BÖHLER FOX CN 18/11

Basic stick electrode, high-alloyed, creep resistant

Classifications

EN ISO 3581-A	EN ISO 3581-B	AWS A5.4
E 19 9 B 4 2	ES308-15	E308-15

Characteristics and typical fields of application

Basic core wire alloyed electrode with controlled delta ferrite content (3-8 FN) for austenitic CrNi steels with increased carbon contents (e.g. 1.4948 / 304H), in the boiler, reactor and turbine fabrication. Approved in long-term condition up to +700 °C service temperature (300 °C in the case of wet corrosion). Resistant to hot cracking, scaling and corrosion.

Excellent weldability in all positions except vertical down.

Also suitable for German material no. 1.4550 and no. 1.4551, which are approved for temperatures up to +550 °C.

Base materials

Similar alloyed creep resistant steels

1.4948 X6CrNi18-11, 1.4949 X3CrNiN18-11

AISI 304H, 321H, 347H

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

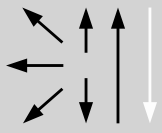
	C	Si	Mn	Cr	Ni		FN
wt-%	0.05	0.3	1.3	19.4	10.4		3-8

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	-10 °C
u	**420** (≥ 350)	**580** (≥ 550)	**40** (≥ 30)	**85**	≥ 32

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 18/11 308-15 E 19 9 B	2.5	250	50 – 80
			3.2	350	80 – 100
			4.0	350	110 – 140

Preheating is not required, only in case of wall thickness above 25 mm preheat up to 150 °C
Interpass temperature should not exceed 200 °C.

Approvals

TÜV (0138.), KTA 1408.1 (8067.), LTSS, SEPROZ, CE, NAKS (ø 3,2 mm)