

## Classifications

|               |               |             |              |
|---------------|---------------|-------------|--------------|
| EN ISO 2560-A | EN ISO 2560-B | AWS A5.1-04 | AWS A5.1M-04 |
| E 42 0 RC 1 1 | E 4313 A      | E6013       | E4313        |

## Characteristics and typical fields of application

Rutile cellulose covered electrode.

General purpose; useable in all positions; excellent gap-bridging and arc-striking ability; for tack-welding and bad fit-ups. Well suited for welding rusty and primed plates (roughly 40 µm); excellent vertical down characteristics. Useable on small transformers (42 V, open circuit).

## Grundwerkstoffe

S235JRG2 - S355J2; GS-38; GS-45; St35; St45; St35.8;  
boiler steels P235GH, P265GH, P295GH; shipbuilding steels corresp. to app.-grade 2; fine grained structural steels up to P355N; weldable ribbed reinforcing steel bars.  
ASTM A36 and A53 Gr. all; A106 Gr. A, B, C; A135 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

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

|      | C    | Si   | Mn   |
|------|------|------|------|
| wt-% | 0.09 | 0.35 | 0.50 |

## Mechanische Gütwerte des Schweißgutes

| Heat-treatment | Yield strength<br>$R_{p0.2}$ | Tensile strength<br>$R_m$ | Elongation<br>A ( $L_0=5d_0$ ) | Impact work<br>ISO-V KV J |
|----------------|------------------------------|---------------------------|--------------------------------|---------------------------|
|                | MPa                          | MPa                       | %                              | +20 °C                    |
| aw             | 420                          | 510                       | 22                             | 50                        |

## Operating data

| Polarity | $\varnothing$ (mm) | L mm | Amps A    |
|----------|--------------------|------|-----------|
| DC (-)   | 2.0                | 250  | 50 – 60   |
| AC       | 2.5                | 250  | 60 – 90   |
|          | 2.5                | 350  | 60 – 90   |
|          | 3.2                | 350  | 90 – 140  |
|          | 4.0                | 350  | 150 – 190 |
|          | 4.0                | 450  | 150 – 190 |
|          | 5.0                | 350  | 190 – 240 |
|          | 5.0                | 450  | 190 – 240 |

## Approvals

TÜV (00425), DB (10.132.19), ABS, BV, LR, GL, DNV, CE