

# LABORATORY "VALLEY" BEATER VB-50 model

For laboratory use in the refining process of pulp under standard conditions.





## LABORATORY "VALLEY" BEATER VB-50 model

#### **APPLICABLE STANDARDS:**

ISO 5264/1 - SCAN C 25 - TAPPI T200 & 205 - PAPTAC C.2

#### **GENERAL INFORMATION**

This procedure is used to define the paper quality of the pulp, subjecting it to a controlled mechanical treatment in a laboratory refiner.

The VALLEY method VB-20 Laboratory Refiner is used in addition to determining the quality of celluloses in the market, in research studies, to evaluate new pulps and to provide a basis for process control when using different types of pulps in papermaking.

#### **TEST DESCRIPTION**

360 grams of moistened paper pulp are chopped into pieces approximately 25 x 25 mm in size. The sample is diluted in 23 liters of water and the suspension is poured into the refining cell.

Before placing the weights on the lever, it is advisable to take a raw sample to have a set of test sheets. During refining, the first sample is taken after 5 minutes, and the following after every 15 minutes (sulphite pulps) or 20 minutes (Kraft pulps), until reaching or exceeding the maximum power.

Uniform paper sheets can be made from these samples in the sheet former to be tested. Now the different refining curves can be traced by means of which the pulps can be classified. These curves show not only the final effort of the paste, but also the ratio of effort developed, which is of greater importance.

- Refining vessel made of stainless steel
- Good refining pressure reproducibility, adjustable by means of weights
- Volume of the refining tank 25 liters
- It allows calculating the power used to obtain the desired degree of refining
- Maximum sample capacity 360 g
- Carry out mass coloring and gluing tests
- Engine stop sensor, by opening the cover.
- Safety cover according to CE standards



#### **SPECIFICATION**

- Speed of the refining roller: 500 r.p.m.
- Tank with a capacity of 25 liters, made of 18/8 stainless steel
- Adjustable refining pressure by means of weights
- Control panel with:
  - ✓ Digital AMMETER, to follow during the refining the variations in electricity consumption produced by the different pulps, different concentrations and / or pressures on the refining mill.
  - ✓ TIMER / ALARM: Automatically disconnects and warns at the end of the test.



POWER SUPPLY: 230V/60Hz or 380V/50Hz triphasic REFINER DIMENSIONS: 1550 x 750 x 1200 mm (W x D X H) NET WEIGHT APPROX.: 200 Kg TRANSPORT PACKAGING DIMENSIONS: 1640 x 920 x 1450 mm (W x D X H) GROSS WEIGHT: 360 Kg (Wood packaging with phytosanitary treatment)

### CONTENTS OF THE STANDARD SUPPLY:

- \* Laboratory refiner type VALLEY model VB-50
- \* Additional weights