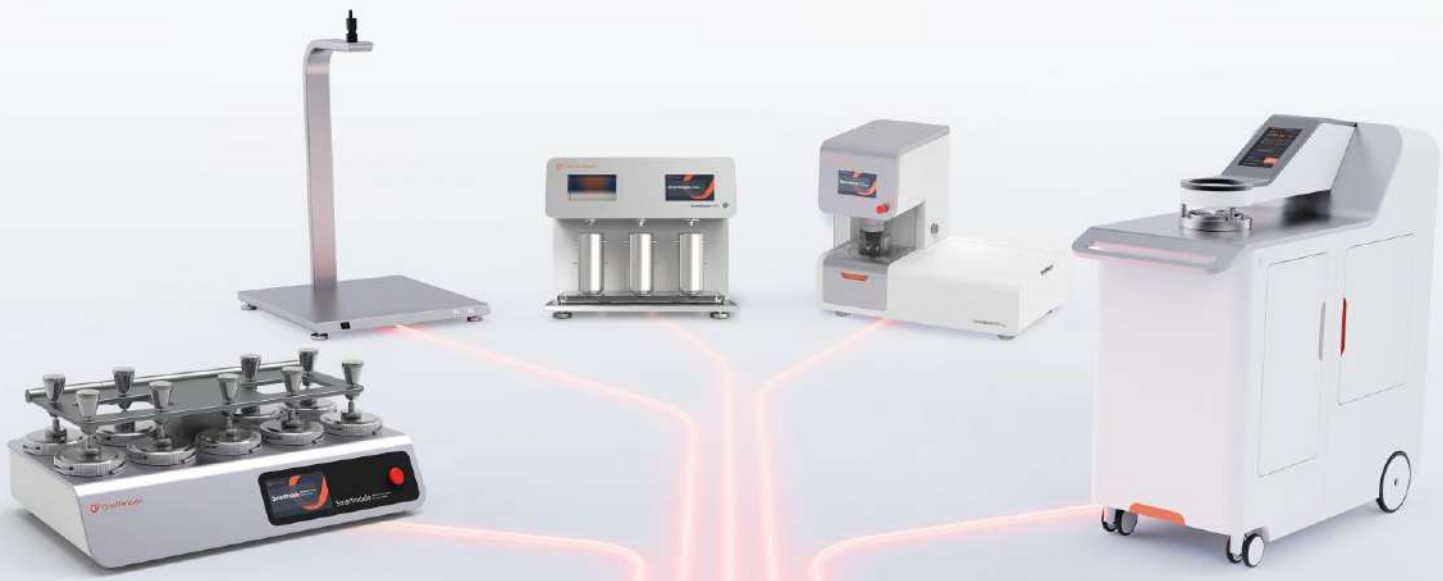
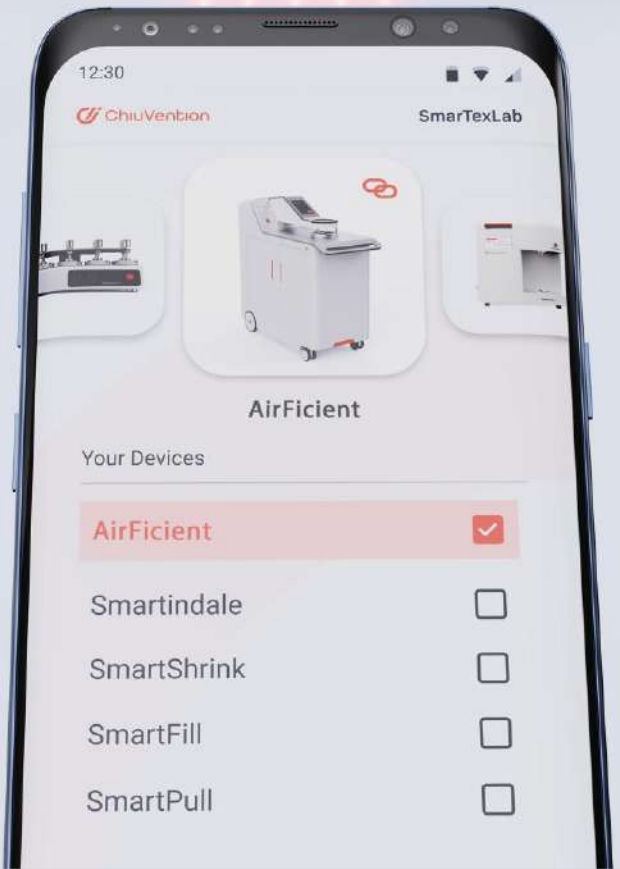
ChiuVention

THE DIGITAL FUTURE OF TEXTILE TESTING





Why ChiuVention

SmarTexLab

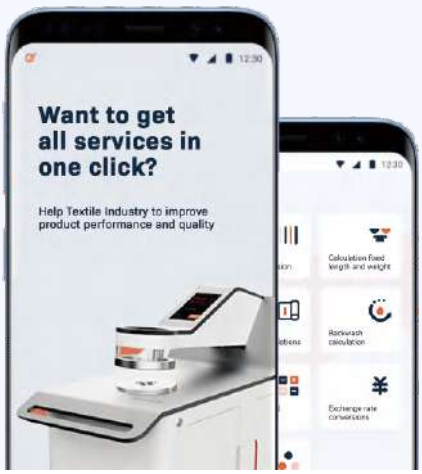
Track samples with RFID, QR code, etc.; Take new technologies such as visual inspection combined with AI algorithms to make testing instruments smarter; Reconfigure the processes of order recording, sampling, testing, reporting and realizing them with the SmarTexLab intelligent lab system based on lean production concepts; Install SmarTexLab system on smart instruments and smartphones/tablets/computers and interconnecting them with IoT technology; You can also link the instruments and SmarTexLab with labs LIMS or directly to factory ERP. So ultimately link to the quality management systems of apparel brands to realize the digitalization of the whole value chain! Make the test transparent, more accurate and faster!

30% More Reliable

Reliable and easy-to-use smart instrument designed by German Team and SmarTexLab system, which can finish the work: identifying samples by code scanning, smart sample cutting and automatic sample making, as well as automatic program selection, machine vision inspection, and AI intelligent algorithm to obtain test results. Finally the system can automatically output and send test reports. Professional operation is no longer required, which greatly reduces human errors and improves test reliability by about 30%.

50% Faster

Enter the sample info into the system. Select the test requirements to generate QR codes. The smart cutting machine scans and cuts the samples in one go. The lab technician receives the info and notifies receipt of the samples. Then, the instrument scans the codes and installs the samples. It automatically selects a program and completes the test. After setup, all original records will be uploaded to the SmarTexLab system. All test items will be summarized to output a report. The related parties can view the reports from smartphones or computers. After the seller tests the inventory, the buyer can use it in production. This saves time, as there is no need to repeat the test. The whole process is about 50% faster.



What is Important

Mission

The Digital Future of Textile Testing

Vision

Be the global leader in smart textile instruments

Core Values

Centered on the Customers

Centered on the Strivers

Honest Trustworthy

Open Innovative

ISO9001-
Certified by SGS

National
High-Tech Enterprise

Member of ASTM

Member of AATCC

Smart Instruments & Quality Standard

Strictly meet standards
All data for each instrument meet the standard parameters.

Consistent with international third party laboratories
All test results are consistent with those of well-known international third party laboratories.

High repeatability
By using the Verifiction Fabrics from SDCE, after multiple tests on the same machine, the results are consistent.

High reproducibility
By using the Verifiction Fabrics from SDCE, after multiple tests on different machines of the same model, the results are consistent.

Longer service life
For all the machines manufactured by ChiuVention, before mass production, prototypes are made and required to pass the strict Reliability Test, i.e. tested under challenging environments such as high and low temperature, high speed and high load, and etc., to ensure a sufficiently long expected service life.

About ChiuVention

ChiuVention was incorporated in Europe, the U.S.,and China. Designed in Germany, we specializes in developing smart instruments for functional textiles and testing digitalization. ChiuVention is the first company in the world to propose the "SmarTexLab"and to promote the digital future of textile testing together with the world's top sports brands.

ChiuVention, formerly known as TESTEX, which was founded in 2010 and focuses on the international market, fully started the smart testing innovations in 2020. At ITMA 2023 in Milan, Italy, with the newly created smart textile laboratory system SmarTexLab and a series of smart instruments, ChiuVention finished the global launch, which was widely recognized in the international arena. ChiuVention has attracted top sports brands and research groups. It has since cooperated with them to develop smart testing tools for digital textiles and functional fabrics.

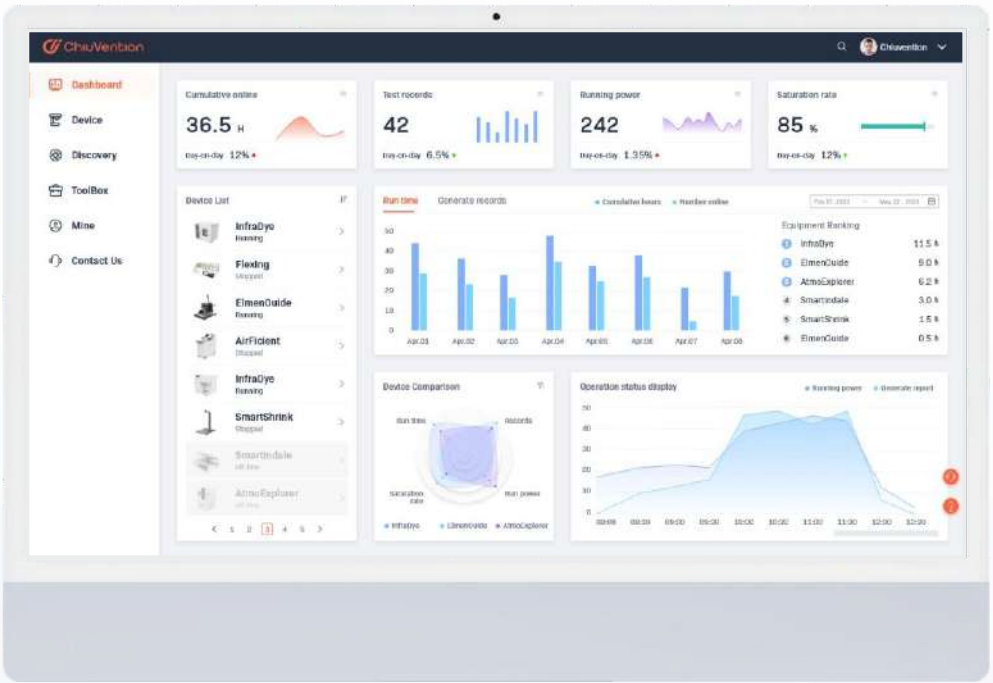
ChiuVention is sold in 42 countries and regions through the global agent network, the main markets are European countries and the United States. Recognized and recommended by the world's first-tier apparel brands, ChiuVention is also growing rapidly in recent years in Southeast Asia and China's market. We have been serving third-party testing organizations such as SGS, Intertek, BV, and sports and fashion brands such as NIKE, adidas, Anta, Decathlon, etc. for more than ten years and has gained a good reputation.

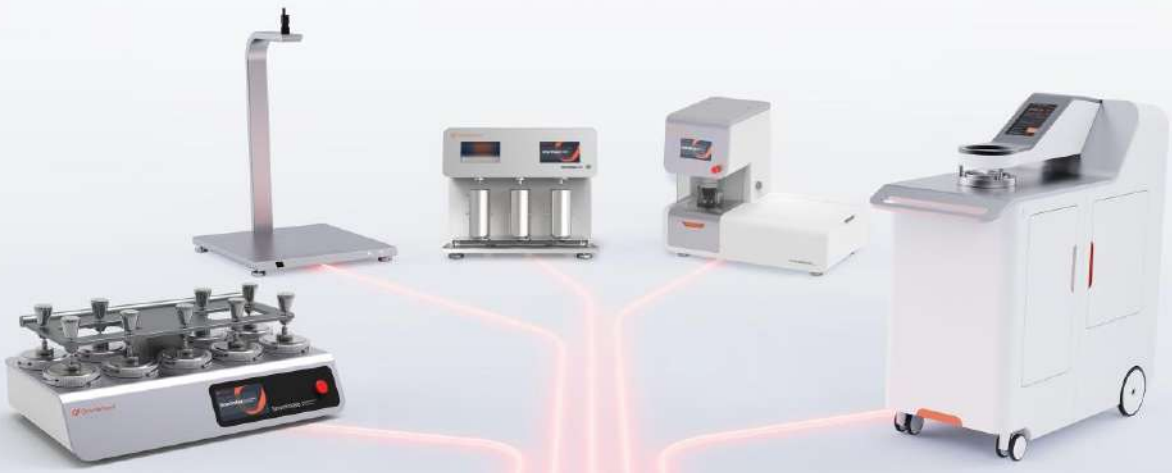
ChiuVention insists on customer-centeredness, takes the digital future of textile testing as our mission, and aspires to be the global leader of smart textile instruments! TEST SMART NOW!

Contents

SmarTexLab

ChiuVention





What are we facing in textile testing?

Unreliable Testing

In the traditional testing process, 3 people may get 3 different test results, and transcription, calculation, and data entry may also lead to errors.

Non-transparent Testing

Samples and consumables,the process of testing and the status of instruments,temperature and humidity, etc. are not fully documented and are difficult to trace.Therefore, there is a possibility of falsification or alteration.

Long Testing Cycle

Production may only take 3 days, but testing takes 3 days as well, due to the amount of labor and time required to record, calculate, and summarize the test results of each sample, and enter them into the computer to form reports.

ChiuVention Solution — SmarTexLab

What is SmarTexLab?

Apply RFID, QR code, and other technologies to sample tracking; Use technologies like visual inspection and AI algorithms to make test instruments smarter; Connect each smart instrument to the SmarTexLab system on the smartphone, tablet, or computer via IoT technology. And then connect it with factory ERP or lab LIMS, and also with brands quality management system.

How does SmarTexLab operate?

You can send the test standard of the order directly to the instrument via ERP. Then, the instrument can execute the test after scanning the order samples' code. It will summarize the report and send it back to ERP after completing the tests. It will also check if the quality meets the requirements and retain all the original data for traceability.

SmarTexLab mobile App

You can download the APP to monitor each lab instrument remotely. The instrument will be upgraded by remote OTA software regularly. You can contact ChiuVention online for support. The instrument will remind the admin to calibrate, maintain, and replace consumables regularly. On the APP, you can check training videos and view articles on various tests.

TEST SMART NOW

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

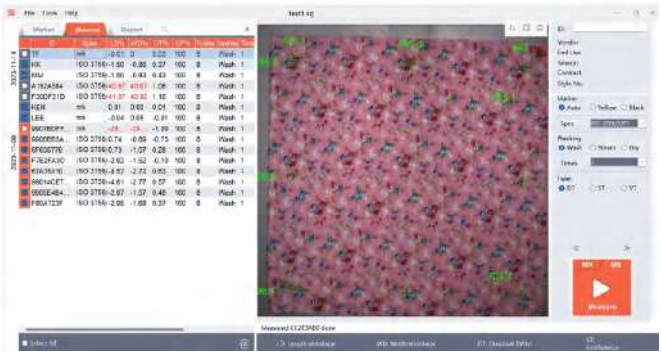
Power
220/110V 50/60Hz

Weight
40kg

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

Specification

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



- **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 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

SmartDry
Drying Rate Tester

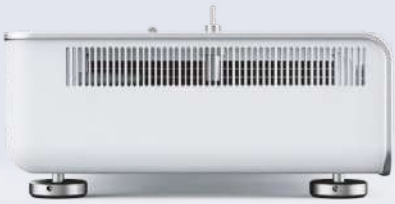
SmartDry is suitable for testing quick-drying fabrics. Equipped with high-precision temperature sensors, wind speed sensors, and precision dripping devices, SmartDry can quickly simulate the process of human sweating and quickly determine the drying rate of textiles. Unique uniform airflow control and 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

Power
220/110V 50/60Hz

Weight
20kg

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



- **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 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.

Specification

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
Sampling plate	1 pc 150mm*150mm
Water bottle	1 pc 60mL

Standard

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
125kg

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

Specification

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 cm² (standard)
Test pressure	10 ~ 2,500 Pa
Air velocity	0.6 ~ 10,000 mm/s (20 cm²)
Measurable sample thickness range	0 ~ 10 mm (other thicknesses and fixtures can be customized)
Testing Accuracy	< +/-2%
Optional test heads	5 cm², 25 cm² (5*5cm), 38 cm², 50 cm², 100 cm²

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

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/(cm^2-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 re-tested 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.

Power
220/110V 50/60Hz

Weight
about 30 kg

Dimension
435*545*315 mm(D*W*H)

Specification

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 15~25°C,
Size 200mm * 200mm, Precise temperature control

Temperature display resolution of 0.01°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

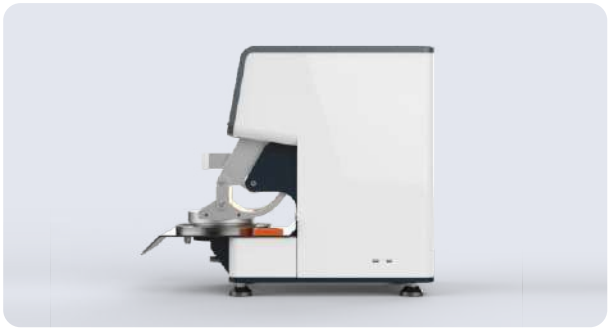
JIS L1927
FTTS-FA-019
GB/T 35263-2017
CNS 15687-2013

HydroDetector

Hydrostatic Head Tester

The HydroDetector Hydrostatic Head Tester can test materials for waterproofness. It works on textiles, leather, and films under high water pressure. The HydroDetector allows for complete automation and intelligent testing. It has a high-definition camera that records the test process. AI algorithms automatically check for water droplets or other test-ending conditions that meet the standards. The system then ends the test and notifies the operator via smartphone or buzzer. It also has an intelligent assistance mode to trace the test video for manual correction. The adaptive sample clamping system and servo-mechanical pressing ensure stable, precise testing. No need for compressed air, which eliminates noise. IoT tech connects the instrument, smartphones, and computers. It integrates with ERP and LIMS systems. This greatly boosts testing efficiency.

HydroDetector
Hydrostatic Head Tester



Power
220/110V 50/60Hz

Weight
94kg

Dimension
360*670*635 mm (L*W*H)

- **Automated Intelligent Testing**
  The system has visual detection with smart judgement. It uses a high-definition camera to record the testing process. AI algorithms automatically identify and determine compliant water droplets or other test-ending conditions. They then end the test and notify the operator via smartphone or buzzer. This testing instrument supports continuous learning and upgrades. It enables more accurate detection and judgement. It has remote OTA (Over-the-Air) updates for better functionality.

- **Intelligent Assistance Mode**
  The system includes a video playback feature. After automated testing, complex samples can be quickly reviewed via video playback. If there is an error in judgment, manual annotation can quickly correct it.

- **Adaptive Sample Clamping System**
  The servo clamping system can automatically adjust the clamping force based on the testing pressure by using advanced algorithms. This keeps enough clamping force to prevent water leaks and also protects the sample's integrity.

- **Servo-Mechanical Pressurization**
  The servo-mechanical pressurization system applies pressure at a standard rate. This ensures stability and prevents large water droplets from spraying after sample rupture.

- **High-pressure testing is available.**
  HydroDetector is capable of high-pressure testing up to 600 kPa. You can customize higher test pressures.

- **Powerful and User-friendly Control Screen**
  The control screen is powerful and as easy to use as a smartphone. It allows convenient viewing of the testing process and results. Test videos and results can be exported in several formats for review. The test results can be edited and corrected based on manual judgement. With the IoT app, users can monitor tests remotely. They get alerts when tests finish. They can view or send test reports, or upload them to the LIMS. Besides, this instrument does not need compressed air, eliminating noise. Its unique design allows for rapid replacement of fixtures and mesh clamps.

Specification

Standard test head	100cm²
Units	Pa, kPa, mmHg, cm H_2O
Pressure range	0~600 kPa (50m water column) Higher test pressures customizable
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.R0(15)
GB/T 24218.16
FZ/T 01004

ElmenGuide
Elmendorf Tear Tester

The ElmenGuide Tearing Strength Tester, or Pendulum Tear Tester, measures fabric tear resistance. This instrument is stable and reliable for testing. The original balanced pendulum improves testing accuracy. ElmenGuide can auto-recognize weights and adjust the range. A dual-button switch design prevents collisions and injuries. A sensitive brake device and easy-to-use fixtures make the test user-friendly. IoT tech can connect the instrument to smartphones and computers. It can also link to ERP and LIMS systems. This will greatly improve testing efficiency.

ElmenGuide
Elmendorf Tear Tester

Power
220/110V 50/60Hz

Weight
70kg

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

- **Self-developed calibration system for more reliable testing**
  Multiple calibration points for each test range to ensure stable and reliable testing.

- **Automatic recognition of weights**
  The machine can automatically recognize the hanging weights and adjust the matching range automatically.

- **Unique balanced pendulum to achieve a higher level of testing accuracy.**
  The pendulum arm is specially designed so that the center of gravity of the whole pendulum arm coincides with the center of rotation when the weights are not hung. So the machine is more precise and reliable.

- **Humanized design, safer**
  Double-button switch design, anti-collision function, sensitive brake device, easy to use fixture, more friendly to the testers.

- **Smart Tearing Strength 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.

Specification

Load range	8N, 16N, 32N, 64N, 128N
Testing accuracy	≤±0.2%F·S
Tear length	43mm
Automatic incision length	20±0.2mm
Sample size	100×75mm

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 1 pc, 256 N (optional)
Calibration weight a	1 pc, 8C
Calibration weight b	1 pc, 16C
Calibration weight c	1 pc, 32C
Calibration weight d	1 pc, 64C
Calibration weight e	1 pc, 128C

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

HydroBurst
Bursting Strength Tester

HydroBurst adopts hydraulic drum explosion (elastic diaphragm method) to determine the expansion force and expansion degree of materials such as knitted fabrics, woven fabrics, nonwoven fabrics and laminated fabrics, elastic woven fabrics, paper, etc., when they are subjected to simultaneous force in the warp, weft and all directions, or the resistance of materials to expansion and breaking. HydroBurst realizes accurate control of the speed of expansion and breaking by one-time pre-testing. Equipped with high precision sensors and intelligent recognition system for test cups, the HydroBurst provides higher precision and more efficient testing, and the sensor has a longer service life.

HydroBurst
Bursting Strength Tester

Power
220/110V 50/60Hz

Weight
130kg

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

- **One pre-test can accurately control the bursting speed**
  The full servo hydraulic system is controlled by AI algorithm, together with precise screw drive, only by one pre-test, the machine can reach the expansion speed within the standard requirements of 20s.
- **High Precision Sensor**
  The pressure measurement part uses high-precision pressure sensors, and the precision can reach 0.2 level.
- **Smart recognition system for test cups**
  When replacing the test cup for testing, the system will automatically recognize the model of the current test cup and automatically switch the test parameters without manual input changes, greatly improving work efficiency.
- **Longer service life of sensor**
  The use of Panasonic laser displacement sensors, easy to replace the test cup, and the sensor is not easy to damage. (traditional top-rod type, there is a possibility that the rod will be bent, resulting in damage to the sensor).
- **Smart Bursting Strength 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.

Specification

Model No.	1.CV.142.01 CV142 HydroBurst Bursting Strength Tester
Testing mode	fixed-speed bursting, fixed-pressure bursting, fixed-expansion bursting, and fixed-time bursting.
Measurement range	0-10 MPa ±1%(with test cup ≤ 10cm²)
	0-3 MPa ±1%(with test cup = 50cm²)
	0-1 MPa ±1%(with test cup = 100cm²)
Testing rate	50-500 ml/min
Hydraulic medium	7.HY.004 glycerin 500ml/1pc

Test cup mode、Fixture mode and related dimensions

Test Cup 1(Standard) 2.Z.CV 142.01 7.3cm²(Dia.30.5mm±0.2mm)
Lower fix ture base 1(Standard)
2.Z.CV 142.11 7.3cm²(Dia.30.5mm±0.2mm)

Test Cup 5(Standard) 2.Z.CV 142.05 50cm² (Dia.79.8mm±0.2mm)
Lower fix ture base 5(Standard)
2.Z.CV 142.15 50cm² (Dia.79.8mm±0.2mm)

Test Cup 2(Optional) 2.Z.CV 142.02 7.55cm²(Dia.31mm±0.2mm)
Lower fixture base 2(Optional)
2.Z.CV 142.12 7.55cm²(Dia.31mm±0.2mm)

Test Cup 4(Optional) 2.Z.CV 142.04 10cm² (Dia.35.7mm±0.2mm)
Lower fixture base 4(Optional)
2.Z.CV 142.14 10cm² (Dia.35.7mm±0.2mm)

Test Cup 6(Optional) 2.Z.CV 142.06 100cm² (Dia.113mm±0.2mm)
Lower fix ture base 6(Optional)
2.Z.CV 142.16 100cm² (Dia.113mm±0.2mm)

Test diaphragm(optional) 4.M.020 Dia.148mm*1.6mm(10pcs/box)
Maximum expansion height 65mm±1mm
(with test cup of 50cm² also can be used for 70mm±1mm)
Operating environment temperature 20°C±5°C, humidity:50%~70%.

Installation conditions air supply pressure of 5~8 bar
(ensure that the air is clean and dry)

Specification \ Standard		FZ/T01030 -2016MethodB	GB/T7742.1 -2005	ISO13938 -1-2019	ASTMD3786/ 3786M-18(2023)	EN 12332 -2-2002
Test Fixture	7.3cm² (ϕ30.5mm)	✓	✓	✓	✓	–
	7.55cm² (ϕ31±0.75mm)	–	–	–	✓	–
	10cm² (ϕ35.7±0.5mm)	–	✓	✓	–	✓
	50cm² (ϕ79.8mm)	–	✓	✓	–	–
	100cm² (ϕ113±1mm)	–	✓	✓	–	✓

AirBurst

Bursting Strength Tester

Bursting strength testers are usually hydraulic or pneumatic. The AirBurst pneumatic tester is for testing common materials like textiles, films, paper, foam, and plastics. Its simple design makes it easy to operate and maintain. The HydroBurst tests materials needing high, stable pressure, like high-strength textiles and leather. The AirBurst can realize one-button test. It has built-in test standards and lets users define test modes for flexible testing. Clamping pressure is precisely adjustable, widely adapted to different sample testing. It can automatically recognize the test cup, to reach quick test and avoid errors. Automatic lifting of the protective cover ensures safety throughout the test. Compact body, modular design, easy calibration and maintenance.

AirBurst
Bursting Strength Tester

- **One pre-test can accurately control the bursting speed**
  AI algorithms control the pneumatic system. They only need one pre-test to control the expansion speed within the 20s standard.

- **High Precision Sensor**
  The pressure measurement part uses high-precision pressure sensors, and the precision can reach 0.2 level.

- **Smart recognition system for test cups**
  When replacing the test cup for testing, the system will automatically recognize the model of the current test cup and automatically switch the test parameters without manual input changes, greatly improving work efficiency.

- **Accurate measurement of expansion height**
  The micron-polar laser sensor goes right to the test sample, and the high-speed response makes testing faster and more accurate.

- **Smart Bursting Strength 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
AC 220V 50HZ

Weight
120kg

Dimension
600*360*660 mm (L*W*H)

Specification

Maximum air pressure	1.4 MPa
Measurement accuracy	±2% FS
Measuring range	0.01~1.4 Mpa
Maximum expansion height	70±1mm
Operation System	Android
IoT (Internet of Things)	configuration is required

Test cup mode、Fixture mode and related dimensions

Test Cup 1(Standard) 2.Z.CV 142.01 7.3cm²(Dia.30.5mm±0.2mm)
Lower fix ture base 1(Standard)
2.Z.CV 142.11 7.3cm²(Dia.30.5mm±0.2mm)

Test Cup 5(Standard) 2.Z.CV 142.05 50cm² (Dia.79.8mm±0.2mm)
Lower fix ture base 5(Standard)
2.Z.CV 142.15 50cm² (Dia.79.8mm±0.2mm)

Test Cup 2(Optional) 2.Z.CV 142.02 7.55cm²(Dia.31mm±0.2mm)
Lower fixture base 2(Optional)
2.Z.CV 142.12 7.55cm²(Dia.31mm±0.2mm)

Test Cup 4(Optional) 2.Z.CV 142.04 10cm² (Dia.35.7mm±0.2mm)
Lower fixture base 4(Optional)
2.Z.CV 142.14 10cm² (Dia.35.7mm±0.2mm)

Test Cup 6(Optional) 2.Z.CV 142.06 100cm² (Dia.112.87mm±0.2mm)
Lower fix ture base 6(Optional)
2.Z.CV 142.16 100cm² (Dia.112.87mm±0.2mm)

Test diaphragm(optional) 4.M.020 Dia.148mm*1.6mm(10pcs/box)
Maximum expansion height 65mm±1mm
(with test cup of 50cm² also can be used for 70mm±1mm)
Operating environment temperature 20℃±5℃, humidity:50%~70%.

Installation conditions air supply pressure of 5~8 bar
(ensure that the air is clean and dry)

Standard

ISO 13938-2
GB/T 7742.2
ASTM D3786

Environmental Requirements

Operating temperature range	20 °C±2°C
Storage temperature range	-20°C~60°C
Operating humidity range	65% ± 4%
Air source	0.4 ~0.7MPa

Specification \ Standard		GB/T 7742.2 -2015	ISO13938 -2-2019	ASTMD3786/ 3786M-18(2023)
Test Fixture	7.3cm² (ϕ30.5mm)	✓	✓	✓
	7.55cm² (ϕ31±0.75mm)	–	–	✓
	10cm² (ϕ35.7±0.5mm)	✓	✓	–
	50cm² (ϕ79.8mm)	✓	✓	–
	100cm² (ϕ113±1mm)	✓	✓	–

Smartindale
Martindale Abrasion & Pilling Tester

The Smartindale is used for abrasion and pilling tests on fabrics. It uses a digital algorithm to create a Lissajous curve to drive the friction. It runs accurately without calibration. You can switch the abrasion and pilling tests with a one-click touch on the screen button. No need to change the pins. After over 10 million cycles of ultra-high-intensity friction testing (equal to three years of nonstop operation) with rubber samples and double weights, the Lissajous curve is still accurate and perfect. The flip cover design is easy to see and use. A world-class third-party testing organization in France is using this instrument. Testers recognize it as easy to use.

Smartindale
Martindale Abrasion & Pilling Tester

Power
220/110V 50/60Hz

Weight
90kg

Dimension
510*850*300 mm(W*L*H)

- **One-touch switching between pilling and abrasion testing, more efficient**
  One-touch switching of test modes (abrasion, pilling, or straightness) on the control panel. So you do not need to remove the cover and change the pin position.

- **The Lissajous curve is calibration-free, while the test is more reliable.**
  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 over 10 million cycles of ultra-high-intensity friction testing (equal to three years of nonstop operation) with rubber samples and double weights, the Lissajous curve is still accurate and perfect. So the test is more reliable.

- **Flip-up cover for easy observation and operation**
  The upper cover can be easily flipped up and locked with one hand, making it easy for the operator to observe the test; it also greatly facilitates the installation of consumables and samples; and the slow-lowering device of cover ensures the safety of operator and the machine.

- **Easy to use**
  A world-class third-party testing organization in France is using this instrument. Testers recognize it as easy to use.

- **Smart Abrasion and Pilling 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 sample information, test process and results can be uploaded to the system and summarized with other tests to output reports. You can communicate with ChiuVention customer service personnel online to get support quickly; receive reminders of instrument calibration, maintenance, and replacement of consumables; and perform OTA remote upgrades on a regular basis.

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
Ball Plate	Φ120mm

Standards
ISO 12945-2-2020 ISO12947-1-1998 ISO12947-2-2016
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 D4966-22

Optional Standards
BS EN 388-2016+A1-2018 Protective gloves for mechanical hazards;
BS EN 16094-2012 Laminated wood flooring,
Test method for the determination of micro-scratches;
ISO 17076-2-2011; GB/T 39507-2020

Unidale
Martindale Abrasion & Pilling Tester

The Unidale Martindale Abrasion and Pilling Tester is stable and reliable. The instrument has various running trajectories and stations. Measuring speed is optional. It has a butterfly guide plate design. It's lightweight, space-saving, and easy to observe the test status. Its precision design features an aluminum alloy with a hard, oxidized surface. It's both well-designed and durable. It can test the abrasion resistance and pilling of cotton, linen, and silk woven fabrics. It also works for other textiles, membrane materials, knitted fabrics, woolen fabrics, artificial leather, synthetic leather, gloves, and labor protection materials.

Unidale

Martindale Abrasion & Pilling Tester

- **Smart Abrasion and Pilling 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 sample information, test process and results can be uploaded to the system and summarized with other tests to output reports. You can communicate with ChiuVention customer service personnel online to get support quickly; receive reminders of instrument calibration, maintenance, and replacement of consumables; and perform OTA remote upgrades on a regular basis.

- **Stable running, reliable test results**

  The fixture rotates flexibly and the grinding table and specimen fixture is highly parallel. The machine and the surface of the grinding table have a very low vibration (less than 0.05mm),so those are more conducive to achieving reliable test results.

- **3 kinds of running trajectories, 3 kinds of test stations, and 3 kinds of speeds, to meet a variety of requirements.**

  It is equipped with 3 kinds of trajectories, one is straight line trajectory, the other two are Lissajous curve, 24mmx24mm (pilling test), 60.5mmx60.5mm (abrasion test), and you have a wide selection of test stations: 9, 6, 4 stations, and 3 speeds, slow (24rpm), standard(47.5rpm), and fast (75rpm), which can be adapted to a wide range of test methods and standards.

- **Light design, easy to use**

  Unique butterfly-shaped guide plate, lightweight and space-saving, so it is easy for you to change accessories and observe the test status.

  In addition, the machine is durable with precise design and aluminum alloy hard oxidation surface; the trapezoidal chassis is more stable, seven-inch color touch screen is easy to use.

Specification

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

Power

220/110V 50/60Hz

Weight

9 work-station type 90kg(net) 147kg(packed)
4-6 work-station type 75kg(net) 110kg(packed)

Dimension

9 work-station type
Machine 850*600*340mm(L*W*H)
Machine+Accessories 990*840*770mm(L*W*H)
4-6 work-station type
Machine 710*530*340mm(L*W*H)
Machine+Accessories 840*720*640mm(L*W*H)
(The machine is 9 work -station type, 4-6 type appearances are different)

Accessories

(Note: 4-6-9, 8-12-18 refers to the number of accessories for the 4-6-9 work station type separately.)

Fuse tube	2pcs
Foam wool	4-6-9 pcs Φ38 mm
Wool felt	8-12-18 pcs Φ90 mm, Φ140 mm
Wool abrasive	4-6-9 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	4-6-9 sets for pilling test
Fixture 2	4-6-9 sets for abrasion test
Weight 1	4-6-9 sets 12Kpa
Weight 2	4-6-9 sets 9Kpa
Rubber ring	4-6-9 pcs
Test pen	1pc
Connection shaft	4-6-9 pcs for pilling test
Connection shaft	4-6-9 pcs for abrasion test
Stainless steel ring	4-6-9 pcs 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
Ball Plate	Φ120mm

Standards

ISO 12945-2-2020 ISO12947-1-1998 ISO12947-2-2016
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 D4966-22

Optional Standards

BS EN 388-2016+A1-2018 Protective gloves for mechanical hazards;
BS EN 16094-2012 Laminated wood flooring,
Test method for the determination of micro-scratches;
ISO 17076-2-2011;GB/T 39507-2020

PillSnag

ICI Pilling and Snag Tester

The PillSnag evaluates the pilling and hooking properties of textiles. It can be flexibly configured with a variety of standards, 2 or 4 stations, and It can also be equipped with round or octagonal boxes specified by European clothing brands, and European or Japanese standard hook and loop boxes are also available. The test places the sample on a polyurethane tube. It then puts the tube inside a roller box, which a drive system rotates at a constant speed. A cork-lined abrasive or hooking nail inside the roll box rubs against the sample. This simulates actual use by pilling and hooking. After rolling a set number of times, the sample is removed. It is then compared to a standardized sample to assess pilling and hooking.

PillSnag
ICI Pilling and Snag Tester

Power
220/110V 50/60Hz

Weight
100kg

Dimension
470*860*900 mm(D*W*H)

- **Flexible configurations to suit all standards**
  It can be flexibly configured with a variety of standards, 2 or 4 stations, and It can also be equipped with round or octagonal boxes specified by European clothing brands, and European or Japanese standard hook and loop boxes are also available.

- **Smart Pilling and Snagging 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.

- **Multiple testing modes to meet different needs**
  The equipment can carry out a variety of modes of testing to meet the needs of different textile testing.

Specification

Forward and reverse rotation function	
Chamber interior dimensions	235mm *235mm * 235mm (excluding cork lining)
Chamber rotation speed	30–70 rpm (adjustable)
Chamber rotation count	2–999999 times (settable)
2 or 4 Chambers can be customized	

Standard Accessories & Consumables

Sampling board	1 pc 125*125 mm
Polyurethane specimen tube	set of 16pcs 140*Φ31.5 mm
Cork liner	24 pcs

Optional Accessories & Consumables

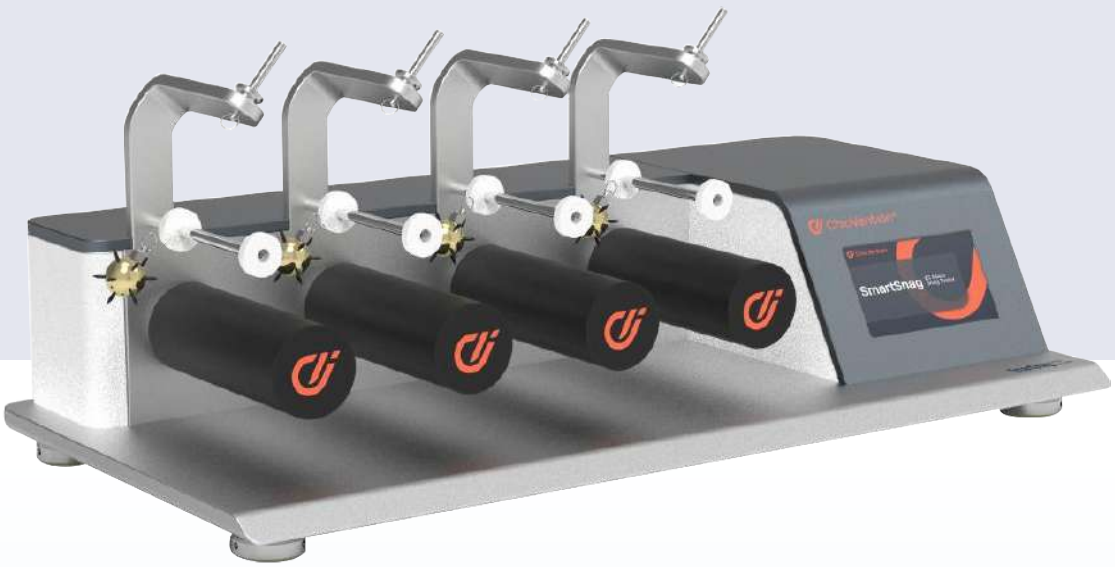
Polyurethane specimen tube	set of 4 140*Φ31.5 mm
Cork liner	pack of 6
Mounting jig	per set
Pilling Standard Photographs	set of 4*5 (20pcs)
Sampling board	114*114 mm
BS 8479 Octagonal box	

Standard

ISO 12945-1
GB/T 4802.3
NEXT TM19
BS 5811

Optional Standard

BS 8479
JIS L1058 Method D-2



SmartSnag

ICI Mace Snag Tester

SmartSnag checks how easily a fabric can be hooked under normal wear. For evaluating the degree of hooking of outerwear and other fabrics, especially those made of chemical fibers or filaments. The test takes 10 minutes. It is a true reproduction of the hooking scene. The results are reliable. It is low noise and durable.

SmartSnag
ICI Mace Snag Tester

- **10-minute test with reliable results**
  This ICI Mace Snag Tester runs fast and the rotation speed can be adjustable. The ball has tungsten carbide needles evenly distributed on it. They contact the specimen in 360 degrees. This realistically reproduces the hooking scenario and makes the test results more reliable.

- **Durable and low-noise**
  Precise and high-grade motor drive, smooth running, and low noise. The whole shell and main structure are made of hard, rustfree, impact resistant oxidized aluminum alloy and stainless steel. They are still as good as new after many years.

Power
220/110V 50/60 Hz

Weight
62kg

Dimension
900*460*390 mm (L*W*H)

Specification

Number of stations	4
Rotating speed of cylinder	the standard speed is (60±2) r/min.
Diameter of cylinder	82 mm (including rubber)
Mace weight	(160±10) g
Thickness of the felt	3.0~3.2 mm
Working width of guide bar	125 mm
Distance between nail hammer and guide bar	45 mm

Standard accessories and consumables

Felt sleeves	1 Pack of 4
Rubber ring	8 pcs
Measuring rod	1pc 45 mm
Sampling board	1pc 205*330 mm
Mace	4 pcs
Fuse	2pcs 3A
Steel ruler	1pc 200 mm
Open-end wrench	1pc 8-10 mm
Hexagonal wrench	1pc 1.5 mm

Optional accessories and consumables

Tungsten carbide points	1 pack of 12
ASTM D Felt sleeves	1 pack of 4
GB Felt sleeves	1 pack of 4
Snagging Standard Photographs	1 pack of 9
Mace	1 set

Standard

ASTM D3939
GB/T 11047
JIS L1058

TumblePill

Random Tumble Pilling Tester

The TumblePill tests textiles for pilling. It simulates the friction and tumbling of actual use. The test results are more reliable. The impeller can be disassembled and replaced with different standard shapes. The TumblePill runs quietly. It can connect to smartphones and computers via IoT. It can also connect to the lab's LIMS for automatic report output.

Test Principle: Under the specified conditions, the rotating impeller will tumble the sample in a test bin lined with a material. And the sample will be randomly rubbed by this lining material under the rotating. After a set time, we will visually assess the fabrics' pilling and felting performance.

TumblePill

Random Tumble Pilling Tester

Power
220/110V 50/60Hz

Weight
about 70kg

Dimension
560*360*620 mm(L*W*H)

Specification

Number of test chambers	4
Sample size	square 100×100 mm; or round 100cm²
Test chamber specification	Diameter Φ146±1mm
	Depth 152.4±1mm
Impeller length	L=121mm
Impeller shaft diameter	Φ12.7mm
Rotation speed	1200r/min (speed adjustable)
Compressed air pressure	14kPa~21kPa

Standard Accessories & Consumables

Sampling board	1 pc	105 *105 mm
Gas pipe	1 pc	2m Φ8 mm
Leather belt	2 pcs	
Impeller 1	4 set	Apply for ASTM, JIS

Optional Accessories & Consumables

Impeller 2	1 set Apply for JIS
Impeller 3	1 set Apply for ISO, GB/T
Cork liner	pack of 50
Cotton sliver	1yds/pack
Pilling Standard Photograph	pack of 5
Dust collector	1 pc

Standard

ASTM D3512

Optional Standard

ISO 12945-3
JIS L 1076 D
GB/T 4802.4

- **More reliable test results**
  The sample in the test chamber can tumble at a high, constant speed. The compressed air will flow smoothly to the chamber to prevent the sample from sticking to the cylinder walls. The liner surface is flat and closely adhered to the walls to avoid movement. All this guarantee more reliable test results.

- **The impeller can be taken apart. It can be replaced with different shapes to meet various standards.**
  Impellers of different shapes can be fitted to meet ISO, ASTM, JIS, GB/T, and other standards.

- **Low noise running**
  The impeller is rotating smoothly with no abnormal noise. Very friendly for labs.

- **Convenient for observation**
  The transparent acrylic window and each chamber has light. They provide a good view of the sample test status.

- **Smart Tumble Pilling Test**
  The instrument connects to the SmarTexLab APP via IoT on a smartphone or computer. It can also connect directly to ERP/LIMS. The operator can remotely monitor the status of multiple tests on smartphone. He can also modify the test requirements, get a reminder before the test ends, and stop or repeat the test. The operator 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.

BeanSnag
Bean Bag Snag Tester

The BeanSnag Bean Bag Snag Tester, to determine the snagging and picking resistance of knitted and woven fabrics by tumbling fabrics pillows containing a weighted bean bag within two separate test cylinders. The test is reliable since it closely simulates real snagging scenarios. The device is easy to operate, highly durable, and operates with low noise. It is suitable for testing knitted fabrics, woven fabrics, synthetic filament fabrics, and textured yarn fabrics. However, it is not recommended for mesh fabrics, as the pins on the cylinder may snag the bean bag itself rather than the fabric during testing.

Testing Principle:

There are two independent test cylinders, each equipped with needle bar and pins. A sealed fabric bag filled with steel balls, commonly known as a "bean bag," is placed inside a fabric sample that has been also sewn into a bag. The “pillow” is then securely stitched and placed into the test cylinder.

Once the machine runs, the sample rotates and tumbles 360 degrees, allowing it to make full contact with the pin nails. This replicates real-life snagging conditions for the fabric.

When the test is over (typically 100 rotations), the sample is assessed to determine its snagging resistance rating.

BeanSnag
Bean Bag Snag Tester

Power
220/110V 50/60Hz

Weight
50kg

Dimension
590*290*440 mm

- **More reliable test**
  Highly simulates real snagging scenarios, so the test results are more reliable, more conducive to evaluating the performance of the fabric; at the same time, the microcomputer program control makes the test process more stable, and also further enhances the test reliability.
- **Longer service life**
  The machine is made of high quality aluminum alloy with hard surface treatment, which is not easy to scratch and damage.
- **Low noise**
  The actual noise of running is less than 50 dB, much lower than other competed products in the market.
- **Humanized design, user-friendly**
  The built-in design of the drum is convenient for observation and ensures the safety of testers; the operation interface is ergonomic, and this machine can store the data automatically in case of power failure, and the operation data can be edited.

Specification

Testing station	2 stations
Testing speed	20r/min
Test times	0~ 99999999 (adjustable)
Cylinder size	Φ200 mm*145 mm
Rotation Cylinder inner size	Φ180 mm*127 mm
Number of needle bars	8, each contains 9 pins

Standard accessories
Needle bar (with pins)
Sampling board 215*115 mm

Optional accessories
Bean bag (with 450g steel balls)

Standard
ASTM D5362
JIS L1058

SmartCrock

Crockmeter

SmartCrock is used to test the color fastness of textiles or leather under wet and dry rubbing conditions. It is a highly automated instrument. After installing the dry rubbing cloth, press the start button. And the rubbing head will descend for testing. It will raise when the test is finished. When you replace by the wet rubbing cloth. just shift the loading table left and right to start the wet rubbing color fastness test. If a test is not smooth, the rubbing table can be moved again for the third test. It is automatic and efficient. It saves 40% of the sampling and testing time by reducing manual influence on the test results.

SmartCrock
Crockmeter

Power
220/110V 50/60 Hz

Weight
23kg

Dimension
663*173*250 mm (L*W*H)

Specification

Friction head	diameter 16 mm
Vertical pressure	9N +/- 10%
Friction stroke	104 mm

Standard accessories
AATCC friction cloth
Sandpaper
Clamping sleeve
Sampling plate

Optional accessories and consumables
AATCC/ISO Friction Cloths
AATCC/ISO stained gray card
Sandpaper
Rectangular test head with clamping ring
Round clamping ring

Standard
ISO 105x12 (round friction head), AATCC 8, GB/T 3920 (round friction head), ISO 20433 Method C;

Optional standard
ISO 105xD02, AATCC 165, ISO 105x12 (rectangular friction head), GB/T 3920 (rectangular friction head)

- **Automatic stretching device for elastic fabrics, more accurate testing**
  The patented sample clamping and stretching device solves the problem of wrinkles when testing knitted samples: it automatically stretches the samples to the same distance while clamping, avoiding wrinkles or overstretching of the samples and making the test more accurate and reproducible.

- **Wet and dry friction tests can be performed in a single test, 40% faster.**
  Only one piece of sample is needed in direction of warp and weft, and through the innovative flexible platform, the dry and wet friction tests can be completed successively on the same piece of cloth, which saves sampling and loading time and greatly speeds up the test by 40%.

- **Smart Color Fastness to Rubbing 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.

WashTrue

Washing Color Fastness Tester

WashTrue uses an intelligent temperature control algorithm. It ensures the washing color fastness test meets requirements and gives reliable results. A series of test operations can be done on the touch screen. They include selecting standards, parameters, time, and temperature. Also, you can add or drain water. The system is intelligent and efficient. After the test, the buzzer alarms automatically. Multi-safety design, and can be low noise and long time running. There are two different specifications of single and double cylinders. Double cylinder model, two cylinders independent control.

WashTrue
Washing Color Fastness Tester

Power
AC/220V/3N/50/60Hz 40A
AC/380V/3N/50/60Hz 23A

Weight
150kg

Dimension
1060*720*860 mm(L*W*H)

- **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.

- **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.

- **Smart Color Fastness to Washing 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.

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
GB/T 5711-2015 AATCC132-2004e3

WashTrue

Washing Color Fastness Tester

WashTrue uses an intelligent temperature control algorithm. It ensures the washing color fastness test meets requirements and gives reliable results. A series of test operations can be done on the touch screen. They include selecting standards, parameters, time, and temperature. Also, you can add or drain water. The system is intelligent and efficient. After the test, the buzzer alarms automatically. Multi-safety design, and can be low noise and long time running. There are two different specifications of single and double cylinders. Double cylinder model, two cylinders independent control.

WashTrue
Washing Color Fastness Tester

Power
AC/220V/3N/50/60Hz 40A
AC/380V/3N/50/60Hz 23A

Weight
255kg

Dimension
1180*780*920 mm(L*W*H)

- **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.
- **Dual-cylinder models and they are independently controlled.**
  It allows two sets of tests to be performed at the same time. For example, one cylinder can be used for routine washing color fastness tests, while the other can be used for tests at different temperatures, times, or chemical agent conditions.
- **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.
- **Smart Color Fastness to Washing Test**
  The instrument connects to the SmarTexLab APP via IoT on a smartphone or computer. And 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. 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.

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 1200±50mL	12pcs/12pcs
Stainless steel ball Φ6±0.5mm	200pcs
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 AATCC sealing	12pcs/12pcs
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
GB/T 5711-2015 AATCC132-2004e3

SmartDispen

Detergent Dispenser

The SmartDispen is a sample preparation device for soaping washing color fastness testing, which greatly improves the accuracy and efficiency of testing. It weighs soap flakes and dispenses water, then heats and stirs. And dispenses soap based on the sample bath ratio. Finally, it outputs a set number of steel beads. This prepares the soap for color fastness testing in one step. This reduces manual error and makes the test more reliable. The three-station design can prepare three different samples at once.

SmartDispen
Detergent Dispenser

Power
220V 50HZ

Weight
70kg

Dimension
610*510*530 mm (L*W*H)

Specification

Balance	weighing limit 600g, accuracy ± 0.01g
Soap tank	working volume 5000ml * 3
Single pumping volume of soap	2.5~1000ml
Liquid output accuracy	1ml±5%
Soap pumping speed	≤ 28ml /s (with steel balls)
Temperature control range	0~60°C，precision ±1°C
Grade of water	Tertiary water (purity)

- **Three stations can be operated independently to dispense different soaps.**
  The three stations can be independently temperature controlled and they can dispense soap separately, so the sample preparation for washing color fastness testing can be completed within minutes. This greatly improves the efficiency of sample preparation and allows the textile laboratory to perform more wash color fastness tests per day.

- **More reliable testing**
  High-precision balance for automatic weighing, automatic soap dispensing according to the strict bath ratio, and fully automatic soap flake stirring and dispensing, as well as precise temperature control and ball counting, all make sample preparation more accurate and testing more reliable.

- **Smart Sample Preparation Device**
  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. Sample orders and standards can be sent to the instrument. The sample information can be read by scanning the code. The operator can remotely monitor the status of sample preparation. 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.

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 SmarTexLab 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

Specification

Balance weighing limit	600g, accuracy ± 0.01g
Soap tank	working volume 6500ml (Soap can be refilled automatically)
Single pumping volume of soap	2.5~1000ml,
Liquid output accuracy	1ml ±5%
Soap pumping speed	≤ 28ml / s (With steel balls)
Temperature control range	0~65°C, precision ±1°C

Power
220/110V 50/60Hz

Weight
45kg

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

- **Smart Sample Preparation Device For Wash Color Fastness Test**
  The instrument is connected via IoT to the SmarTexLab APP in the phone/PC. And The app can connect to ERP/LIMS via an API. Or, the instrument can connect directly to ERP/LIMS. You can get the sample preparation order and sample preparation process, sample preparation results, etc., from the system, and the system automatically summarize them into a sample preparation report. The report can be sent to SmarTexLab or ERP/LIMS. The relevant parties can view the report in real time. In SmarTexLab, You can chat with ChiuVention service staff for quick support. You'll get reminders that instruments need calibration, maintenance, and new consumables. Regular OTA remote upgrades are available.

- **More accurate testing**
  The 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, for 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.

- **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.

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 ISO 9073-3, ISO13934-1/2 , ASTM D5034, ASTM D5035, ISO 3377-2, ISO 13937-3 ,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.

- **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.

- **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.

- **Applicable up to a series of standards**
  Such as ISO 3377-2, ISO 13934-1/2, ISO 13937-2/3, ISO 20932-1, ASTM D5034, ASTM D5035, ASTM D5587, GB/T3917.2, FZ/T 01030, ISO 9073-4, ISO13934-1/2, ISO 9073-3, ISO 13937-2/3, ISO 4674-1, GB/T 3917.4, GB/T 3923.1, ISO 2062, ASTM D6797, GB/T 19976.

- **Easy operation**
  Multi-functional pneumatic gripper, just replace the clips to complete different tests, easy and quick to replace. Tensile tests and top breaking tests do not need to replace the sensor.

- **Unique design**
  SmartPull Tensile Tester has a unique appearance design combined with a sense of technology, scratch-resistant surface, and it is durable.

- **User-friendly**
  Side cutting design, more user-friendly.

Power
220/110V 50/60Hz

Weight
90kg

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

Specification

Testing capacity	250kg,(500kg is optional and the appearance will change)
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
Force accuracy	≤1%

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

Fixture and standards
Version A :
ISO 9073-3, ISO 13934-1, ISO 13934-2, ASTM D5034, ASTM D5035, GB/T 3923.1, GB/T 3923.2
GB/T 13773.1, GB/T 13773.2, GB/T 24218.3
(The standards above are matched with: clamps by 25x25 mm, 25x50 mm, 25x75 mm)

Optional fixture and standards
Clamps by 25x100 mm : ISO 9073-4 GB/T 3917.3
Clamps by 50x75 mm : ASTM D5587
Leather tearing fixture: ISO 3377-2
Top breaking fixture: ASTM D6797 FZ/T 01030 GB/T 19976
Yarn fixture: ISO 2062
Version A+: ISO 13937-2 (Sample 50 mm wide) ISO 13937-3 GB/T 3917.2 (Sample 50 mm wide) GB/T 3917.5
Clamps by 25x200 mm: ISO 13937-4 ISO 4674-1 GB/T 3917.4

Version C: ISO 13936-2, ASTM D4964 (U type fixture)
Version C+: ASTM D434, ASTM D1683 ISO 13936-1
ISO 20932-1(with linear clamps, or choose other fixtures and replace the clamps)
(The standards above need to be programmed according to the test requirements provided by customers.)

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, ISO13934-1/2 , ASTM D5034, ASTM D5035, ISO 3377-2, ISO 13937-3 , 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
220/110V 50/60Hz

Weight
160kg

Dimension
830*600*1730 mm(D*W*H)

Specification

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	0.5% ~ 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

Fixture and standards
Version A :
ISO 9073-3, ISO 13934-1, ISO 13934-2, ASTM D5034,
ASTM D5035, GB/T 3923.1, GB/T 3923.2
GB/T 13773.1, GB/T 13773.2, GB/T 24218.3
(The standards above are matched with: clamps by 25x25 mm, 25x50 mm, 25x75 mm)

Optional fixture and standards
Clamps by 25x100 mm : ISO 9073-4 GB/T 3917.3
Clamps by 50x75 mm : ASTM D5587
Leather tearing fixture: ISO 3377-2
Top breaking fixture: ASTM D6797 FZ/T 01030 GB/T 19976
Yarn fixture: ISO 2062
Version A+: ISO 13937-2 (Sample 50 mm wide) ISO 13937-3
GB/T 3917.2 (Sample 50 mm wide) GB/T 3917.5
Clamps by 25x200 mm: ISO 13937-4 ISO 4674-1 GB/T 3917.4

Version C: ISO 13936-2, ASTM D4964 (U type fixture)
Version C+: ASTM D434, ASTM D1683 ISO 13936-1
ISO 20932-1(with linear clamps, or choose other fixtures and replace the clamps)
(The standards above need to be programmed according to the test requirements provided by customers.)

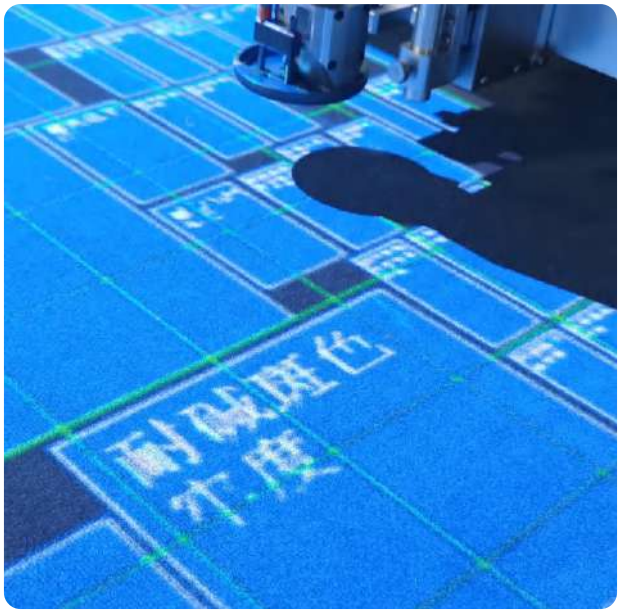
Computer Configuration of SmartPull
CPU for the Intel Celeron (Celeron) 2GHz or more CPU
Memory at least 512MB, more than 1GB is better
Hard disk space of more than 2GB
Display resolution of 1024 × 768 or more.
Printer compatible with the operating system (if output reports are required)
The applicable 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.

SmartCut
Fabric Sample Cutting System

The SmartCut can complete the sampling of fabrics within 3 minutes.
It has smart sample-cutting software. Users can select various cutting patterns and sizes based on project or test standards. These can be saved as a template for easy future access. And then the SmartCut will layout the sample graphics of the items to be tested in accordance with the standard requirements through a unique algorithm.
Next step, the sample graphics will be projected on the fabric and the SmartCut starts cutting fabric samples, automatically marking the samples as the the customer's settings.
It is suitable for sampling requirements of dozens of tests such as pilling, tearing strength, water repellency, anti-static, tensile strength, color fastness, flammability, etc. It supports various standards such as GB/T, FZ/T, ISO, EN, JIS L, AATCC, ASTM, CAN, AS and so on.

SmartCut

Fabric Sample Cutting System



- **Strictly cuts the samples according to the standards, making sure the test is more reliable.**

  It supports decentralized sampling, trapezoidal sampling, full-width sampling, and 45° sampling, and can cut samples according to the rules such as alignment to grid and to edge. So, the reliability of the test is guaranteed from the sampling.

- **More precise cutting and higher sample pass rate.**

  The tungsten steel blade of SmartCut is sharp and can be rotated 360°, with a cutting accuracy of 0.1mm, and a round-trip cutting error rate of less than 0.01mm, i.e. cut grams of specimens accurately.

- **Saves 5 laborers per year (about $420,000) for large-scale labs.**

  If you need to cut 100 whole samples per day, the conventional manual cutting requires 3000 minutes, i.e. 6 laborers; while using SmartCut sample cutting system, 100 whole samples need only 0.6 laborers, saving 5 laborers per year for the laboratory.

  And SmartCut can also achieve multi-station cutting (cutting different fabrics at the same time); multi-layer cutting (maximum cutting thickness of 7mm, can cut 1-20 layers); shaped cutting (irregular graphics). It can mark samples.

Specification

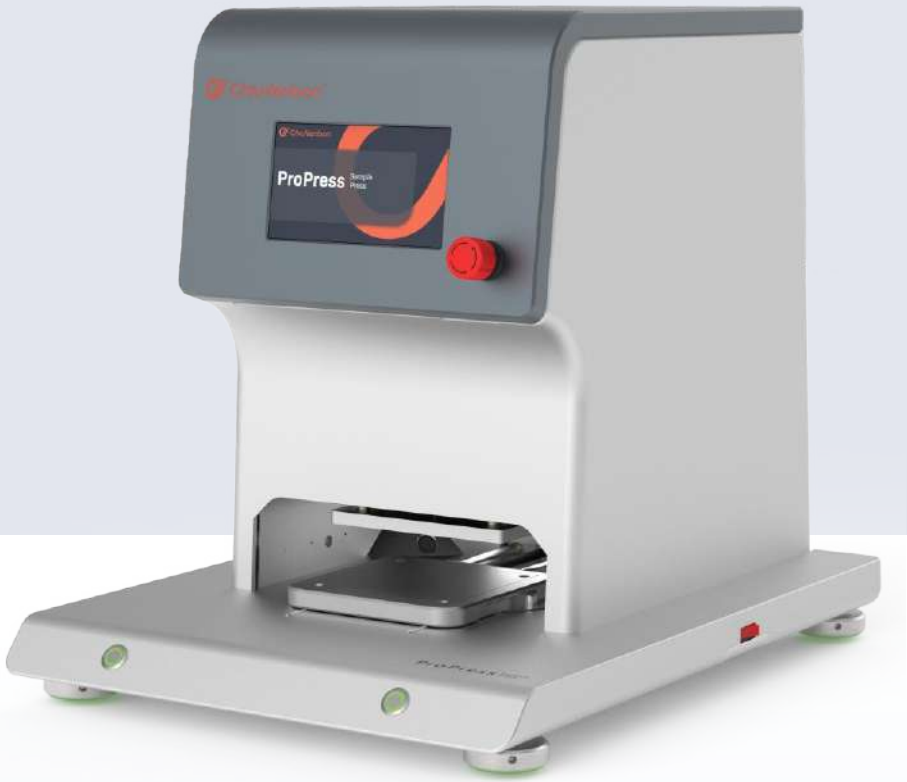
Cutting accuracy:	±0.1 mm
Repeatability:	±0.01 mm
Maximum cutting thickness:	7mm
Power supply:	220V/380V 50Hz-60Hz 20A-40A

Fabric fixing method	vacuum adsorption to ensure flatness
Table top wear resistance	it is recommended to replace the table top once a year.
Standard order	smart sample cutting software, smart cutting machine, computer, projector, brush function.
Optional	Inkjet marking function of the software, vibrating cutter head can be added.

Model	Working Area(cm)	Weight(kg)	Power(kw)	Warranty Period
CV517-6060	60*60	400	4.5	1 year
CV517-1410 CV517-1610	140*100/ 160*100	600	4.5	1 year
CV517-1516	150*160	650	4.5	1 year
CV517-1810 CV517-1812	180*100/ 180*120	700	4.5	1 year
CV517-2516	250*160	1000	9.5	1 year
CV517-3020	300*200	1200	9.5	1 year

Applicable test items and standards

Abrasion & Pilling	GB/T4802 、ISO12945 、 JIS L1076、ASTM D4970
Tearing Strength	GB/T3917 、ISO 13937 、 JIS L1096 、ASTM D751
Water Proof	GB/T4745、ISO 4920、AATCC 22、 ISO 9865、JIS L1092
Antistatic Test	GB/T12703 、GB/T 22042、 EN 1149、ISO 6330
Core Suction Height	GB/T21655、JISL1907、ISO6330
Dimentional Stability	GB/T 8629、ISO 6330、JIS L0217、 AATCC 135、AS2001.5.4
Elastic Elongation	FZ/T01062、ASTMD3107、 JIS L1096、EN 14704
Tensile Strength	GB/T3923、ISO 13934 、 ASTM D5034、EN 29073-3
Fabric Weight	GB/T4669、ASTM D3776、ISO 3801、 JIS K6772、EN 12127
Abrasion Resistance	GB/T21196.2、ISO 12947、 ASTM D3884、AS 2001.2.28
Peel Strength	FZ/T80007.1、ISO 8096、JIS L1089、 ASTM D2724
Burst Strength	GB/T7742.1、ISO13938-1、 ASTM D3786
Seam slippage	GB/T13772.1 、FZ/T20019、 ISO13936 、JIS L1096
Anti-hooking	GB/T11047、BS8479、ASTMD3939
Downproof	GB/T12705 、GB/T 14272、 EN 12132、ISO 6330
Color fastness to rubbing	GB/T3920、AATCC 8、ISO 105 X12、 ASTM D2054、JIS L0849
Color fastness to sunlight	GB/T8427、AATCC-16(3)、 ISO 105-B02、ASTM D6544
Other color fastness items	GB/T、FZ/T、ISO、EN、JISL、AATCC、 ASTM、CAN、AS
Flammability	GB/T5455、FZ/T01028、ISO 3795、 GB 8410、ASTM D5132



ProPress
Sample Press

The ProPress is fully automatic. It punches and cuts the sample to be tested into 5x5mm pieces in under 8 seconds. It can cut and punch multiple layers of fabric at once. The ProPress is for cutting test samples from textiles, yarns, leathers, and plastics. The samples are used for tests of formaldehyde, pH, azo, heavy metals, and more. Stable operation, precise and fast cutting, highly consistent samples for reliable test results. Sample preparation is faster, saving more than 80% of sample preparation time for laboratories. Customizable knife die for punching and cutting different samples;Servo drive, quiet and friendly. Simple installation, no gas source and oil pressure can be used on site. Small size, can be directly placed on the worktable.

ProPress
Sample Press

Power
220V 5A /110V 10A 50/60Hz 1200W

Weight
Net weight 100kg
Gross weight 126kg

Dimension
Net size 600*450*530 mm (L*W*H)
Packing size 740*550*740 mm (L*W*H)

- **More accurate sample preparation, for more reliable test results.**

  Traditional manual cutting of samples can easily lead to large differences in sample shape and size, which can cause insufficient dissolution, thus affecting the reliability of the test ; ProPress cuts samples by pressing, which is precise and fast, and the highly consistent samples make the test results of formaldehyde, pH value, etc. more reliable.

- **Faster sample preparation, saving more than 80% of time.**

  The ProPress presses samples in 8 seconds per operation, compared to at least 60 seconds for manual cutting, making it valuable for large-scale testing labs that prepare large number of test samples every day.

- **Ensures the quality of samples throughout the whole process.**

  The ProPress is equipped with a self-cleaning system that blows air to clean all kinds of fiber debris generated during the cutting process, and a built-in high-definition camera (2 megapixel, 1920x1080 resolution) used for observing the cleaning and ensures that there is no mixing between samples.

- **Customized dies are available for punching samples of different sizes.**

  Different shapes and sizes of samples (≤80*80 mm) can be punched, and the customizable die can be 4mm ≤ diameter ≤113mm.

- **Anti-static design, reducing the adsorbing of samples.**

  The ProPress has an anti-static design to ensure that samples will not be adsorbed on the machine during the punching process.

Specification

Machine	1.CV.518.01 CV518 ProPress Sample Press
Press thickness	0.1mm*4mm
Press pressure	5T (adjustable force as 1T, 2T, 3T, 4T, 5T , to improve the service life of the cutter)

Standard accessories (mode and dimensions)

Matting	4.M.011 129 mm*129 mm*6 mm	6pcs
Die	2.Z.CV518.01 5 mm *5 mm	
	(Press area 100mm*100mm)	1pc
Pallet	2.Z.CV518.03 160 mm*160 mm*16 mm	2pcs

Optional accessories (mode and dimensions)

Die	2.Z.CV518.02 3 mm *3 mm (Press area 80mm*80mm)
Hoover	7.XCQ.001 220V 1200W
Hoover	7.XCQ.002 110V 1200W

Other customized dies dimensions limits: max. diameter 113 mm, min. diameter 4 mm.

Wear parts and consumables

Matting	4.M.011 129 mm*129 mm*6 mm (Forward and reverse sides are available)
Die	2.Z.CV518.01 5 mm *5mm (Press area 100mm*100mm or customized dimensions)

Installation conditions

Equipped with a socket 220V or 110V, compressed air (or not), work surface area of not less than 700mmx1000mm

Applicable Tests and Standards

pH test	ISO 3071 GB/T 7573
Formaldehyde	ISO 14184.1 GB/T 2912.1
Heavy metal	GB/T 17593.1/2/3
Azo	FZ/T 01133 GB/T 17592

QuicExtra

Fiber Oil Extractor

The QuicExtra Fiber Oil Extractor,uses the principle of solvent (e.g. petroleum ether, ether or other organic solvents) penetration and evaporation to dissolve the oils and fats in the textile fibers, thus detecting the oils and fats content of wool and synthetics samples.The 4-station design allows for fast and thorough extraction of oils and fats in less than 10 minutes, and the oil content is automatically calculated and the data will be uploaded to the system after confirmation.

QuicExtra
Fiber Oil Extractor

Power
220V 50HZ

Weight
20kg

Dimension
720*255*290 mm (L*W*H)

- **Fast extraction, high efficiency and labor saving**
  QuicExtra is based on the principle of automatic weight pressurization. It uses weights, so manual pressure is not needed. Each of the 4 stations has its own operation buttons. They complete the extraction of fiber oils and fats in less than 10 minutes.

- **Thorough extraction and more accurately testing.**
  Adopting microcomputer temperature control, with good temperature uniformity. It ensures that the oil is extracted thoroughly and the test results are more accurate.

- **Get the weight with one-click, calculate the oil content automatically and upload it.**
  Each working station is timed independently and the timing can be reminded by APP. With an optional smart balance, the weight of the sample and oil content can be obtained from the operation screen with one-click (if not equipped, the weight can be input manually), then the oil content can be calculated automatically and uploaded to the instrument system after confirmation.

Specification

Quantity of workstations	4 workstations
Pressurization mode	heavy weight
Timing range	0-99min LED display
Temperature range of heating board	90°C-120°C LED display
Temperature control precision	±1°C
Applicable extraction solvents	petroleum ether, ethyl ether, dichloromethane, etc

Standard
GB/T 6504-2017

InfraDye
Infrared Lab Dyeing Machine

The InfraDye quickly makes stained samples at a lower cost. It works by infrared heating principle. A smart temp control algorithm and a multi-cup design enable it to dye multiple solutions at once. It is stable, durable, and quiet. It has a temp calibration function and multiple safety protections. High quality components, durable.

InfraDye
Infrared Lab Dyeing Machine

- **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.
- **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.
- **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.

- **Smart Sample Dyeing Machine**
  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 can be sent to the instrument. The sample information can be read by scanning the code. The program can be automatically selected and tested. You can receive the reminder via smartphone when the dyeing is completed. After the dyeing, a digital raw record will be created. You can input the dyeing effect evaluation. 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. You can get quick customer support from ChiuVention on the SmarTexLab App. Also, receive reminders to calibrate, maintain, and replace consumables on the instrument. Lastly, the OTA remote upgrading are available.

Power
230V/50Hz 32A

Weight
145kg

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

Specification

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

AtmoExplorer
Temperature & Humidity Chamber

The AtmoExplorer tests materials in various environments. It checks their heat, cold, dryness, and humidity resistance. It is for testing the quality of products like electronics, appliances, cell phones, communications, instruments, vehicles, plastics, metals, food, chemicals, building materials, and medical, aerospace, and other products. The system excels at controlling temperature and humidity. It heats and cools quickly. It can also set different temperatures and humidity in different test sections. The test chamber has high-quality insulation and a humidifier. It uses a Japanese and French imported refrigeration system and parts. This ensures stable, durable operation. You can customize various sizes.

AtmoExplorer
Temperature & Humidity Chamber

Model	Measurable temperature range	Overall dimension L*W*H(mm)	Inner box size D*W*H(mm)	Power(KW)	Voltage / Frequency	Number of phases	Gross weight (kg)
CV340-80L	-40℃~ 150℃ -20℃~ 150℃	1250*700*1510	400*400*500	5.0KW 4.5KW	AC220V/50H	1 phase/3 wire	307
CV340-150L	-40℃~ 150℃ -20℃~ 150℃	1350*800*1610	500*500*600	5.0KW 4.5KW	AC220V/50H	1 phase/3 wire	367
CV340-225L	-40℃~ 150℃ -20℃~ 150℃	1350*970*1720	500*600*750	7.0KW 6.0KW	AC380V/50H	3 phase/5 wire	422
CV340-408L	-40℃~ 150℃ -20℃~ 150℃	1450*1080*1820	600*800*850	8.0KW 7.0KW	AC380V/50H	3 phase/5 wire	518
CV340-1000L	-40℃~ 150℃ -20℃~ 150℃	1850*1280*1970	1000*1000*1000	14.0KW 12. 0KW	AC380V/50H	3 phase/5 wire	783

- **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: ±0.5°C; ±3%RH
  Temperature and humidity uniformity: ±2°C; ±5.0%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 shutdown protection.

- **Various sizes can be customized**
  Such as 80L, 150L, 225L, 408L, 800L, 1000L

Specification

Temperature range	-20°C~+150°C (-60°C/-40°C~+150°C Optional)
Humidity range	20%-98%RH
Temperature and humidity control accuracy	±0.5°C; ±3%RH
Temperature and humidity distribution uniformity	±2°C; ±5%RH
Heating time temperature to	100°C, within 30 minutes
Cooling time temperature down to	-20°C, within 60 minutes
Testable area	500*600*750mm (225L D*W*H)

InnoFlex Bally Flexing Tester

The InnoFlex Bally Flexing Tester tests the flexing resistance of leather, cloth, and other materials. It uses advanced servo motors for accurate positioning. This ensures a stable test process and reliable results. You can select 12 stations. Choose single or multiple station modes. Each mode can be counted individually. You can test a variety of samples at the same time. Low noise operation, user-friendly.

InnoFlex
Bally Flexing Tester

Power
220/110V 50/60Hz

Weight
55kg

Dimension
850*490*287 mm(D*W*H)

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

- **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.

- **Smart Bally Flexing 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.

- **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.

Specification

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 ISO 20344-2011

Optional standards
SATRA TM 55

TEST SMART NOW

JARP Benelux
Transistorstraat 91-24
1322 CL
Almere
The Netherlands
+31 36 26 000 16
info@jarp.nl
www.jarp.nl