

## Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.5	AWS A5.5M
E 42 3 C 2 5	E 49 10-P1 A U	E7010-P1	E4910-P1

## Characteristics and typical fields of application

Cellulose electrode for vertical-down welding of high strength large diameter pipelines. Especially recommended for hot passes, filler and cover layers. Highly economical compared with conventional vertical-up welding. The BÖHLER FOX CEL 70-P provides a more intensive arc and a more fluid weld metal as compared to the well-known BÖHLER FOX CEL 75.

BÖHLER FOX CEL 70-P 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, L210-L415NB, L290MB-L415MB, L450MB, P355T1, P235T2-P355T2, P235G1TH, P255G1TH

API Spec. 5L: Grade A, B, X42, X 46, X52, X56, X60, X65, root pass up to X80

## Typical analysis of all-weld metal

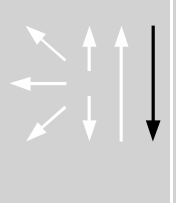
	C	Si	Mn	Ni
wt.-%	0.15	0.10	0.45	0.17

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

Condition	Yield strength R <sub>eH</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J		
	MPa	MPa	%	+20°C	-20°C	-30°C
u	<b>460</b> (≥ 420)	<b>560</b> (500 – 640)	<b>23</b> (≥ 22)	<b>100</b>	<b>80</b>	<b>65</b> (≥ 47)

u untreated, as welded

## Operating data

	<b>Polarity:</b>	<b>Redrying:</b>	<b>Electrode identification:</b>	<b>ø mm</b>	<b>L mm</b>	<b>Amps A</b>
	DC ( + )	not allowed	FOX CEL 70-P	3.2	350	60 – 130
	DC ( - )		7010-P1 E 42 3 C	4.0	350	100 – 180
	polarity negative for root pass			4.8	350	130 – 200
				5.0	350	140 – 210

## Approvals

TÜV (11180.), CE