

ETC PH56S TENAX 56S



MMA Electrodes C-Mn and low-alloy steels

TENAX 56S is a basic coated low hydrogen MMA electrode with a very thin coating to improve joint access when root pass welding. The principal applications are related to the all positional welding of steels to BS 4360-50D or equivalent. Designed for pipe welding in position. The main applications are in the following industries, offshore oil and gas, petrochemical and power engineering. Efficiency 100%.

| Classification | | Approvals | Grade |
|----------------|------------------------|-----------|-----------|
| EN ISO | 2560-A: E 42 5 B 12 H5 | ABS | 4H5-4Y |
| EN | 499: E 42 5 B 12 H5 | BV | 3-3YHHH |
| AWS | A5.1: E 7016-1 H4 | DB | ● |
| GOST | 9467-75: ?50A-E51 6 | DNV | 4YH5 |
| | | GL | 3Y H5 |
| | | LRS | 3m 4Ym H5 |
| | | RINA | 4YH5 |
| | | TÜV | ● |

CE

Chemical analysis (Typical values in %)

| C | Mn | Si | P | S |
|------|-----|-----|--------|--------|
| 0.06 | 1.2 | 0.5 | ≤ 0.02 | ≤ 0.02 |

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 | 500-640 | ≥ 22 | ≥ 110 |
| 620 °C x 1h | ≥ 390 | 500-620 | ≥ 22 | ≥ 110 |

Materials

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

Storage

Keep dry and avoid condensation.

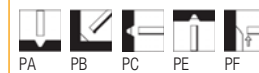
HD ≤ 5: Re-dry at 340-360 °C for 2 hours, 5 times max.

HD ≤ 10: Re-dry at 300-350 °C for 2 hours, 5 times max.

HD ≤ 10: Re-dry at 350-370 °C for 1 hour, 5 times max

Current condition and welding position

AC; DC-; DC+



Packaging data

| Diam. (mm) | Length (mm) | Current (A) | Approx. weight (kg/1000) | BOX | |
|------------|-------------|-------------|--------------------------|-----|-------------|
| | | | | PC | Code |
| 2.0 | 300 | 60-75 | 10.5 | 320 | - |
| 2.5 | 300 | 60-90 | 16.7 | 215 | - |
| 2.5 | 350 | 60-90 | 19.5 | 215 | ETC PH56S25 |
| 3.2 | 350 | 80-130 | 31.2 | 140 | ETC PH56S32 |
| 3.2 | 450 | 80-120 | 39.8 | 140 | - |
| 4.0 | 350 | 125-170 | 46.1 | 95 | - |
| 4.0 | 450 | 125-170 | 58.4 | 95 | ETC PH56S40 |
| 5.0 | 450 | 170-240 | 89.1 | 65 | ETC PH56S50 |

