

# **FCW 310**

High productivity 310 type Flux cored wire

## Classification

AWS A5.22 : ~E310T0-1/-4

ISO 17633-A : T 25 20 R M21(C1) 3

#### **Description & Applications**

Flux cored wire for gas shielded (Ar + CO<sub>2</sub>) arc welding for 310 type stainless steel and adapted for welding dissimilar steels as heat resistant steels to stainless steels. Deposit resisting to corrosion and oxidation up to 1100°C and against hot cracks. High deposit rate in flat position. Could be used in positions.

**Main applications:** Ovens, boilers, thermal equipment for heat treatment, chemical and petrochemical installations.

| Typical Chemical Composition (%) |      |          |     |      |      |      |          |          |       |
|----------------------------------|------|----------|-----|------|------|------|----------|----------|-------|
| I                                | C    | Si       | Mn  | Cr   | Ni   | Мо   | Cu       | P        | S     |
| Min                              | 0.06 | <u> </u> | 1.0 | 23.0 | 18.0 | 1010 | <u> </u> | <u> </u> |       |
| Max                              | 0.20 | 1.2      | 5.0 | 27.0 | 22.0 | 0.3  | 0.5      | 0.030    | 0.025 |
| Type                             | 0.12 | 0.50     | 2.4 | 24.0 | 20.5 | 0.25 | 0.10     | 0.020    | 0.008 |

### **All Weld Metal Mechanical Properties**

|      | R <sub>p0.2</sub> ( MPa ) | $R_{m}$ (MPa) | A <sub>5</sub> (%) | KV (  | J ) |
|------|---------------------------|---------------|--------------------|-------|-----|
| Min  | 350                       | 550           | 20                 |       |     |
| Max  |                           |               |                    |       |     |
| Type | 410                       | 580           | 30                 | +20°C | 50  |

#### **Welding Current & Instructions**

| Welding mode  | Wire Ø     | V                      | Shielding Gas      |                    |   |
|---------------|------------|------------------------|--------------------|--------------------|---|
| vveiding mode | (mm)       | Current (A)            | Voltage (V)        | Stick out (mm)     | Silleluling Gas   |
| FCAW<br>= +   | 1.2<br>1.6 | 100 - 280<br>150 - 400 | 23 - 33<br>23 - 35 | 10 - 25<br>10 - 25 | ISO 14175 :<br>M21 (Ar/CO <sub>2</sub> )<br>12 - 20 l/min |

