

EN ISO 3581-A: E 29 9 R 1 2
 AWS A5.4: E312-16

BÖHLER FOX CN 29/9

**SMAW rutile basic electrode
high-alloyed, special applications**

Description

Rutile basic electrode of type 29% Cr 9% Ni / E312. BÖHLER FOX CN 29/9 is a repair & maintenance electrode that offers outstanding operating characteristics 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.

Typical Composition of All-weld Metal

	C	Si	Mn	Cr	Ni
wt-%	0.11	1.0	0.7	29.0	10.2

Mechanical Properties of All-weld Metal

	u	
yield strength R_e N/mm ² (MPa):	620	(≥490)
tensile strength R_m N/mm ² (MPa):	770	(≥690)
elongation A ($L_0=5d_0$) %:	25	(≥20)
impact work ISO-V KV J +20°C:	30	(≥24)

u untreated, as-welded

Operating Data



re-drying if necessary:

250-300°C, min. 2 h

electrode identification:

FOX CN 29/9 E 29 9 R

Preheating and interpass temperature as required by the base metal.

ø mm	L mm	amps A
2.5	300	60-80
3.2	350	80-110
4.0	350	110-140



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.

Approvals and Certificates

DB (30.014.11), ÖBB, SEPROZ, CE

Same-alloy Filler Metals

SMAW electrode: FOX CN 29/9-A