BÖHLER FOX CN 16/13

Covered electrode, high-alloyed, austenitic stainless, creep resistant

Classifications

EN ISO 3581-A

E Z 16 13 Nb B 4 2

Characteristics and typical fields of application

Basic coated, core wire alloyed electrode of E Z 16 13 Nb B type for welding of heat and creep resistant CrNi-alloyed austenitic stainless steels in high efficiency boilers and turbine components. Approved in long-term condition up to 800ºC. Fully austenitic weld deposit. Resistant to embrittlement and hot cracking. Excellent weldability in all positions except vertical down.

Base materials

Similar alloyed heat and creep resistant steels
1.4878 X8CrNiTi18-10, 1.4910 X3CrNiMoBN17-13-3, 1.4919 X6CrNiMoB17-12-2, 1.4981 X8CrNiMoNb16-6,
1.4988 (G)X8CrNiMoVNb16-13
UNS S31635, S32100
AISI 316H, 321

Typical analysis

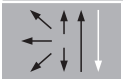
	C	Si	Mn	Cr	Ni	Nb
wt.-%	0.14	0.5	3.8	16.0	13.0	1.5

Mechanical properties of all-weld metal - 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
u	460 (≥ 390)	630 (≥ 550)	31 (≥ 30)	59 (≥ 32)

u untreated, as-welded

Operating data



Polarity	DC+	Dimension mm	Current A
Electrode identification	FOX CN 16/13 E Z16 13 Nb B	2.5 × 250	60 – 80
		3.2 × 350	80 – 110

Preheating normally not necessary. Material with a thickness exceeding 25 mm is preferably preheated up to 150ºC.
Low heat input, max. 1.5 kJ/mm is recommended.
Interpass temperature should not exceed 150ºC.

Approvals

TÜV (00550), CE