

No. 2076

## Klemm tester

This tester is designed to offer easy measurement of absorptiveness of liquids such as water, ink, oil and the like, and suitably used for towel paper, toilet thin paper of high absorptiveness. The specimen is suspended from the top of the pad containing liquid. After a certain span of time, the level of absorbed liquid is measured to the nearest millimeters.

**Specimen:** 15mm wide x 180mm long, 8 specimens mountable.

**Scale:** 200mm (1mm increment)

**Referential standard:** JIS P-8141-2004

**Outer dimensions:** 370 x 150 x 400mm

**Instrument weight:** 4kg



Absorption/Expansion

No.2077

## Fenchel expansion meter

This machine is designed to measure expansion of a paper sheet or paperboard sheet by immersing the paper in water. The specimen is fixed with the upper and lower clamps. From the upper clamp, a weight is suspended via a pulley, with the thread linked to a dial gauge. With this weight, a certain amount of tension is given to the specimen that is in the water for a certain span of time. Expansion of the specimen is indicated on the gauge.

There are two pipes on the upper lid, enabling to monitor dimensional stability of a specimen with changing relative humidity, under the circulation of the air of a constant humidity in the container.

**Specimen:** 15mm wide, 150mm long and span 100mm

**Maximum expansion:**  $\pm 10$ mm, 1/100mm accuracy

**Measurement gauge:** digital type

**Weights:** 5, 10, 20, 50, 100g

**Immersion time:** 5 minutes for paper, 10 minutes for paperboard

**Recorder (optional):** able to record changes in expansion.

**Referential standards:** J. TAPPI No. 27-2000, ISO 5635

**Outer dimensions:** 250 x 310 x 890mm

**Instrument weight:** 14kg

