

THE DIGITAL FUTURE OF TEXTILE TESTING



SmarTexLab

ChiuVention combines cutting-edge RFID, visual inspection, and other technologies as well as a variety of sensors with AI algorithms, to upgrade conventional textile labs to digital and smart ones, connecting smart instruments, smartphones/tablets/computers to the SmarTexLab system through IoT technology, and link to the factory ERP or lab LIMS.

It reduces lab testing time by about 30%, thus greatly shortening the total production cycle. The traditional manufacturing industry can keep up with the speed of fast fashion;

What's more, SmarTexLab can reduce labor costs of testing labs by 40% and with digital transmission during all the test procedures, or paperless, helping fashion brands to achieve sustainability.



SmarTexLab Textile Testing

VS

Conventional Textile Testing

The test requirements are all collected online and received by the smart cutting machine.

The collection of test requirements

Fill out the test requirements manually, input them into the computer, and then print out some forms and corresponding labels.

The cutting machine automatically cuts the fabric into samples of different sizes and put them into the RFID basket that can identify and track the samples.

Cutting and identification of samples

Several samples were manually cut and labeled separately for differentiation.

By scanning the sample bar code or placing an RFID basket in the induction area, all information are automatically identified and recorded, then the instruments will be automatically set according to the test requirements.

Recording of test elements

You need to manually record the test elements, such as environment, temperature and humidity, test material information, test method, etc., and set the instruments according to the test requirements, start the test.

Start test and just leave, the operator can monitor the test from app, until mobile phone alarms to re-test or stop the tests.

Monitoring of the testing process

The operators have to stay with the instruments to monitor the test status and wait for the ending of tests.

The system automatically calculates the test results, just confirm them.

Calculation of test results

Manually record and calculate the test results.

Only need to confirm the report results and share them to all parties concerned in 1 minute.

Summary of test results and sharing

1 person is in charge of grouping a series of test reports and the other needs to input all the info into computer and print out them, then send to all parties concerned.
Time:20 minutes

All the test results and pictures even videos are saved in the computer that eases the big data analysis.

Analysis of big data

The test results are recorded on the papers.
It is very hard to do big data analysis.

What's more, you can get the instrument calibration guide and maintenance service, consumable supply, as well as massive testing knowledge only by one-click on SmarTexLab. Test Smart Now!



SmartShrink Shrinkage Rate Tester

SmartShrink Shrinkage Rate Tester determines multiple shrinkage rate test results in 5 seconds for fabrics after washing, steaming, and dry-cleaning.

SmartShrink takes a picture of a fabric sample by using a camera equipped on the top, automatically measuring the distances between the marked dots, and calculates the test results by the patented vision inspection algorithm of ChiuVention. The test results will be real-time shared with the IoT-connected SmarTexLab app installed on the computer and smartphone.

SmartShrink automatically measures fabric shrinkage and calculates the test results, avoiding manual errors and making the test more accurate and reliable; It automatically saves the test data and sample photos, and can share and send the test results in real-time, making the test more transparent and trustworthy; The whole process of the test has been reduced from 6 minutes to only 5 seconds, making the test more rapid and reducing the cost by more than 90%.

SmartShrink

Shrinkage Rate Tester



- **The test results are more accurate and reliable.**
By using SmartShrink, the test sample is photographed with a high-definition camera, and the distances between the marked dots are automatically measured, then shrinkage rate is calculated with a unique algorithm, yielding all test results in real-time accurately.
- **Save \$30,000/year for textile testing labs.**
In the conventional process, for each sample to be tested for shrinkage, it totally takes 6 minutes to finish the work: measuring and recording before/after washing, calculating, typing the data into the computer, printing the report, etc., while SmartShrink can do all the work above in just 5 seconds.
- **Output multiple data at one time, reflecting the quality of fabric more comprehensively and objectively.**
Warp and weft shrinkage, seam twist rate, vertical twist rate, and diagonal twist rate can be output at one time, including credibility rating for the test results. It can evaluate the quality of the fabric more comprehensively.
- **Famous brands are using SmartShrink.**
International fashion brands such as Adidas, Anta, Texwinca and so on have widely used SmartShrink Shrinkage Rate Tester.
- **Can be connected to ERP or LIMS system.**
The test results can be directly uploaded to the factory's ERP or laboratory LIMS system. SmartShrink can help you manage shrinkage test data conveniently and efficiently.



Power

AC100-245V 50/60Hz 3A



Weight

40kg



Dimension

810*690*1170 mm(L*W*H)

The Specification of SmartShrink

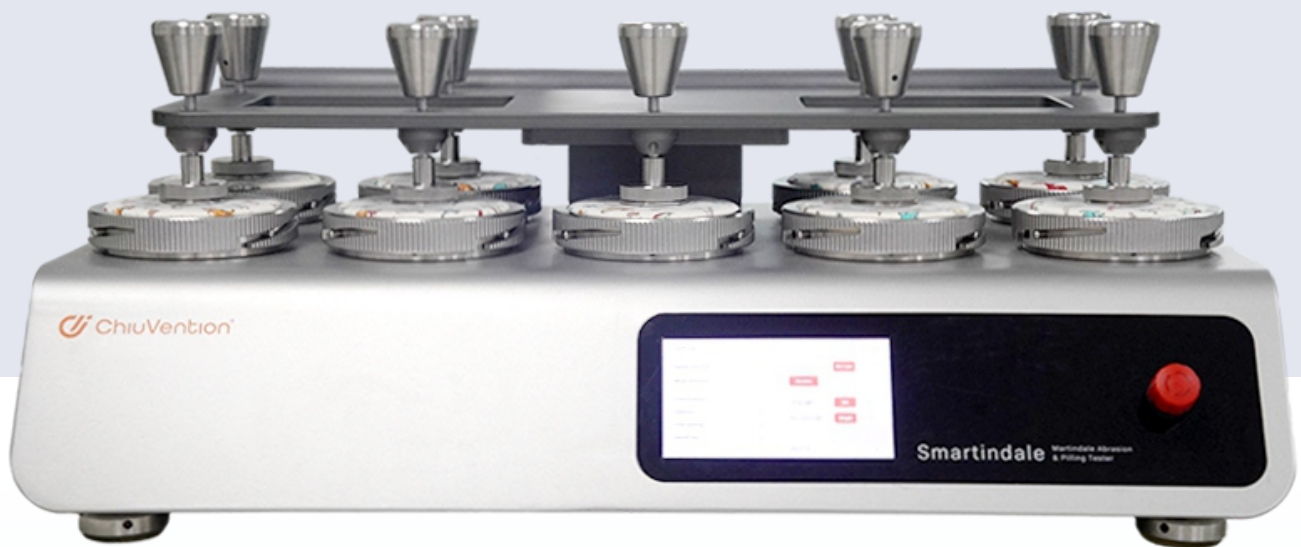
Test mode:	automatic test
Sample test size:	200*200mm, 250*250mm, 350*350mm, 450*450mm, 460*460mm, 500*500mm, 10*10in. 15*15in. 18*18in. The sample test size also can be customized.

Note:

An additional computer is required (optional)
Operating system: Windows 10/11
Processor: Intel Core i3 or higher level
Memory: 16GB DDR4 or higher level
Hard disk: 500GB SATA, solid state drive is recommended.
Graphics card: Discrete graphics card 1G or more memory are recommended.
Expansion interface: USB3.0 or USB3.1

Standard

ISO 3759 ISO 5077 and other customized standards



Smartindale Martindale Abrasion & Pilling Tester

Smartindale Martindale Abrasion and Pilling Tester is used for fabric abrasion and pilling tests. It generates a Lissajous curve with a digital algorithm, and then drives the friction, achieving accurate running without calibration. You can switch test modes such as the abrasion test to the pilling test with one click without changing the pins.

You can also control and monitor the Smartindale from your smartphone by SmarTexLab app connection, and the test data can be uploaded to ERP or LIMS system, to realize smart testing.

It can test the abrasion and pilling resistance of cotton, linen, silk woven fabrics and other textiles, film materials, knitted fabrics, woolen fabrics, artificial leather, synthetic leather, gloves, labor protection materials, and so on. It is widely applicable to more than 20 international standards such as ISO 12945-2-2020, ISO 12947-2-2016, BS EN 530-2010; ASTM D4970/4970M-22, etc.

Smartindale Martindale Abrasion & Pilling Tester



- **The Lissajous curve is calibration-free, making it a more reliable test.**

Smartindale runs by an exclusive and patented digital algorithm that drives dual servo motors and precision slide rails, replacing the traditional mechanical analog drive to generate a perfect Lissajous curve. After more than 10 million times (equal to three years non-stop) of ultra-high intensity friction life test with rubber simulation specimen and double weight, the Lissajous curve is still accurate and perfect, so the test is more reliable.

- **Can be connected to ERP or LIMS through an APP, more smart**

Smartindale can be connected to the APP SmarTexLab installed on your smartphone, then you can set the parameters, monitor the test status, etc. After the completion of the test, the sample information, the test process, and the results can be uploaded to ERP or LIMS, to achieve smart testing, more in line with the requirements of the laboratory management system (ISO17025), such as CNAS or ILAC, so that the entire testing process is more convenient, transparent, and efficient.

- **One-touch switching between abrasion and pilling testing, for greater efficiency.**

You can switch the test modes (e.g. abrasion to pilling) on the control panel, no need to remove the cover plate and change the pin position.

- **User-friendly design**

The flip-up guide plate can be lifted with one hand, which is convenient for loading samples and taking samples; there is a cushioning function when the cover plate falls, which avoids damaging the machine and is safer for the operators.



Power
230V 50/60Hz 5A



Weight
90kg



Dimension
510*850*300 mm

The Specification of Smartindale

Abrasion test	
Max stroke of movement	60.5+/-0.5mm
Weight of holder and spindle	198+/-2g
Pilling test	
Max stroke of movement	24+/-0.5mm
Weight of holder and spindle	155+/-1g

Accessories

Fuse tube	2pcs
Foam wool	9 pcs Φ38 mm
Wool felt	18 pcs Φ90 mm, Φ140 mm
Wool abrasive	9 pcs Φ140 mm
Sampling plate	3 pcs Φ38 mm, Φ90 mm, Φ140 mm
Sampler	1 pc for pilling test
Sampler	1 pc for abrasion test
Press	1 pc Φ126mm, 2.5kg
Fixture1	9 sets for pilling test
Fixture 2	9 sets for abrasion test
Weight 1	9 sets 12Kpa
Weight 2	9 sets 9Kpa
Rubber ring	9pcs
Test pen	1pc
Connection shaft	9pcs for pilling test
Connection shaft	9pcs for abrasion test
Stainless steel ring	9pcs 260g

Optional Accessories

EMPA990 rating chart card	1 set knitted + Woven
SM50 rating chart card	1 set IWS + ASTM
SM25 abrasion resistant wool cloth	1 pack 1.6 X 5m/pack
Sm26 woven wool felt	1 box 24 pcs/box Φ140mm
Sm26 woven wool felt	1 box 24 pcs/box Φ90 mm
SM28 polyurethane ether foam	1box 250 X 200mm/pc, 25pcs/box

Standards

ISO 12945-2-2020 ISO12947-2-2016 ISO12947-1-1998
 ISO12947-3-1998 ISO12947-4-1998
 GB/T 21196.1-2007 GB/T 21196.2-2007
 GB/T 21196.3-2007 GB/T 21196.4-2007
 GB/T 4802.2-2008 BS EN 530-2010
 ASTM D4970/4970M-22 ASTM D 4966-22

Optional Standards

BS EN 388-2016+A1-2018 SATRATM31 A/B PUMA
 BS EN 16094-2012 ISO 20344-2021 Item 6.12
 BS EN 13520-2002 ISO 5470-2-2021



AirFicient Air Permeability Tester

The AirFicient Air Permeability Tester allows you to quickly get reliable air permeability test results, and it is a smart instrument so you can set parameters, monitor the test status, etc., from your smartphone, which greatly improves work efficiency.

It is suitable for a variety of textiles including technical fabrics, non-woven fabrics, and other breathable products such as sponges paper, and other materials for air permeability testing. Applicable to GB/T5453, ISO 9237, ISO 9073:15, JIS L1096 Item 8.26 Method C, BS 3424-16, BS 6F 100 3.1, NWSP 070.1.RO(15), GB/T 24218.15, etc.

The principle is that the air passes vertically through the fabric, forming a certain pressure difference between the front and back sides of the fabric, measuring the amount of air flowing through the fabric under a certain pressure difference, thus obtaining the air permeability value.

AirFicient

Air Permeability Tester



■ Tests are easy and fast.

The AirFicient is easy to operate, you can select the test standards and measurement units from the operation screen. And the instrument can automatically recognize the different ranges of the test fixture head. You can start the test and get the result directly.

■ More reliable test results

Innovative test model, the range conversion components are maintenance-free, no loss, bringing high repeatability and reliability to test results.

High-quality core components, such as pressure sensors from famous brands, further ensure the accuracy of the test results.

■ Smart instrument

Can be connected through Wi-Fi with the SmarTexLab App installed in the smartphones, you can set parameters, monitor the test status, receive equipment warning reminders, etc., and share test results with the quality control department or brand buyers.



Power

230V 50/60Hz 8A



Weight

125kg



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 ² (standard)
Test pressure	10 ~ 2,500 Pa
Air velocity	0.6 ~ 10,000 mm/s (20 cm ²)
Maximum sample thickness	0 ~ 10 mm
Testing Accuracy	< +/-2%
Optional test heads	5 cm ² , 25 cm ² , 38 cm ² , 50 cm ² , 100 cm ²

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.RO(15) GB/T 24218.15

Optional standard

ASTM D737



SmartFill Liquid Filling Machine

The SmartFill is a matching device of washing color fastness tester, which can greatly improve the accuracy and efficiency of the test.

It is equipped with a weighing balance. After weighing the sample, it automatically prepares and heats the soap solution according to the set bath ratio, and outputs the soap solution at a constant temperature, also outputs the set number of steel balls into the test cup.

The SmartFill makes sample preparation more accurate and efficient, and it enhances economic efficiency by allowing wash color fastness testing to be done immediately without waiting.

The SmartFill can also be connected to the SmartTexLab App installed in the smartphone via WIFI, allowing the operator to perform a series of operations on the phone, such as setting the bath ratio, and temperature, and making appointments for replenishment of the soap and heating, etc.

SmartFill Liquid Filling Machine



The Specification of SmartFill

Balance weighing limit:	600g, accuracy $\pm 0.01g$
Soap tank:	working volume 6500ml
Single pumping volume of soap:	2.5~1000ml,
Liquid output accuracy:	$\pm 5\%$
Soap pumping speed:	$\leq 28ml / s$
Temperature control range:	0~65°C, precision $\pm 1^\circ C$
Steel ball filling speed:	10pcs/s



Power

230V 50/60Hz 6.5A



Weight

45kg



Dimension

500*500*520 mm(L*W*H)

More accurate testing

The 1% high precision balance weighs the sample, and the soap dosage is automatically dispensed strictly according to the bath ratio, accurate to 1ml, together with the precise temperature control and steel ball counting, it makes the whole sample preparation more accurate, thus making the test of washing color fastness more reliable.

Testing is more efficient, saving nearly 30% of individual labor costs each year.

By choosing SmartFill, 1 wash color fastness tester with 12 test cups.

Each test preparation can save 10 minutes, according to 200 samples per day, or save 30% of individual labor costs for enterprises in a year.

Smart instrument

Can be connected through Wi-Fi with the SmarTexLab App installed in smartphones, then you can set parameters, monitor the test status, receive equipment warning reminders, replenishment reminders, etc.

Well-known brands are using.

Anta supply chain chose SmartFill, which more quickly and efficiently got the garment color fastness data so that corporate brand and quality management became more scientific.





WashTrue

Washing Color Fastness Tester

The WashTrue Washing Color Fastness Tester adopts smart temperature control algorithm to ensure that the washing color fastness test meets the test standards and the results are reliable. Through IoT technology, it can be connected to smartphones and achieve series control and monitoring remotely, greatly improving work efficiency. It is applicable to standards such as ISO 105 C06:2010, AATCC61-2013e3, GB/T 12490-2014, M&S C4A, AATCC190-2010e2 (2016) e2, NEXT TM 02, etc.

A series of testing operations can be completed on the touch screen, such as selecting standards, parameters, time, and temperature settings, adding water, draining water, etc., it is smart and efficient, and the buzzer alarms automatically when the test is completed. The WashTrue also has multiple safety designs, and can run long time with low noise.

WashTrue

Washing Color Fastness Tester



Smart, Easy to use and Efficient

The smart screen interface allows direct access to a variety of operations: selection of test standards, customization of test parameters, temperature calibration, selection of temperature increase rate, setting of time, heating temperature, etc.

It can also be networked with the SmarTexLab app installed in the smartphone via WIFI to set parameters, monitor the test status and get alerts from the phone. Besides, you can set parameters and get equipment warning reminders, then improve work efficiency.

Precise temperature control, more reliable testing

Smart temperature control algorithm achieves accurate and effective test water temperature control.

Humanized design, durable

Multiple safety protection design, the test rotating frame is equipped with an anti-jamming function to protect the instrument.

The heating is achieved by solid state relay controlled electric, bringing more stable temperature and longer service life.

The water tank is made of SUS304 material, also durable.



Power

AC/220V/3N/50/60Hz 25A
AC/380V/3N/50/60Hz 16A



Weight

45kg



Dimension

500*500*520 mm(L*W*H)

The Specification

Temperature setting range:	Normal temperature (>0°C)~ 95°C
Heating rate:	1.5±0.5°C/min
Temperature accuracy:	± 2°C
Speed:	40 ± 2 r/min
Distance from the bottom of the cup to the rotary axis:	45±10 mm

Standard Accessories

Test steel cup	
550±50mL or 1200±50mL	12 pcs
Stainless steel ball	
Φ6±0.5mm	200 pcs
Fuse ,380V 32A	4pcs
Inlet pipe	1pc
Drain pipe	1pc
Tape	1pc
Screwdriver	1pc
Throat hoop	1pc
Sampling plate	
40 x 100 mm	
50 x 100 mm	
50 x 150 mm	3pcs
Rubber gloves	1pc
ISO sealing or AATCC sealing	12 pcs
measuring cup 100ml	1pc

Optional Accessories

Test steel cup,550±50mL,	1pc
Test steel cup,1200±50mL,	1pc
Stainless steel ball Φ6±0.5mm	1pc
Stainless steel sheet Φ30±2mm thickness 3±0.5mm	1pc
ISO color change gray card	1pc
ISO color change gray card	1pc
AATCC color change gray card	1pc
DW Multi-Fiber Cloth 50m/box	1pc
AATCC No.10 Multi-Fiber Cloth 25m/roll:	1pc

Standard

ISO 105 C06: 2010 AATCC61-2013e3 GB/T 12490-2014
ISO105-C08-2010 GB/T 29255-2012 ISO105-C09-2010/amd.1:2003
GB /T 23343-2009 ISO 105 C10: 2006
GB /T 3921-2008 ISO105-E03:2010 ISO105-E12:2010
M&S C4A AATCC190-2010e2(2016)e2 NEXT TM 02

Optional Standard

ISO105-D01: 2010
GBT 5711-2015 AATCC132-2004e3



HydroBurst Bursting Strength Tester

The HydroBurst Bursting Strength Tester utilizes hydraulic bursting (diaphragm method) to determine the bursting strength and expansion of knitted fabric, woven fabric, non-woven fabric, laminated fabric, elastic woven fabric, paper and other materials when subjected to stress in both warp and weft directions, as well as in all other directions, to get the material's resistance to bursting.

HydroBurst

Bursting Strength Tester



Smart instrument

Can be connected through Wi-Fi with SmarTexLab App installed in the smart phones, set parameters, monitor the test status, receive equipment warning reminders, replenishment reminders, etc., and share test results with one click.

Smooth operation, precise and durable

The hydraulic system adopts full servo control and precise screw drive, providing smooth operation, precise and durable transmission, and low noise.

High-precision testing

The pressure measurement part is equipped with a high-precision pressure sensor, with accuracy up to 0.2, which means the deviation is 0.2% of the maximum range.

Longer service life of sensors

HydroBurst is equipped with the Panasonic laser displacement sensors which have no rod and are easy to replace testing cups, thus providing sensors with better protection and reducing the risk of damage compared to traditional rod-type sensors.

Automatic testing improves efficiency.

During the testing process, the protective cover automatically descends, and then the testing cup is pressed for testing. When the test is completed, the testing cup automatically lifts, and the protective cover automatically ascends. The testing process is automated, without manual operation, which improves work efficiency and reduces operation risks.

Smart identification system for testing cups

When changing the testing cup, the system can automatically identify the current testing cup model and switch the testing parameters automatically, which also greatly improves work efficiency.

In addition, the mechanical shell of HydroBurst is made of steel plate with electrostatic spraying process, which makes the appearance generous. The mechanical interior is mainly composed of high-quality lightweight all-aluminum structure, which greatly reduces the weight of the whole machine.



Power

230V 50/60Hz 5A



Weight

150kg



Dimension

500*830*660 mm(L*W*H)

Specifications

Testing mode

fixed-speed bursting, fixed-pressure bursting, fixed-expansion bursting, and fixed-time bursting.

Measurement range 0-10 MPa \pm 1%

Testing rate 50-500 ml/min

Hydraulic medium glycerin

Testing cup size 7.310 cm²

(diameter: 30.5 mm \pm 0.2 mm)

10 cm² (diameter: 35.7 mm \pm 0.2 mm)

50 cm² (diameter: 79.8 mm \pm 0.2 mm)

100 cm² (diameter: 112.8 mm \pm 0.2 mm)

Maximum expansion

height 70 mm \pm 1 mm

Operating

environment

temperature: 20°C \pm 5°C,

humidity: 50-70%RH

Installation

conditions

air supply pressure of 6~8 bar

(ensure that the air is clean and dry)

Standard

GB/T7742.1-2005 ISO13938-1-2019

ASTM D3786/D3786M-18



ElmenGuide Elmendorf Tear Tester

The ElmenGuide, also known as the Pendulum Tearing Tester, do the test by using a pendulum tearing method. The pendulum falls from a certain starting height, converts all potential energy into kinetic energy, cuts a slit on the fabric, and then measures the force required for the fabric to tear to a specified length, which can be used to calculate the fabric's tear resistance.

It is mainly suitable for woven fabrics, also for other textiles produced by other technologies, such as non-woven fabrics. However, it is not suitable for knitted fabrics, woven elastic fabrics, and fabrics in which the tearing direction will change during testing.

ElmenGuide

Elmendorf Tear Tester



- The innovative balance pendulum plate design, achieves a higher level of testing accuracy**
 The pendulum arm of ElmenGuide is specially designed, and the center of gravity of the entire pendulum arm coincides with the rotation center when no weights are attached. This results in higher accuracy and reliability of the equipment.
- Smart instrument**
 Can be connected through Wi-Fi with SmarTexLab App installed in the smart phones, set parameters, monitor the test status, receive equipment warning reminders, replenishment reminders, etc., and share test results with one click.
- Automatic recognition of weights**
 The machine can automatically recognize the weight attached and adjust to the corresponding range.
- Humanized design, for more safety**
 The double-button switch design prevents accidents and is more user-friendly for testers.
- Precise manufacturing and stable operation**
 The fixture rotates flexibly and the loss of empty pendulum is minimal. Multiple measurement units (N, cN, gf, cP) to choose from. In addition, ElmenGuide has a precise appearance design, with an aluminum alloy hard oxidation surface that is sleek, durable, and easy to clean. The trapezoidal chassis is more stable, and the seven-inch color touch screen is simple and easy to use.



Power
100~245V 50/60Hz 3A



Weight
70 kg



Dimension
580*420*600mm (D*W*H)



Specifications

Load range	8N, 16N, 32N, 64N, 128N
Testing accuracy	≤±0.2%F-S
Tear length	43mm
Automatic incision length	20±0.2mm
Sample size	100×63mm

Accessories

Fuse	2 pcs
Sample cutter	1 pc, 100mm*75mm
Test weight A	1 pc, 8N
Test weight B	1 pc, 16N
Test weight C	1 pc, 32N
Test weight D	1 pc, 64N
Test weight E	2 pcs, 128N
Calibration weight a	1 pc, 8N
Calibration weight b	1 pc, 16N
Calibration weight c	1 pc, 32N
Calibration weight d	1 pc, 64N
Calibration weight e	1 pc, 128N

Standard

ASTM D1424 BS ISO 13937-1 GB/T 3917.1 ISO 4674-2

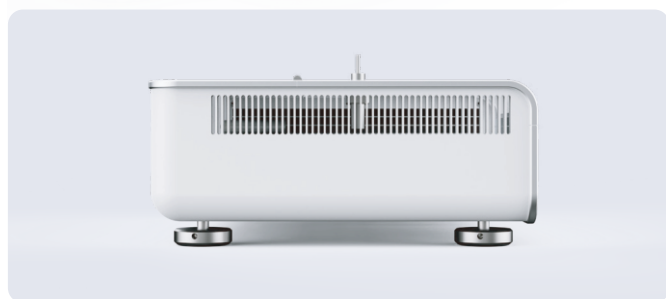


SmartDry Rate Tester

SmartDry Dry Rate Tester is equipped with high-precision temperature sensors, wind speed sensors and precision water dripping devices, etc., which can quickly simulate the process of human sweating and quickly determine the drying rate of textiles. The specially designed parallel cross-flow fan makes the wind speed more uniform and smooth, which can restore the actual evaporation process and make the test results more reliable. SmartDry is a smart instrument, which can be connected to the SmartTexLab app installed in the smartphone through WIFI, so that the parameters can be set remotely and the test process can be monitored, which greatly improves the working efficiency. SmartDry is applicable to the AATCC 201 standard.

A test sample is placed on top of a heating plate at a constant temperature of 37° (99°F), and a certain amount of water rises from the bottom of the instrument to the center of the plate and saturates the sample. An anemometer inside the instrument dries the sample. An infrared temperature sensor measures the change in temperature of the sample to determine if the drying is finished, then the drying speed is determined by the test drying time.

SmartDry Rate Tester



▪ Smart instrument

Can be connected through Wi-Fi with SmarTexLab App installed in the smart phones, set parameters, monitor the test status, receive equipment warning reminders, replenishment reminders, etc., and share test results with one click.

▪ Efficient and convenient

High precision temperature sensor, wind speed sensor, and precision drip device can automatically complete the test of fabric drying time, drying rate and a series of data analysis work.

- Original parallel cross-flow wind box, so that the wind speed is more uniform, more smooth, more restore the actual evaporation process, more reliable test results.

▪ Precise appearance design

Aluminum alloy hard oxidation surface, durable and easy to clean; seven-inch color touch screen is easy to use.



Power

AC100-245V 50/60Hz 3A



Weight

20 kg



Dimension

400*590*180mm (D*W*H)

Specifications

Fan	can produce airflow of 0.5-3.5m/s
Heater plate	305mm x 305mm±1mm
Soft heating plate	305mm x 305mm±1mm
Heat-insulating cork board	305mm x 305mm±1mm
Metal pressure bar	150mm x 40mmx2mm±1mm
The Heating temperature	25-40°C±0.5°C (with overheat protection)
The Accuracy	0.5-3.5m/s±0.1m/s
Infrared temperature sensor	15-50°C±0.1°C
Drip accuracy	0.05-1.0ml±0.003ml 1.0-4.5ml±0.01ml

Accessories

Fuse	2pcs
Sampling plate	1 pc 150mm*150mm
Water bottle	1 pc 60mL

Standard

AATCC201



InnoFlex Bally Flexing Tester

InnoFlex Bally Flexing Tester is equipped with advanced servo motors for precise positioning, and a stable testing process, achieving more accurate and reliable test results. It is a smart instrument that can be connected to the SmarTexLab app installed in your smartphone via WIFI, which allows you to remotely set the parameters and monitor the testing process, greatly improving work efficiency. With a noise level of only 60 dB, it is user-friendly and durable. Suitable for a wide range of testing standards, such as ISO 5402-1:2017, ISO 32100:2018, and ISO 20344-2011, SATRA TM 55.

InnoFlex Bally Flexing Tester also known as InnoFlex Leather Folding Endurance Tester, is used to test the flexing resistance of leather, cloth, and other materials. Take one side of the sample as the inner side, and the other side as the outer side, then InnoFlex will bend the sample back and forth until the damage occurs, or bend a certain number of times to see the degree of damage, to determine the sample flexing strength.

InnoFlex

Bally Flexing Tester



More accurate and reliable tests

Microcomputer program control and advanced servo motor bring accurate positioning. The InnoFlex Leather Folding Endurance Tester can automatically return to its original position and keep stable during the testing process to achieve more accurate and reliable tests.

Smart instrument

It can be connected with the SmarTexLab app installed in smartphones through WIFI, allowing test men to set parameters, monitor the testing process, and get alerts from the device on the smartphone, as well as share the test results in real-time.

Efficient and durable

12 workstations can be selected, and you can choose single station/multi-station mode. The running times of each mode can be counted separately, so you can test a variety of samples at the same time. The NSK bearings are from Japan, and the machine is made of precision mold-casting stainless steel, with a scratch-resistant appearance, and longer service life.

More user-friendly

The actual noise is only 60dB, much lower than other similar products in the market. The operation interface is ergonomic, and the running data can be saved, even if a power failure occurs.



Power

220V 50HZ~60HZ 6.5A



Weight

55 kg



Dimension

850x490x287mm (D*W*H)

Specifications

Testing station	12 stations
Testing speed	100r/min
Working stroke	swing angle 22.5°±0.5°
Test times	0~9999999 (adjustable)
Maximum clamping distance	maximum folding thickness of test product 7mm
Upper and lower spacing	The spacing between upper and lower clamps 25mm

Standard accessories

Cutter die: 70X45mm

Standards

ISO 5402-1:2017 ISO 32100:2018 ISO20344-2011



Optional standards

SATRA TM 55



AtmoExplorer Temperature & Humidity Chamber

The AtmoExplorer is used for testing the performance of various materials under different environmental conditions. It is suitable for testing the heat resistance, cold resistance, dry resistance, wet resistance, and other properties of materials. The testing chamber is applicable for quality testing of products, such as electronics, electrical appliances, mobile phones, communication devices, instruments, vehicles, plastic products, metals, food, chemicals, construction materials, medical equipments, and aerospace products.

AtmoExplorer

Temperature & Humidity Chamber



- **Wide range of applications**

It can simulate the environment of high temperature, low temperature, high humidity, and low humidity, and is suitable for testing requirements in various fields and industries such as electronics, materials research, medicine, automobiles, food, etc.

- **Excellent performance on control precision and uniformity of temperature and humidity**

Temperature and humidity control precision: $\pm 0.5^{\circ}\text{C}$; $\pm 3\% \text{RH}$
 Temperature and humidity uniformity: $\pm 2^{\circ}\text{C}$; $\pm 3.0\% \text{RH}$

- **Achieve heating and cooling quickly**

When unloaded, the AtmoExplorer can achieve heating from room temperature to 100°C within 30 minutes. It can also achieve cooling from room temperature to -20°C within 60 minutes.

- **Intuitive and practical screen, easy to operate**

AtmoExplorer has a 7-inch large touch screen that displays information in both Chinese and English. The set values (SV) and perform values (PV) of temperature and humidity are displayed directly, as well as the currently executing program number, segment information, remaining time, and number of cycles.

- **Stable operation, originated from high-quality insulation materials and humidifiers**

The heating element is made of spring-type nickel-chromium wire, and the humidifier is a UL-shaped humidifier in the form of stainless steel electric steam generation.

- **High quality refrigeration system and refrigeration auxiliary parts**

Tecumseh fully hermetic high efficiency compressor from France, solenoid valve from Japan, and pressure controller & oil separator are international famous brand.

- **A variety of safety protection**

The burn prevention switch, the high-pressure protection for the compressor, the overheating protection for the compressor, the over current protection for the compressor, the no-fuse switch protection, the short-term water shortage alarm and the long-term water shortage shut-down protection.

- **Various sizes can be customized**

Such as 80L, 150L, 225L, 408L, 800L, 1000L



Power

380V 50HZ 20A 3 φ 4 wire



Weight

295kg



Dimension

225L 1330*940*1670mm (D*W*H)

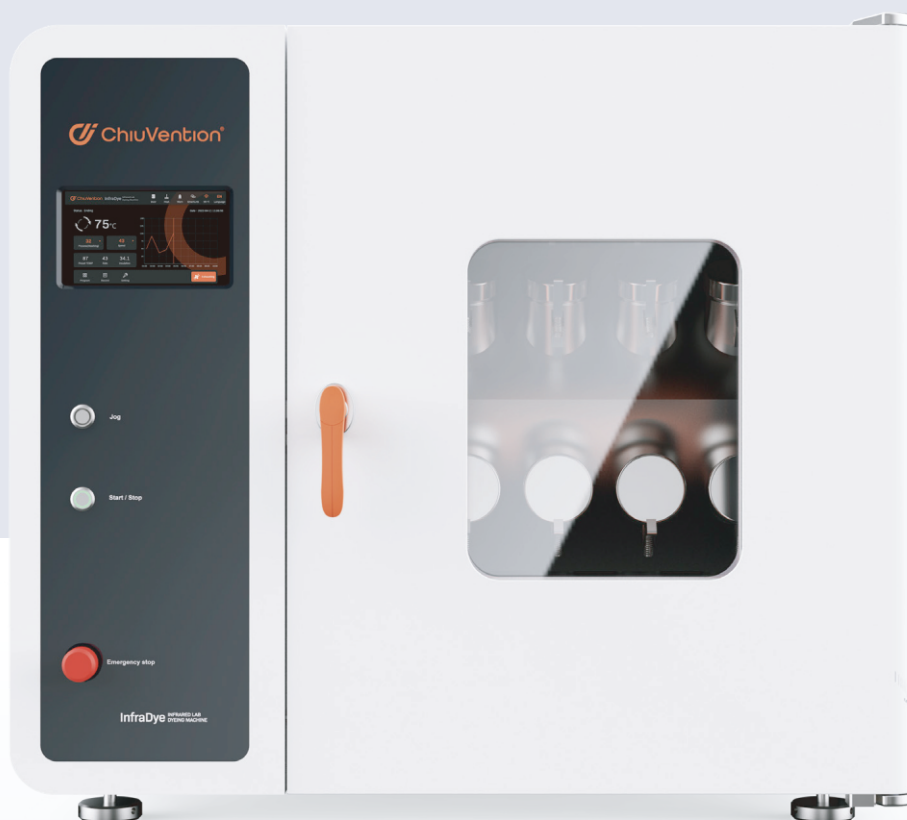
Specifications

Temperature range	$-20^{\circ}\text{C} \sim +150^{\circ}\text{C}$
Humidity range	20-98%RH
Temperature and humidity control accuracy	$\pm 0.5^{\circ}\text{C}$; $\pm 3\% \text{RH}$
Temperature and humidity distribution uniformity	$\pm 2^{\circ}\text{C}$; $\pm 3\% \text{RH}$
Heating time temperature to	100°C , within 30 minutes
Cooling time temperature down to	-20°C , within 60 minutes
Testable area	500*750*600mm (D*W*H)

Controller specifications

Accuracy temperature	$\pm 0.1^{\circ}\text{C} + 1 \text{digit}$
humidity	$\pm 1\% \text{RH} + 1 \text{digit}$
Degree of Reolution	temperature $\pm 0.1^{\circ}\text{C}$, humidity $\pm 0.1\% \text{RH}$
Temperature slope	0.1~9.9 can be set

- Display the current program number, number of segments, remaining time and number of laps.
- Temperature and humidity program setting value is displayed in a circular curve, with instant display of program curve execution function.
- Separate program editing screen, at least 4 temperature and time steps can be input on each page.



InfraDye Infrared Lab Dyeing Machine

The InfraDye is designed to dye samples quickly and at a low cost. In order to reduce dyeing errors, textile manufacturers need lab dyeing machine for testing samples before dyeing large batches. In addition, fabric dyeing laboratories also need these machines for dyeing studies.

InfraDye

Infrared Lab Dyeing Machine



- Longer service life**
 Solid state relay control electric heating, no mechanical contact, long service life. The mechanical shell is made of stainless steel powder coating process, the mechanical interior is made of high quality SUS304 stainless steel, and the dyeing cup is made of SUS316, which is durable.



Power
230V 50Hz 32A



Weight
145 kg



Dimension
710*840*750mm (D*W*H)

- Smart temperature control algorithm**
 Achieving different test temperatures, suitable for all kinds of dyeing with room temperature and high temperature.
- Multiple dyeing solutions**
 Can be realized at one time: different specimens can be dyed in different cups.
- Smart instrument**
 Can be connected through Wi-Fi with SmarTexLab App installed in the smart phones, set parameters, monitor the test status, receive equipment warning reminders, replenishment reminders, etc., and share test results with one click.
- User-friendly, convenient and efficient**
 Microcomputer control, simple operation, automatically retain the current data in case of power failure, the running process can be edited, and the buzzer automatically alerts after the test is completed.
- Stable, durable and noiseless**
 The transmission mechanism is upgraded to rotary operation, which is more stable, more durable and noiseless.
- Multiple safety protection**
 Such as over-temperature alarm function and automatic stop of rotating cup holder when the door is mistakenly opened.
- Temperature calibration function**
 Can avoid the temperature differences caused by the aging of the probe.

Specifications

Test temperature range	
room temperature	0°C ~ 140 °C
Temperature control range	
room temperature	25 °C ~ 140 °C
Heating temperature	
control speed	0.1 °C / min ~3 °C / min
Temperature control accuracy	
Isothermal state	± 0.5°C/min
Temperature control mode	optimized automatic control
Rotational speed	0 ~ 50 rpm (adjustable)

Accessories

test cup volume	300±20ml 24pcs
T-socket wrench	1 pc
stainless steel copy wrench	1 pc
Fuse	4 pcs
Gloves	1 pc

Optional Accessories

Heating tube



SmartPull Tensile Tester

SmartPull Tensile Tester is AC servo-driven and equipped with ball screws to provide stable pulling force and achieve higher testing accuracy. The software of the tester is compatible and powerful by outputting comprehensive test indexes, such as displacement, maximum force, elongation, stress, etc.; and there are various safety designs to protect the instrument and the operator's safety. It is a tensile machine specially built for textiles, leather, footwear, etc. It can do tension, compression, bending, tearing, shearing, peeling and top breaking tests. It is applicable to many international standards, such as ISO3377, ISO 13935, ISO 13937, ISO 20932-1, ISO 4674, ASTM 5034, ASTM D4964, GB/T 3917.5, FZ/T 01030 and so on.

SmartPull Tensile Tester



- Safety guarantee for the whole testing process**
 Equipped with intelligent and active displacement and torque alarm system, overload and emergency stop device, up and down travel limiting device, always keep the testing process safe and stable.
- Powerful software**
 The test software can be applied to different languages, and can present the displacement, maximum force, elongation, stress, maximum stress, bending stress, speed and other test results. That is getting more comprehensive test indicators.
- Applicable up to a series of standards**
 Many standards and optional standards such as ISO3377 ISO 13935 ISO 13937 ISO 20932-1 ISO 4674 ASTM 5034 ASTM D4964 GB/T 3917.5 FZ/T 01030,etc.
- Easy operation**
 Multi-functional pneumatic gripper, replace the clips to complete different tests, easy and quick. No need to replace the sensor when do tensile tests and top breaking tests.
- Unique design**
 Unique appearance design combined with sense of technology, surface aluminum alloy hard oxidation treatment, durable.
- User-friendly**
 Side cutting design, more user-friendly.



Power
230V 50/60Hz 5A



Weight
90kg



Dimension
630*460*1470mm (D*W*H)

The Specification of SmartPull

Testing capacity	250 kg , 500 kg
Test level	class1
Max Travel	800mm (without fixture)
Travel accuracy	≤1%
Travel speed	1mm/min ~500mm/min
Speed accuracy	≤1%
Test force range	0.2% ~ 100%FS
Test force value accuracy	±1%
Range of constant rate control	0.5%~100FS

Software configuration (standard)

A version of the test system, with a single-step test

Software configuration (optional)

The C version of the test system can achieve a multi-step test

Optional fixture and standards

Manual tension fixture or pneumatic tension fixture: ISO 9073-3, ISO13934-1/2, ISO 13935-1/2, ASTM D5034, ASTM D5035, ISO 3377-1, ISO 13936-1, ISO 13936-2, ISO 13937-2, ISO 13937-3, GB/T 3917.5, GB/T 3923.1 (equipped with: clamps by 25x25mm, 25x50mm, 25x75mm)

ISO 9073-4, GB/T 3917.3 (clamps by 25x100 mm)

ISO 13937-4, ISO 4674-1 (clamps by 25x200 mm)

ISO 20932-1 (linear clamps are required, or use other clamps)

Footswitch	Use in case of pneumatic clamps
U-shaped Fixture	ASTM D4964
Yarn Fixture	ISO2062
Bursting Fixture	ASTM D6797 FZ/T 01030 GB/T 19976
Leather Tearing Fixture	ISO 3377-2

Computer Configuration of SmartPull

CPU for the Intel Celeron (Celeron) 2GHz or more CPU

Memory at least 512MB, more than 1GB is better

Hard disk space of more than 2GB

Display resolution of 1024 × 768 or more.

Printer compatible with the operating system (if output reports are required)

The applicable operating system for Microsoft's Windows XP, Windows 7, Windows 8, Windows 10

If you need to output the report in Word and Excel format, you should install Microsoft's Microsoft Office 2003, 2007, and 2010 versions of the software.



SmartPull Tensile Tester

SmartPull Tensile Tester is AC servo-driven and equipped with ball screws to provide stable pulling force and achieve higher testing accuracy. The software of the tester is compatible and powerful by outputting comprehensive test indexes, such as displacement, maximum force, elongation, stress, etc.; and there are various safety designs to protect the instrument and guarantee the operator's safety. It is a tensile machine specially designed for textiles, leather, footwear, etc. It can do tension, compression, bending, tearing, shearing, peeling, and top-breaking tests. It is applicable to many international standards, such as ISO 9073-3, ISO 13934-1/2, ISO 13935-1/2, ASTM D5034, ASTM D5035, ISO 3377-1, ISO 13936-1, FZ/T 01030, GB/T 19976 and so on.

SmartPull Tensile Tester



- **Higher testing accuracy**

AC servo drive and ball screw achieve stable and constant pulling force, with force accuracy within 1%, ensuring the reliability and repeatability of test results.

- **Powerful software**

The test software can be applied to different languages and can present the displacement, maximum force, elongation, stress, maximum stress, bending stress, speed, and other test results. That is, getting more comprehensive test indexes.

- **Safety guarantee for the whole testing process**

Equipped with an intelligent and active displacement and torque alarm system, overload and emergency stop device, and up and down travel limiting device, SmartPull always keeps the testing process safe and stable.

- **It can be customized to meet diversified needs.**

S-type load cell for pulling force of 5KN-10KN can be customized to realize more testing functions, and the testing software also can be customized to realize automatic repeated testing.

- **Lightweight design**

The SmartPull is 100 kg lighter than the initial generation, making it easier to handle and operate.



Power

230V 50/60Hz 5A



Weight

160kg



Dimension

830*600*1730 mm

The Specification of SmartPull

Testing capacity	1000 kg
Test level	class1
Max Travel	900mm (without fixture)
Travel accuracy	≤1%
Travel speed	1mm/min ~500mm/min
Speed accuracy	≤1%
Test force range	0.2% ~ 100%FS
Test force value accuracy	±1%
Range of constant rate control	0.5%~100FS

Software configuration (standard)

A version of the test system, with a single-step test

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The C version of the test system can achieve a multi-step test

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