BÖHLER FOX CN 19/9 M

Covered electrode, high-alloyed, austenitic stainless, special applications

Classifications

EN ISO 3581-A	AWS A5.4 / SFA-5.4
E 20 10 3 R 3 2	E308Mo-17 (mod.)

Characteristics and typical fields of application

Rutile coated, core wire alloyed electrode of E 20 10 3 R / E308Mo-17 type. Designed for dissimilar joints and weld cladding. BÖHLER FOX CN 19/9 M offers a lower chromium and ferrite content than an E309LMo 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 –80ºC to 300ºC. Excellent weldability in all positions except vertical down. Runs well also on AC.

Base materials

Welding and dissimilar joining of high-strength, mild steels and low-alloyed constructional steels; quench tempered steels, armour plates and austenitic manganese steels. Welding of unalloyed as well as alloyed boiler or constructional steels to high-alloyed stainless Cr and CrNi-steels.

Typical analysis

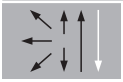
	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.04	0.7	0.8	20.2	10.3	3.2

Mechanical properties of all-weld metal - 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	–80°C
u	500 (≥ 400)	700 (≥ 620)	30 (≥ 20)	70	40 (≥ 32)

u untreated, as-welded

Operating data



Polarity	DC+ / AC
Electrode identification	FOX CN 19 9 M / E 20 10 3 R

Dimension mm	Current A
2.5 × 250	50 – 85
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.
Redrying if necessary at 250 – 300ºC for min. 2 h.

Approvals

TÜV (01086), DB (30.014.03), ABS, DNV, LR, CE