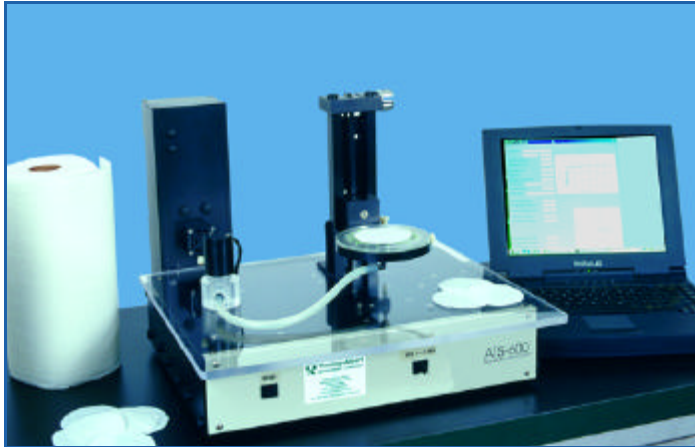


ATS-600 Absorbency Testing System



The ATS-600 is a table top instrument that measures the absorption and desorption rate and total capacity of absorbent materials. Absorption is measured based on time and the amount of fluid displaced from a fluid reservoir. The Desorption test can be run after the absorption test and measures the amount of fluid that is removed from the sample.

The ATS-600 Absorbency Testing System is ideal for research and development as well as quality control applications. Its small size and rugged design make it suitable for both the laboratory and the production floor.

Specific applications include paper products, sanitary products, super absorbers and nonwovens.

Operation

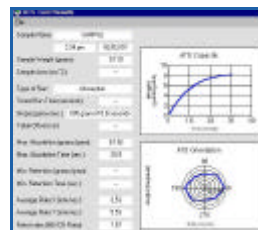
A sample is placed on the test table which is connected to a liquid reservoir by a tube. A highly accurate and reliable optical sensor checks and zeros the fluid level at the beginning of a test to ensure accuracy. The optical system also monitors the fluid reservoir during a test and maintains a constant fluid level at a preset differential head ensuring high sample throughput and virtually limitless absorption capacity.

Unlike competitive systems utilizing electronic balances that are difficult to calibrate and expensive to repair, the optical sensor requires no calibration and is virtually maintenance free.

Once the fluid level is zeroed, a small pulse of fluid is emitted through the tube and is absorbed by the sample to start the test. The test cycle may be given a time limit or terminated when a preset rate of absorption is reached. Operator introduced variations are eliminated with this system as everything is fully automated.

Powerful Software

Designed for easy operation, there is an intuitive Windows98/NT® interface to define test parameters and run tests. During the test, the data is clearly displayed on the screen and stored in memory to be downloaded to a computer for storage and analysis.



Integrated data analysis is automatically calculated and the raw data can be exported to other spreadsheet packages. A test result summary page is provided on each test that gives a total view of a test at a glance.

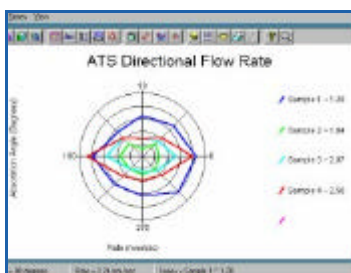
Benefits:

- Windows 98/NT® Interface
- Automatic graphing and analysis
- Absorption and desorption rate and capacity measurements
- Fully automatic operation
- Results available in absolute grams, grams/gram or grams/m²
- No calibration required
- High sample throughput
- Rugged, self-contained design
- Correct for specific gravity
- Save data in a series



ATS-600 Options

Directional Flow Rate, Orientation System



This optional enhancement provides directional absorption rate, sheet orientation information and MD/CMD index measurement. This information provides a total picture of the

sheet absorption properties and structure.

Directional absorption rate is determined by measuring the time required for a fluid to travel from the introduction point to the 8 equally spaced electrodes positioned every 45 degrees around the center. (Different configurations are possible.)

Test results have proven to be excellent indicators of sheet orientation and correlate well with tensile tests.

Static/Dynamic Pressure Testing

The Static/Dynamic Pressure Testing System provides absorption rate and capacity measurements under static or dynamic pressure. The operator has total control over the amount of pressure applied to the sample at all times.

This option requires compressed air and can be combined with the Directional Flow Rate, Orientation System to provide directional absorption/sample orientation information under pressure.

Originally developed for battery separators, it has several applications in other industries including sanitary products.



Physical Specifications

Dimensions

18 in x 16 in x 15 in (457 mm x 406.4 mm x 381 mm)

Weight

25 lb (12 kg)

Performance Data

Electrical

Electrical: 120V/60 Hz, 220 V/50 Hz, 2 amps

Test Types

Timed & Programmable Slope

Time Range

1 to 999 seconds

Absorption Slope Range

0.005 gms/1 second to 0.005 gms/53 minutes

Maximum Sample Absorption Capacity

Virtually unlimited

Weight Sensitivity

0.005 grams w/standard syringe

Time Discrimination

0.001 second

Note: The ATS-600 requires a pentium PC with one available serial port for communication interface.



Thwing-Albert
INSTRUMENT COMPANY

Representante Oficial para América do Sul
REGMED INDÚSTRIA TÉCNICA DE PRECISÃO LTDA

tel: + 55 11 3601-5700

fax: + 55 11 3601-5973

regmed@regmed.com.br

www.regmed.com.br

www.thwingalbert.com

03/01 Specifications subject to change without notice

Windows is a U.S. registered trademark of Microsoft Corporation. Windows NT, Excel and Access are U.S. trademarks of Microsoft Corporation.