

## FLUX CORED WIRES FOR LOW TEMPERATURE LOW ALLOY STEEL

### DESCRIPTION & APPLICATIONS :

- SFC-91M is a 620N/mm<sup>2</sup> grade low alloy steel metal core wire.
- Suitable for ship body, storage tank, engineering machinery, bridge structure, steel structure, and pipe.

### NOTE ON USAGE :

- Use CO<sub>2</sub> gas (min. 99.8%) G.F.R: 15~25 l/min. 80%Ar+20%CO<sub>2</sub> can also be used to get better weldability.

### WELDING POSITION :



### TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) : (80%Ar+20%CO<sub>2</sub>)

| C     | Mn   | Si   | P     | S     | Ni   | Mo   |
|-------|------|------|-------|-------|------|------|
| 0.030 | 1.06 | 0.26 | 0.008 | 0.005 | 2.61 | 0.42 |

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL: (80%Ar+20%CO<sub>2</sub>)

| YIELD POINT<br>N/mm <sup>2</sup> (Kgf/mm <sup>2</sup> ) | TENSILE STRENGTH<br>N/mm <sup>2</sup> (Kgf/mm <sup>2</sup> ) | ELONGATION RATE<br>% | IMPACT VALUES -51 °C<br>J(Kgf-m) |
|---------------------------------------------------------|--------------------------------------------------------------|----------------------|----------------------------------|
| 652(66.5)                                               | 713(72.8)                                                    | 21                   | 50(5.1)                          |

### SIZE AND RECOMMENDED CURRENT RANGE : DC(+)

| Parameters \ Diameter (mm) | 1.2     |        | 1.4     |         | 1.6     |         |
|----------------------------|---------|--------|---------|---------|---------|---------|
|                            | F/H     | V/OH   | F/H     | V/OH    | F/H     | V/OH    |
| Voltage (Volt)             | 23-34   | 18-23  | 24-36   | 20-23   | 26-38   | 20-23   |
| Current (Amp)              | 150-300 | 80-150 | 180-350 | 100-150 | 200-400 | 100-150 |
| Stickout (m/m)             | 10-15   |        | 15-20   |         | 15-30   |         |
| Gas flow (l/min)           | 15-25   |        | 15-25   |         | 20-25   |         |