

## SOMERVILLE type SCREEN FRACTIONATOR SF-10

**Description: For determination of the shive content in Paper Pulp**

According to standards: TAPPI T 275 - TAPPI UM 242...

The Somerville Screen is designed to ensure that no fibre useful for papermaking is included in the shive content and that no significant fibre bundles are present in the accepted stock. Although originally designed for determining shive in groundwood pulps, the method is applicable to all mechanical pulps and chemical pulps. It is also used extensively for determining the contraries (stickies) remaining in recycled waste furnishes.

Chunky fibers may cause difficulties in the paper machine's press section and during drying. Designed in accordance with second report of the **Pulp Evaluation Committee to the Technical Section of Paper Makers Association** and complies with TAPPI 275

The purpose of this method is to separate contaminants such as shives in mechanical pulp, and macro stickies, plastics, sand, metal pieces, and flakes in recycled fiber from pulp fibers for subsequent examination and/or quantification. This method employs a screening device and the separation is based on size difference between fibers and contaminants.

The mechanism gives vibration to digested pulp placed inside the screen box through the bottom screen resting on the rubber diaphragm, sucks them toward the screen plate and discharges them, alternately repeating, promoting passage of digested fibers and sifting through good quality pulp.



### APPLICATIONS

Shive analysis of pulps, separation of stickies and plastics from recycled fibres

- |                                   |   |
|-----------------------------------|---|
| ❖ Rectangular brass screen plate: | Size 305 X 254 mm.  |
| ❖ Screen Slits:                   | Length $45 \pm 0,5$ mm, width $0.15 \text{ mm} + 0.005 / -0,01$ mm (0.140 to 0.155 mm)  |
| ❖ Number of Slits:                | 756 (in 6 columns of 126 slits each)  |
| ❖ Rubber diaphragm: actuation:    | $3.2 \pm 0.1$ mm by eccentric drive at a speed of 690-700 rpm.  |
| ❖ Water flow rate :               | Water flow rate controlled through a calibrated flushing nozzles located in the centre of the screen with a flow rate of 8.6 litre/min. at $1.23 \text{ Kg/cm}^2$ . |
| ❖ Applicable standards            | TAPPI 275   |

### Two equipments in one

**OPTIONAL : Cod. 6912 FLAT SCREEN ROUND HOLE for Somerville (Hole size 2mm or 3mm each)**

With this screen can be turned into a Flat Screen equipment to be used for refining digested pulp and measuring knots.

#### CONNECTIONS:

Electrical: 380 V three-phase 50 or 60 Hz (0,2 HP)

#### DIMENSIONS AND WEIGHT:

Dimensions: 460 x 500 x 1320 mm (W x D x H)

Box for transport: 800 x 800 x 1800 mm (W x D x H)

Weight Net/Gross: 150 Kg / 230 Kg

#### DELIVERY CONTENT:

> Somerville type Screen Fractionator SF-10 model