

Solid Wire Electrode for Submerged Arc Welding

BA-WIRE 385

Normbezeichnung: EN ISO 14343-A – S 20 25 5 Cu L
SFA-5.9 – ER385

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 385	0.015	0.4	1.9	4.5	25.0	20.0	0.015	0.015	1.5
S 20 25 5 Cu L acc. to ISO 14343-A	0.03	1.0	1.0–4.0	4.0–6.0	24.0–27.0	19.0–22.0	0.03	0.02	1.0–2.0
ER385 acc. to AWS A5.9	0.025	0.50	1.0–2.5	4.2–5.2	24.0–26.0	19.5–21.5	0.02	0.03	1.2–2.0

Application:

BA-WIRE 385 is a submerged arc welding wire suitable for welding steels of grade 20Cr/25Ni/4.5Mo/1.5Cu type (AISI 904L).

BA-WIRE 385 has high resistance to corrosion in severe, non-oxidising environments, sulphuric, phosphoric and other inorganic and organic acids, also good resistance to corrosion in concentrated nitric acid. Due to the low carbon, high alloy content of the wire the resistance to intergranular corrosion and stress corrosion cracking is increased, as well as a higher resistance to crevice and pitting corrosion when compared to standard grades AISI 304L and AISI 316L.

Suitable for some offshore applications, including overlays on mild and low alloy steels.

Base Materials:

- Similar Cr/Ni steels with high Mo content
1.4539 /X1NiCrMoCu25-20-5, 1.4439/ X2CrNiMoN17-13-5, 1.4537/ X1CrNiMoCuN25-25-5 UNS N08904, S31726
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.