

MMA Electrodes Stainless and Heat resistant steels

Fume reduced, rutile coated MMA electrode for welding austenitic stainless Cr-Ni-Mo steels or cast steels. The reduced fume formation contributes to an improved working environment for welders and in workshops. The welding fume deposited in the welding zone and on the work piece is considerably lower than with standard electrodes.

For operating temperatures of up to +400 °C. Fine metal droplet transfer, good fusion of joint faces, finely rippled bead surface, easy slag removal, excellent arc striking and restriking. Vacuum packed: no redrying or special storage conditions are required.

| Classification | |
|----------------|------------------------|
| AWS | A5.4: E316L-17 |
| EN | 1600: E 19 12 3 L R 22 |

| Approvals | Grades |
|-----------|--------|
| DB | |
| TÜV | |

see Appendix, Classification Society Approvals, for details pag. 521

Analysis of all-weld metal (Typical values in %)

| C | Mn | Si | P | S | Cr | Ni | Mo | Nb | Cu | N | Ferrite |
|------|------|------|---------|---------|-------|-------|------|----|----|---|---------|
| 0.03 | 0.80 | 0.90 | ≤ 0.025 | ≤ 0.020 | 19.10 | 10.80 | 2.80 | - | - | - | 5-10 |

All-weld metal Mechanical Properties

| Heat Treatment | Yield Strength N/mm ² | Tensile Strength N/mm ² | Elongation A5 (%) | Impact Energy ISO - V (J) + 20 °C | Hardness |
|----------------|-------------------------------------|---------------------------------------|----------------------|---|----------|
| As Welded | ≥ 450 | ≥ 520 | ≥ 30 | ≥ 50 | - |

Materials

1.4401 (X4CrNiMo17-12-2), 1.4435 (X2CrNiMo18-14-3)

1.4571 (X6CrNiMoTi17-12-2), 1.4583 (X10CrNiMoNb18-12)

AISI 316L

Storage and redrying

Keep dry and avoid condensation.

Re-drying not generally required

If necessary: 250-300 °C for 2 hours, 5 times max

Current condition and welding position

DC+



Packaging data

| Diameter (mm) | Length (mm) | Current (A) | Electrode average weight (g) | Weld metal weight per electrode (g) |
|------------------|----------------|----------------|---------------------------------|--|
| 2,5 | 300 | 70-80 | 18,3 | 11,0 |
| 3,2 | 350 | 110-120 | 34,2 | 21,0 |
| 4,0 | 350 | 125-135 | 53,3 | 32,0 |