

No.2061

High pressure densometer

This machine has a configuration similar to the standard densometer, except that mercury is used instead of oil. The inner cylinder of a specified mass gradually moves downwards in the outer cylinder filled with a specified volume of mercury. The time necessary for a specified volume air pass thorough the specimen is measured. The high pressure type is suitable for impermeable materials such as coated paper, which needs 60 to 75 seconds for making 100cc air pass through the specimen on the standard densometer. Higher air pressure shortens the measurement time.

Air pressure: High pressure type Standard type

Downward movement:1cm 12.45cm
Measurement air volume:10cc 100cc
Maximum air volume:30cc 350cc
Minimum air volume:2.5cc 25cc
Circular area: 645.16mm² 645.16mm²

Referential standard: TAPPI T536cm-96 **Outer dimensions:**180 × 255 × 525mm

Instrument weight:15kg



No.2062

Gurley-hill SPS tester

This machine was developed for evaluation of printability of papers according to the US TAPPI standard. It readily measures three characteristics, that is, air permeability, smoothness and flexibility. Its configuration is similar to the standard densometer. Particular attachments are used on the lower orifice plate. Under air pressure of the cylinder, air leaks across the paper layers and through the interstices of several specimens, or through the interval between special plug and specimen. The time necessary for allowing leakage of the specified volume of air is measured to evaluate the three characteristics.

Effective area for air permeability: 645.16mm² Contact area for smoothness: 645.16mm² Contact area for flexibility: 645.16mm² Contact pressure of smoothness: 0.21kg/cm²

Accessory: punch

Referential standards: JIS P-8117-2009, TAPPI T460cm-02 for air

permeability, TAPPI UM574 for smoothness

Outer dimensions: $230 \times 320 \times 460 \text{mm}$

Instrument weight: 15kg