# BÖHLER FOX EV 70 Mo

Basic stick electrode, low-alloyed, high strength

## Classifications

| EN ISO 18275-A | EN ISO 18275-B | AWS A5.5 | AWS A5.5M |
|---|---|---|---|
| E 55 3 MnMo B T 4 2 H5 | E6218-G A H5 | E9018-G | E6218-G |
| | | E9018-D1 (mod.) | E6218-D1 (mod.) |

## Characteristics and typical fields of application

Basic Mn-Mo alloyed electrode especially suited for high-strength fine-grained constructional steels and high-temperature steels, e.g. 15NiCuMoNb5S. Crack resistant, tough and ageing resistant.

Excellent weld ability in all positions except vertical-down.

## Base materials

High-strength fine-grained steels , rail steels up to R 200 (for cladding)

S460N, S460M, S460Q-S555Q, P460N, P460NH, 415NB, L415MB-L555MB, L415QB-L555QB, alform 500 M, 550 M, aldur 500 Q, aldur 550 Q, 20MnMoNi4-5, 15NiCuMoNb5-6-4, GE300,

ASTM A 572 Gr. 65; A 738 Gr. A; A 852; API 5 L X60, X65, X70, X80, X60Q, X65Q, X70Q, X80Q

## Typical analysis of all-weld metal (wt.-%)

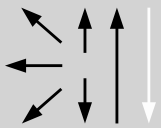
| | C | Si | Mn | Mo |
|---|---|---|---|---|
| wt.-% | 0.06 | 0.4 | 1.6 | 0.5 |

## Mechanical properties of all-weld metal

| Condition | Yield strength $R_{p0,2}$ | Tensile strength $R_m$ | Elongation A ($L_0$=5$d_0$) | Impact work ISO-V KV J | |
|---|---|---|---|---|---|
| | MPa | MPa | % | +20 °C | –30 °C |
| u | **580** (≥ 550) | **680** (620 – 780) | **22** (≥ 18) | **150** | **85** (≥ 47) |
| s | **580** | **650** | **23** | **160** | **90** |

u untreated, as welded
s stress relieved 650 °C/2h / furnace down to 300 °C / air

## Operating data



| Polarity: | Redrying if necessary: | Electrode identification: | ø (mm) | L mm | Amps A |
|---|---|---|---|---|---|
| DC ( + ) | 300 – 350 °C, min. 2 h | FOX EV 70 Mo 9018-G E 55 3 MnMo B T | 2.5 | 250 | 70 – 100 |
| | | | 3.2 | 350 | 110 – 140 |
| | | | 4.0 | 450 | 140 – 180 |
| | | | 5.0 | 450 | 180 – 240 |

Preheating and interpass temperature, as well as post welds heat treatment as required by the base metal.

## Approvals

TÜV (1178.), DB (10.014.11-82.014.12/03), CE