

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.1 / SFA-5.1	AWS A5.1M
E 38 2 C 2 1	E4310 A	E6010	E4310

Characteristics and typical fields of application

Cellulose electrode for vertical-down welding of large diameter pipelines. Especially recommended for root pass welding on D.C. positive polarity in the vertical down and vertical up welding positions.

Apart from its good welding and gap bridging characteristics Böhler FOX CEL+ provides a powerful arc that deposits well penetrated, smooth root passes with high travel speeds as well as high safety against the formation of piping or hollow bead and undercut. BÖHLER FOX CEL+ 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

S235JR, S275JR, S235J2G3, S275J2G3, S355J2G3, P235GH, P265GH, P355T1, P235T2-P355T2, L210NB - L415NB, L290MB - L415MB, P235G1TH, P255G1TH

Root pass up to L555NB, L555MB

API Spec. 5 L: A, B, X 42, X 46, X 52, X 56, Root pass up to X 80

Typical analysis


	C	Si	Mn
wt.-%	0.17	0.15	0.6

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength	Tensile strength R_m	Elongation A	Impact energy ISO-V KV J			
	R_p	MPa	($L_0=5d_0$)	20°C	0°C	-20°C	-30°C
u	MPa	MPa	%				
	430 (≥ 380)	520 (470 - 600)	26 (≥ 22)	105	95	60 (≥ 47)	50 (≥ 27)

u untreated, as welded

Operating data

	Polarity	Electrode identification	Dimension mm	Current A	
		DC +, Minuspol	FOX CEL+ 6010 E 38 2 C	2.5 x 300	50 – 90
				3.2 x 350	80 – 130
				4.0 x 350	120 – 180

Approvals

TÜV (19380.), CE