

TEXTILES TESTING MACHINES GENERAL CATALOG

M001A Universal Testing Machine (Dual Column)

To determine tensile, tension, compression, bend, shear, bonding strength, break strength, peeling, tearing, cyclic and flexure, etc. for rubber, plastics, leather, metal, composites, nylon line, fabrics, paper, aviation, automotive, biomedical, elastomers, packaging, construction, petrification, aviation, petrification, electrician, vehicle, etc.

Max. Capacity 10N, 20N, 50N, 100N, 200N, 500N, 1KN, 2KN, 5KN, 10KN

Stroke Space 1100mm / 900mm

Standards

ISO13934-1, 13934-2, 13935-1, 13935-2, 13936-1, 13936-2, 13936-3, 13937-2, 13937-3, 13937-4, 1421, 2411, 2062, 4674-1, 5082, 9073.3, 9073.4, 9073.18, ASTM D 434, D751, D885, D1683, D2256, D2261, D2724, D2731, D3787, D4034, D4964, D5034, D5035, D5587, D5733, D5735, BS 2543, 2576, 3320, 3424, 4303, 4304, M&S P11, P12, P13, P14; JIS L1096



M001B Universal Testing Machine (Dual Column)

It is used to analyze and test the mechanical properties of various textiles, rubber, shoe material, leather, metal, building material and so on. This kind of equipment is the model with high precision, perfect function, stable performance and high cost performance in domestic mechanical performance testing instruments at present.

Max. Capacity 20KN

Stroke Space 1100mm / 900mm

Standards

ISO13934-1, 13934-2, 13935-1, 13935-2, 13936-1, 13936-2, 13936-3, 13937-2, 13937-3, 13937-4, 1421, 2411, 2062, 4674-1, 5082, 9073.3, 9073.4, 9073.18, ASTM D 434, D751, D885, D1683, D2256, D2261, D2724, D2731, D3787, D4034, D4964, D5034, D5035, D5587, D5733, D5735, BS 2543, 2576, 3320, 3424, 4303, 4304, M&S P11, P12, P13, P14; JIS L1096



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Max. Capacity 50KN

Stroke Space 1100mm / 900mm

Standards

ISO13934-1, 13934-2, 13935-1, 13935-2, 13936-1, 13936-2, 13936-3, 13937-2, 13937-3, 13937-4, 1421, 2411, 2062, 4674-1, 5082, 9073.3, 9073.4, 9073.18, ASTM D 434, D751, D885, D1683, D2256, D2261, D2724, D2731, D3787, D4034, D4964, D5034, D5035, D5587, D5733, D5735, BS 2543, 2576, 3320, 3424, 4303, 4304, M&S P11, P12, P13, P14; JIS L1096



M002A Single Column Universal Tensile Testing Machine

To determine tensile, compression, bending, shearing, bonding strength, peeling, tearing, etc. For rubber, plastic, leather, metal, nylon line, yarn, fabric, paper, aviation, package, construction, petrification, electrician, vehicle and other materials.

Load cell 10N, 20N, 50N, 100N, 200N, 500N, 1KN, 2KN, 2.5KN

Test Speed 0.01-500mm/min 0.01-1000mm/min

Standards

ISO13934-1, 13934-2, 13935-1, 13935-2, 13936-1, 13936-2, 13936-3, 13937-2, 13937-3, 13937-4, 1421, 2411, 2062, 4674-1, 5082, 9073.3, 9073.4, 9073.18; BS 2543, 2576, 3320, 3424, 4303, 4304, M&S P11, P12, P13, P14; JIS L1096, GB/T 3923.1/2; GT/T 3917.1/2/3/4/5; GT/T 19976; ASTM D 5035; ASTM D 2261, etc.



M002B Ball Burst Strength Tester

To determine ball burst and extension for cotton fabric, socks, gloves and elastic fabric.

Force Range 2500N (1%~100% of Full Range)

Speed Range 0.01-500mm/min

Standards

GB/T 19976, ASTM D 3787, FZ/T 01030, FZ/T 60019 EN 12332-1



M003A Electronic Elastic Strength Tester

To determine elastic strength property for materials including various knitted underwear, socks, spandex core, spandex, hammock and elastic cord, etc.

Range 50N / 500N

Standards

FZ/T 01034, FZ/T 01062, ASTM D4964, BS 4592



M003B Electronic Peeling Tester

To determine peeling strength property between adhesive lining cloth, glued laminated fabric, hot melt adhesive lining and apparel fabric, between lining cloth and fabrics, between adhesive coatings.

Range 50N 100N 500N

Standards

FZ/T 01085, FZ/T 80007.1, AATCC 136, FZ/T 01010, FZ/T60011



M003C Stocking Tensile Tester

Used to test the horizontal and vertical extension performance of various socks.

Standards

FZ/T 73001



M004A Snap Button Pull Tester

To determine the holding or breaking strength of the snaps, buttons or fixed accessories attached onto garments. Aim at providing the strict reference basis for garments manufacturers, to ensure the snaps, buttons and fixed accessories can be fixed on garments properly, so as to prevent from snap button fall off and swallow risks for infants. It is widely used in snaps, buttons, toys testing for many brands like H&M, NIKE, NEW BALANCE, LIVIS, NEXT, GAP, etc.

Standards

16 CFR 1500.51~53 ASTM F963 EN71-Part 1 M&S P115A



M005 Elmendorf Falling-Pendulum Type Tearing Tester

To determine the resistance to tear (Elmendorf method) for textiles, non-woven fabrics, sheet metal, paper, paperboard, thin film, plastic cloth, electrician tape, etc. Three interchangeable pendulums ranging from 16,000 to 64,000 Millinewtons (mN) can be selected separately for multiple test method compliance.

Range of tearing force 0-16N / 0-32N / 0-64N

Standards

GB/T 3917.1; FZ/T60006; FZ/T75001; ISO 1974/9290; ASTM D1424/5734



M006A Electronic Elmendorf Tearing Tester

To determine the tearing resistance strength (Elmendorf method) for various textiles. Also available for thick paper, plastic cloth and electrical insulating tapes.

Range of Tearing Force 16N / 32N / 64N

Standards

GB/T 3917.1; FZ/T60006; FZ/T75001; ISO 1974/9290; ASTM D1424/5734



M006B Digital Elmendorf Tearing Tester

To determine the tearing resistance strength (Elmendorf method) for various textiles. Also available for thick paper, plastic cloth and electrical insulating tapes.

Range of tearing force 1600CN, 3200CN, 6400CN, 12800CN

Standards

Textiles: GB/T 3917.1; ASTM D1424, DIN 53862; EN ISO 13937-1; ISO 4674-2; ISO 9290; M&S P29; NEXT 17; NF G07-149

Paper: GB/T455, ASTM D689, BS 4468, DIN 53128, CSA D9, ISO 1974, EN 21974, PAPTAC D9, JIS P8116, SCAN P11, UNI 6444, APPITA P400, TAPPI T414

Plastic: GB/T 11999, ISO6383-2, ASTM D1922, NF T54 141, JIS K7128-2

Non woven: ASTM D5734, WSP 100.1



M007A Hydraulic Bursting Strength Tester

Adopts hydraulic method to determine the burst strength and burst expansion property for various textiles, including knitted fabric, woven fabric and non-woven fabric, laminated fabric under standard or wet condition.

Range 2.00Mpa or 10.00Mpa

Test area 7.3 cm² (Φ30.5mm), 10 cm² (Φ35.7mm), 50cm² (Φ79.8mm), 100 cm² (Φ112.8mm) (optional)

Standards

ISO 13938-1, GB / T 7742, FZ/T 60019, FZ/T 01030, BS 4768, Woolmark TM29, WSP 30.1, JIS L 1018.6.17, ASTM D 3786, etc



M007B Pneumatic Bursting Tester

Adopts pneumatic method to determine the burst strength and burst expansion property for various textiles, including knitted fabric, woven fabric and non-woven fabric, laminated fabric under standard or wet condition.

Range 2.00Mpa

Standards ISO 13938-2, GB / T 7742, FZ/T 60019, ISO 2960, ASTM D 3786, etc



M008A Martindale Abrasion and Pilling Tester

To determine multiple abrasion and pilling tests for various textile structures, including non-woven fabric, carpets, leather, socks, gloves, collars, cuffs, wood, high pressure laminates, painted surfaces, etc.

4, 6, 8, 9 working positions and 2 counting Methods of count up & count down are available.

Working positions: 4 6 8 9

Standards

GB/T4802.2-2008, GB/T13775, GB/T21196.1, GB/T21196.2, GB/T21196.3, GB/T21196.4, FZ/T20020, ISO12945.2, 12947; ASTMD4966, 4970, IWS TM112



M009B Taber Abraser

To determine the wear resistance (including mass loss, thickness loss, and transmittance etc.) of all kinds of structures including textiles, paper, glass, metals, paints, plated surfaces, coated materials, leather and rubber.

Working positions 1 or 2

Standards

ASTM D3884, D4060, ISO 5470-1, ISO 7784-2, DIN 53754, ANSI INCITS 332, QC/T 236, GB/T 1768



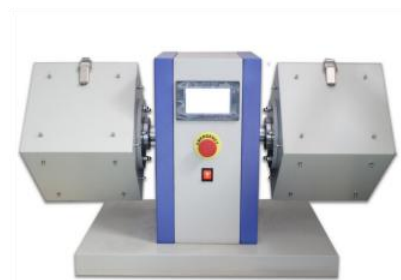
M010 ICI Pilling and snagging Tester

To assess surface pilling degree for fabrics particularly wool knitted fabric. The color touchscreen controller has all the standard tests preloaded so tests can be started with just a couple of touches. Magnetic backed cork liners make cork changes easy without the need to remove the box from the drive.

Number of pilling boxes 2 Boxes 4 Boxes 6 Boxes 9 Boxes

Standards

GB/T4802.3, ISO 12945.1, BS5811, JIS L1076, IWS TM152



M011 Random Tumble Pilling Tester

To determine the pilling and fuzzing property of textile which random tumble inside roller accorded with standard ASTM D3512. Along with the critically important cork liner and high-speed impeller for agitating the test samples for preset test time, compressed air is required to assist in the tumbling action.

[Test chambers](#) 2 / 4

[Standards](#)

GB/T4802.4; ISO12945.3; ASTM D3512; ASTM D1375



M012 Spray Rating Tester

To determine the surface wetting resistance (spray rating) of fabrics which has or has not been processed with water resistance. Whole set is in stainless steel material which is rust-proof and durable. And equipped with high precision spray nozzle to ensure water flow meet with the standards.

[Standards](#)

GB/T4745; ISO4920; AATCC22; JIS L1092



M013 Universal Wear Tester (Stoll Quartermaster)

To determine resistance to laboratory wear and abrasion of such materials as woven and knitted fabrics, footwear, napped and pile fabrics, hosiery, felt, non-woven and coated fabrics, yarns, threads and cordage, plastic films, rubber sheeting, leather, paper and, many other materials.

[Standards](#)

ASTM D3514, D3885, D3886; AATCC 119, 120; JIS L1096



M014 Circular Locus Tester

The Circular Locus Tester is used to assess surface deterioration and quality of fuzzing and pilling property for fabrics (wool, chemical fiber, mixed, knitted and woven fabrics).

[Standards](#)

GB/T 4802.1, JJG 040-1990



M015 45 Degree Automatic Flammability Tester

To determine textile damaged area and length at 45 degree condition and the times of touching flame when textile is melted to specified length after heated at 45 degree condition. Stainless steel test cabinet with glass observation panel provided with automatic timing of flame spread in 0.1 second increments from ignition. Automatic or manual flame impingement for 1,5 or 20 seconds.

Standards

16 CFR 1610; ASTM D1230; CA TB117; GB/T 14644; JIS L1091



M016A Horizontal Flammability Tester

To determine the horizontal burn rates and burn resistance of textiles, particularly those for automotive interior use. It is the flammability test about the required time which flame spreads at horizontal direction to the specified distance.

Standards

ISO 3795; JIS D1201; FZ/T 01028; GB 8410; GB/T 20953;
FMVSS 302 ; SAE J369; GMW3232; ASTM D5132



M017A Vertical Flammability Chamber

Vertical Flammability Chamber is to determine the flammability resistant flame retardant textiles, including woven fabric, knitted fabric, coating products, laminated products, etc. And measure tendency for textiles for continued combustibility, smoldering and carbonization.

Standards

CFR1615/1616; CA TB117 CPAI 84; GB/T5455;
GB/T13488/13489; GB/T 2408; ISO1210; ASTM D6413

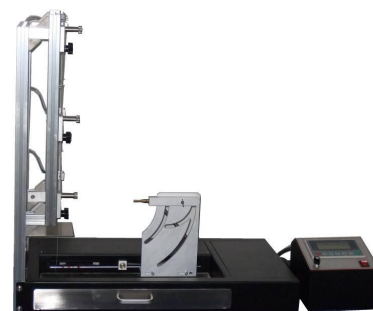


M017B Vertical Flammability Chamber

Mainly used to test the flammability property for nightwear.

Standards

BS 5722; BS 5438 BS EN 532, 533, BS EN 1103, BS EN ISO 6940, 15025,
EN ISO 6941, EN71, ISO 10047, DIN 53438, GB/T 5456, GB/T 5456, 8745
GB/T 8746



M018 Sample Cutter with Balance

GSM Sample round cutter (Cutting area: 100cm², diameter: Φ 112.8mm, thickness: 5mm)

Balance: Weighing range: 300g, Weighing accuracy: 0.01g

Standards accessories

Schroder spare blades (Made in Germany) 4pcs

Cutting mat 1pc



M018C Hand-press Sample Cutter

Hand press type GSM Cutter is the sample round cutter for cutting all kinds of textile, such as cotton, woolen, polyester, knitting, etc. It is also suitable for cutting leather, paper, paperboard and aluminum foil.

The instrument is simpler and smaller, it can quickly and accurately cut the standard area about 100 square centimeters, 5mm thickness.

Cutting mat and spare blades are equipped.



M018C Circular Sample Cutter

Circular Fabric Sample Cutters are used to cut various Wool Fabric, chemical fiber, cotton pinning and knitted fabrics.

Cutting diameter Φ 38mm Φ 90mm Φ 140mm



M019 Pneumatic Sample Press

To cut the samples with specified dimension which is combined with abrasion, pilling, strength, washing, stiffness test, etc. Used to cut the round shape or irregular samples of various wool, cotton, chemical fiber and knitting. 125mm air cylinder equipped.

Standards

ASTM D3776/2646, ISO 3801, BS 3424/2471, BS EN 12127, M&S P65/65A



M020 Automatic Fabric Drapability Tester

To determine the dynamic and statics drapability property (including drape coefficient, lively rate, surface waviness and aesthetic coefficient) for various fabrics.

Standards

BS 5058, FZ/T01045



M021 Fabric Formaldehyde Content Tester

To quickly measure the formaldehyde content for various textiles. Formaldehyde determination value and absorbance value can be measured via extraction method according to national standard test methods.

Standards

GB/T2912.1; GB18401; ISO14184-1



M022A Crease Recovery Tester and Loading Device

To determine crease recovery performance of fabrics by creasing in a loading device for a predetermined time using a weight suitable for the test method specified (BS, ISO, AATCC). After transferring the specimen to the clamp of the tester, the specimen is allowed to recover and the angle of recovery is recorded.

Standards

M&S P22, AATCC 66; GB/T 3819



M022B AATCC Wrinkle Recovery Tester

To determine a fabric's appearance to recover after wrinkling under a predetermined load for specified time. Applicable for to any fiber made of pure spinning or blended fabric.

Standards

AATCC 128, ISO 9867



M023A Digital Hydrostatic Head Tester

To test the waterproof property for fabric which have been waterproof processed, such coating cloth, tent cloth, tarpaulin, rainproof clothing fabric and non-woven fabric material, etc.



Testing range 500pa-200kpa 5kpa-500kpa

Standards

GB/T4744; FZ/T01004; AATCC 127; DIN 53886; JIS L1092

M023B High pressure-servo Hydrostatic Head Tester

To test the waterproof property for fabric, Such as canvas, medical non-woven material, coated fabric, geosynthetic materials, cloth, tent cloth, tarpaulin and rainproof clothing fabric.

Testing range 200kpa 500kpa 1000kpa (Optional)

Standards

GB/T 4744, FZ/T 01004, JIS L 1092, ISO 811, ISO1420, BS EN20811, AATCC127, DIN 53886, ERT120-1 160-0,AFNOR G07-057



M024 ICI Mace Snag Tester

The ICI Mace Snag Tester is designed to test the snagging resistance property for knitted fabric and other easy to be snagged textiles. The instrument should come with a pilling assessment cabinet and standard photographs.

Working position 2 4

Standards

ASTM D3939, GB 11047, JIS L 1058, VDA 230-220



M025 UV Accelerated Weathering Tester

To simulate the destructive effect for materials from sunshine, moisture and temperature. Materials aging including fade, loss of gloss, low intensity, cracking, peeling, pulverization, and oxidation, etc. UV accelerated weathering tester simulate sunshine, condensation and natural moisture condition, and samples stay inside this condition can be equaled to stay outdoor for

several months or years.

The Fluorescent Ultra-Violet Lamp of UV aging chamber can reappear the effect of sunshine, Condensation and water spray system can reappear the effect of rain and dew.

Control Type LCD Control Touch Screen Control



M026 Dry Cleaning Cylinder

To determine appearance color fastness, size change and peeling strength property after dry cleaning via organic solvent and alkaline solution for hot-melt adhesive padding cloth and various textiles.

Additionally, combine with various flammability test to preprocess samples before doing flammability test.

Standards

FZ/T01083, AATCC 162, 16 CFR 1610



M027A Digital Air Permeability Tester

To test the air permeability of various woven fabrics, including industries fabrics, non-woven and other breathable fabric.

Standards

GB/T5453 GB/T13764 ISO9237 ISO7231 ISO5636 ASTM D737 DIN 53887 JIS L1096 BS5636



M027B Full Automatic Air Permeability Tester

To test the air permeability of various woven fabrics, including industries fabrics, non-woven and other breathable fabric.

Standards

GB/T 5453, GB/T 2624, GB/T 13764 ,GB/T 18422, ISO 9237, DIN 53887, JIS L1096, ISO 9073, ISO 7231, ISO 5636, BS 5636, ASTM D737



M028 Pilling Assessment Box

To determine the pilling results under specified light condition of this pilling assessment box for fabrics. The pilling results including Martindale Pilling, Random Tumble Pilling, ICI Pilling, circular locus method pilling test, Brush/Sponge Pilling) or snagging test(ICI Snagging).

Standards

GB/T 4802.3, ISO12945, ASTM D3512 , ASTM D4970



M029 Fabric Water Vapor Transmission Tester

To determine water vapor permeability (waterproofing and moisture-penetration performances) for various fabrics (including moisture permeable coated fabrics) and Non-woven fabric for garment usage including bat wool, space cotton etc.

Standards

GB/T12704, ASTM E96, JIS L1099, BS 7209, ISO 17699, ISO15496



M030 Textile Ultraviolet Prevention Performance Tester

To determine textile UV transmittance and UV proof property, Textiles ultraviolet protection factor(UPF) can be obtained directly from test.

Standards

GB/T 18830, AATCC 183, AS/NZS 4399, BS 7914, PREN13758

M031A Zipper Fatigue Tester

This device is to test whether zipper can bear the specified times of reciprocating pull action, under the horizontal and vertical tension effect. During testing, machine drive the puller of zipper at constant speed, undergoes reciprocating movement of 30 times per minute until reaches specified test times. So as to assess the quality of zipper.

Standards

CNS -1083 , BS 3084 , QB/T2171



M031B Zipper Rotation Testing Machine

Used for metal, plastic, nylon zipper pull head and anti torsion test.

Standards

QB/T2171, QB/T2172, QB/T2173



M032 Downproof Tester

To determine the penetration through fabrics property for inner lining material of cold protective clothing and bedding article, down feather or fiber.(Abrasion method)

Standards

BS EN 12132-1, GB/T 14272, GB/T 12705-1



M033 Automatic Feather And Down Filling Power Tester

To test the filling power of down feather and the products filling materials.

Test Principle

Pressure on the sample by dropping the platen is applied to the filling material at a constant speed and after a stipulated time the level of the platen is noted. The massic volume is calculated with regard to the height and the known diameter of the graduated cylinder.

Standards

GB/T 14272; GB/T 10288; IDFB-FP, FZ/T80001; JISL1903; BSEN12130; QB/T 1193; QB/T 1194; QB/T 1195; QB/T 1196; KSK 0820



M034 Rain Tester

UTS rain tester is designed to test rain penetration protective capability for various textiles material particularly for garment fabric materials.

Standards

AATCC 35



M035A Digital Thickness Tester

To measure thickness of textile and footwear materials.

Test Principle

Place sample between upper and bottom pressure plate with adding a certain of load), and dial indicator will display the thickness of test sample.

Standards

ASTM D1777 Method 1, 2, 5



M035B Electronic Thickness Tester

To measure the thickness of various woven fabric, knitted fabric and uniform thin materials.

Standards

ASTM D1777; GB/T3820; ISO 5084/9073/9863; FZ/T01003



M036 Gas Fume Chamber

To determine the colorfastness resistance to chemistry of butane gas or exposed atmospheric nitric oxide generated from combustion of natural gas for all of textiles not including loose fiber.

Standards

AATCC 23, ISO 105-G02, GB/T 11039



M037 Bean Bag Snag Tester

Bean Bag Snag Tester, to determine snagging resistance for knitted and woven fabrics. It complies with ASTM D5362, JIS L1058, etc

Standards

ASTM D5362, JIS L1058, M&S P21A



M038A Full-Automatic Fabric Stiffness Tester

To test stiffness property for fabrics including cotton, wool, silk, linen, chemical fiber, knitted fabrics, non-woven fabric, coating fabric, etc. As well as for such soft materials as paper, leather, thin film, etc.

Standard

ASTM D 1388, IS09073-7, BS EN22313, ZB WO4003, GB/T18318



M038B Digital Fabric Stiffness Tester

To test stiffness property for fabrics including cotton, wool, silk, linen, chemical fiber, knitted fabrics, non-woven fabric, coating fabric, etc. As well as for such soft materials as paper, leather, thin film, etc.

Standards

ASTM D4032



M039 Wyzenbeek or Oscillatory Abrasion Tester

To determine the abrasion resistance property for textiles, leather, leather cloak, so as to provide the reference for improving quality.

Standards

ASTM D4157, BS EN ISO 12402-7, FTMS 191A 5304



M041 Pick Counter

Pick Counter is applicable for measuring the warp, weft and density for various kinds of textiles in textiles factories, knitting mill, science research units fields.

Standards

GB/T4668; ISO7211.2



M041A Pick Counter



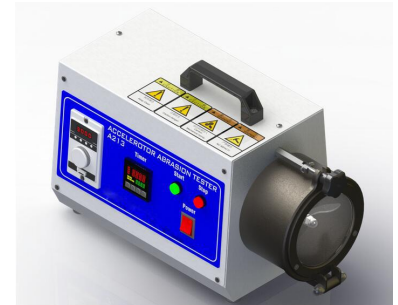
M041B Pick Counter

M042 Accelerator Abrasion Tester

To measure the thickness of various woven fabric, knitted fabric and uniform thin materials. This tester is designed to evaluate the resistance of fabrics and other flexible materials to abrasion.

Standards

AATCC 93



M045 Thermal Insulation Tester / Sweating Guarded Hotplate

M045 Thermal insulation tester/Sweating Guarded Hotplate is used to simulate the process that human skin produces heat and water vapor penetrate fabrics. Special designed to determine the Thermal resistance (heat preservation) and moisture resistance (moisture conductivity) properties under the constant environment, which is applicable for fabric, thin film, coating, foamed plastic, leather, composite material and its garments, quilts, sleeping bags, interior decoration materials, other textiles products.

Standards

ASTM D1518; EN ISO 11092; ASTM F1868-09; ASTM F1868-02; JIS L1096; GB/T 11048; etc.



M048B AATCC 201 Drying Rate Tester (Heated Plate Method)

M048B AATCC 201 Drying Rate Tester (Heated Plate Method), is designed according to the requirements of the American AATCC 201 test standard, to quick determine textiles dry rate.

Standards

AATCC 201



M056 Tog Value Tester

Used for thermal resistance testing of all kinds of fabric physiological comfort and normal conditions.

Standard

GB/T11048-2008 B type static plate method

ADTM D1518-85, JIS_L1096, -2010,ISO11092-1993, FZT 73016-2013



M060 UV Spectrophotometer for Formaldehyde

Used for rapid determination of formaldehyde content in textiles.

Standard

GB/T2912.1, GB/T18401, ISO 14184.1, ISO 1 4184.2, AATCC112



M061 Steaming Shrinkage Tester

Used for testing the dimensional change of woven fabric and knitted fabrics processed by steaming. Measure the dimension change generated under the condition of dissociating steaming processing.

Standard

FZ/T20021



M063 Button Impact Tester

M063 Button impact tester is to determine the resistance to impact ability of plastic button, etc.

Standard

ASTM D5171

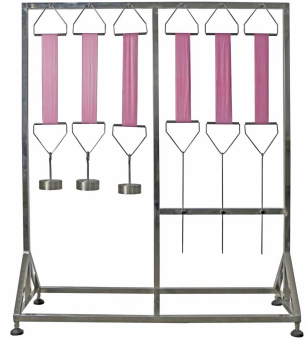


M80A Fabric Stretch and Recovery Tester

To determine the stretch and recovery property of textiles under the condition of Concentration value and fixed length.

Standards

ASTM D2594



M80B ASTM D3107 Fabric Stretch and Recovery Tester

Used to measure growth, elongation and recovery (under constant load and elongation) of low elastic knitted fabrics.

Standards

ASTM D3107



M095 Manual Cut Table

To cut various textiles, fabrics including cotton, fur, silk, sesame, chemical fiber. Support to make various kinds of sample card, color card, etc.



M096 Hydraulic Swing Arm Cutting Machine

For die cutting shoe upper, insole, plastic bags, hand bags, etc.

