

Solid Wire Electrode for Submerged Arc Welding

Classification:

ISO 14171-A -
SFA 5.23 / AWS A5.23 -

S2Ni2
ENi2

Characteristics:

Ni-alloyed wire electrode for submerged arc welding of fine grain steels with low temperature toughness and nickel-alloy steels in vessel, apparatus and tank construction as well as pipe manufacture.

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-S2Ni2	0.09	0.15	1.15	0.02	2.2	0.02	0.006	0.005	0.09
S2Ni2 acc. to ISO 14171-A	0.07-0.15	0.05-0.25	0.80-1.30	0.15	1.80-2.40	0.15	0.020	0.020	0.30
ENi2 acc. to AWS A5.23	0.12	0.05-0.30	0.75-1.25		2.10-2.90		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 fluxes: BF 5.1 and BF 10
- Nickel-alloy steels 14Ni6, 12Ni14 and 13MnNi6-3
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.