

Classifications

EN ISO 3581-A	AWS A5.4 / SFA-5.4
E 25 20 B 2 2	E310-15 (mod.)

Characteristics and typical fields of application

Basic coated, cored wire alloyed electrode of E 25 20 B / E310-15 (mod.) type for welding heat resistant rolled and forged steels as well as cast steels e.g. in annealing plants, hardening plants, steam boiler construction, the crude oil industry and the ceramic industry. Heat resistant CrSiAl-steels exposed to sulfurous gases should be welded with a final layer of FOX FA after joining. Cryogenic resistance down to -196°C . Avoid the service temperature range between 650°C and 900°C due to the risk of embrittlement. Scaling resistant up to 1150°C .

Base materials

1.4586 X5NiCrMoCuNb22-18, 1.4710 GX30CrSi6, 1.4713 X10CrAl7, 1.4724 X10CrAl13, 1.4740 GX40CrSi17, 1.4742 X10CrAl18, 1.4762 X10CrAl 25, 1.4826 GX40CrNiSi22-9, 1.4840 GX15CrNi25-20, 1.4841 X15CrNiSi25-20, 1.4845 X12CrNi25-21, 1.4828 X15CrNiSi20-12, 1.4837 GX40CrNiSi25-12, 1.4840 GX15CrNi25-20, 1.4846 GX40CrNi25-21
UNS S31000, S31400, S44600
AISI 305, 310, 314, 446

Typical analysis

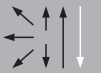
	C	Si	Mn	Cr	Ni
wt.-%	0.12	0.6	3.2	25.0	20.5

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	-196°C
u	390 (≥ 350)	570 (≥ 550)	40 (≥ 30)	110	70 (≥ 32)

u untreated, as-welded

Operating data

	Polarity	DC+	Dimension mm	Current A
	Electrode identification	FOX FFB E 25 20 B	2.5 × 300	50 – 75
	Redrying	-	3.2 × 350	80 – 110
		-	4.0 × 350	110 – 140
		-	5.0 × 450	140 – 180

Preheating and interpass temperature depending on the base material and material thickness.

Approvals

TÜV (00143), CE