

## THJ422

Titania Type Electrode

ISO 2560-B-E4303 A

JIS D4303 (mod.)

GB/T 5117 E4303

### Applications:

It is suitable for welding of Rm 430MPa level low carbon steel structure.

### Characteristics:

THJ422 is a titania type electrode. Can be welding by both AC & DC power source and can be for all-position. It have excellent welding performance as stable arc, little spatter, easy slag removal and reignition-ability etc.

### Attention:

In generally, don't need to re-dry the electrode before welding. When it be affected with damp, should be re-dry it at 150°C-170°C for 0.5-1 hour.

### Chemical Composition of All Weld Metal:

(Wt. %)

| Items           | C     | Mn        | Si    | S      | P      | Ni    | Cr    | Mo    | V     |
|-----------------|-------|-----------|-------|--------|--------|-------|-------|-------|-------|
| Requirements    | ≤0.10 | 0.27-0.55 | ≤0.25 | ≤0.030 | ≤0.035 | ≤0.30 | ≤0.20 | ≤0.30 | ≤0.08 |
| Typical Results | 0.08  | 0.37      | 0.14  | 0.018  | 0.022  | 0.030 | 0.035 | 0.005 | 0.004 |

### Mechanical Properties of All Weld Metal:

| Items           | Rm/MPa  | Rel/Rp <sub>0.2</sub> /MPa | A/% | KV <sub>2</sub> (0°C) /J | KV <sub>2</sub> (-20°C) /J |
|-----------------|---------|----------------------------|-----|--------------------------|----------------------------|
| Requirements    | 430-560 | ≥330                       | ≥22 | ≥47                      | ≥47                        |
| Typical Results | 480     | 420                        | 28  | 80                       | 70                         |

### X-ray Radiographic Inspection:

Level II

### Typical Operating Procedures: (AC or DC)

| Diameter (mm) | 2.0   | 2.5   | 3.2    | 4.0     | 5.0     | 5.8     |
|---------------|-------|-------|--------|---------|---------|---------|
| Length (mm)   | 300   | 300   | 350    | 400     | 400     | 400     |
| Current (A)   | 40-70 | 60-90 | 90-140 | 160-210 | 220-270 | 260-310 |

### Classification Of Society Certification:

| Ship Inspection Agency | ABS | BV | CCS | HAKC  | DNV | LR | NK   | KR | RINA |
|------------------------|-----|----|-----|-------|-----|----|------|----|------|
| Recognition Level      | 3   | 3  | 3   | E4303 | 3   | 3m | KMW3 | 3  | 3    |

### Welding Positions:

