

Classifications

EN ISO 17634-A	AWS A5.29 / SFA-5.29	AWS A5.36 / SFA-5.36
T ZCrMoCo9VNbNB P M21 1	E91T1-GM	E91T1-M21PY-G

Characteristics and typical fields of application

FOXcore CB 2 RC is a rutile-basic flux-cored wire for welding creep resistant, cast material COST CB2. This flux-cored wire is developed for welding with conventional power sources on DC (+) under mixture gas (Ar + 15 – 25% CO₂). It is also suitable for positional welding.

Base materials

Similar alloyed creep resistant steels
 GX12CrMoCoVNbB9-2-1, GX13CrMoCoVNbNB10-1-1

Typical analysis

	Gas	C	Si	Mn	Cr	Ni	Mo	V	Co	Nb	N	B
wt.-%	M21	0.12	0.2	0.8	9.0	0.2	1.4	0.2	1.0	0.03	0.02	0.006

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
s	590	740	17	30

s stress relieved 730 °C/24 h / furnace down to 300 °C / air – shielding gas Ar + 18 % CO₂

Operating data

	Polarity	DC +	Dimension mm
	Shielding gas (EN ISO 14175)	M21	1.2

Preheating and interpass temperature 200 – 250 °C. After welding, the weld joint should cool down below 80 °C to finish the marten site transformation. Soaking at 250 – 350 °C/ 2 – 4h is recommended.

The following post weld heat treatment is recommended: annealing 730 °C/min. 12 h, heating and cooling rates below 550 °C max. 150 °C/h, above 550 °C max. 80 °C/h.

Approvals

TÜV (19464), CE