

Solid Wire Electrode for Submerged Arc Welding

Classification:

ISO 14171-A -
SFA 5.17 / AWS A5.17 -

S1
EL12

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-S1	0.08	0.07	0.44	0.01	0.05	0.04	0.015	0.0015	0.014
S1 acc. to ISO 14171-A	0.05-0.15	0.15	0.35-0.60	0.15	0.15	0.15	0.025	0.025	0.30
EL12 acc. to AWS A5.17	0.04-0.14	0.10	0.25-0.60				0.030	0.030	0.35

Materials:

- Non alloy structural steels: According to EN 10025/ASTM: S185, S235JR, S235J0, S235J2, S275JR, S275J0, S275J2, S355JR, S355J0, S355J2, S275N, S355N, S275M, S355M, P235GH, P355GH, P275N, P355N, P355M, 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 3.5, BF 5.1
- Pipe steels acc. to ISO 3183, EN 10208 and API-5: L210 – L360/X42 – X52 Suitable fluxes: BF 6.30 and BF 6.5
- Boiler steels acc. to EN 10028/ASTM: P235GH, P355GH, P275N, P355N, P355M/A516 grade 55, A516 grade 70, A572 grade 42, A572 grade 50 Suitable fluxes: BF 1, BF 3, BF 3.5, BF 5.1
- Shipbuilding steels: Grades A-E, AH36, DH36 Suitable fluxes: BF 1, BF 3, BF 3.5, BF 5.1

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 bis 5,0 mm; Maße und Grenzmaße nach ISO 544 und AWS A5.17.

Wire electrode surface:

2.0 – 5.0 mm; sizes and tolerances acc. to ISO 544 and AWS A5.17.

Package forms:

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