



Equipment for manufacturing (forming) standard wet sheets of paper in the laboratory





# MANUAL SHEET FORMER "TAPPI" FTH-1

#### **APPLICABLE STANDARDS**

ISO 5269/1 - TAPPI T205 - SCAN C26 - PAPTAC C4

#### **GENERAL INFORMATION**

In order to know the physical-mechanical and optical properties of paper, cardboard and similar sheet materials, it is necessary to manufacture them in the laboratory with a fast and reliable method that allows a fast sheet making sequence under similar conditions.

24 grams of paste are diluted in 2000 ml of distilled or deionized water, and disintegrated in a standard Disintegrator. Once the paste has disintegrated, water is added up to a total of 8 liters. Gently stirring the suspension, 400 ml are withdrawn. For each sheet to be manufactured.

To form a sheet of paper, the forming cylinder is half filled and the prepared sample is poured. Water is added, opening the water inlet valve of the former, until reaching the upper mark on the cylinder. We insert the perforated shaker and shake from top to bottom, 5 times for 6 seconds. Repeat this action for 6 times in 6 seconds and carefully remove the stirrer. Wait 5 seconds, before opening the water evacuation valve.

This evacuation by gravity causes a small vacuum, which removes more water from the sheet of paper itself. Using blotting paper and the roller, the formed sheet of paper is removed. We perform this process as many times as test paper sheets are needed in the laboratory.

The sheets obtained in the former are pressed in a laboratory press and then dried, ready to be tested.

## **SPECIFICATIONS**

- Sheet size: 159 mm. diameter
- Upper fabric: 150 mesh according to TAPPI
- Bottom support fabric: 20 mesh
- Suction height: 800 mm.
- Made of stainless steel
- Drainage time:  $3.8 \pm 0.2$  seconds, at 20 °C  $\pm 1$  °C

#### **ACCESSORIES INCLUDED IN THE STANDARD SUPPLY:**

- Manual stirrer,
- Roller
- Plate,
- 16 mirror polished stainless steel discs on one side
- 17 thermoset plastic rings for drying the sheets of paper, perforated to allow air circulation and stackable





**EQUIPMENT DIMENSIONS:** 350 x 350 x 1400 mm (W x D x H)

**NET WEIGHT:** 70 Kg

**DIMENSIONS OF TRANSPORT PACKAGING:** 1600 x 460 x 800 mm (W x D x H) **GROSS WEIGHT:** 120 Kg (Wooden packaging with phytosanitary treatment)

### STANDARD SUPPLY CONTENT:

- \* Standard Paper Sheet Former TAPPI FTH-1
- \* Manual stirrer
- \* Couch Roll
- \* Couch plate
- \* 16 stainless steel polished discs
- \* 17 Thermosetting Plastic Drying stackable perforated rings to allow conditioned air to flow through.

**OPTIONAL**: White Water Recirculation System model WR-01

