

# Solid Wire Electrode for Submerged Arc Welding

Classification: EN ISO 24598-A (EN 12070) - S CrMo2

SFA-5.23 / AWS A5.23 - **EB3(R)** 

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

(Weight Percent)

| Wire electrode                 | С             | Si            | Mn            | Мо            | Ni   | Cr            | Р     | S     | Others                      |
|--------------------------------|---------------|---------------|---------------|---------------|------|---------------|-------|-------|-----------------------------|
| Typical analysis<br>BA-S1CrMo2 | 0.10          | 0.18          | 0.64          | 1.02          | 0.02 | 2.4           | 0.008 | 0.007 | Cu total<br>0.09            |
| S CrMo2 acc. to<br>ISO 24598-A | 0.08–<br>0.15 | 0.05–<br>0.25 | 0.30-<br>0.70 | 0.90–<br>1.15 | 0.3  | 2.2–<br>2.8   | 0.020 | 0.020 | V 0.03<br>Nb 0.01<br>Cu 0.3 |
| EB3 acc. to AWS A5.23          | 0.05-<br>0.15 | 0.05-<br>0.30 | 0.40-<br>0.80 | 0.90-<br>1.10 |      | 2.25-<br>3.00 | 0.025 | 0.025 | Cu 0.35                     |
| EB3R: As / Sn / Sb 0,005       |               |               |               |               |      |               | 0.010 | 0.010 | Cu 0.15                     |

#### Characteristics:

CrMo-alloyed low impurity wire electrode (suitability for step-cooling) for submerged arc welding of heat-resistant steels in boiler and pressure vessel construction as well as pipe manufacture.

#### **Base Materials:**

 Heat-resistant steels acc. to EN 10028 and ASTM: 10CrMo9-10/A182-F22/A387 grade 22 Suitable fluxes: BF 10 and BF 16

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.

## Package forms:

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

### 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.

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