

Solid Wire Electrode for Submerged Arc Welding

BA-WIRE 82

Classification: EN ISO 18274 – S Ni 6082
SFA-5.14 – ERNiCr-3

Typical analysis and chemical composition acc. to EN ISO 18274 and AWS A5.14: (Weight Percent)

Wire electrode	Ni	Si	C	Cr	Mn	Ti	Fe	Nb	S	P	Cu total
Typical analysis BA-WIRE 82	Bal.	0.2	< 0.1	20.5	3.0	< 0.7	< 3.0	2.6	0.010	0.015	0.2
S Ni 6082 acc. to ISO 18274	> 67.0	0.5	0.10	18.0–22.0	2.5–3.5	0.7	3.0	2.0–3.0	0.015	0.020	0.5
ERNiCr-3 acc. to AWS A5.14	> 67.0	0.50	0.10	18.0–22.0	2.5–3.5	0.75	3.0	2.0–3.0	0.015	0.03	0.5

Application:

BA-WIRE 82 is a wire electrode for SA welding of nickel base alloys. The weld metal exhibits good mechanical properties with hot cracking resistance and high corrosion resistance, resistance to oxidation, as well as creep resistance at high temperatures.

Base materials:

- INCONEL alloys 600, 601, 690, INCOLOY 800 and 800HT and INCOLOY alloy 330, ASTM B 163, B 166, B 167 and B 168 having UNS number N06600.
- Surfacing of mild steel.
- Dissimilar welding of stainless steels to nickel alloys and carbon.
Suitable fluxes: BF 38, WP 380

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.

Package forms:

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

Diameter:

1.2 – 2.4 mm; sizes and tolerances acc. to ISO 544 and AWS A5.14.

Wire electrode surface:

Smooth finish free from surface defects and foreign matter.