## SC-110M Cored

TYPE: Metal-Cored

#### **Applications**

Single and multipass welding of high strength low alloy steels, such as HY-80, and HY-100.

#### Characteristics on Usage

SC-110M Cored is a metal cored wire which provides an exceptionally smooth and stable arc, low spatter and minimal slag coverage.

#### **Notes on Usage**

- ① Proper preheating(50~150℃)(122~302℃) and interpass temperature must be used in order to release hydrogen which may cause cracking in weld metal when electrodes are used for medium and heavy plates.
- ② One-side welding defects such as hot cracking may occur with wrong welding parameter such as high welding speed.
- 3 Use Ar+20-25% CO2 gas.

| Welding Position   | Current | Shielding Gas            |  |  |
|--------------------|---------|--------------------------|--|--|
|                    | DC +    | Ar+20~25%CO <sub>2</sub> |  |  |
| 1G 2F<br>(PA) (PB) |         |                          |  |  |

#### Typical Chemical Composition of All-Weld Metal (%)

| С    | Si   | Mn   | Р     | S     | Ni  | Cr   | Мо   |
|------|------|------|-------|-------|-----|------|------|
| 0.04 | 0.70 | 1.80 | 0.015 | 0.015 | 2.0 | 0.10 | 0.60 |

### Typical Mechanical Properties of All-Weld Metal

| YS            | TS            | EL  | Temp.     | CVN-Impact Value |
|---------------|---------------|-----|-----------|------------------|
| MPa(lbs/in²)  | MPa(lbs/in²)  | (%) | ℃ (°F)    | J (ft · Ibs)     |
| 760 (110,200) | 820 (119,000) | 20  | -51 (-60) | 45 (34)          |

| Approval | I Packing |      |           |      |    |    |
|----------|-----------|------|-----------|------|----|----|
|          | Dia. (mm) | 1.2  | Spool(kg) | 12.5 | 15 | 20 |
|          | (in)      | .045 | (lbs)     | 28   | 33 | 44 |

# Sizes Available and Recommended Currents (Amp.) Size mm (in) 1.2 (.045) F & HF 220 ~ 290