This automated laboratory beater allows a fast beating of pulps as a previous step to determine the characteristics of those pulps. It can be used for routine beating as well as for research and development purposes.

Operation

The PFI mill consists of 2 rollers - a stainless steel roll with chiselled bars and a stainless steel bed plate in the form of a container with a smooth cylindrical internal wall, into which the pulp is charged. Both bed plate and roll rotate on independent vertical axes in the same direction, the roll rotating faster than the bed plate.

Pressure and distance conditions between the beating elements may be varied to abide with different standards. The unit is equipped with an automatic counter of cycles to register the number of revolutions and it displays the power consumption of the beating elements.

Features

• Excellent repeatability
• Programmable test variables
• Automatic up and down of the beating cylinder
• Test revolutions digital programmable counter with automatic stop
• Safety system includes transparent guard that pivots up for easy cleaning and down for refining - two-hand operation makes lowering the beater into the bowl safe for the operator
• Independent controls for the roll and bed plate movements (difference in peripheral speeds: 6 ± 0.2 m/s)
• "Soft starters" greatly reduce startup kick
• Auto key switch for calibration mode
Physical specifications

Equipment
Modern design (ergonomic) of easy cleaning and functioning, with all the measurement and actioning tools integrated into the console table. The whole equipment has been painted with high quality enamel oven dried, which allows to maintain the equipment in good conditions for a long time. All rotating parts are made of stainless steel.

Dimensions
61 x 80 x 125 cm (WxDxH)

Net Weight
345 kg

Standards

ISO 5264/2, TAPPI T-248, SCAN C24, CPPA C7, EN 25264-2

Every PFI beater is inspected and calibrated by University Paper Engineering School

Performance data

Pulp
5.0 to 40 g pulp can be beaten in concentrations between 5 and 50 % (max. 450 ml suspension)

Beating pressure
Adjustable from 1.0 to 5.5 N per mm of bar length

Display
Triple display for:
- current hour recorder
- electrical features
- absorbed power in W (continuous measure)
- consumed energy in Kw/h during the beating process

Display shows roll revolutions and the beating pressure in N/mm

Power supply
220/380 V, 50/60 Hz, three-phase