

BÖHLER FOX CEL 90

Cellulosic stick electrode, for vertical-down welding, pipe welding

Classifications					
EN ISO 2560-A	EN ISO 2560-B	AWS A5.5	AWS A5.5M		
E 50 3 1Ni C 2 5	E 57 10-G A	E9010-P1	E6210-P1		
		E9010-G	E6210-G		

Characteristics and typical fields of application

Cellulose-coated electrode for vertical-down welding of high strength large diameter pipelines. Highly economical compared with conventional vertical-up welding. Especially recommended for hot passes, filler and cover layers. The special design of the coating and the core wire guarantees the highest metallurgical quality & soundness of the weld metal deposit with excellent mechanical properties. The electrode allows good weld pool visability, and easy manipulation in all positions, as well as high safety margins against porosity and slag inclusions.

BÖHLER FOX CEL 90 can be used in sour gas applications (HIC-Test acc. to NACE TM-02-84). Test values for SSC-test are available too.

Base materials

L450MB, L485MB	
API Spec. 5 L:	X 65, X 70, X 80

Typical analysis of all-weld metal (wt%)						
	С	Si	Mn	Ni		
wt-%	0.17	0.15	0.9	0.8		

Mechanical properties of all-weld metal

Condition	Yield strength R _e	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J				
	MPa	MPa	%	+20 °C	±0 °C	−20 °C	−30 °C	–40 °C
u	580 (≥ 530)	650 (620 – 720)	21 (≥ 18)	100	90	75	65 (≥ 47)	40

u untreated, as welded

Operating data

Polarity: DC (+)	Redrying: not allowed	Electrode identification: FOX CEL 90 9010-P1 E 50 3 1Ni C	ø (mm) 4.0 5.0	L mm 350 350	Amps A 120 – 180 160 – 210
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Approvals

TÜV (1324.), Statoil, SEPROZ, CE