

Solid Wire Electrode for Submerged Arc Welding

BA-WIRE 309L

Classification: EN ISO 14343-A – S 23 12 L
SFA-5.9 / AWS A5.9 – ER309L

Typical analysis and chemical composition acc. to EN ISO 14343-A and AWS A5.9: (Weight Percent)

Wire electrode	C	Si	Mn	Mo	Ni	Cr	P	S	Cu total
Typical analysis BA-WIRE 309L	0.015	0.4	1.8	0.1	13.0	23.5	0.020	0.013	0.15
S 23 12 L acc. to ISO 14343-A	0.03	0.65	1.0–2.5	0.5	11.0–14.0	22.0–25.0	0.03	0.02	0.5
ER309L acc. to AWS A5.9	0.03	0.30–0.65	1.0–2.5	0.75	12.0–14.0	23.0–25.0	0.03	0.03	0.75

Application:

BA-WIRE 309L is a submerged arc welding wire suitable for joining stainless Cr-Ni steels type 309, Cr-steels and dissimilar steels like austenitic stainless steels to mild or low-alloyed steels, buffer layers and overlays on C-Mn, mild steel or low alloy steels and for joining 304L/321. Also recommended for welding 12%Cr ferritic steels.

Base Materials:

- Dissimilar joints between mild steels, low alloy steels, high tensile low alloy steels, ferritic Cr steels, austenitic Cr-Ni steels and manganese steels.
Surfacing/overlay for the first layer.
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:

1.6 – 4.0 mm; sizes and tolerances acc. to ISO 544 and AWS A5.9.

Wire electrode surface:

Smooth finish free from surface defects and foreign matter.