Flux Cored Wire for High Tensile Steels

AWS A5.20 E71T-1C BS EN ISO 17632 T42 2 P C 1 H10 JIS Z3313 YFW-C50DR CSA W48-01 E491T-1-H8 GB/T 10045 E501T-1

Type of Flux: Rutile

Welding Position: F, H, HF, OH, V, VD

Type of Current: DCEP

#### **Features & Applications**

CHT711 shows excellent welding performance and higher efficiency in welding. Vertical down welding could be applied. It is widely used in structures fabricated by equivalent mild steels and 490MPa grade high tensile strength steels, such as ships, pressure vessels, machineries, petrochemical industry equipments, bridges and so on.

### **Chemical Composition of Deposited Metal (%)**

| С        |       | Mn    | Si    | S     | P     |  |
|----------|-------|-------|-------|-------|-------|--|
| Standard | ≤0.18 | ≤1.75 | ≤0.90 | ≤0.03 | ≤0.03 |  |
| Typical  | 0.055 | 1.35  | 0.40  | 0.009 | 0.018 |  |

#### **Mechanical Properties of Deposited Metal (AW)**

|          | Yield Strength | Tensile Strength | Elongation | Impact Value (J) | Shield Gas    |  |
|----------|----------------|------------------|------------|------------------|---------------|--|
|          | ReH (MPa)      | Rm (MPa)         | A4 (%)     | -20 °C           | $CO_2$        |  |
| Standard | ≥400           | ≥480             | ≥22        | ≥27              |               |  |
| Typical  | 440            | 535              | 32         | 110              | purity≥99.98% |  |

The standard of mechanical properties conforms to shipping institutions and the certificate of inspection would follow it unless the purchaser has special requirement.

X-ray radiographic inspection: Grade I

**Diffusible hydrogen in deposited metal:** ≤10ml/100g (mercury process)

## **Recommended Current** (DC<sup>+</sup>)

| Diameter(mm) |       | 1.0    | 1.2     | 1.4     | 1.6     |  |
|--------------|-------|--------|---------|---------|---------|--|
|              | F     | 90-220 | 120-300 | 150-380 | 180-430 |  |
|              | HF    | 90-200 | 120-280 | 150-320 | 180-380 |  |
| Current (A)  | V, OH | 90-180 | 120-260 | 150-270 | 180-280 |  |
|              | Н     | 90-200 | 120-280 | 150-320 | 180-330 |  |
|              | VD    | 90-200 | 200-280 | 220-300 | 250-300 |  |

# Approvals

| Institute | CCS     | LR                   | ABS     | GL     | BV       | DNV        | NK                              | BKI    | KR           | CWB        |
|-----------|---------|----------------------|---------|--------|----------|------------|---------------------------------|--------|--------------|------------|
| Grade     | 3YSMH10 | 3YS, H10<br>3YM, H10 | 3YSAH10 | 3YH10S | SA3YMH10 | ■ YMS(H10) | KSW53G(C) H10<br>KAW53MG(C) H10 | 3YH10S | 3YSMG(C1)H10 | E491T-9-H8 |

Notice: 1) The flow rate of shield gas should within 20L-25L/min in welding.

- 2) The wire extention should be 15mm-25mm.
- 3) The surfaces to be welded must be cleaned away impurities of oil contamination, rust, moisture and so on.
- 4) The welding conditions mentioned above for reference only and it is better to do a welding procedure qualification according to project before put it into formal welding.



