# Laboratory BEATER “PFI” type NPFI-02 model

For use in the laboratory for beating of chemical pulps under standardized conditions
and also for the defibration of semi-digested raw material fibres

Applicable standards: ISO 5264/2 - DIN-EN 25264-2 - SCAN C 24 - TAPPI T248 - PAPTAC C.7

For use in the laboratory for beating of chemical pulps under standardized conditions and also for the defibration of semi-digested raw material fibres.

The beating elements of the mill consist of a roll with chiselled bars and a circular smooth bedplate, both made of staniless steel. The roll and the bedplate are independently driven and rotate in the same direction but the roll has a higher peripheral speed.

Beating conditions, such as the pulp consistency, beating pressure and distance between the beating elements may be varied within wide limits. The mill beater is equiped with a digital counter to register of roll revolution during a beating test.

- Absorbed power in Watt (continuous measure)
- Consumed energy in kW/h, during the beating process
- High economic for a fast operation and small volume of pulp (30 g)
- Can beat from 5 to 40 g of pulp in concentrations from 5 to 50 % (max. 450 ml of suspension)
- Excellent repetitive to be used in quality control and research
- Security element protection for the user and equipment
- Up and down beater cylinder by electric automatic operation

TECHLAB SYSTEMS, S.L.
Head Office: Txatxamendi 10, Pol. 110 – 20100 Lezo – SPAIN
US Office: 1549 Ardmore Ave. –Itasca, Illinois 60143 USA
www.techlabsystems.com

DESCRIPTION

The cylindrical container turns at 720 +/- 20 r.p.m and the beater roll with 33 bars at 1440 +/- 30 r.p.m both in the same direction. The beater roll is pressed against the container wall with 3,33 N/mm of bar length. The pulp is beaten due to the pressure between the wall and the bars. The beating time is between 2 and 10 minutes according to the kind of pulp.

WORKING PROCESS

A weighed and disintegrated pulp sample is put into the container. By hand the pulp sample is pressed evenly to the outside wall of the container. The swivelling beating head is placed over the container and the beating procedure starts when the head is lower into the container. By moving the hand lever the beating head presses against the container wall. Due to the pulp there is no direct contact between the metal parts. Now the machine beats to the preset number of revolutions. After reaching the adjusted number of revolutions the machine stops and the beating procedure ends. The head is moved again into the lateral position, the pulp is taken out of the mill and the SR value and/or the CSF value is determined.

SPECIFICATIONS

- Beater roll and housing are made of stainless steel
- Timing-belt driven roll and housing
- After pressing “Start” the mill automatically starts the beating programme
- Pre-selection of the beater roll revolutions
- Adjustable beating-gap
- Triple display for :
- Current hour recording
- Electrical features
- Absorbed power in Watt (continuous measure)
- Consumed energy in kW/h, during the beating process

Every PFI Beater is inspected and calibrated in its features and functions. As calibration standard is used reference pulp from PAPRICAN Institute in Canada.

CONNECTIONS:
Electrical: 230V / 60 Hz or 380V / 50 Hz 3-Phase

DELIVERY CONTENT:
> PFI Mill NPFI-02 model
> Standard test pulp from PAPRICAN Canada
> Additional weight

DIMENSIONS AND WEIGHTD

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|---|---|
| Dimensions: | 660 x 755 x 1700 mm (W x D x H) |
| Box for Transport : | 1100 x 940 x 1950 mm (W x D x H) |
| Weight Net/Gross | 380 Kg / 550 Kg |

* TECHLAB SYSTEMS reserves the right to do any technique modification without advance notice

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