

Solid Wire Electrode for Submerged Arc Welding

BA-WIRE 309LMo

Classification: EN ISO 14343-A – S 23 12 2 L
SFA-5.9 / AWS A5.9 – ER309LMo

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 309LMo	0.018	0.4	1.6	2.7	13.5	23.5	0.020	0.013	0.15
S 23 12 2 L acc. to ISO 14343-A	0.03	1.0	1.0–2.5	2.0–3.5	11.0–15.5	21.0–25.0	0.03	0.02	0.5
ER309LMo acc. to AWS A5.9	0.03	0.30– 0.65	1.0–2.5	2.0–3.0	12.0–14.0	23.0–25.0	0.03	0.03	0.75

Application:

BA-WIRE 309LMo is a submerged arc welding wire similar to BA-WIRE 309L with the addition of 2.0 – 3.5 % molybdenum to increase pitting corrosion resistance. Also used for surfacing of base metals to improve their resistance to corrosion. BA-WIRE 309LMo is suitable for joining stainless steels to carbon steels or low-alloy steels such as 316L to mild steel and for overlay welding where higher Mo content is desired in the second and third layers.

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.