# SAW (submerged arc welding) wires for mild and low alloyed steel

FLIESS SINCE 1915

## UP-100 (S2)

| Classification DIN EN ISO | Classification AWS |
|---|---|
| 14171-A S2 | A5.17 EM12, A5.23 EM12 |
| **Approvals** | **Material No.** |
| TÜV 03275.05, CE, DB 52.045.02, GL | 1.0494 |

### Characteristics and application

Submerged arc welding wire for standard CMn structural steels. Typical applications include shipbuilding, pressure vessels and general construction.

### Base materials

For CMn and mild steels with yield strength up to ~380MPa (56ksi).
S185-E360, S235JR-S355JR, S235J0-S355J0, S235J2-S355J2, S275N-S355N, S275M-S355M, P235GH-P355GH, P275N-P355N, P355M, P355Q, Pipeline steels L210-360, Shipbuilding grades A-E, AH36, DH36
ASTM: A36, A106 grades A/B/C, A139, A210 grades A1/C, A216 grades WCA/WCB/WCC, A234 grade WPB, A266 grades 1/2/4, A283 grades A/B/C/D, A285 grades A/B/C, A299 grades A/B, A515 grades 60, A516 grades 55, A656 grade 50
API: 5L grades X42-X56

### Typical analysis in %

| C | Si | Mn |
|---|---|---|
| 0,09 | 0,08 | 1,05 |

### Typical heat treatment

Welding procedure (including preheat temperature, interpass temperature and PWHT) will be dependent on the base material being welded, including its thickness, and any applicable design codes.