

FOR HEAT-
RESISTING STEEL

AWS E505-16
JIS DT2616
KS DT2616

K-505

Typical applications

Welding of super-heater tubes of high temperature and high pressure boilers, heater tubes of oil refining equipments.

Coating

Low hydrogen type.

Characteristics on Usage

- ① Preheat at 250~400°C and postheat treat at 730~780°C because of high self-hardening property of the deposited weld metal.
- ② Redry the electrode at 300~350°C for 60 minutes prior to use.

Typical chemical composition of all-weld-metal (%)

| C | Si | Mn | Cr | Mo |
|------|------|------|------|------|
| 0.08 | 0.74 | 0.98 | 8.48 | 0.90 |

Typical mechanical properties of all-weld-metal

| Temp. | Y · P N/mm ² {kgf/mm ² } | T · S N/mm ² {kgf/mm ² } | EI (%) | PWHT |
|-------|---|---|-----------|------------------|
| R.T | 480 {49} | 570 {58} | 30 | 850°C × 1hr. S·R |
| 500°C | 440 {45} | 490 {50} | 8 | |

Sizes available and recommended currents (AC or DC ⊕)

| Dia. | (mm) | 2.6 | 3.2 | 4.0 | 5.0 | 6.0 |
|--------|------|-------|--------|---------|---------|---------|
| Length | (mm) | 350 | 350 | 400 | 400 | 450 |
| Amp. | F | 55~90 | 75~115 | 120~160 | 160~220 | 210~260 |
| | V&OH | 50~60 | 70~110 | 90~150 | — | — |

Welding positions



Approved by