its application. In combination with the wire electrode the most suitable flux should match the requirements of the plate material as closely as possible under the existing welding conditions. Further information can be obtained from the technical flux data sheets.

**Diameter:**

2.0 – 5.0 mm; Sizes and tolerances acc. to ISO 544 and AWS A5.23.

**Wire electrode surface:**

Copper-coated, smooth finish free from surface defects and foreign matter.

**Package forms:**

Coils, spools, drums and spiders as standard package forms for SAW-wire electrodes, different package forms on request.