TYPE: Rutile

### **Applications**

All position welding of building, shipbuilding, bridge construction machinery, and vehicles.

#### Characteristics on Usage

SC-71LH is titania type flux cored wire for all position welding. It has extra low hydrogen levels(H5) and provide an exceptionally smooth and stable arc with a fast freezing slag system.

#### **Notes on Usage**

- ① Proper Preheating(50~150℃)(122~302°F) 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 100% CO, gas.

| Welding Position     | Current | Shielding Gas   |
|----------------------|---------|-----------------|
| 1G 2F 3G 4G          | DC+     | CO <sub>2</sub> |
| (PA) (PB)(PF.PG)(PE) |         |                 |

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

| С    | Si   | Mn   | Р     | S     |
|------|------|------|-------|-------|
| 0.06 | 0.47 | 1.35 | 0.014 | 0.012 |

## Typical Mechanical Properties of All-Weld Metal

| YS           | TS           | EL  | Temp.     | CVN-Impact Value |
|--------------|--------------|-----|-----------|------------------|
| MPa(lbs/in²) | MPa(lbs/in²) | (%) | ℃ (°F)    | J (ft · lbs)     |
| 550 (79,800) | 590 (85,600) | 27  | -30 (-22) | 70 (52)          |

| Approval              | l Packing(Including Ball Pac) |      |      |      |           |      |    |    |
|-----------------------|-------------------------------|------|------|------|-----------|------|----|----|
| ABS, BV, DNV, NK, LR, | Dia. (mm)                     | 1.2  | 1.4  | 1.6  | Spool(kg) | 12.5 | 15 | 20 |
| GL, KR, RINA          | (in)                          | .045 | .052 | 1/16 | (lbs)     | 28   | 33 | 44 |

| Sizes Available and Recommended Currents (Amp.) |            |            |            |  |
|---|------------|------------|------------|--|
| Size mm (in)                                    | 1.2 (.045) | 1.4 (.052) | 1.6 (1/16) |  |
| F & HF  | 220~290    | 240~320    | 260~330    |  |
| V-up,OH   | 180~250    | 200~260    | 230~290    |  |
| V-down  | 210~290    | 250~320    | 270~330    |  |