

## Solid Wire Electrode for Submerged Arc Welding

**Classification:**

ISO 26304-A -  
SFA 5.23 / AWS A5.23 -

**S3Ni2,5CrMo**  
**EM4 mod.**

**Characteristics:**

NiCrMo-alloyed wire electrode with higher Mn-content for submerged arc welding of high tensile quenched and tempered fine grain steels in vessel and apparatus construction as well as high tensile pipe steels.

**Typical analysis and chemical composition acc. to EN ISO 26304-A and AWS A5.23:**

Wire electrode	C	Si	Mn	Mo	Ni	Cr	P	S	Others
Typical analysis BA-S3NiCrMo2,5	0.10	0.17	1.50	0.55	2.40	0.50	0.008	0.007	CU total 0.08
S3NiCrMo2,5 acc. to ISO 26304-A	0.07- 0.15	0.10- 0.25	1.20- 0.80	0.40- 0.70	2.00- 2.60	0.30- 0.85	0.020	0.020	CU total 0.30
EM4 acc. to AWS A5.23	0.10	0.20- 0.60	1.40- 1.80	0.30- 0.65	2.00- 2.80	0.60	0.010	0.015	V 0.03 Ti/Zr/Al 0.10 Cu 0.25

**Base Materials:**

- Fine grain steels acc. to EN 10025, EN 10028: S620QL to S690QL  
Suitable flux: BF 10
- Pipe steels acc. to ISO 3183, EN 10208 and API-5: L625M/X90 to L690M/X100  
Suitable fluxes: BF 6.30 and BF 6.5
- Shipbuilding steels: high strength fine grain steels up to 690 MPa yield strength  
Suitable flux: 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.