# SUBMERGED ARC WELDING WIRE AND FLUX FOR 490N/mm<sup>2</sup> HIGH TENSILE STEEL

#### **DESCRIPTION & APPLICATIONS:**

- Suitable for thickness plates in deep groove applications. It is designed for multi-pass welds.
- Typical applications include pressure vessels, ship building, bridge and steel structures.

#### **NOTE ON USAGE:**

- SF-65 is a neutral flux and need to be re-dry at 350°C for 1hr prior to use.
- Lower current is recommended for welding first pass.
- Appropriate new flux is required to add with the recycling used flux for maintain the welding quality.

## TYPICAL CHEMICAL COMPOSITION OF WELD METAL:

| С    | Mn   | Si   | P     | S     |
|------|------|------|-------|-------|
| 0.05 | 1.80 | 0.60 | 0.016 | 0.008 |

## TYPICAL MECHANICAL PROPERTIES OF WELD METAL:

| OI WELD MEIAL        |   |  |  |
|----------------------|---|--|--|
| YP<br>N/mm²(Kgf/mm²) |   | TS<br>N/mm <sup>2</sup> (Kgf/mm <sup>2</sup> ) |  |
| 500(51.0)            |   | 585(59.7)                                      |  |
| <b>EL</b><br>%       |   | IV -30°C/-40°C<br>J(Kgf-m)                     |  |
| 28                   | ć | 57(6.8)/48(4.9)                                |  |

# SF-66×SW-M12K

AWS A5.17 F7A4/P4-EM12K EN ISO 14171-A S 42 5 FB S2Si GB T5293 F5A4/P4-H08MnA

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### TYPICAL CHEMICAL COMPOSITION OF WELD METAL:

| С    | Mn   | Si   | P     | S     |
|------|------|------|-------|-------|
| 0.07 | 1.51 | 0.42 | 0.018 | 0.015 |

## TYPICAL MECHANICAL PROPERTIES OF WELD METAL:

| YP<br>N/mm²(Kgf/mm²)         |           | TS<br>(Kgf/mm²)   | EL<br>% |
|------------------------------|-----------|-------------------|---------|
| 460(46.9)                    | 560       | (5 <i>7</i> .1)   | 30      |
| 425(43.4)                    | 515(52.5) |                   | 29      |
| IV -30 °C/-50 °C<br>J(Kgf-m) |           | HEAT<br>TREATMENT |         |
| 90(9.2)/70(7.1)              |           | Welding process   |         |
|                              |           | 620°Cx1hr         |         |