



MMT[®]

Moisture Management Tester

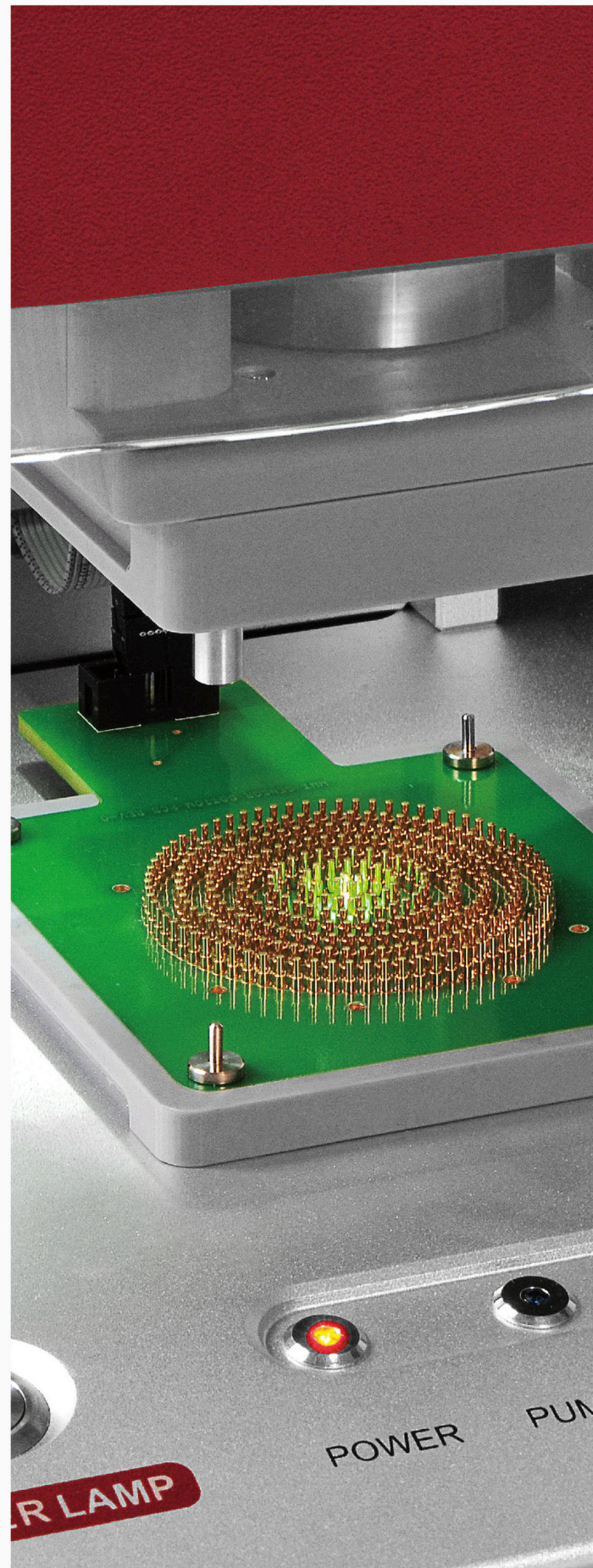
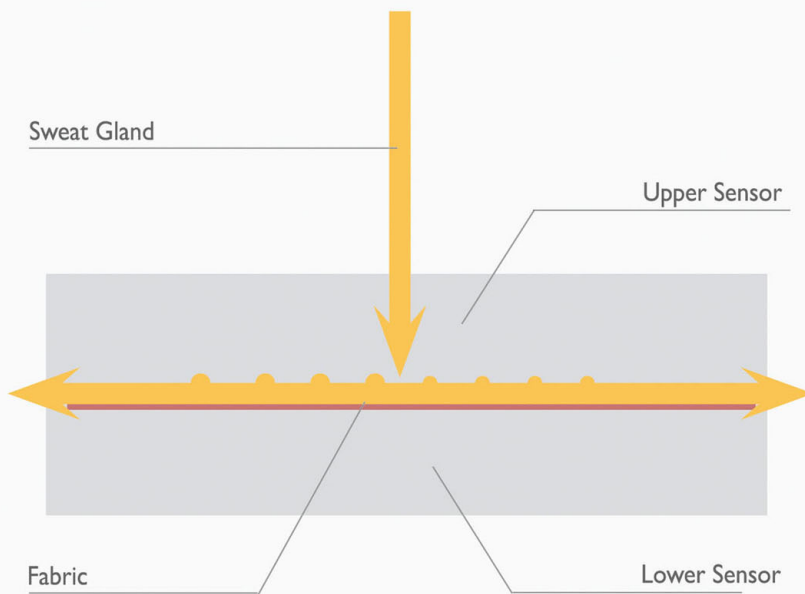
An Innovative Instrument for Innovative Fabrics

While performance fabrics require the typical standard tests of other fabrics, they also require an extra level of specialized testing to assure their engineered properties. The MMT® (Moisture Management Tester) provides this by measuring, evaluating, and classifying liquid management properties of fabrics.

AATCC Test Method 195 and GB/T 21655.2 were developed based on the MMT.

To measure the dynamic liquid transport properties, a sample is placed horizontally in the instrument between the upper and lower sensors. These sensors are made of concentric rings of pins. A solution, representing perspiration, is dropped on the center of the upper facing (skin side) of the test sample. As the solution moves through and across the sample, the changes in electrical resistance are measured and recorded.

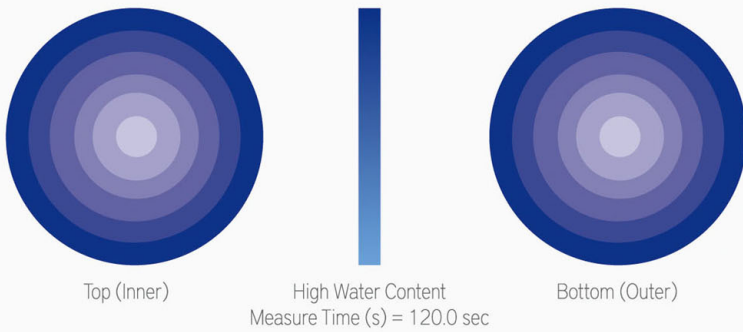
Testing Solution



The MMT was developed and patented in coordination with the Hong Kong Polytechnic University.

MMT At a Glance

Water Location vs. Time
Low Water Content



Moisture Management Performance Profile

One 2-minute test gives a comprehensive profile of a fabric's performance, producing the following data:

- Overall Moisture Management Capability
- Accumulative One-Way Transport Capability
- Wetting Time for top and bottom surfaces
- Absorption Rate for top and bottom surfaces
- Max Wetted Radius for top and bottom surfaces
- Spreading Speed for top and bottom surfaces

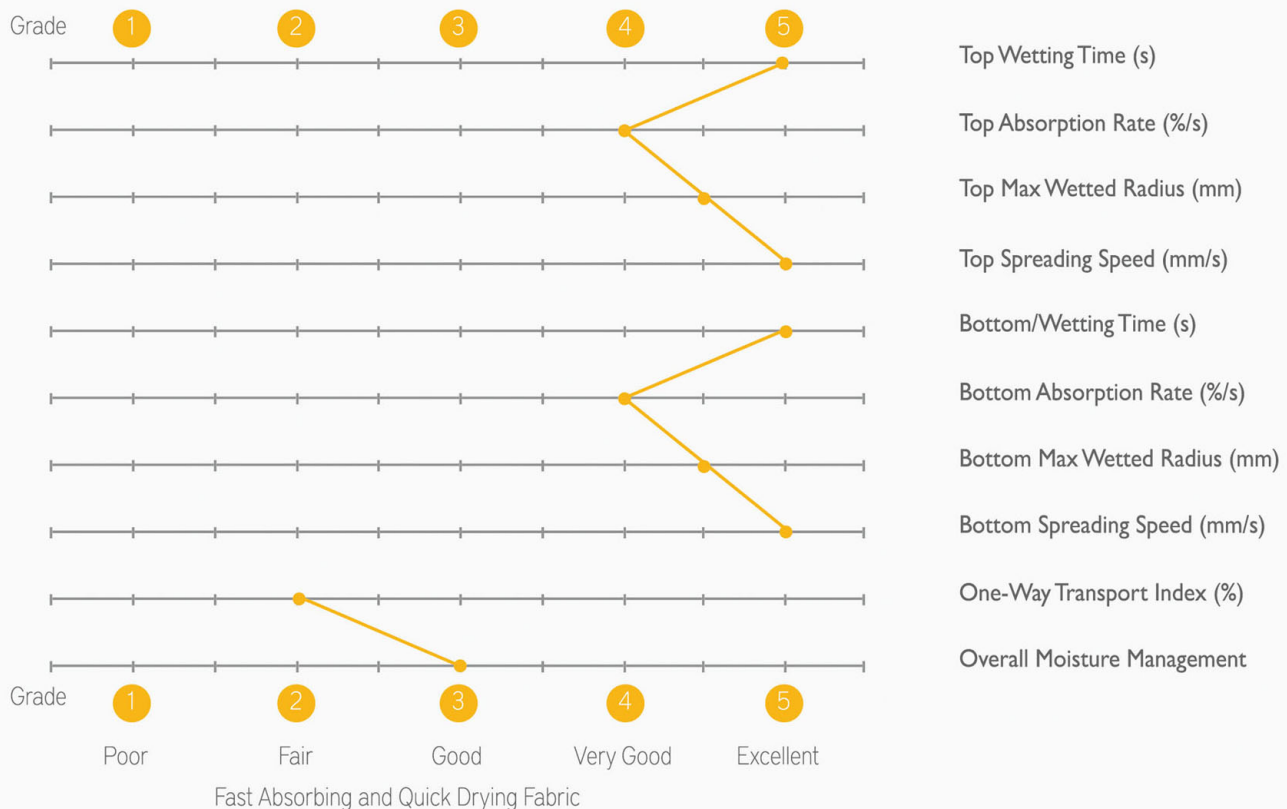
MMT can identify 7 types of fabrics

- Waterproof fabric
- Water repellent fabric
- Slow absorbing and slow drying fabric
- Fast absorbing and slow drying fabric
- Fast absorbing and quick drying fabric
- Water penetration fabric
- Moisture management fabric

| | Top Surface | Bottom Surface |
|------------------------|-------------|----------------|
| Wetting Time | 2.953 | 3.046 |
| Absorption Rate (ø/s) | 71.8323 | 68.7287 |
| Max Wetted Radius (mm) | 20.0 | 20.0 |
| Spreading Speed (mm/s) | 4.232 | 4.1326 |
| One Way Transport | -25.8368 | |
| Test Description | MMT | |

The SDL Atlas MMT (Moisture Management Tester) is the only instrument on the market that can precisely calculate the liquid management properties of performance and technical fabrics.

Finger Print of Moisture Management Properties (AATCC TM-195)



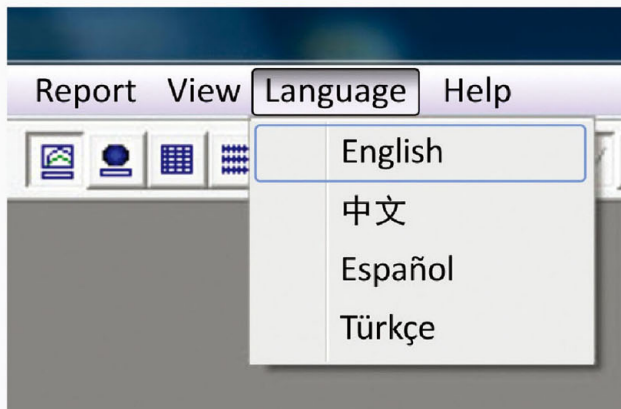
MMT Instrument Features

The MMT's metal cabinet is not only more durable, but the open style gives improved access for sample handling. With this design, the operator can also easily remove the instrument's sensors for routine cleaning and maintenance.

The upper sensor and protective translucent door are motorized to automatically move into position at the beginning and conclusion of the test. The new center positioning indicator allows the operator to precisely place the sample, thus increasing test repeatability and reproducibility.

Software improvements have been made to make the MMT even more accessible to international users. The display now offers multiple languages with interface options in English, Spanish, Turkish and Chinese. Also, grading tables of international test standards now provide quick and reliable analysis for operators.

Patent registration number:
China ZL 2014 3 0428922.3
US 6,499,338 B2



The MMT provides much greater confidence in moisture management testing than more traditional tests.



Standards

AATCC 195-2009

GB/T 21655.2-2009

Product Specifications

| | |
|-------------------------------|--|
| Size (Width x Depth x Height) | 300 mm x 420 mm x 545 mm |
| Weight | 27 kg |
| Interface | USB 1.1/2.0 |
| Power Supply | 110V 60Hz 1A or 230V 50Hz 0.5A |
| Operation Temp & RH | 16°C to 29°C, 80% maximum (non-condensing) |
| Pump On Time | 20s |
| Test Solution | Conductivity 16 ms +/- 0.2 ms |

Applications

- Quality control in fabric and garment manufacturing
- Research and development of new functional fabrics and garments
- Classification of fabrics according to dynamic liquid transport properties
- Ranking of apparel fabrics by comfort factors related to moisture management

Standard Accessories

- MMT
- Conductivity Meter with Calibration Solution (batteries not included)
- Conductive Rubber Matt
- Standard Testing Solution
- Spare Silicon Tube
- Sentinel Software Key
- USB Cable
- CD for Instruction Manual and MMT Software

Providing Confidence

For over 60 years, the SDL Atlas companies have been providing confidence in standard based testing through expertise and global partnering. Our customers can be assured that they are making informed decisions based on accurate test results.

SDL Atlas experts work closely with standards committees and retailers on development of standards. Our engineers develop instruments to meet these standards. Our service team calibrates the instruments to exacting UKAS and internal standards. High quality consumables that are consistent from batch to batch are also produced and distributed by SDL Atlas.

Fabrics and Consumables

Consumables are a critical part of many textile tests. SDL Atlas produces and distributes a complete line of consumables. Each batch is thoroughly tested to ensure conformity and consistency from batch to batch.

Our consumables offerings include:

- Multifiber
- Cork Liners
- Abradents
- Phenolic Yellowing
- Detergents
- Ballasts
- Crocking Fabric

Calibration & Service

- UKAS calibration
- ISO calibration
- Service support
- Factory trained representatives
- SDL Atlas service technicians
- Crocking Fabric



With UKAS accredited technicians located in Europe, Asia, and North America, we are prepared to support our customers in maintaining their investment and their confidence in their test instruments. SDL Atlas calibration certificates are accepted by all accreditors.

Providing confidence in standard based testing
through expertise and global partnering



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