Solid Wire Electrode for Submerged Arc Welding

Classification:
ISO 14171-A - **S4**
SFA 5.17 / AWS A5.17 - **EH14**

Characteristics:
Wire electrode for submerged arc welding intended for welding mild steel used in pressure vessels, shipbuilding and steel structures.

Typical analysis and chemical composition acc. to EN ISO 14171-A and AWS A5.17:

Wire electrode	C	Si	Mn	Mo	Ni	Cr	P	S	Cu total
Typical analysis BA-S3	0.12	0.08	1.90	0.01	0.05	0.04	0.015	0.015	0.14
S4 acc. to ISO 14171-A	0.07-0.15	0.15	1.75-2.25	0.15	0.15	0.15	0.025	0.025	0.30
EH14 acc. to AWS A5.17	0.10-0.20	0.10	1.70-2.20				0.030	0.030	0.35

Base Materials:

- Non-alloy structural steels acc. to EN 10025 and ASTM:
  S185, S235JR, S235J0, S235J2,S275JR, S275J0, S275J2, S355JR,S355J0,S355J2, S275N, S355N, S275M, S355M, S460N, S460M,E295, E335, E360/A36, A106 grades A/B/C, A139, A210 grades A1/C, A216 grades WCA/WCB/WCC, A234 grade WPB, A266 grades 1/2/4, A283 grades A/B/C/D, A285 grades A/B/C, A299 grades A/B, A515 grades 60/65/70, A516 grades 55-70, A656 grade 50
  Suitable fluxes: BF 1, BF 3, BF 4, BF 5.1, BF 10

- Pipe steels acc. to ISO 3183, EN 10208 and API-5: L210 – L450/X42 – X65
  Suitable fluxes: BF 5.1, BF 6.30 and BF 6.5

- Boiler steels acc. to EN 10028 and ASTM: P235GH, P355GH, P275N, P355N, P355M, P460N, P460M/A516 grade 55, A516 grade 70, A572 grade 42, A572 grade 50
  Suitable fluxes: BF 1, BF 3, BF 4, BF 5.1and BF 6.5, BF 10

- Shipbuilding steels: Grades AH40, EH40
  Suitable fluxes: BF 1, BF 3, BF 4, BF 5.1, 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 A5.17.

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.