

TIG welding rod and wire**Classification:** ASME / AWS A5.18 ER70S-G**Features:**

- Good impact value at low temperatures
- Most widely used in Japan

Shielding Gas: Ar**Polarity:** DC-EN**Identification color:** Yellow**Chemical composition of rod and wire (%) as per AWS**

| | C | Si | Mn | P | S | Cu | Al | Ti | Zr |
|----------|-------|-------|-----------|--------|--------|-------|-------|-------|-------|
| Example | 0.10 | 0.74 | 1.40 | 0.009 | 0.010 | 0.24 | 0.01 | 0.01 | 0.01 |
| Guaranty | ≤0.12 | ≤0.95 | 1.00~1.50 | ≤0.025 | ≤0.025 | ≤0.50 | ≤0.15 | ≤0.15 | ≤0.12 |

Mechanical properties of all-weld metal as per AWS

| | 0.2%OS (MPa) | TS (MPa) | EI (%) | IV (J) | PWHT (°C×h) |
|----------|-----------------|-------------|-----------|------------|----------------|
| Example | 480 | 580 | 33 | -29°C: 180 | AW |
| | 380 | 500 | 36 | -29°C: 230 | 625x8 |
| Guaranty | ≥400 | ≥480 | ≥22 | -29°C≥27 | AW |

Approvals

| ABS | LR | DNV | BV | NK | CCS |
|-----------|----------|--------|-------|-----------|---------|
| 3, 3Y, MG | 3Ym(H15) | III YM | SA3YM | KSW53G(I) | 3, 3YSM |

Packages

| Dia. (mm) | Type | Weight (kg) | Length (mm) | Weight per piece (g) |
|--------------|-------|----------------|----------------|-------------------------|
| 0.8 | Spool | 10 | - | - |
| 1.0 | Spool | 10 | - | - |
| 1.2 | Spool | 10 | - | - |
| | Spool | 20 | - | - |
| | Tube | 5 | 1,000 | 9 |
| 1.6 | Spool | 10 | - | - |
| | Tube | 5 | 1,000 | 16 |
| 2.0 | Tube | 5 | 1,000 | 25 |
| 2.4 | Tube | 5 | 1,000 | 35 |
| 3.2 | Tube | 5 | 1,000 | 63 |