



J506Fe

Conform to GB/T 5117 E5018
 AWS A5.1 E7018
 ISO 2560-B-E 49 18 A

Instructions: J506Fe is carbon steel welding rod covered with iron powder low-hydrogen potassium coating, and it can be used under AC and DC. Since the coating contains iron powder, the deposition efficiency can be improved. Arc is stable, spatter is low, slag removal is easy, process performance is good, the deposited metal has good mechanical properties, and all-position welding is possible.

Purpose: It is used for welding of carbon steel and low-alloy steel structures, such as 16Mn.

Chemical composition of deposited metal (%)

| Items | C | Mn | Si | S | P | Ni | Cr | Mo | V |
|-----------------|--------|--------|--------|---------|---------|--------|--------|--------|--------|
| Guarantee value | ≤ 0.15 | ≤ 1.60 | ≤ 0.90 | ≤ 0.035 | ≤ 0.035 | ≤ 0.30 | ≤ 0.20 | ≤ 0.30 | ≤ 0.08 |
| Measured value | 0.077 | 1.07 | 0.54 | 0.005 | 0.014 | 0.011 | 0.028 | 0.007 | 0.016 |

Mechanical properties of deposited metal

| Test Items | R _m (MPa) | R _{eL} (MPa) | A(%) | KV ₂ (J) -30°C |
|-----------------|----------------------|-----------------------|------|------------------------------|
| Guarantee value | ≥ 490 | ≥ 400 | ≥ 20 | ≥ 27 |
| Measured value | 550 | 455 | 32 | 156 |

X-ray radiographic inspection requirements: Level I

Reference current (AC.DC⁺)

| Welding wire diameter (mm) | Φ2.5 | Φ3.2 | Φ4.0 | Φ5.0 |
|----------------------------|----------|----------|-----------|-----------|
| Welding Current (A) | 60 ~ 100 | 80 ~ 140 | 110 ~ 210 | 160 ~ 230 |

Precautions:

1. Welding rods must be baked at 350°C for 1h before welding and they shall be baked immediately before use.
2. the rust, oil stain, water and other impurities of the weldment must be removed before welding.
3. Short arc operation is required for welding and string bead is preferred.

Welding position:

