

EN 499: E 38 2 RB 1 2  
 AWS A5.1-91: E 6013 (mod.)  
<sup>1)</sup> DIN 1913: E 43 43 RR (B) 7  
<sup>1)</sup> BS 639: E 43 43 RR 22  
<sup>1)</sup> NFA 81-309: E 43 4/3 RR 22

## BÖHLER FOX SPE

**SMAW stick electrode**  
**mild steel, rutile-basic-coated**

<sup>1)</sup> replaced by EN 499

### Description

Thick coated rutile-basic electrode especially recommended for out-of-position work except vertical-down. Excellently suited for welding root passes. Produces first class X-ray quality welds.

Preferably used in structural and tank welding as well as in tube&pipe construction.

### Typical Composition of All-weld Metal

|      | C    | Si  | Mn  |
|------|------|-----|-----|
| wt-% | 0.08 | 0.2 | 0.5 |

### Mechanical Properties of All-weld Metal

|                                            |                  |           |
|--------------------------------------------|------------------|-----------|
|                                            | u                |           |
| yield strength $R_e$ N/mm <sup>2</sup> :   | <b>420</b>       | (≥380)    |
| tensile strength $R_m$ N/mm <sup>2</sup> : | <b>500</b>       | (470-600) |
| elongation A ( $L_0=5d_0$ ) %:             | <b>28</b>        | (≥20)     |
| impact work ISO-V KV J                     |                  |           |
|                                            | +20°C: <b>90</b> | (≥70)     |
|                                            | ±0°C: <b>75</b>  | (≥60)     |
|                                            | -10°C: <b>70</b> | (≥50)     |
|                                            | -20°C: <b>60</b> | (≥47)     |

u untreated, as-welded

### Operating Data



re-drying: **not necessary**  
 electrode identification:  
**FOX SPE E 38 2 RB**

| ø mm | L mm    | amps A  |
|------|---------|---------|
| 2.0  | 250     | 45-75   |
| 2.5  | 250/350 | 60-100  |
| 3.2  | 350     | 90-140  |
| 4.0  | 450     | 110-190 |
| 5.0  | 450     | 170-250 |



### Base Materials

steels up to a yield strength of 380 N/mm<sup>2</sup>

S275JR, S235J2G3 - S355J2G3, P235GH, P265GH, P255NH, P355T1, P235T2-P355T2, P235G1TH, P255G1TH, L210 - L360NB, L290MB - L360MB, S235JRS1 - S235J4S

ASTM A36 u A53 Gr. all; A106 Gr. A, B, C A 135 Gr. A, B; A283 Gr. A, B, C, D; A366; A285 Gr. A, B, C; A500 Gr. A, B, C; A570 Gr. 30, 33, 36, 40, 45; A607 Gr. 45 A668 Gr. A, B; A907 Gr. 30, 33, 36, 40; A935 Gr.45; A936 Gr. 50; API 5 L Gr. B, X42, X52

### Approvals and Certificates

TÜV-D, TÜV-Ö, DB (10.014.03), ABS, BV, CL, DNV, GL, LR, RMR, ÖBB (10.01.004), UDT, LTSS, Ü, SEPROS