

Permeability Profiler

Description

Paper capillary and porosity structure determine gas and fluid penetration and propagation potential and characteristics in media, thus having an impact in e.g. coating, printing, gluing, impregnation and laminating quality, as well as handling of paper and board sheets.

The novel AMBERTEC permeability analysis method allows fast and accurate measurement of permeability characteristics of all sheeted materials.

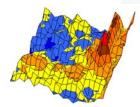
Thus samples of different paper grades, produced by different processes using different raw materials can reliably be ranked and compared.

The AMBERTEC Permeability Profiler can measure permeability in paper and board with a very high 1.0 mm spatial resolution. It is then possible to obtain detailed maps of gas permeability variations within paper and board samples.

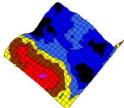
AMBERTEC Permeability Profiler has been designed to measure automatically cross-directional sample strips or sample sheets: simply load in the sample and press start button. In the default routine measurement sample permeability is measured at 400 points over an area of 70 x 70 mm. After completed measurement the results are stored into a database and sent automatically to mill computer or reported to given e-mail recipients.



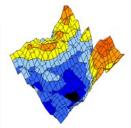
Uncoated fine paper.



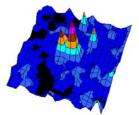
Coated fine paper.



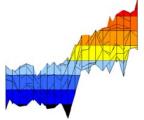
Board.



Windbreaker/non-woven.



Defects - Pin holes.



Non-printed/printed.

Technical specifications

Operation principle: Patented AMBERTEC Gas Permeability measurement

Stepping scanner (specimen is stationary during measurement)

Automatic profiling or single sheet measurement

Basis weight range: $0 - 500 \text{ g/m}^2$

Sample type: Single or multiple sheets, CD profile strips
Width of sample: 210 mm max (ISO A4 format sheet)
Measuring area: Default measuring area 70 x 70 mm

Selectable; width 70 mm max, length up to length of the sample

Distance between measuring points: Freely selectable in both X- and Y-directions

Number of points per measurement: 400 (default), selectable Measuring aperture: 1 mm in diameter

Pneumatic: Instrument air, 7 bar (0 l/min)
Electrical: 110...230 VAC, 50/60 Hz, 350 VA

Dimensions: 450 mm (width) x 600 mm (length) x 700 mm (height)

Weight: 40 kg

Shipping dimensions: 800 mm (width) x 600 mm (length) x 600 mm (height)

Shipping weight: 60 kg