BÖHLER FOX CN 16/13

Basic stick electrode, high-alloyed, creep resistant

Classification

EN ISO 3581-A

E Z16 13 Nb B 4 2

Characteristics and typical fields of application

Basic core wire alloyed electrode for high quality weld joints in high efficiency boilers and turbine components . Approved in long-term condition up to +800°C.

Fully austenitic weld deposit. Insusceptible to embrittlement and resistant to hot cracking.

Base materials

Similar alloyed creep resistant steels

1.4961 X8CrNiNb16-13, 1.4910 X3CrNiMoN17-13, 1.4981 X8CrNiMoNb16-16, 1.4988 X8CrNiMoVNb16-13, 1.4878 X12CrNiTi18-9

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

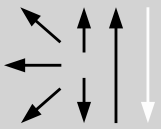
	C	Si	Mn	Cr	Ni	Nb
wt-%	0.14	0.5	3.8	16.0	13.0	1.5

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	**450** (≥ 390)	**600** (≥ 550)	**31** (≥ 30)	**55** (≥ 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 16/13 E Z 16 13 Nb B	2.5 3.2	250 350	60 – 80 80 – 110

Preheating is not required, only in case of wall thickness above 25 mm preheat up to 150 °C. Low heat input is recommended. Interpass temperatures should not exceed 150 °C.

Approvals

TÜV (0550.), SEPROZ, CE