

Classification

EN ISO 3581-A

E Z13 1 B 6 2

Characteristics and typical fields of application

Basic coated electrode for welding similar corrosion resisting, martensitic and martensitic-ferritic rolled, forged, and cast steels. Improved ductility from added nickel. Resistant to corrosion from water, steam, and sea water atmosphere. Excellent slag removability and smooth bead appearance. Metal recovery approx. 130 %. Out-of-position weldability. Preheating 150 – 200 °C, interpass temperature 180 – 260 °C. Postweld heat treatment at 650 – 750 °C.

Base materials

1.4000 X6Cr13, 1.4002 X6CrAl13, 1.4006 X10Cr13, 1.4024 X15Cr13, 1.4006 GX10Cr13
AISI 403, 405, 410, 420

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

	C	Si	Mn	Cr	Ni	Mo
wt-%	0.04	0.3	0.5	12.2	1.5	0.3

Mechanical properties of all-weld metal

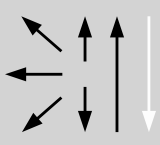
Condition	Yield strength R _{p0,2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
u	760 (≥ 700)	990 (950 – 1110)	8 (≥ 6)	36
a	540 (≥ 500)	730 (680 – 830)	20 (≥ 15)	65
v	580 (≥ 500)	670 (630 – 780)	23 (≥ 18)	110

u untreated, as welded

a annealed, 700 °C/2h / air

v quenched and tempered, 950 °C/0.5h / air 700 °C/2h / air

Operating data

	Polarity:	Redrying if necessary:	Electrode identification:	∅ (mm)	L mm	Amps A	
	DC (+)				3.2	450	90 – 120
		300 – 350 °C, min. 2 h	FOX CN 13/1	4.0	450	110 – 160	
			E Z 13 1 B	5.0	450	160 – 220	

Approvals

SEPROZ