ChiuVention

SMART SHRINK
SHRINKAGE RATE TESTER

SmartShrink
Shrinkage Rate Tester

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

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

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

SmartShrink
Shrinkage Rate Tester

- **The test results are more accurate and reliable.**
  By using SmartShrink, the test sample is photographed with a high-definition camera, and the distances between the marked dots are automatically measured, then shrinkage rate is calculated with a unique algorithm, yielding all test results in real-time accurately.

- **Save $30,000/year for textile testing labs.**
  In the conventional process, for each sample to be tested for shrinkage, it totally takes 6 minutes to finish the work: measuring and recording before/after washing, calculating, typing the data into the computer, printing the report, etc., while SmartShrink can do all the work above in just 5 seconds.

- **Output multiple data at one time, reflecting the quality of fabric more comprehensively and objectively.**
  Warp and weft shrinkage, seam twist rate, vertical twist rate, and diagonal twist rate can be output at one time, including credibility rating for the test results. It can evaluate the quality of the fabric more comprehensively.

- **Famous brands are using SmartShrink.**
  International fashion brands such as Adidas, Anta, Texwinca and so on have widely used SmartShrink Shrinkage Rate Tester.

- **Can be connected to ERP or LIMS system.**
  The test results can be directly uploaded to the factory's ERP or laboratory LIMS system. SmartShrink can help you manage shrinkage test data conveniently and efficiently.

Power
AC100-245V 50/60Hz 3A

Weight
40kg

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

The Specification of SmartShrink

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

Note:

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

Standard

ISO 3759 ISO 5077 and other customized standards

Smartindale
Martindale Abrasion & Pilling Tester

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

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

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

Smartindale
Martindale Abrasion & Pilling Tester

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

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

- **One-touch switching between abrasion and pilling testing, for greater efficiency.**
  You can switch the test modes (e.g. abrasion to pilling) on the control panel, no need to remove the cover plate and change the pin position.

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

Power
230V 50/60Hz 5A

Weight
90kg

Dimension
510*850*300 mm

The Specification of Smartindale

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

Accessories

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

Optional Accessories

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

Standards

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

Optional Standards

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

ChiuVention

WASHTRUE
WASHING COLOR FASTNESS TESTER

WashTrue

Washing Color Fastness Tester

The WashTrue Washing Color Fastness Tester adopts smart temperature control algorithm to ensure that the washing color fastness test meets the test standards and the results are reliable. It is applicable to standards such as ISO 105 C06:2010, AATCC61-2013e3, GB/T 12490-2014, M&S C4A, AATCC190-2010e2 (2016) e2, NEXT TM 02, etc.
A series of testing operations can be completed on the touch screen, such as selecting standards, parameters, time, and temperature settings, adding water, draining water, etc., it is smart and efficient, and the buzzer alarms automatically when the test is completed. The WashTrue also has multiple safety designs, and can run long time with low noise.

WashTrue
Washing Color Fastness Tester

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

Weight
45kg

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

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

- **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.

The Specification

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

Standard Accessories

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

Optional Accessories

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

Standard

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

Optional Standard

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