Solid Wire Electrode for Submerged Arc Welding

| Classification: | | Characteristics: | | | | | |
|------------------------|-------|--|--|--|--|--|--|
| ISO 14171-A - | S3 | Wire electrode for submerged arc welding of non-alloy | | | | | |
| SFA 5.17 / AWS A5.17 - | EH10K | and fine grain steels as well as boiler and vessel steels. | | | | | |

Typical analysis and chemical composition acc. to EN ISO 14171-A and AWS A5.17:

| Wire electrode | С | Si | Mn | Мо | Ni | Cr | Р | S | Cu total |
|-------------------------|-----------|-----------|-----------|------|------|------|-------|-------|----------|
| Typical analysis BA-S3 | 0.11 | 0.12 | 1.61 | 0.03 | 0.02 | 0.05 | 0.015 | 0.012 | 0.10 |
| S3 acc. to ISO 14171-A | 0.07-0.15 | 0.15 | 1.30-1.75 | 0.15 | 0.15 | 0.15 | 0.025 | 0.025 | 0.30 |
| EH10K acc. to AWS A5.17 | 0.07-0.15 | 0.05-0.25 | 1.30-1.70 | | | | 0.025 | 0.025 | 0.35 |

Base Materials:

Non-alloy structural steels acc. to EN 10025 and ASTM: S235JRG2/A570 grade 36 to S355J2G3R/A572 grade 50
 Statute for the former DE 0, DE 5, 1 and DE 0, 5

Suitable fluxes: BF 3, BF 5.1 and BF 6.5

- Fine grain steels acc. to EN 10025, EN 10028 and ASTM: P355N/S355NL/A516 grade 70 and A633 grade E to P460N/S460NL
 Suitable fluxes: BF 3, BF 5.1, BF 6.5 and BF 10
- Boiler steels acc. to EN 10028 and ASTM: P355GH/A516 grade 70 and S355J2G3/A572 grade 50 Suitable fluxes: BF 3, BF 5.1, BF 6.5 and BF 10

Flux type suitability is strongly dependent on its application. In combination with the wire electrode the most suitable flux should match the requirements of the plate material as closely as possible under the existing welding conditions. Further information can be obtained from the technical flux data sheets.

Diameter:

2.0 – 5.0 mm; Sizes and tolerances acc. to ISO 544 and AWS A5.17.

Wire electrode surface:

Copper-coated, smooth finish free from surface defects and foreign matter.

Package forms:

Coils, spools, drums and spiders as standard package forms for SAW-wire electrodes, different package forms on request.