

# MAJRA INDUSTRY

TESTING EQUIPMENTS FOR TEXTILE INDUSTRY

Textile testing equipment plays a vital role in ensuring the quality, safety, and performance of textiles products across various industries. These testing instruments are designed to evaluate various characteristics of textiles such as strength, durability, colorfastness, dimensional stability, and more.





#### Random Tumble Pilling Tester

Pilling and other changes in surface appearance, such as fuzzing, that occur in normal wear are simulated on a laboratory testing machine. Pills are caused to form on fabric by a random rubbing action produced by tumbling specimens in a cylindrical test chamber lined with a mildly abrasive material. To form pills with appearance and structure that resemble those produced in actual wear, small amounts of short-length gray cotton fiber are added to each test chamber with the specimens. The degree of fabric pilling is evaluated by comparison of the tested specimens with visual standards that may be actual fabrics, or photographs of fabrics, showing a range of pilling resistance. The observed resistance to pilling is reported using an arbitrary rating scale. Random Tumble Pilling Tester is specially designed equipment to determine the pilling and fuzzing characteristics of textile fabrics.

Smith Barney Inc. are now able to offer a technically advanced machine that is easy to use and inexpensive to own.

#### Standards:

ASTM D3512,ISO 12945-3



# **ICI** Pilling Tester

## 2 box, 4 box and 6 box

Pilling is a fabric surface phenomenon characterized by little balls formed by entangled fibers clinging to the surface. These are formed during wearing or washing by the entanglement of the loose fibers, which protrude from the fabric surface, and development of these into spherical bundles anchored to the fabric by a few unbroken fibers. These give a very unsightly look to the garments. To determine the tendency to form pills, test specimens taken from the fabric sample are rubbed against each other under controlled conditions. The appearance of the test specimen, after rubbing for the specified period, is compared against standard rating photographs (Woven pilling photographs and knitted pilling photographs) for grading the fabric. ICI Pilling and Snagging Tester is specially designed equipment to access resistance to pilling of any type of fabrics as per ICI pilling system.

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#### Standards:

ISO 12945-1,BS 5811,IWSTM 152,NEXT 19 JIS L1076,M&S P18,M&S P21A,BS 8479

# Rotawash Colorfastness Tester

#### 4+4, 8+8 Beaker

Rotawash Colorfastness Tester ,also as a kind of textile testing equipment,is applied to determine the textile dye washing color fastness, resistant to washing, resistant to dry cleaning and resistant to shrink of textile cotton, wool, silk jute and chemical fiber textiles.

## Standards:

ISO 105-C06,ISO 105-C08,ISO 105-C09,ISO 105-C10,ISO 105-D01, ISO 105-E03 AATCC 61,190 AATCC 86,132



# Wash Fathers Tested

# Rotawash Colorfastness Tester

#### 20+20 Beaker

The Launder-Ometer is a laboratory instrument used for conducting accelerated laundering or dyeing tests. It is applicable for performing washing, dry cleaning, dyeing, colorfastness to fulling, detergency, and other laboratory tests. It is equipped with a four-sided, stainless steel rotor, which holds five metal containers on each side. The containers in the rotor are simultaneously exposed to controlled conditions of test solution, temperature, and mechanical agitation. Each container is sealed and allows a reliable experiment with no interaction from other test specimens.

#### Standards:

# **Color Matching Cabinet**

Color Assessment Cabinet, also a kind of textile testing equipment, suitable for all industries and applications where there is a need to maintain color consistency and quality. eg- Automotive, Ceramics, Cosmetics, Foodstuffs, Footwear, Furniture, knitwear, Leather, Dyeing, Packaging, Printing, Inks and Textile test.

Textile Color Assessment Cabinet is very important to use standard light source to check color difference in night duty. Besides D65 light source, TL84,UV, and F/A light sources are available in this Lamp Cabinet for metamerism effect.

#### Standards:

ASTM D3512,ISO 12945-3

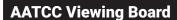


# Pilli Scope

The Pilling Assessment Viewer is a specialized viewing booth to undertake the assessment of pilling on fabrics against standard photographs. The unit can be used for assessing the pilling with Martindale pilling, random tumble pilling, ICI pilling samples etc

#### Standards:

ISO 12945-1, ISO 12945-2, ISO 12945-3, BS 5811, ASTM D3512, ASTM D3514, ASTM D4970



Veri Vide has long been known throughout the textile and apparel industries as the specialist for any requirement in the field of colour assessment technology. Complimenting this, VeriVide's textile testing equipment enables quality control technologists to assess and evaluate surface appearance.

#### Standards:

American Association of Textile Chemists and Colorist (AATCC) approved test methods 88B/88C/124/128/143/178.



# Martindale Abrasion cum Pilling tester

### 4 Station, 6 Station and 9 Station

Martindale Abrasion tester, also as a kind of textile testing equipment, mainly applies to the resistance test of textile and outside layer, lining or under layer of the footwear or the similar fabric. Testing the samples as per the standard, test can be classified as dry test and wet test. And test the samples Lissajous-oriented for the regulated times, then observe the difference between it and the original samples and decide the grade of scrubbing resistance.

#### Standards:

ASTM D4970, ISO12945-2 and other pilling degree test. ASTM D4966, ISO12947 and other fabric abrasion tests.

# Button Snap Pull Strength Tester

The aim of button snap pull tester is defined responsibility of garment manufacturer, make sure button, push-button and fixed accessories can fixed on garments suitable. To avoid button fall off garments & risk of infant eating. So, all the button, push-button & fixed accessories on garments must pass snap button pull strength test. This machine can do even and vertical tensile test of all kinds of buttons on garments. Test fastness degree of button reach relative security standard or not.

#### Standards:

16 CFR 1500.51-53, ASTM PS79-96, D4846



# **Motorized Crock Meter Tester**

Motorized for frequent use and long run tests and fitted with an electronic counter for up to 9,999 strokes. Comes with a standard weight (9 N) arm that complies to a variety of standards including AATCC 8 and 165 and traditional sample holder. New to this design is an option for a lightweight arm for easily adding weights to perform a wider range of tests

# Standards:





# **Button Impact Tester**

Button Impact Tester to determine the impact resistance of plastic sew-through flange buttons to a falling mass of 0.84kg (29.5 oz), released from a height of 67mm (2.625 inch) or other heights as required. Cracking, chipping or breakage constitutes failure

# Standards:

**ASTM D 5171** 



# **Rotary Crock Meter Tester**

Rotary Crockmeter is used for testing the transference of color from the surface of one material(particularly for printer fabrics) to another by either wet or dry rubbing. Specimens are rubbed with dry, standard cotton cloth (Crocking cloth) and again, if applicable, with wet cloth. The staining of the crocking cloths is assessed with the Grey Scale.

#### Standards:

AATCC 116-2013 Colorfastness to Crocking: Rotary Vertical Crockmeter Method

ISO 105-X16 Textiles -- Tests for colour fastness -- Part X16: Colour fastness to rubbing -- Small area

# Water Spray Tester

Water repellency is an important property of textile fabrics to measure the efficiency of water resistant/repellant finishing applied on textiles. Spray Rating Tester is the appropriate equipment to test the property spraying a specified volume of distilled water is sprayed on a Test specimen, which has been mounted on a ring and placed at an angle of 45°, so that the center of the specimen is 150mm below the spray nozzle. The Spray rating is determined by comparing the appearance of the specimen with AATCC Spray Test Rating Chart.



# Fabric Stretch and Recovery Tester

To determine the elastic fabric under a certain tension to stretch the specified elongation and then recovery

#### Standards:

**ASTM D2594** 



# **Impact Penetration Tester**

This tester is applicable to any textile fabric, which may or may not have been given a water resistant or water-repellent finish. It measures the resistance of fabrics to the penetration of water by impact, and thus can be used to predict the probable resistance of fabrics to rain penetration. water impact penetration tester is especially suitable for measuring the penetration resistance of garment fabrics

#### Standards:

AATCC 42 ISO18695



# Perspirometer Tester

Perspirometer Tester which is also called as Perspirometer Tester, is to test textile color fastness resistance to perspiration, sea water, water and etc. Perspiration tester is a stainless steel frame which can test 20 samples according to AATCC or 10 samples as per ISO standard



# **Sublimation Tester**

This Scorch and Sublimation Tester apply to textile assist color change or transfer capacity under heating condition, simulate textile being ironing and under high temperature & humidity dyeing color fastness to sublimation degree in daily life.

#### Standards:

GB/T 5718, GB/T6152, M&S C13, ISO 105-P01, X11, BS 1006, AATCC 92 114 117 133, DIN 54022/54060T



# **Swatch Cutter Manual**

# 300 mm, 400 mm and 500 mm

A Fabric Swatch Cutting Machine is a device used to cut small, precise samples or swatches of fabric. It is commonly used in the textile industry to produce fabric samples for product development, quality control, and customer presentations.

The machine consists of a cutting platform with a sharp blade or rotary cutter that is guided by a cutting

#### Standards:

# **Swatch Cutter Motorized**

#### 500 mm

Automatic Sample Cutting Machine is suitable for cutting cotton fabric, wool, silk, hemp, chemical fiber, etc. This automatic sample cutter widely used in textile industrial and sales company for cutting and making sample.

#### Standards:





# **Tearing Tester**

# 6.4 Kg and 12.8 Kg

Textile Elmendorf Tearing Tester ,also a kind of textile testing equipment,to determine the ballistic tearing strength of woven fabrics, plastic films, paper, Textile Elmendorf Tearing or other similar materials.

#### Standards:

ASTM D1424, DIN 53862, EN ISO 13937-1, ISO 4674-2, ISO 9290, M&S P29, NEXT 17

# **Bursting Strength Tester**

Textile fabrics having no particular directions cannot be tested its strength via tensile testers a multi-directional force generated by hydrostatic pressure is applied on fabric to check the strength of that fabric, this phenomenon is called bursting strength testing. Automatic Hydraulic Diaphram Bursting Tester is specially designed to perform the bursting strength testing of kitted fabrics, with pneumatic control.lt can also be used for leather, paper & card Boards etc.

#### Standards:

ASTM D 3786 Standard Test Method for Hydraulic Bursting Strength of Textile Fabrics ISO 2758 Paper - Determination of bursting strength



# Flammability Tester 45°

Flammability Tester is used to test the burning properties of textile fabrics, such as clothing fabrics, decorative fabrics, tent fabrics, etc.

#### Standards:

ASTM D1230 for textile flammability testing

# Glow wire Tester

This device simulates the thermal stress test of glowing component or heat source like overload resistance or ignition source which is caused in short time. It is suitable for electric and electronic products, household appliances and other material to do fire hazard testing. It is also used in the non-flame ignition source fire test to determine initiation temperature and flammability index of related glowing filament.

#### Standards:





# Needle Flame Tester

The device is used to evaluate the fire hazard by imitating the effect of small flames which can occur during faulty operation of devices and machines with a needle flame. The testing flame is the fire source to which a specimen is exposed for a defined period of time. The flame is confirmed by the testing arrangement and the calibration device. The temperature on the copper block is measured by a type K mineral-insulated metal-sheathed thermocouple (Class 1) under IEC 60584-2. The calibration device can automatically measure the time interval from 100°C to 700°C and determine the average value of three measurements. The calibration device does also have a digital and analog temperature output which can be used to determine the time intervals externally. The power supply is provided by an IEC-320 AC power cordset 100-230 VAC (50/60 Hz)

## Standards:



