

Classifications

EN ISO 3581-A	AWS A5.4 / SFA-5.4
E 23 12 L B 2 2	E309L-15

Characteristics and typical fields of application

Basic coated electrode of E 23 12 L B / E309L-15 type with controlled alloying elements to meet the metallurgical requirements of buffer layers. Final layer(s) are normally performed with another stainless electrode for final properties, mostly for improved corrosion resistance. Depending on the base material being clad, an additional post-weld heat treatment may be required. For service temperatures up to 400°C. Ferrite measured with FERITSCOPE FMP30: FerriteScope 11 – 14 FN.

Base materials

For buffer layers on weldable unalloyed, low-alloyed, high tensile and high temperature steels.

Typical analysis


	C	Si	Mn	Cr	Ni
wt.-%	0.03	0.3	1.3	23.8	12.0

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact energy ISO-V KV J	
	MPa	MPa	%	20°C	-60°C
u	440 (≥ 320)	565 (≥ 510)	39 (≥ 25)	85	60

u untreated, as-welded

Operating data

	Polarity	DC+ / AC	Dimension mm	Current A
	Electrode identification	FOX CN 24/13 309 L-15 E 23 12 L B	2.5 × 350	60 – 90
			3.2 × 350	95 – 115
			4.0 × 350	120 – 145
			5.0 x 450	145 – 200

Stringer bead technique is recommended.

Preheating and interpass temperature determined by the base material being clad.

Approvals

CE