



## **SmartShrink**Shrinkage Rate Tester

The SmartShrink Shrinkage Rate Tester measures fabric shrinkage and twist rate after washing, steaming, and dry cleaning. It takes under 5 seconds. It is fully compatible with various shrinkage testing standards, including AATCC, ASTM, ISO, JIS, and GB. SmartShrink can automatically measures fabric shrinkage and generates test reports. It saves test data and sample photos, also shows test results in real-time. Users can see them on PCs and smartphones using the SmarTexLab app via IoT tech. SmartShrink can also be connected with enterprise ERP or LIMS to facilitate shrinkage data management, make testing faster and reduce costs by more than 90%. Well-known brands and laboratories have taken the lead in using the instrument: adidas Germany, AEO Supply Chain, Anta Supply Chain, Bureau Veritas, Intertek, the China Textile Association, and Texwinca Textile Group.

### **SmartShrink**Shrinkage Rate Tester



### More accurate and reliable test results

Visual inspection technology, clicking the button to take the picture of fabric sample, combined with AI algorithms, then the fabric shrinkage rate and twist rate can be measured in 5 seconds and the system will output a report automatically. The test results are more accurate and reliable than manual measurement.

- Compatible with various shrinkage testing standards
   Whether it is AATCC, ASTM, ISO, JIS, GB, etc., it can be
   applied. Multiple dimensions of shrinkage data can be
   measured at once.
- Well-known brands and laboratories are using the instrument.

adidas Germany, AEO Supply Chain, Anta Supply Chain, Bureau Veritas, Intertek, the China Textile Association, and Texwinca Textile Group.

### Smart Shrinkage Rate Test

The instrument connects to the SmarTexLab APP via IoT on a smartphone or computer. It then connects to ERP/LIMS through an API. The instrument can also connect directly to ERP/LIMS. Test orders and standards can be sent to the instrument. The sample information can be read by scanning the code. The program can be automatically selected and tested. After the test, a digital raw record will be created. It will include the test process, results, temperature, and humidity. This record will be uploaded to the system. It will be summarized with other tests to output a report. All relevant parties can view the report in realtime. The operator can remotely monitor the status of multiple tests. They can also modify the test requirements, get a reminder before the test ends, and stop or repeat the test. You can use online chat to get quick support from ChiuVention customer service. Also, receive reminders to calibrate, maintain, and replace consumables on the instrument. Lastly, perform OTA remote upgrades regularly



### The Specification of SmartShrink

Test mode: automatic test

Sample test size: 200\*200mm, 250\*250mm, 350\*350mm,

450\*450mm,460\*460mm, 500\*500mm,

10\*10in. 15\*15in. 18\*18in.

The sample test size also can be customized.

A computer is required.

Operating system: Windows 10/11







## **HydroDetector**Hydrostatic Head Tester

HydroDetector Hydrostatic Head Tester can determine the waterproof penetration ability of materials, such as textiles, leather and film under high water pressure.

The high-definition camera records the test and uses AI to analyze. It detects the third drop of water and then stops the test. It notifies the tester via a smartphone app. It uploads the test process and results. It saves the video and pictures for traceability. The whole machine does not need compressed air. An intelligent servo provides water pressure stably to avoid spray. An intelligent clamping system makes the test more accurate. The instrument uses IoT technology to connect with smartphones and computers. It also links to enterprise ERP and LIMS systems. This greatly improves testing efficiency.

### HydroDetector

### **Hydrostatic Head Tester**



 Ultra-high-definition industrial vision camera, can recognize the water droplets and end the test.

After starting the test, the ultra-high-definition camera will: Photograph the sample's surface. Monitor the water seepage. Identify, then record the time and pressure of the three water droplets. It will then stop the test and notify the operator via the SmarTexLab App.

### Intelligent detection and manual judgement

In addition to intelligent detection of water droplet oozing, manual observation and judgement can also achieve. When the test is completed, image reports and videos are generated, and the results can be manually verified by playing back the videos.

### Avoid water spraying after bursting of sample

A unique and precise pressurisation mode that can pressurise the sample without compressed air. It gently and stably pressurises the sample, avoiding water spray after the sample bursts.

### High-pressure testing is possible.

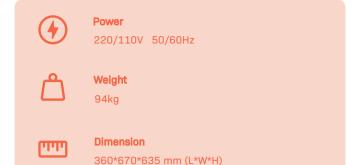
HydroDetector are capable of high-pressure testing up to 600 kPa. You can customize higher test pressures.

### Intelligent Sample Clamping System

The instrument drives the servo clamping system with an Al algorithm. During testing, it can adjust the clamping pressure based on the samples' thickness and hydrostatic pressure resistance. This prevents water leakage while ensuring the right pressure. It also avoids changing the fabric's shape or structure. This prevents invalid tests from damaged samples or seepage at the edges.

### Smart Hydrostatic Head Test

The instrument connects to the SmarTexLab APP via IoT on a smartphone or computer. It can also connect directly to ERP/LIMS. After the test, the test report including the sample information, test process and results will be generated and uploaded to the system. All relevant parties can view the report in real-time. The operator can remotely monitor the status of multiple tests. They can also modify the test requirements, get a reminder before the test ends. You can use online chat to get quick support from ChiuVention customer service. Also, receive reminders to calibrate, maintain, and replace consumables on the instrument. Lastly, perform OTA remote upgrades regularly.



### Specification

Standard test head	100cm <sup>2</sup>
Units	Pa, kPa, mmHg, cm H₂0
Pressure range	0~600 kPa (50m water column )
Rising speed of water pressure	1 ~ 60 kPa/min,
	with variable and adjustable speed

### Standard

AATCC 127 Option 2 ISO 811 GB/T 4744 GB/T 40910 JIS L1092

### **Optional Standard**

ISO9073-16 EN 1734 ISO 1420 AATCC 208 IS 7016(Part7) NWSP 080.6.RO(15) GB/T 24218.16 FZ/T 01004





# **SmartDry**Drying Rate Tester

SmartDry is suitable for testing quick-drying fabrics. Equipped with high-precision temperature sensors, wind speed sensors, and precision dripping devices, SmartDry can quickly simulate the process of human sweating and quickly determine the drying rate of textiles. Unique uniform airflow control and magnetic stripe fixture for sample pressing make the test more reliable. The drying rate test takes only a few minutes. Its results match those of international third-party tests. Lululemon Canada headquarters is in use, and it is in line with the adidas standard, so it is widely used by adidas-recognized suppliers (such as Jiale Textile in Indonesia).

### **SmartDry**Drying Rate Tester



 A unique uniform wind speed control and magnetic stripe fixture, making the test more reliable.

The wind is more uniform and smooth during the test. The sample and test plate are closely adhered, all above reproduce the actual evaporation process. A built-in temperature and humidity sensor makes the results more reliable.

 Fast test, test results are highly consistent with authoritative testing organizations.

A drying rate test can be done in a few minutes. Its results match those of international third-party testing organizations.

 Lightweight and easy to use, well-known brands are using it.

Lululemon's Canadian HQ is using it. It meets adidas' standards and is widely used by suppliers recognized by adidas, like Jiale Textile Corp. In Indonesia.

### Smart Drying Rate Test

The instrument connects to the SmarTexLab APP via IoT on a smartphone or computer. It then connects to ERP/LIMS through an API. The instrument can also connect directly to ERP/LIMS. Test orders and standards can be sent to the instrument. The sample information can be read by scanning the code. The program can be automatically selected and tested. After the test, a digital raw record will be created. It will include the test process, results, temperature, and humidity. This record will be uploaded to the system. It will be summarized with other tests to output a report. All relevant parties can view the report in realtime. The operator can remotely monitor the status of multiple tests. They can also modify the test requirements, get a reminder before the test ends, and stop or repeat the test. You can use online chat to get quick support from ChiuVention customer service. Also, receive reminders to calibrate, maintain, and replace consumables on the instrument. Lastly, perform OTA remote upgrades regularly.





### **Specifications**

Fan	can produce airflow of 0.5-3.5m/s ±0.1m/s
Heater plate	305mm x 305mm± 0.5m
Soft heating plate	305mm x 305mm± 0.5m
Heat-insulating cork	
board	305mm x 305mm± 0.5m
Metal pressure bar	150mm x 40mmx2mm±1mm
The Heating	
temperature	25-40°C±0.5°C
	(with overheat protection)
Infrared temperature	
sensor	15-50°C±0.1°C
Drip accuracy	0.05-1.0ml±0.001ml
	1.0-4.5ml±0.01ml
Accessories	
Fuse	2pcs

1 pc 150mm\*150mm

1 pc 60mL

### **Standard**

Sampling plate

Water bottle

AATCC 201 FZ/T 01176-2024





## AirFicient Air Permeability Tester

AirFicient tests the air permeability of various textiles. These include technical textiles, nonwovens, and other breathable products like sponge paper. It is simple to operate. You can select the test standard and unit of measurement on the screen. The instrument automatically recognizes the test fixture head's ranges. This allows for quick testing and results in seconds. High-quality, maintenance-free core and range conversion components ensure reliable, repeatable test results. A self-designed calibration system ensures the test is always accurate. Canada Goose HQ is using the instrument, and the world's No. 1 electric car brand (USA) uses the instrument for testing automotive interiors.

### AirFicient Air Permeability Tester



### More reliable test results

Test results are highly consistent with third-party authoritative testing organizations. High-quality core components and range conversion components are maintenance-free and wear-free, bringing high repeatability and reliability to test results.

### Self-designed calibration system ensures accurate testing at all times

The calibration system has been tested by a third party and is authoritative and reliable, making it convenient for users to calibrate the instrument at any time.

### User-friendly design for fast test and low noise

AirFicient is easy to operate, you can select the test standards and measurement units on the operation screen. The instrument also automatically recognizes the different ranges of the test fixture head. The AirFicient is quick to test, delivers results in seconds, and operates at low noise levels.

Canada Goose (Canada headquarters) and the world's No. 1 electric car brand (USA) uses the instrument for testing automotive interiors.

### Smart Air Permeability Test

The instrument connects to the SmarTexLab APP via IoT on a smartphone or computer. It then connects to ERP/LIMS through an API. The instrument can also connect directly to ERP/LIMS. Test orders and standards can be sent to the instrument. The sample information can be read by scanning the code. The program can be automatically selected and tested. After the test, a digital raw record will be created. It will include the test process, results, temperature, and humidity. This record will be uploaded to the system. It will be summarized with other tests to output a report. All relevant parties can view the report in real-time. The operator can remotely monitor the status of multiple tests. They can also modify the test requirements, get a reminder before the test ends, and stop or repeat the test. You can use online chat to get quick support from ChiuVention customer service. Also, receive reminders to calibrate, maintain, and replace consumables on the instrument. Lastly, perform OTA remote upgrades regularly.



Power

220/110V 50/60Hz



Weight



**Dimension** 

970\*400\*970 mm(L\*W\*H)

### The Specification of AirFicient

Measurement units:	mm/s, m/s, l/m²/s, ft³/min/ft², cfm cm³/s/cm², l/s/cm², l/m²/min 1/dm²/min, l/min, m³/min, dm³/s m³/s/m², m³/min/m², m³/h/m², ft³/s/ft²
Test Mode	Automatic
Test head	20 cm <sup>2</sup> (standard)
Test pressure	10 ~ 2,500 Pa
Air velocity	0.6 ~ 10,000 mm/s (20 cm <sup>2</sup> )
Measurable sample thickness range	0 10 (ath as this less and first
thickness range	0 ~ 10 mm (other thicknesses and fixtures can be customized)
Testing Accuracy	< +/-2%
Optional test heads	5 cm <sup>2</sup> , 25 cm <sup>2</sup> (5*5cm), 38 cm <sup>2</sup> , 50 cm <sup>2</sup> , 100 cm <sup>2</sup>

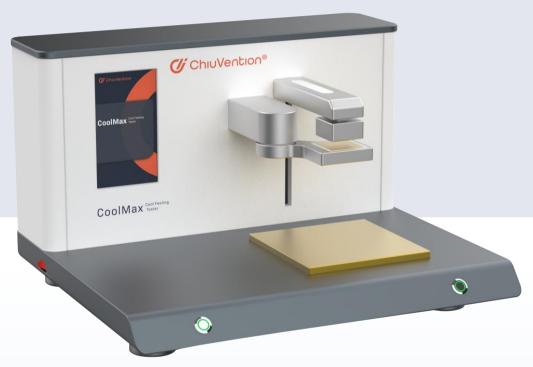
### Standard

GB/T5453 ISO 9237 ISO 9073:15 JIS L1096 Item8.26 Method C BS 3424-16 BS 6F 100 3.13 NWSP 070.1.R0(15) GB/T 24218.15

### **Optional standard**

ASTM D737





## **CoolMax**Cool Feeling Tester

The CoolMax Cool Feeling Tester is for testing textiles with instant cooling. It checks if they can dissipate heat and cool. The tester is suitable for sportswear, outdoor apparel, and home furnishing fabrics. It also works on underwear, car seat covers, and other functional fabrics. The test is fast and accurate. Its results are reliable. They are an authoritative reference for the R&D, production, and quality control of cool-feeling fabrics. Applicable to JIS L1927, FTTS-FA-019, GB/T 35263-2017, CNS 15687-2013, and other standards.

Test Principle: Under the specified test conditions, a heat detection board with a higher temperature is in contact with the sample. The board's temperature is measured over time. The contact coolness coefficient (Q-max) is calculated. It characterizes the sample's instantaneous coolness. A larger Q-max value means a stronger coolness felt by the skin and a greater cooling effect of the fabric. A smaller value means less of a cooling effect.

Q-max: The max heat flow density after contact between the heat detection board and the sample. The unit is Joule per square centimeter second [J/(cm²-s)].

### **CoolMax**Cool Feeling Tester



### Fast and accurate testing

Rapidly heats the heat detection board to 35°C and responds with a Q-max value in seconds. So it minimizes the temperature loss of samples for accurate tests. You can preheat it or start it remotely via a mobile app.

### Precise control of temperature deviation

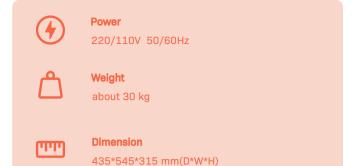
If the ambient temperature in the laboratory deviates due to the location of the instrument or other reasons, the built-in temperature sensor can record those deviation and you can trace it. Besides, the instrument ensures that the deviation between the detection board and the sample is constant and controlled.

### More reliable test results

Samples tested by one third-party organization are retested by our CoolMax and the results match the third-party data.

### Smart Cool Feeling Test

At SmarTexLab App, you can set up a program to start or stop the instrument remotely; and you can schedule a test or remotely reheat the detection board to make testing more efficient.



### The Specification of AirFicient

Heat detection plate temperature 35+/-0.5°C, adjustable from 20°C to 40°C

Cold plate 1 Polyester foam plate, Size 220mm \* 220mm Cold plate 2 Copper plate temperature 25°C, Size 200mm \* 200mm, Precise temperature control

Temperature display resolution of  $0.01^{\circ}$ C for thermal test plate and sample carrier.

Response time of thermal inspection plate<0.2s

Test time 1~99s adjustable

Testing mode manual/automatic

Test sample area 200\*200 mm

Real-time test control system developed based on the Android system, which can display the test curve in real time.

With two USB-A interfaces, you can directly export the test report or external other supporting equipment.

Light flashes when the test is complete.

### Standard

JIS L1927 FTTS-FA-019 GB/T 35263-2017 CNS 15687-2013