

## Solid Wire Electrode for Submerged Arc Welding

**Normbezeichnung:**

ISO 14171-A -  
 ISO 24598-A (EN 12070) –  
 SFA 5.23 / AWS A5.23 -

**S2Mo**  
**S Mo**  
**EA2**

**Characteristics:**

Mo-alloyed wire electrode for submerged arc welding of fine grain steels, pipe steels and heat-resistant boiler and vessel steels.

**Typical analysis and chemical composition acc. to EN ISO 14171-A and AWS A5.23:**

Wire electrode	C	Si	Mn	Mo	Ni	Cr	P	S	Cu total
Typical analysis BA-S2Mo	0.09	0.16	1.15	0.50	0.01	0.02	0.006	0.005	Cu 0.07
S2Mo acc. to ISO 14171-A	0.07-0.15	0.05-0.25	0.80-1.30	0.45-0.65	0.3	0.15	0.025	0.025	Cu total 0.30
S Mo acc. to ISO 24598-A	0.08-0.15	0.05-0.25	0.80-1.20	0.45-0.65	0.3	0.2	0.025	0.025	V 0.03 Nb 0.01 Cu 0.3
EA2 acc. to AWS A5.23	0.05-0.17	0.20	0.95-1.35	0.45-0.65			0.025	0.025	Cu total 0.35

**Base Materials:**

- Fine grain steels acc. to EN 10025, EN 10028 and ASTM: P420N/S420NL/A633 grade E and P460N/S460NL  
 Suitable fluxes: BF 3, BF 4, BF 5.1, BF 6.5 and BF 10
- Pipe steels acc. to ISO 3183, EN 10208 and API-5: L415N/X60 to L485Q/X70  
 Suitable fluxes: BF 5.1, BF 6.30 and BF 6.5
- Heat-resistant steels acc. to EN 10028 and ASTM: 16 Mo 3/A204 grade A and A209 grade T1, S275J2G3/A572 grade 42 and S355J2G3/A572 grade 50  
 Suitable fluxes: BF 1, BF 3, BF 4, BF 5.1, BF 6.5 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.