Solid Wire Electrode for Submerged Arc Welding

Classification:
ISO 14171-A - **S2Ni1**
SFA 5.23 / AWS A5.23 - **ENi1**

Characteristics:
Ni-alloyed wire electrode for submerged arc welding in the multi-run technique of fine grain steels in vessel and apparatus construction as well as pipe steels for low temperature toughness requirements down to –60 °C.

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-S2Ni1	0.09	0.14	1.05	0.02	0.95	0.02	0.006	0.004	0.08
S2Ni1 acc. to ISO 14171-A	0.07-0.15	0.05-0.25	0.80-1.30	0.15	0.80-1.20	0.15	0.020	0.020	0.30
ENi1 acc. to AWS A5.23	0.12	0.05-0.30	0.75-1.25	0.30	0.75-1.25	0.15	0.020	0.020	0.35

Base Materials:

- Fine grain steels acc. to EN 10025, EN 10028 and ASTM: P355ML2/S355ML and P420ML2/S420QL1 and ASTM A633 grade E
  Suitable fluxes: BF 5.1, BF 6.5 and BF 10

- Pipe steels acc. to ISO 3183, EN 10208 and API-5: L360M/X52 to L415M/X60
  Suitable fluxes: 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.