Solid Wire Electrode for Submerged Arc Welding

Classification:
ISO 14171-A - **S2Ni3**
SFA 5.23 / AWS A5.23 - **ENi3**

Characteristics:
Ni-alloyed wire electrode for submerged arc welding of fine grain steels with low temperature toughness and nickel-alloy steels up to 3.5 % Ni in vessel, apparatus and tank construction as well as pipe manufacture for low temperature toughness requirements down to –100 °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-S2Ni3	0.09	0.13	1.11	0.03	3.15	0.02	0.006	0.003	0.07
S2Ni3 acc. to ISO 14171-A	0.07-0.15	0.05-0.25	0.80-1.30	0.15	2.80-3.70	0.15	0.020	0.020	0.30
ENi3 acc. to AWS A5.23	0.13	0.05-0.30	0.60-1.20		3.10-3.80	0.15	0.020	0.020	0.35

Base Materials:

- Fine grain steels acc. to EN 10025, EN 10028 and ASTM: P355ML2/S355ML to P460ML2/S460QL1 and ASTM A633 grade E
  Suitable flux: BF 10

- Nickel-alloy steels 10Ni14 and 12Ni14
  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.