

Classification

EN ISO 3581-A	EN ISO 3581-B	AWS A5.4
E 29 9 R 3 2	ES312-17	E312-17

Characteristics and typical fields of application

Rutile electrode of type 29 % Cr 9 % Ni / E312. BÖHLER FOX CN 29/9-A is a repair & maintenance electrode that offers outstanding operating characteristics on both DC and AC and weld metals of high strength combined with high crack resistance when welding problem steels or dissimilar joints. The weld metal also work hardens making it suitable for wear resisting build-ups on clutches, gear wheels, shafts, etc. Also suitable for repair welding of tools.

Base materials

For problem steels with high strength, joining of dissimilar materials, tool steels, heat treatable or quenched and tempered steels, spring steels, high carbon steels etc.

Typical analysis of all-weld metal (wt.-%)

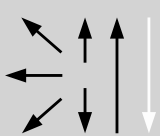
	C	Si	Mn	Cr	Ni
wt.-%	0.11	0.9	0.7	28.8	9.5

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0,2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
u	650 (≥ 450)	790 (≥ 660)	24 (≥ 15)	30

u untreated, as welded

Operating data

	Polarity:	Redrying if necessary:	Electrode identification:	ø (mm)	L mm	Amps A
	DC (+)	250 – 300 °C, min. 2 h	FOX CN 29/ 9-A E 29 9 R	2.5	300	60 – 80
	AC			3.2	350	80 – 110
				4.0	350	110 – 140
				5.0	450	140 – 180

Preheating and interpass temperature as required by the base metal.

Approvals

DB (30.014.16, 20.014.07), CE