

BÖHLER FOX CEL 70-P

Stick electrode, low-alloyed, cellulose coated, pipeline welding

SMAW

Classifications

EN ISO 2560-A
E 42 3 C 2 5

AWS A5.5 / SFA-5.5
E7010-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

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

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

| Condition | Yield strength R _e MPa | Tensile strength R _m MPa | Elongation A (L ₀ =5d ₀) % | Impact values ISO-V KV J | | |
|-----------------------------|--------------------------------------|--|--|--------------------------|-------|-----------|
| | | | | 20°C | -20°C | -30°C |
| u u untreated, as welded | 460 (≥ 420) | 560 (500 – 640) | 23 (≥ 22) | 100 | 80 | 65 (≥ 47) |

Operating data



| | |
|---------------------------------|-------------------------------|
| Polarity | DC+/-, Minuspol für Wurzel |
| Electrode identification | FOX CEL 70-P 7010-P1 E 42 3 C |
| Redrying | not allowed |

| Dimension mm | Current A |
|--------------|-----------|
| 3.2 × 350 | 60 – 130 |
| 4.0 × 350 | 100 – 180 |
| 4.8 × 350 | 130 – 200 |
| 5.0 × 350 | 140 – 210 |

Approvals

TÜV (11180), CE