

Solid Wire Electrode for Submerged Arc Welding

BA-WIRE 2594NL

Classification: EN ISO 14343-A – S 25 9 4 N L
SFA-5.9 – ER2594

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	W	N	P	S	Cu total
Typical analysis BA-WIRE 2594NL	0.015	0.35	0.4	4.0	9.5	25.0	–	0.25	0.015	0.012	0.1
S 25 9 4 N L acc. to ISO 14343-A	0.03	1.0	2.5	2.5–4.5	8.0–10.5	24.0–27.0	1.0	0.20–0.30	0.03	0.02	1.5
ER2594 acc. to AWS A5.9	0.03	1.0	2.5	2.5–4.5	8.0–10.5	24.0–27.0	1.0	0.20–0.30	0.03	0.02	1.5

Application:

BA-WIRE 2594NL welding wire has been developed for welding super-duplex stainless steels 2507 and other super-duplex stainless steels. The wire has excellent resistance to stress corrosion (SCC) in chloride-bearing environments and excellent resistance to pitting and crevice corrosion. BA-WIRE 2594NL is also suitable for welding duplex stainless steel grade 2205 and corresponding duplex steels when high corrosion resistance is required.

Base Materials:

- UNS S32760, UNS J93380, 1.4508, 1.4501, ASTM A890 6A, ASTM A182 F55 ACI, CD3MWCuN, UNS 32750, 2507, UNS S32550, S32520, UNS S39274, UNS S32950, UNS J93404, 1.4469
ASTM A890 5A, ACI CE3M
Suitable flux: BF 38SD

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

Wire electrode surface:

Smooth finish free from surface defects and foreign matter.