

**Classifications**

|               |                |            |               |
|---------------|----------------|------------|---------------|
| EN 636-A:2008 | : W 46 3 W3Si1 | JIS Z 3316 | : W 49 A 3U 6 |
| EN 636-B:2008 | : W 49A 3 U W6 | KS D 7140  | : YGT50       |
| AWS A5.18-05  | : ER70S-6      |            |               |

**Description**

- For mild steel and 490MPa tensile strength steel welding of structural steels, machineries and vehicles.
- Excellent mechanical and toughness properties in low temperature conditions.
- It is generally used in root pass welding of pipes in all positions.
- Proper tungsten electrode extension from the tip of torch is 4-6mm in general.

**Typical chemical composition of rod (%)**

| C    | Si   | Mn   | P     | S     |
|------|------|------|-------|-------|
| 0.07 | 0.82 | 1.52 | 0.012 | 0.015 |

**Typical mechanical properties of all-weld-metal**

|           | Y.S<br>(MPa) | T.S<br>(MPa) | El.<br>(%) | IV (J)<br>-30°C | Remarks |
|-----------|--------------|--------------|------------|-----------------|---------|
| AWS A5.18 | min. 400     | min. 480     | min. 22    | ≥ 27            | Ar      |
| EN 636-A  | min. 460     | 530~680      | min. 20    | ≥ 47            | Ar      |
| Example   | 490          | 580          | 30         | 130             | Ar      |

**Operating data**

|                |           |
|----------------|-----------|
| Dia.(mm)       | 2.4~3.2   |
| Current (Amp.) | 200 ~ 300 |

**Polarity and Shielding gas**

- DCEN (DC-)
- Ar : (15~25ℓ/min)

**Approvals**

| Shielding gas | ABS  | LR     | KR     |
|---------------|------|--------|--------|
| Ar            | 2YSA | 4YMH15 | RSW54G |