

Classification

EN ISO 3581-A

E Z21 33 B 4 2

Characteristics and typical fields of application

Basic coated electrode for joining and surfacing of heat resistant steels and cast steels of the same or similar chemical composition. Suitable for operating temperatures up to 1050 °C in carburized low-sulphur gas. Typically alloy for welding of pyrolysis furnace tubes.

Atmosphere:

Air and oxidizing combustion gases.
Reducing combustion gases.

max. application temperature °C

Sulphur free **max. 2 g S/Nm³**

1050	1000
1000	950

Base Materials

1.4876 X10 NiCrAlTi 32 20
1.4859 GX10 NiCrNb 32 20
1.4958 X 5 NiCrAlTi 3120
1.4959 X 8NiCrAlTi 32 21
Alloy 800 H, UNS N08800, N08810, N08811

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

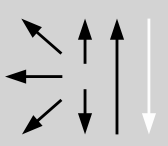
	C	Si	Mn	Cr	Ni	Nb
wt-%	0.14	0.3	4.5	21.0	33.0	1.3

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	≥ 410	≥ 600	≥ 25	≥ 70

u untreated, as welded

Operating data

	Polarity:	Redrying:	Electrode identification:	ø (mm)	L mm	Amps A
	DC (+)	250 – 300 °C, min. 2 h	FOX CN 21/33 Mn	2.5	300	50 – 75
				3.2	350	70 – 110
			4.0	400	90 – 140	

Approvals

TÜV (10514.), CE