

TIG welding rod and wire

| | |
|------------------------------|---|
| Features: | ▪ Its tensile strength after long time PWHT is high enough for 490MPa |
| Classification: | AWS A5.18 ER70S-6 |
| Shielding Gas: | Ar |
| Identification color: | 1st Black |
| Polarity: | DCEN |

Packaging data

| φ mm | Spool | | Tube | | |
|------------------|------------------|----|-----------------|---------|--|
| | kg | kg | Length mm | g/piece | |
| 0.8 | 10 | - | - | - | |
| 1.0 | 10 | - | - | - | |
| 1.2 | 10 | - | - | - | |
| 1.6 | - | 5 | 1,000 | 16 | |
| 2.0 | - | 5 | 1,000 | 25 | |
| 2.4 | - | 5 | 1,000 | 35 | |
| 3.2 | - | 5 | 1,000 | 63 | |
| Volume mm | 240W, 110H, 230L | | 40W, 35H, 1015L | | |

Composition (wire mass%)

| | Typical | Guaranty ^a |
|-----------|---------|-----------------------|
| C | 0.10 | 0.06~0.15 |
| Si | 0.86 | 0.80~1.15 |
| Mn | 1.56 | 1.40~1.85 |
| P | 0.012 | 0.025 |
| S | 0.012 | 0.035 |
| Ni | 0.01 | 0.15 |
| Cr | 0.02 | 0.15 |
| Mo | <0.01 | 0.15 |
| Cu | 0.24 | 0.50 |
| V | <0.01 | 0.03 |
| Al | <0.01 | - |
| Ti | <0.01 | - |
| Zr | <0.01 | - |

Note: ^aSingle values are maximum.

All-weld mechanical properties

| | Typical | | Guaranty |
|---------------------|---------------------|--------|----------|
| | 0.2%YS (MPa) | 510 | 420 |
| TS (MPa) | 610 | 550 | 483min. |
| EI on 4d (%) | 32 | 35 | 22min. |
| IV -29°C (J) | 210 | 160 | 27min. |
| PWHT (°C×h) | AW | 625x24 | AW |

Approvals

| | |
|------------|---------|
| TÜV | DIN8559 |
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