

AWS A5.5 E9015-G

Characteristics and Applications: AK-I607RH is a special low alloy steel electrode for pressure equipment with ultra -low hydrogen and high toughness, excellent welding performance, less spatter, beautiful shape, easy slag. It is used for welding 600MPA grade low alloy steel of pressure equipment with higher low temperature requirement, such as water, electricity and low temperature storage tank, or for welding between heat-resistant and low temperature low allov steel.

Note:

- 1. The electrode must be baked for one hour at 380-400 ° C before using.
- 2. Impurities such as water, oil and embroidery must be removed from the surface of the welding part.
- 3. Short arc narrow pass welding, the maximum swing should not exceed three times the line diameter.

Chemical composition of deposited metal (mass fraction):

| | С | Si | Mn | S | Р | Ni | Мо |
|---------------|-------|------|--------|-------|-------|-----------|-----------|
| Requirement | 0.10 | 0.80 | ≥ 1.00 | 0.015 | 0.025 | 0.60-1.20 | 0.10-0.40 |
| Actual Result | 0.068 | 0.45 | 1.30 | 0.010 | 0.016 | 0.90 | 0.20 |

The mechanical properties of deposited metal were (620 ± 15 ° CX1H)

| | Tensile strength (MPa) | Yield strength (MPa) | Elongation (%) | Impact function (J) |
|----------------|------------------------|----------------------|----------------|---------------------|
| GB/NB Standard | ≥ 590 | ≥490 | ≥ 16 | ≥27J/-20C |
| AWS Standard | ≥620 | ≥ 530 | ≥ 17 | |
| Actual Result | 640 | 540 | 27 | 120 |

Diffused hydrogen content of molten metal: ≤4.0mL/100g(mercury method or thermal conductivity method)

Molten metal X-ray detection requirements: Grade I

Recommended parameters: (Polarity: DC)

| Diameter/mm | | 2.5*300 | 3.2*350 | 4.0*400 | 5.0*400 |
|-------------|------|---------|---------|----------|---------|
| Current (A) | F/H | 70- 100 | 90-130 | 140- 180 | 170-200 |
| | V/OH | 60-90 | 80- 120 | 130- 170 | |