## Phoenix Blau — Stick electrode

| Classifications | | unalloyed rutile |
|---|---|---|
| EN ISO 2560-A: | AWS A5.1: | |
| E 42 0 RC 11 | E6013 | |

### Characteristics and field of use

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 primered plates (roughly 40 µm); excellent vertical down characteristics. Useable on small transformers (42 V, open circuit).

### Base materials

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 | | |
|---|---|---|---|---|
| 0.09 | 0.35 | 0.50 | | |

### Mechanical properties of all-weld metal

| *Heat Treatment* | *Yield strength 0.2%* | *Tensile strength* | *Elongation ($L0=5_d0$)* | *Impact values ISO-V* |
|---|---|---|---|---|
| | *MPa* | *MPa* | *%* | *+20°C* |
| untreated | 420 | 510 | 22 | 50 |

### Operating data

Polarity = - / ~

| *Dimensions (mm)* | *Amperage A* |
|---|---|
| 2.0 x 250 | 30- 75 |
| 2.5 x 250 | 40- 90 |
| 2.5 x 350 | 40- 90 |
| 3.2 x 350 | 90-130 |
| 4.0 x 350 | 140-190 |
| 4.0 x 450 | 140-190 |
| 5.0 x 350 | 190-240 |
| 5.0 x 450 | 190-240 |

### Approvals and certificates

TÜV (00425.), DB (10.132.19), ABS, BV, LR, GL (2Y), DNV