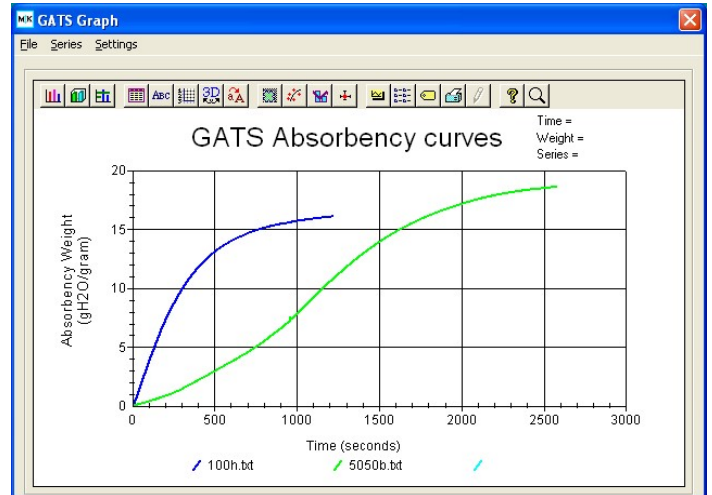
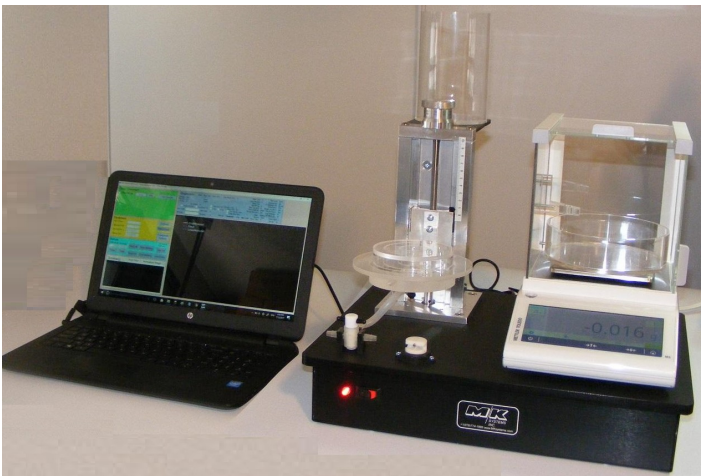


The most accurate liquid absorbency characterization
The M/K G.A.T.S: Gravimetric Absorption Testing System

- The GATS measures liquid absorption rate and total absorbency capacity.
- The device employs a unique liquid head leveling mechanism for accuracy.
- The GATS is fully automated to start, end, and reset test parameters.
- The device has been optimized for simple operation. Using the GATS is easy.
- The GATS is widely used for analyzing liquid uptake in nonwovens, tissues, towels, textiles, clothing, powders, and a host of other absorbent substrates.
- A number of different test plates are available.



GATS Features:

- Absorption data 1/1000g accuracy
- Multiple points per second
- Absorption vs. time graphs and raw data
- Head-leveling mechanism
- Automatic Refilling mechanism
- Real-time graphing
- NEW: EVAPORATION MEASURING OPTION

A brief summary of GATS Absorption Applications

- Tissues, Paper Towels, Nonwovens, Cotton, etc.
- Clothing, fabrics, apparel, or any wearable substrate.
- Powders, starches, cat litters, or any granular material.
- Diapers, Tampons, Feminine Hygiene products, etc
- Battery separators and other porous materials.
- Modeling human skin sweating and related skin issues

GATS Standards

- TAPPI Standard T-561 is being replaced by M/K's new GATS Tappi standard (under review).
- AATCC TM200 compliant
- TAPPI T-561
- ASTM D5802

M/K GATS Technology Patents

- US8176769 May 15, 2012
- US20100307228 Dec 9, 2010
- US7779685 Aug 24, 2010

GATS options

- Absorption under pressure option
- Wide variety of test plates
- Thickness gauge option

References are listed on page 2



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Quality instrumentation since 1969

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Examples of clients who obtained a US Patent with claims using the M/K GATS data.

#	Patent #	Description
1	8,497,410	Method for making absorbent products
2	8,247,641	Absorbent products and methods of preparation thereof
3	7,288,167	Cross-linked pulp sheet
4	7,258,758	Strong high loft low density nonwoven webs and laminates thereof
5	7,018,511	Crossed-linked pulp and method of making same
6	6,821,383	Preparation of modified fluff pulp, fluff pulp products and use thereof
7	6,548,431	Melt spun polyester nonwoven sheet
8	6,383,609	Absorbent structure comprising a highly absorbent polymer, and an absorbent article comprising the absorbent structure
9	6,310,268	Non-ionic plasticizer additives for wood pulps and absorbent cores
10	5,916,670	Absorbent material for use in absorbent articles
11	5,874,159	Durable spun laced fabric structures
12	5,866,242	Soft, strong, absorbent material for use in absorbent articles
13	5,693,707	Liquid absorbent composition for nonwoven binder applications
14	5,501,772	Cellulosic modified lignin and cationic polymer composition and process for making improved paper or paperboard
15	5,361,627	Method and apparatus for the measuring the capillary attraction developed at a surface of an absorbent body
16	5,531,727	Fluid absorbing article utilizing a flow control cover sheet
International Patent Applications		
17	International Application WO1999023291A1	Durable, absorbent spunlaced fabric structures
18	International Application WO2000037724A2	NONWOVEN FABRICS FOR WIPING APPLICATIONS