

MMA Electrodes C-Mn and low-alloy steels

TENAX 35S is a general purpose basic coated low hydrogen MMA electrode containing iron powder additions, suitable for positional welding. The weld appearance is very good and spatter levels minimal. The excellent mechanical properties make this electrode suitable for critical applications in industries including offshore oil and gas, nuclear and pressure vessels and the general construction industry. Very good X ray quality. Efficiency 120%.

| Classification | |
|----------------|------------------------|
| EN ISO | 2560-A: E 42 5 B 32 H5 |
| EN | 499: E 42 5 B 32 H5 |
| AWS | A5.1: E 7018-1 H4 |
| GOST | 9467-75: ?50A-E51 6 |

| Approvals | Grade |
|-----------|----------|
| ABS | 4H5 4Y |
| BV | 3YHHH |
| DB | ● |
| DNV | 4YH5 |
| GL | 4Y40 H5 |
| LRS | 3YMH5 |
| RINA | 4D/4YDH5 |
| TÜV | ● |

CE

Chemical analysis (Typical values in %)

| C | Mn | Si | P | S |
|-------|------|------|--------|---------|
| 0.075 | 1.35 | 0.35 | ≤ 0.02 | ≤ 0.015 |

All-weld metal Mechanical Properties

| Heat Treatment | Yield Strength (MPa) | Tensile Strength (MPa) | Elongation A5 (%) | Impact Energy ISO - V (J) |
|----------------|----------------------|------------------------|-------------------|---------------------------|
| | | | | -50 °C |
| As Welded | ≥ 420 | 510 - 640 | ≥ 22 | ≥ 100 |
| 620 °C x 1h | ≥ 400 | 490 - 560 | ≥ 22 | ≥ 100 |

Materials

SA 516 gr.60; SA 516 gr.70; SA 106 gr.B

S(P)235-S(P)420, GP240-GP280, L245-L360

Storage

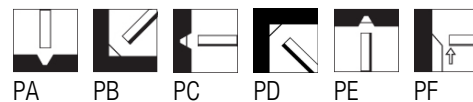
Keep dry and avoid condensation.

HD ≤ 5: Re-dry at 400-420 °C for 1 hour, 3 times max.

HD ≤ 10: Re-dry at 350-370 °C for 1 hour, 3 times max

Current condition and welding position

AC; DC+



Packaging data

| Diam. (mm) | Length (mm) | Current (A) | Approx. weight (kg/1000) | VPMD | |
|------------|-------------|-------------|--------------------------|------|------|
| | | | | PC | Code |
| 2.5 | 350 | 70-100 | 23.5 | 90 | ● |
| 3.2 | 350 | 90-130 | 39.0 | 55 | ● |
| 3.2 | 450 | 90-130 | 49.5 | 55 | ● |
| 4.0 | 450 | 110-170 | 70.9 | 40 | ● |
| 5.0 | 450 | 175-220 | 106.5 | 25 | ● |