| Classification |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AWS A5.1 |  | AWS A5.1M |  |  | EN ISO 2560-A |  |  | EN ISO 2560-B |  |
| E7018 H4R |  | E4918H4R |  |  | E 423 B 42 H 5 |  |  | E 4918 A U H5 |  |
| Characteristics and typical fields of application |  |  |  |  |  |  |  |  |  |
| - Basic covered electrode with very good welding characteristics including out of position work. <br> - Weld metal recovery about $115 \%$ *. <br> - Crack-free weld metal when welding high-carbon steels. <br> - Suitable for use in tank construction, boiler and pressure vessel manufacturer, apparatus engineering, vehicle manufacture, offshore applications and ship building. |  |  |  |  |  |  |  |  |  |
| Base Materials |  |  |  |  |  |  |  |  |  |
| S235JRG2 - S355J2, E295, E335, C35; boiler steels P235GH, P265 GH, P295GH, P355GH; fine grained structural steels up to S420N; shipbuilding steels A, B, D, E; offshore steels; pipe steels P265, P295, L290NB - L415NB, L290MB - L415MB, X42 - X56; cast steels GS-38, GS-45, GS52; ageing resistant steels Ast35 - Ast52; SA 516 Gr 60, 65, 70; SA333 Gr 6. |  |  |  |  |  |  |  |  |  |
| Typical analysis of all weld metal (wt.-\%) |  |  |  |  |  |  |  |  |  |
| C | Si |  |  | Mn |  | P |  |  | S |
| 0.08 | 0.50 |  |  | 1.40 |  | 0.009 |  |  | 0.01 |
| Mechanical properties of all-weld metal |  |  |  |  |  |  |  |  |  |
| Heat treatment | Yield strength $\mathrm{R}_{\mathrm{e}} \mathrm{N} / \mathrm{mm}^{2}$ |  | Tensile strength $\mathrm{R}_{\mathrm{m}} \mathrm{N} / \mathrm{mm}^{2}$ |  | Elongation ( $L_{0}=5 d_{0}$ ) |  | Impact work ISO-V KV J |  |  |
|  | MPa |  | MPa |  | \% |  | $+20^{\circ} \mathrm{C}$ |  | $-40^{\circ} \mathrm{C}$ |
| As Welded | 490 |  | 560 |  | 30 |  | $160$ |  | 55 |

## Operating data

| Polarity |  |
| :--- | :--- | :--- |
| DCEP | Note: * metal recovery rate may vary slightly with higher diameter <br> Re-drying if necessary: $300-350^{\circ} \mathrm{C}$ min. 2h <br> Electrode Identification: FOX S EV $50 / 7018-H 4 R$ |

## Approvals

ABS,LR,DNV,BKI
Size, Packaging and Electrical Operating Data

| Size (mm) |  | Carton Pack |  | Vacuum Pack |  | Amperage (A) |
| :---: | :---: | :---: | :--- | :---: | :---: | :---: | :---: |
| $\boldsymbol{\varnothing}$ | Length | Kg / <br> Pack | $\mathbf{K g} / \mathbf{B o x}$ | $\mathbf{K g} / \mathbf{V a c}$. | $\mathbf{K g} / \mathbf{B o x}$ |  |
| 2.50 | 350 | 5.0 | 20.0 | 2.0 | 12.0 | $80-110$ |
| 3.25 | $350 / 450$ | 5.0 | 20.0 | 2.0 | 12.0 | $100-145$ |
| 4.00 | $350 / 400 / 450$ | 5.0 | 20.0 | 2.0 | 12.0 | $140-200$ |
| 5.00 | 450 | 5.0 | 20.0 | 2.0 | 12.0 | $190-250$ |

