

Classifications

| | | | |
|---------------|---------------|----------|-----------|
| EN ISO 2560-A | EN ISO 2560-B | AWS A5.1 | AWS A5.1M |
| E 38 2 RB 1 2 | E 4303 AU | E6013 | E4313 |

Characteristics and typical fields of application

Excellent vertical up welding characteristics; easy handling in out of position work; particularly suitable for fabricating radiographically sound circumferential pipe welds; good porosity-free root weld fusion, also in tight air gaps.

Useable in pipeline, boiler and tank construction, structural steel work and shipbuilding.

Base materials

S235JRG2 - S355J2; shipbuilding steels appr.-grade 3;

Boiler steels P235GH, P265GH, P295GH;

ASTM A36 u. A53 Gr. alle; 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

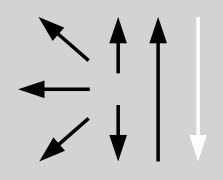
Typical analysis of all-weld metal (wt.-%)

| | | | |
|------|------|------|------|
| | C | Si | Mn |
| wt-% | 0.08 | 0.20 | 0.55 |

Mechanical properties of all-weld metal

| Heat-treatment | Yield strength $R_{p0.2}$ | Tensile strength R_m | Elongation A ($L_0=5d_0$) | Impact work ISO-V KV J |
|----------------|------------------------------|---------------------------|--------------------------------|---------------------------|
| | MPa | MPa | % | +20 °C |
| aw | 380 | 460 | 22 | 75 |

Operating data

| | | | | |
|-------------------------------------------------------------------------------------|---------------------------------|---------------|-------------|---------------|
|  | Polarity: DC (-) / AC | ø (mm) | L mm | Amps A |
| | | 2.0 | 250 | 30 – 75 |
| | | 2.5 | 250 | 40 – 90 |
| | | 2.5 | 350 | 40 – 90 |
| | | 3.2 | 350 | 90 – 130 |
| | | 4.0 | 350 | 140 – 190 |
| | | 4.0 | 450 | 140 – 190 |
| | | 5.0 | 450 | 190 – 250 |

Approvals

TÜV (01591), DB (10.132.20), ABS, BV, GL, LR, DNV, CE