

Classifications

EN ISO 3581-A	EN ISO 3581-B	AWS A5.4
E 20 10 3 R 3 2	ES(308Mo)-17	E308Mo-17 (mod.)

Characteristics and typical fields of application

Rutile electrode of type E 20 10 3 / 308Mo. This electrode is designed for dissimilar joints and weld cladding. BÖHLER FOX CN 19/9 M offers a lower chromium and ferrite content than a 309MoL weld deposit with the result that carbon diffusion and Cr-carbide formation is reduced after post weld heat treatment and lower ferrite contents can be achieved in the second layer of 316L surfacing. Suitable for service temperatures from -80°C to +300°C. Safety against formation of porosity due to the moisture resistant coating

Base materials

High-strength, mild steels and low-alloyed constructional steels, QT-steels and armour plates among themselves or among each other; non-alloy as well as alloyed boiler or constructional steels with high-alloy stainless Cr- and Cr-Ni-steels; austenitic manganese steels similar and dissimilar.

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

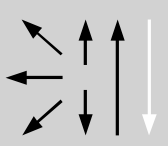
	C	Si	Mn	Cr	Ni	Mo
wt-%	0.04	0.7	0.8	20.2	10.3	3.2

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	-80°C
u	520 (≥ 400)	700 (≥ 620)	28 (≥ 20)	70	≥ 32

u untreated, as welded

Operating data

	Polarity:	Redrying if necessary:	Electrode identification:	∅ (mm)	L mm	Amps A
	DC (+)	250 – 300°C, min. 2 h	FOX CN 19 9 M E 20 10 3 R	2.5	250	50 – 85
	AC			3.2	350	75 – 115
				4.0	350	110 – 160
				5.0	450	160 – 200

Preheating and interpass temperature as required by the base metal.

Approvals

TÜV (1086.), DB (30.014.03), ABS (Cr18/20, Ni8/10Mo), GL (4431), SEPROZ, CE