Dynamic Absorption Tester



Fast and accurate measurement

The DAT measures the contact angle (dynamic and static), surface tension, penetration, surface energy and spreading. The instrument uses a sophisticated camera to capture the fall/ shape of the drop, the shape on the sample and eventually the penetration. The pump and the camera work closely together. This is critical to have the correct amount of liquid and have each test start at the same time.

Test results

The relationship between board stiffness and crease recovery is an important factor in the performance of cartons on packaging machines or manual packing. With the results of the Crease and Board Stiffness tester the perfect characteristics can be measured and maintained.

Features

- High precision pump, accurate within 0.1 micron
- Drop application synchronized within 1 ms
- Purity of liquids, surface tension, static and
- Dynamic Contact Angle
- Strong software
- Export data in Excel and to SQL server
- High speed camera
- Automatic feed (block feed or strip feed option)

International Standards

- Tappi T 588
- ASTM D-5725

Is your required standard not here? Ask us



Taking care of quality



High speed camera The highspeed camera captures

100 frames per second. This vast amount of information is rapidly analyzed by the software and shown on the PC.



Consistent measurement The highspeed camera is in direct communication with the automatic drop applicator. This ensures that that each drop is captured in the same way.



Pump system The pump system enables you to use fluids with higher viscosity. The accuracy of the drop applicator is 1 µl.



Different test methods The DAT PC software has multiple test methods. Besides contact angle and surface energy, several different calculations for surface tension are available



Block/ strip feed Block feed: a block with the sample attached is inserted in the instrument. Strip feed: a roll of paper is inserted in the instrument.



Automatic drop applicator Between each drop, the specimen is moved automatically until the requested number of drops has been measured.

Specifications

Model Liquid size units Pump accuracy Drop/camera sync Results DAT software Changing fluids 68-96 0.5 - 10 µl 0.1 µl withing 1 ms image and statistic included possible

Installation requirements

Electrical
Air
Dimension
Weight

110V /60 Hz or 220V /50 Hz not required 14 x 36 x 19 cm (5.5 x 14 x 7.5 inch) 7 kg (15.5 lbs)



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