

EYTest[®]



EY60 MMTTest

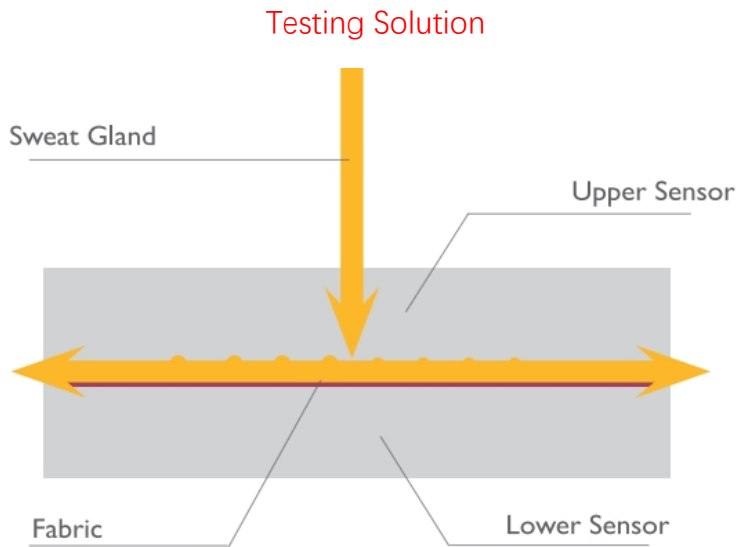
Moisture Management Tester

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 MMTTest (Moisture Management Tester) provides this by measuring, evaluating, and classifying liquid management properties of fabrics.

AATCC Test Method 195 and GB 21655.2 were developed based on the MMTTest.

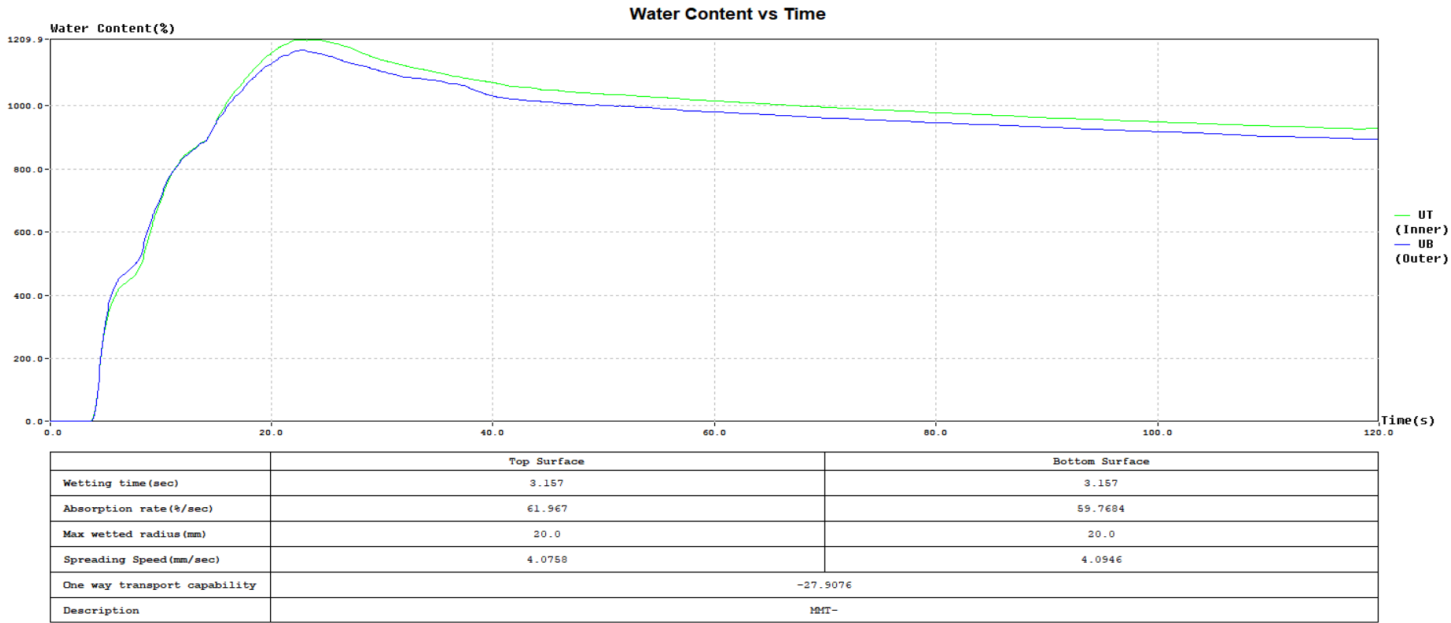


To measure the dynamic liquid transport properties, a sample is placed horizontally in the instrument between the upper and lower sensors. These sensors are made of concentric rings of pins. A solution, representing perspiration, is dropped on the center of the upper facing (skin side) of the test sample.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

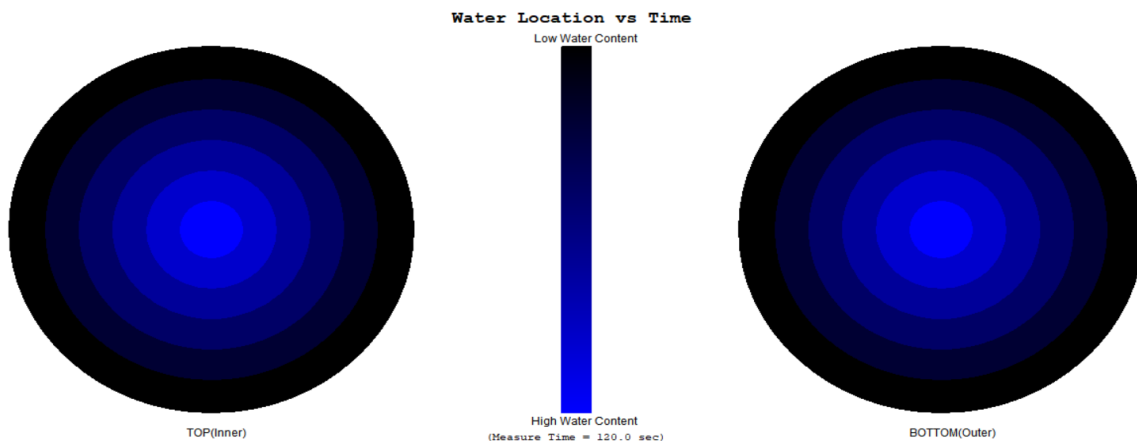


When saltwater drips into the fabric, it diffuses through the fabric. The probes of adjacent two rings can quickly detect changes in the resistance value of the fabric, send resistance value data to computer analysis software, which calculates the test results and reports we need. The entire testing process takes 2 minutes.

Multiple types of test reports



Water Content vs Time Chart, It can be observed that there is a difference in diffusion between the inner surface (Top) and the outer surface (Bottom) of the fabric.



	Top Surface	Bottom Surface
Wetting time (sec)	3.157	3.157
Absorption rate(%/sec)	61.967	59.7684
Max wetted radius (mm)	20.0	20.0
Spreading Speed (mm/sec)	4.0758	4.0946
One way transport capability	-27.9076	
Description	MMT-	

Water Location vs Time, Use images to represent the location of water diffusion, with lighter colors indicating water content. You can click to play and simulate the dynamic process of water diffusion

MMTest can Producing the following data:

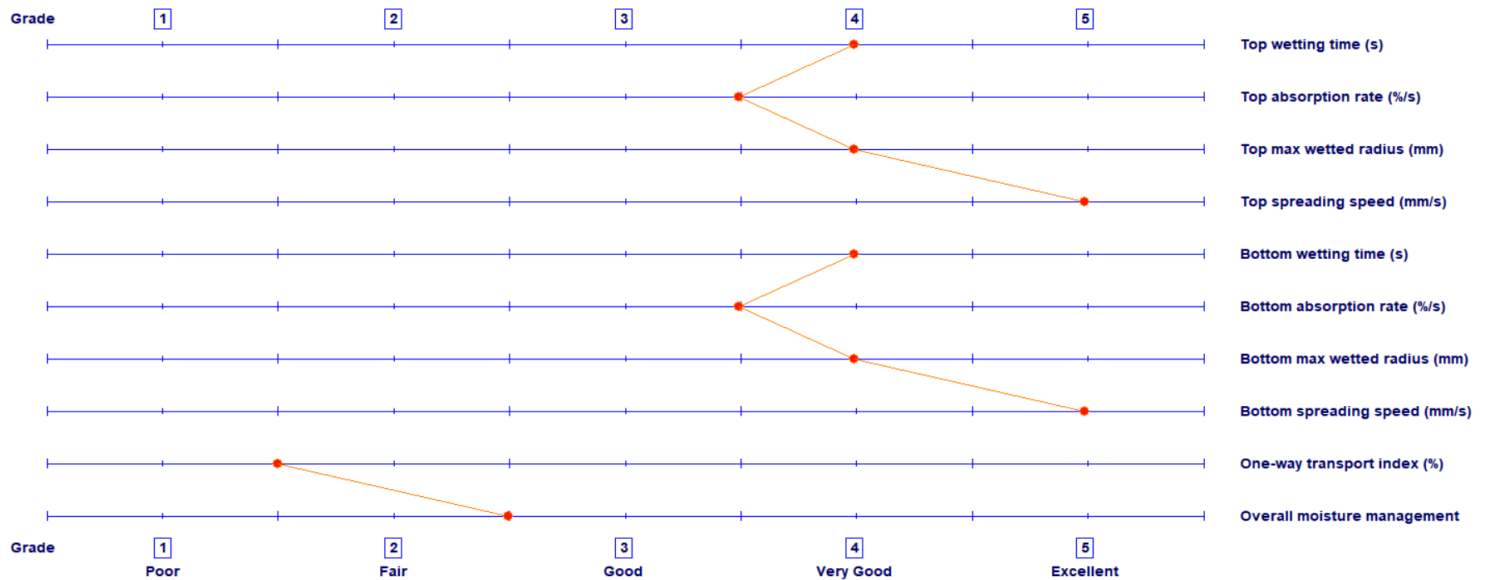
- Wetting Time for top and bottom surfaces
- Max Wetted Radius for top and bottom surfaces
- Accumulative One-Way Transport Capability

- Absorption Rate for top and bottom surfaces
- Spreading Speed for top and bottom surfaces
- Overall Moisture Management

Grade and List reports

Finger Print of Moisture Management Properties

(Fabric: F-3)



The test results can be graded according to each piece of fabric, or based on the average value.

The grading standard can be AATCC or GB, and the grading results can help customers understand the fabric grade in a simple way.

Multi-Measurement Profile

	Wetting Time Top(sec)	Wetting Time Bottom(sec)	Top Absorption Rate(%/sec)	Bottom Absorption Rate(%/sec)	Top Max Wetted Radius (mm)	Bottom Max Wetted Radius (mm)	Top Spreading Speed (mm/sec)	Bottom Spreading Speed (mm/sec)	Accumulative one-way transport index(%)	OMMC
✓ F-1	3.312	3.406	63.7016	63.1588	20.0	20.0	3.928	3.8564	-52.5877	0.3857
✓ F-2	3.157	3.157	63.0558	61.0079	20.0	20.0	4.0428	4.0685	-21.9623	0.4228
✓ F-3	3.157	3.157	61.967	59.7684	20.0	20.0	4.0758	4.0946	-27.9076	0.4128
✓ F-4	3.157	3.313	62.3883	60.3554	20.0	20.0	4.0276	3.9541	-45.0939	0.3915
✓ F-5	3.234	3.234	61.8467	58.4361	20.0	20.0	4.0922	4.092	-63.1493	0.3845
✓ F-6	3.235	3.313	61.2628	59.4822	20.0	20.0	3.9592	3.979	-36.8455	0.4003
✓ F-7	3.235	3.079	59.8697	58.4783	25.0	25.0	4.0338	4.1259	-25.0938	0.4123
✓ F-8	3.157	3.235	58.9248	57.4458	25.0	20.0	4.2331	4.01	-33.7083	0.3999
✓ F-9	3.079	3.079	59.5819	56.2177	20.0	20.0	4.2583	4.2105	-42.2673	0.387
✓ F-10	3.313	3.407	61.561	57.6564	20.0	20.0	3.9672	3.9232	-55.5963	0.376
✓ F-11	3.156	3.235	57.8627	58.1572	20.0	20.0	4.0859	4.0022	-44.8218	0.3895
✓ F-12	3.078	3.157	58.6472	57.9422	25.0	20.0	4.3555	4.0864	-41.5187	0.3926
Mean	3.1892	3.231	60.8891	59.0089	21.25	20.4167	4.09	4.0336	-40.8794	0.3963
S.Deviation	0.0777	0.1119	1.8663	1.8676	2.2613	1.4434	0.1289	0.0979	12.5346	0.0138
CV	0.0244	0.0346	0.0307	0.0316	0.1064	0.0707	0.0315	0.0243	0.3066	0.0348

All test results are displayed in the test result list, which can be printed or saved to an Excel file.

MMTest can identify 7 types of fabrics

Waterproof fabric

Water repellent fabric

Slow absorbing and slow drying fabric

Fast absorbing and slow drying fabric Water penetration fabric

Fast absorbing and quick drying fabric

Water penetration fabric

Moisture management fabric

Instrument features

MMTest aluminum alloy oxide shell is more durable, with an open design that makes it convenient for users to place samples, There is no size requirement, you can test samples of 8cm * 8cm, and you can also test samples with a maximum size of 100cm * 20cm。 The sensor has a magnetic suction structure, which is easy to remove for cleaning and maintenance。

Choose a stepper motor with adjustable speed for the pump fluid, The pump volume can be adjusted by the user to meet standard requirements,The operation panel is designed with a pump IN button, The liquid in the pipeline can be sucked into the tank to prevent salt from crystallizing in the pipeline.

The instrument has a self check function, which automatically checks whether the liquid has dripped onto the sensor, If the yellow error light flashes, Indicates the need to remove the tested fabric Indicates the need to remove the tested fabric or clean the test sensor.

Standards

AATCC 195-2017 GB/T21655.2-2019

Product Specifications

Size (Widthx Depth xHeight)	280mm×420mm×420mm
Weight	26kg
Interface	WiFi
Power Supply	AC110V~220V 60/50Hz 1A
Operation Temp & RH	18°C to 29°C.80% maximum (non-ccndensing)
Pump On Time	20s
Pump Volume	0.22g Can be adjusted
Test Solution	Conductivity16 ms +/- 0.2 ms

Applications

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

Standard Accessories

MMTest
Conductivity Meter
Spare Silicon Tube
MMTest Software

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