

MOISTURE MANAGEMENT TESTER



Physical specifications

Dimensions

210 mm x 320 mm x 250 mm

Weight

4.7 kg

Standards

AATCC 195 SN DRAFTING

Fabric liquid moisture transport properties in multidimensions, called moisture management properties, influence the human perception of moisture sensations. To improve the comfort of today's clothing, especially in sportswear, it is important to know the liquid moisture management properties. Although some test methods exist for evaluating absorbency, wicking and strikethrough time, existing standards are unable to measure the behavior of liquid transfer in clothing materials dynamically. The Moisture Management Tester (MMT) was developed to measure dynamic liquid transport properties of knit and woven fabrics in three dimensions.

1. Absorption Rate - Moisture absorbing time of the fabric's inner and outer surfaces.

2. One-way Transportation Capability - One-way transfer from fabric's inner surface to outer surface.

3. Spreading/Drying Rate - Speed of liquid moisture spreading on fabric's inner and outer surfaces.

MMT consists of upper and lower concentric moisture sensors. The specimen is held flat under fixed pressure between the sensors while standard test solution is introduced on to the top surface of the fabric. Electrical resistance changes between the upper and lower sensors are then recorded dynamically on computer.

MMT permits the measurement of the following indexes:

- Wetting Time Top/Bottom (WTT/WTB)
- Absorption Rate Top/Bottom (TAR/BAR)
- Maximum Wetted Radius Top/Bottom (MWRT/MWRB)
- Spreading Speed Top/Bottom (TSS/BSS)
- Accumulative One-Way Transport Capacity (R)
- Overall Moisture Management Capacity (OMMC)