

Classifications

| EN ISO 2560-A | EN ISO 2560-B | AWS A5.1M | AWS A5.1 / SFA-5.1 |
|---------------|---------------|-----------|--------------------|
| E 38 2 RB 1 2 | E4303 A U | E4313 | E6013 |

Characteristics and typical fields of application

Rutile-basic coated electrode especially recommended for out-of-position work except vertical-down. Excellently suited for welding root passes. Produces first class X-ray quality welds. Excellent welding properties on A.C. Preferably used in structural and tank welding as well as in tube & pipe construction. High mechanical properties, thus suitable for many different base metals.

Base materials

Steels up to a yield strength of 380 MPa (52 ksi)

S235JR-S355JR, S235JO-S355JO, S275N-S355N, S275M-S355M, P235GH-P355GH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L360NB, L245MB-L360MB

ASTM A 106 Gr. A, B; A 283 Gr. A, C; A 285 Gr. A, B, C; A 414 Gr. A, B, D, G; A 501 Gr. B; A 516 Gr. 55, 60, 65, 70; A 573 Gr. 58, 65, 70; A 588 Gr. A, B; A 633 Gr. A, C, D; A 662 Gr. A, B, C; A 711, Gr. 1013; API 5 L Gr. B, X42, X52

Typical analysis


| | C | Si | Mn |
|-------|------|-----|------|
| wt.-% | 0.08 | 0.2 | 0.45 |

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

| Condition | Yield strength R_e | Tensile strength R_m | Elongation A ($L_0=5d_0$) | Impact energy ISO-V KV J | | | |
|-----------|-------------------------|---------------------------|--------------------------------|--------------------------|-----|-------|-----------|
| | | | | 20°C | 0°C | -10°C | -20°C |
| u | 420 (≥ 380) | 500 (≥ 470 – 600) | 28 (≥ 20) | 90 | 75 | 70 | 60 (≥ 47) |

u untreated, as welded

Operating data

|  | Polarity | DC – / AC | Dimension mm | Current A |
|--|--------------------------|-------------------|--------------|-----------|
| | Electrode identification | FOX SPE E 38 2 RB | 2.0 × 250 | 45 – 75 |
| | | | 2.5 × 250 | 60 – 100 |
| | | | 2.5 × 350 | 60 – 100 |
| | | | 3.2 × 350 | 90 – 140 |
| | | | 4.0 × 450 | 110 – 190 |
| | | | 5.0 × 450 | 170 – 250 |

Approvals

TÜV (00731), DB (10.014.03), ABS, BV, DNV, LR, CE