# **STRONG FLUX – 10G** FLUX FOR SUBMERGED ARC WELDING CLASSIFICATION: AWS SFA 5.17 F7AZ-EL8, F7A4-EM12K, F7A4-EH14



## **CHARACTERISTICS**

STRONG FLUX 10G is an agglomerated fluoride basic type flux mainly for welding of General Structural Steels and Pressure vessel steels. The behavior in terms of Mn is neutral while slight Si pick-up occurs hence use with medium & high Mn wires is recommended. This flux offers good slag detachability along with uniform and smooth weld bead finish. The flux has low moisture pick-up tendency, hence weld metal diffusible hydrogen is low.

#### **APPLICATIONS**

Fine Grain Steels, General Structural Steels, API grades pipes, Penstock shells, Pressure vessels and boilers involving Medium and High strength Steels.

#### **CURRENT CARRYING CAPACITY**

This flux exhibits stable operating characteristics up-to 1000 amps. Flux is suitable for use with both AC and DC for single wire, Twin wire and tandem wire (AC/DC).

FLUX TYPE - Fluoride Basic BASICITY INDEX - 1.8 (Boniszewski) GRAIN SIZE - 15-35 MESHES

**COMPOSITION OF THE FLUX (%)** 

| SiO2 + TiO2 | CaO + MgO | Al2O3 +<br>MnO | CaF2      | S         | Ρ         |
|-------------|-----------|----------------|-----------|-----------|-----------|
| 18.0-25.0   | 28.0-35.0 | 23.0-30.0      | 16.0-25.0 | 0.035 MAX | 0.040 MAX |

### **ALL WELD MECHANICAL PROPERTIES**

| SAW WIRE | с    | Mn   | Si   | S     | Ρ     | Cu   | Y.S. | U.T.S. | ELONGATION<br>(L=4D) | CHAR<br>NOTCH | РҮ V<br>ІМРАСТ |
|----------|------|------|------|-------|-------|------|------|--------|----------------------|---------------|----------------|
|          | %    |      |      |       |       |      | МРа  | МРа    | %                    | -18°C         | -40°C          |
| EL8      | 0.05 | 0.55 | 0.15 | 0.025 | 0.025 | 0.25 | 350  | 440    | >29                  | >75           | -              |
| EM12K    | 0.07 | 1.20 | 0.40 | 0.025 | 0.025 | 0.30 | 430  | 545    | >30                  | >60           | >40            |
| EH14     | 0.08 | 1.50 | 0.25 | 0.025 | 0.025 | 0.30 | 445  | 560    | >28                  | >60           | >50            |

WELDING PARAMETERS - Current up-to 1000 amps, Voltage: 24-34 V, Speed: Up-to 1.00 mts/min.

PACKAGING SPECIFICATION - In 25 kg Paper / PP Bag with Plastic liner.

**RE-DRYING CONDITION - Recommended at 300° - 350°C for 2 hours.** 

