
PROWHITE®
TEST EQUIPMENT

About Us

PRO-SER has been producing test equipments and auxiliary test equipments at BS, DIN, ISO, AATCC standards since 1998 till present.

PRO-SER, which offers the entire product portfolio to the end users with the PROWHITE brand, reaches its customers directly to different countries or through its dealers.

PRO-SER company which is formed by combining the founders of the company Seven Yılmaztürk and Cengiz Yılmaztürk's experiences in technology, textile, education and food fields.Today, PRO-SER has become an international company that has been recognized all over the world with its expert staff and wide technological capability.Besides standard testing equipments PRO-SER has the capacity to produce new technological test equipments thus became a solution oriented partner to many other companies all over the world.

The production process of products is done with strict discipline standards in order to guarantee 100% compatibility and continuity.We would like to thank through this catalogue over 3000 customers whom have been trusting and working with us since 1998.

product groups

fiber test equipment

yarn test equipment

fabric test equipment

carpet test equipment

washing&dyeing test equipment

general test equipment

flammability tester

footwear&leather test equipment

www.prowhite.eu

Fiber Testing

E-001A

FIBER DIAGRAM MACHINE

The device is an essential device for accurate and consistent of fiber lenght measurement.

Devices within the range of 5 ... 500 mm can measured all types of length and length distribution of fibers, Barbe and Hauteur in terms measured.

The world's leading manufacturing firms and after manufacturing quality control measurements can trust the results due to the useing of this device.

It is used to measure in fiber bundle form of fiber.

Easy and fast calibration possibility because of measurement by laser measurement technology.

Recording measurement results according the ambient humidity and temperature ensures consistency.

Fiber Testing Equipment

Standards	ISO 2646, BS 5182, IWTO 16-67

E-002

FIBER STRENGHT TESTER

It is used to determine fiber's resistance and lengthening rates. It has lengthening measurement features with a precision of 0.1 mm.

Its maximum load capacity is 500 gr and sample movement length is 250 mm. The sample holder jaws are with pneumatic controls. The movement's speed can be digitally adjusted. For usage, Standard laboratory compressor is required.

Rs232 computer output is standard for the device and the computer software, computer and printer are offered optionally.

Standards

ASTM D 1294, ASTM D 5079, ASTM D 2524, ASTM D 3106, ASTM D 3217, ASTM D 1445, BS 3411, BS 4029, BS 5116, BS EN 12751, DIN 53843-2, EN ISO 5079, EN 13895, ISO 3060

K-002

LIGHTBOX-COLOR ASSESSMENT CABINET

It is used to perform color evaluation and color comparisons under standard light sources. Together with D65 daylight, which offers the best alternative to natural daylight, there are other models offering numerous light sources such as TL84, D50, TL83, F-INCA, UV and U30. The device has an electronic controller on which, the lamp life and its features can be observed.

Models with 4 or 5 light sources are available and can be ordered with observation areas of 60- 120 and 150 cm. Desktop and suspension type models are available.

We also have light cabinets in different sizes and specifications

Standards

AATCC 61,133,132,117,116 ,109,8, 15,16,23,190,ASTM D1729,BS 950 PART 1, ISO 105-C09,C05,C01,C02,C03,C04,C06,C07,C08,X11,NEXT 18,8B,18A,10,9A,9,7B,7A, 7,6,5,4A,4,3A, 3,2

NEP TOP TESTER

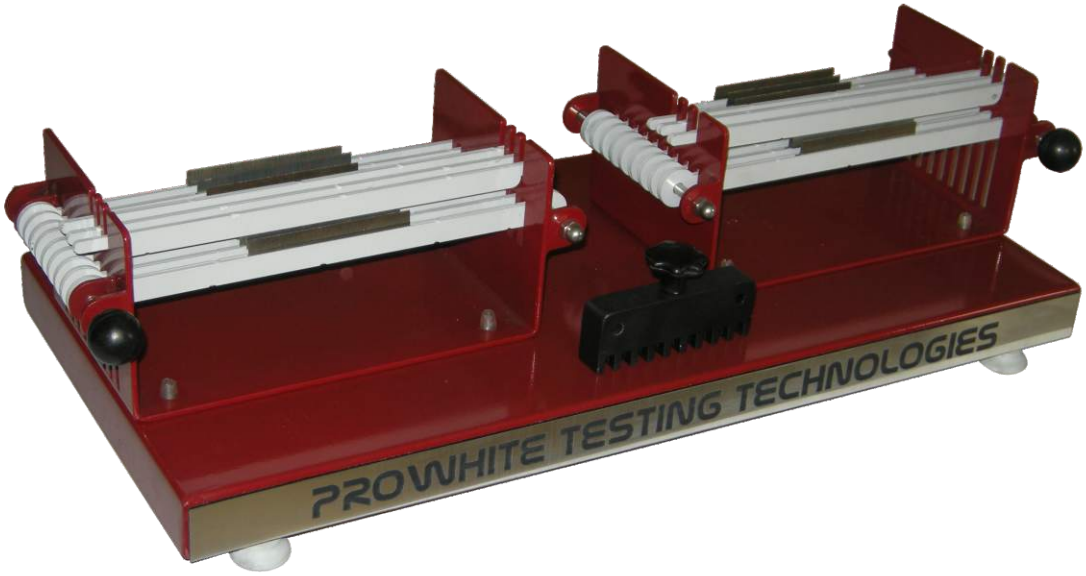
It makes the exact count of each remaining neps, seed, bark and other foreign remains of short staple fibers in every step of the operation of bending the bands from raw materials. It has a 3 cylinder traction system, an illuminated observation area and adjustable front and rear lightning.

10 pieces of 4-digit counter classifies foreign substances

E-001CS

COMB SORTER

Fiber Testing Equipment



The device is used to analyse lenght and parameter of fiber with a comb sorter. Uninflected Combed slivers and slivers which passed preparation can be analysed

Standards	ISO 920, BS 4044, ASTM D 1440/1575, IWTO 1-66

E-004

MICRONAIR

This device is used to measure avarage diameter of wool whith transfering straight air current inside wool bunch. Regular wool which has not medula layer can be analysed with that device.

Especially It is suitable for combed slivers.In addition,greasy rovings can be analysed provided that if amount of greas is constant and calibrated

Standards	ISO 1136, ISO 2403, BS 3181-1, ASTM D1448, ASTM D1282, IWTO 6, IWTO 28

E-026

RAPID OIL EXTRACTION APPARATUS

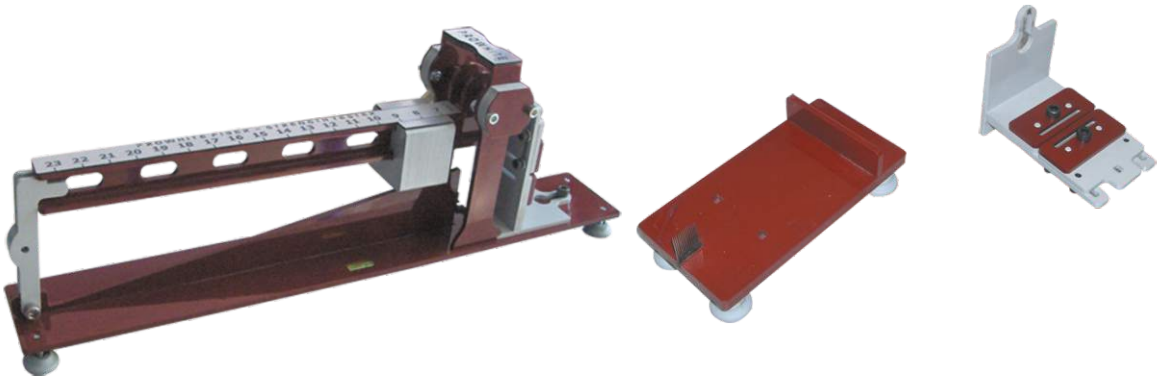
Rapid Oil Extraction Apparatus, to determine the oil or finish content of wool or synthetic samples by solvent percolation and evaporation within 15 minutes.

Temperature range is between 60°C-150°C, sample weight for each testing 2g

Standards	GB/T6504, GB6977

E-005

FIBER BUNDLE STRENGHT TESTER



Device is used to analyse breaking off load,resistence of tensile and avarage of fiber breaking off load

Standards	ISO 3060, BS 5116, ASTM D 1445/2524

E-006

ROVING REEL

It is used to determine the band length or top repare band samples of desired length. It has electronical controller and engine. The measurement precision of the device is 1 mm. Over the device, there's a digital speed controlling unit.

There are also different models with manuel controller and mechanical counter.

COHESION METER

Instrument for the contiuous measurement on slivers and rovings of fiber/fiber cohesion forces, to investigate the influence of finish preparations and crimps on the drafting of fibers and determine the spinning capabilities of the fibres.

For slivers and rovings 1-33 gramms/meter

For fiberlengths of 38-250 mm

Setting of passage speed 1-60 m/min

Cohesionforce measurements 1-100 N

Determination of the specific cohesion length

Data processing on PC, statistical values and graphs

E-003

MICROSCOPY CROSS SECTION KIT

According AATCC 20-2007 standards with mushroom and plate method, Microscopic cross section kit include all accesories and comsumables to prepare fiber cross section to use microscopic analyses

Standards	AATCC 20-2007.


Yarn Testing

I-001

YARN STRENGHT TESTER

It is used to measure the resistance of yarn, cable and similar products. The maximum force is 50 kgf (500 Newton). It has features of reading maximum rate of breaking off. The device saves resistance of sample which is pressed between jaws. Speed of breaking off process is set automatically by speed adjustable motor. Device has features to measure extension (0.1 mm sensitivity).

Breakout jaws can be selected as manual or pneumatic controller in order.

Length is 1000 mm except jaws. It is single column model. Measurement of device is with load cells. It has USB output.

PC, printer and software are available and are offered as an option

Standards	BS EN 10002-2, ASTM E-4, DIN 51221-1

I-001A

AUTOMATIC YARN FEEDING STRENGHT TESTER

It is used for strength, elongation and RCM measurement in yarn and similar products. The maximum force is 50 kgf (500 Newton). Maximum value reading capability applied at break.

The unit has an automatic feed unit for 10 bobbins.

Thread jaws are pneumatic.

The device has a touch screen

The device records the tensile strength in gf or cN of the specimen compressed through the jaws.

The device has the capability to measure the elongation. (With a sensitivity of 0.1 mm) Movement length excluding jaws: 1000 mm. The device is single columned. Instrument measurement is Load Cell with electronic load cell. USB computer communication output is available as standard.

Standards	ISO 2062, TS EN 150 2062, ASTM D2256, ASTM D885, ASTM D76

MOISTURE METER

Demonstrates the percentage of humidity held by objects with a high sensitivity and accuracy. Showing the humidity percentage of textile materials, namely cotton bails, plait fabrics and woven fabrics, thread bobbin, warps, etc... To provide highest level of quality and commercial efficiency as well as providing inconsistencies at weight computation.

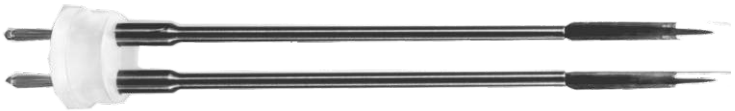
It is used with a great reliability at agricultural product, grain seed purchases, during fermentation of plants such as tobacco and tea at feed grain industry and some other areas.

Roller Electrode

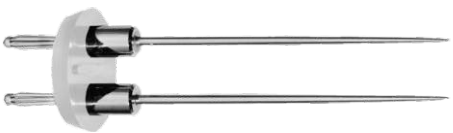
25 mm. Electrode

Holder

Cable



175 mm. Stab Electrode



100 mm. Electrode

I-006

EVENNESS TESTER

Made of natural and synthetic fibers; It is used for measuring many parameters like yarns, rovings and slivers evenness (U%, CV%), thin thick place, neps count, periodical errors, hairiness measurement and entanglement and durability.The computer is in complete set with the Application-Analysis Program and Printer.The built-in humidity and temperature measurement sensors on the device minimize measurement and comparison errors.

Options:

I006-L: Laser Sensor Module (for Synthetic Yarn Measurement)

I006-C: Capacitive Sensor Module (for natural fiber and yarn measurement)

I006-H: Hairiness Measurement Module

I006-P: Number of entanglement and Retention Module

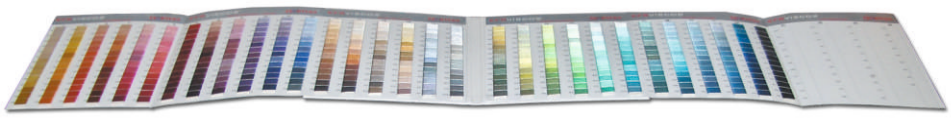
I006- D: Automatic cop changer, Automatic yarn feeder unit and 24 sample-quality jumper

Standards	ISO 16546, ISO 2649, ASTM D1425, IWTO-18

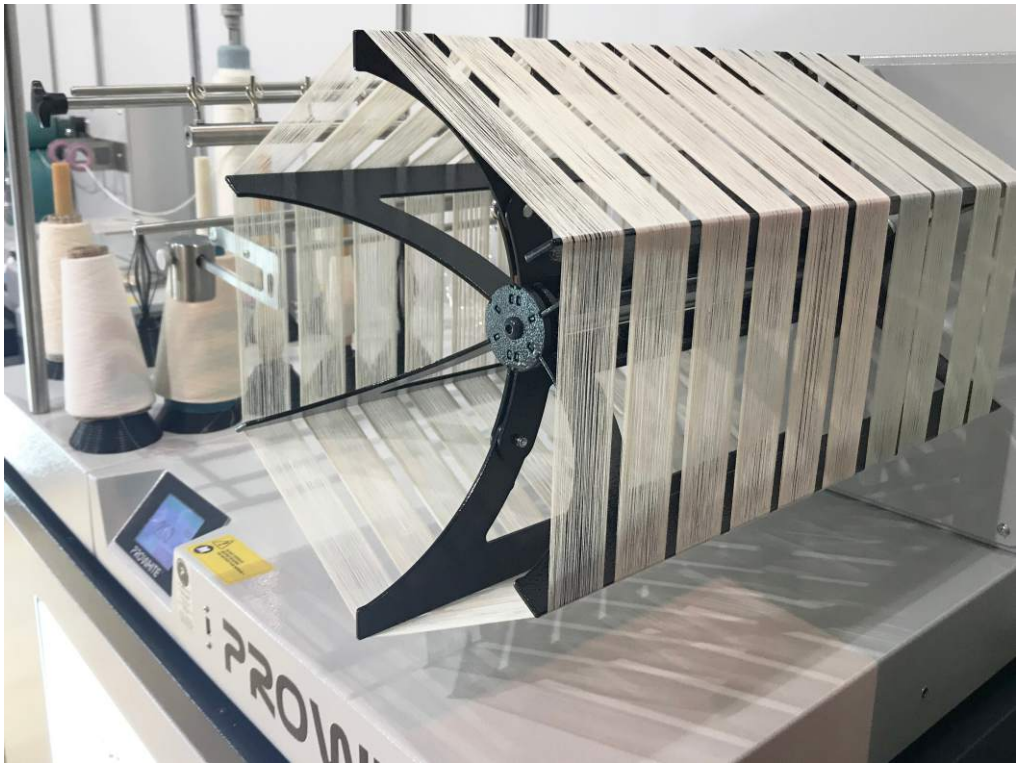
YARN SAMPLE WINDERS

Device uses for prepare regular , fast and repeatable yarn sample winders. Device has electronic control and double motor. The front and back speed settings can be made digitally to create the desired speed combination according to yarn thickness.

Device can winding 50 different yarn to same card. The winding length can be adjusted electronically between 1 to 135 mm . It is available for labaratory practices and professional windings. Precise adjustment possibilities allow the closest specimens to be winding to the fabric effect



WRAP REEL



For operations such as thread number assignment or dyeing tests, it used to establish hank of predetermined length. It has electronically controller and engine. The wheel's circumference can be ordered as 1 meter, 1 yard or 1,5 yard. Through the liable arm, the hank can easily be removed from the device. The device is equipped with measurement safety conditions and offered with thread stand enabling simultaneous winding of 10 different threads.

I 008 M : Manuel Wrap Reel (5 Positions)
I 008 A : Automatic Wrap Reel (10 Positions)

Standards	ISO 2060, BS 2010, ASTM D1907/2260 DIN 53830

I-002

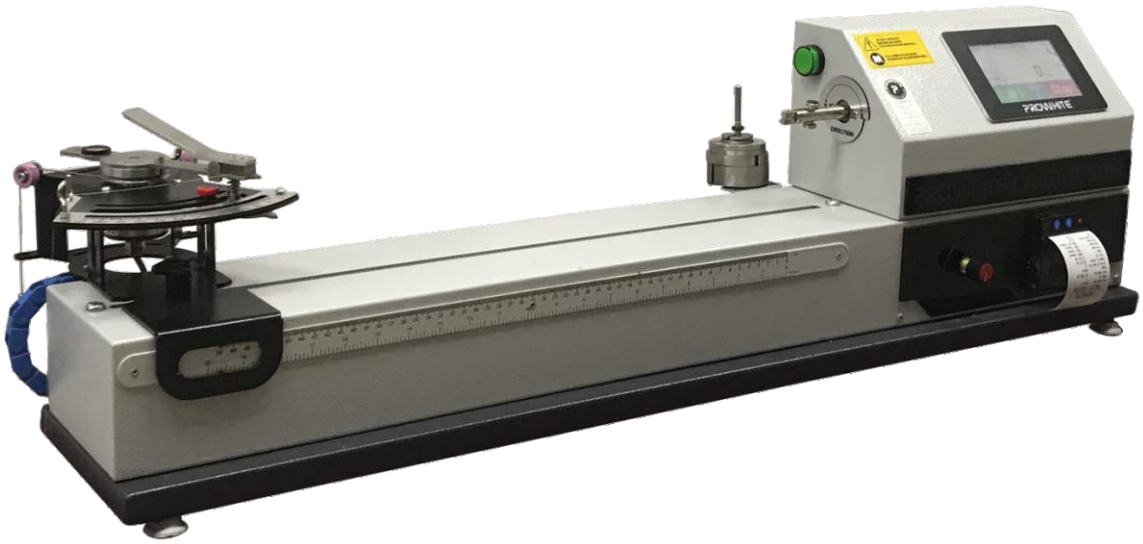
PROSORTER YARN COUNT SYSTEM

It has numerous features such as textile scale and software (thread number meter), Tex, Denier, NM, NEC, CV, averaging. The length options are 3yd, 7yd, 120yd, 840yd, 2m, 10m, 100m and 500m. The offered applications are arithmetic average Standard deviation (AVERAGE) highest and lowest values, upon request sends the information to a computer or printer and many other weighing features.

Standards	ISO 2060/3801, BS 2471, BS EN 12127, BS EN ISO 2060, IWTO 22-82, IWSTM 13, ASTM D 1907/2646/3776

I-009

TWIST TESTER



It is used to measure the twist measurement for single and double coated threads. Open-end yarn measurement module can be offered as optional. It has a digital indicator and an electronically speed controller. Choice between S and Z twist can be made. It can be adjusted for a measurement length between 10 and 500 mm. Provides high accuracy by taking the average.

The pre-stress calculation can be made tough the device.

All operations can be directed easily through the PLC controlled operator panel. USB computer data output is the standard.

Printer and twist analyze software can be supplied optionally.

Standards	ISO 2061, BS 2085, ASTM 1422/1423, DIN 53832, IWTO 25-70

I-010

YARN EXAMINING MACHINE - CONICAL BOARD

The conical black or white board is used for detecting non-smoothness, feathering and other errors at the thread sample by winding it at predetermined extent and range. It can wind at variable speed from 8 to 19 windings per centimeter.

One white conical board is given with the device as standard. The Standard photographs ASTM which are required to compare can be supplied optionally. ASTM photographic yarn view standard

Standards	ASTM D2255

I-014

CRIMP TESTER

Device uses to accurately measure the length of yarn samples taken from woven or knitted fabrics under known tension.

It works according to the principle of correcting the applied tension.

Tension can display digitally. Correction Tension is provided by a manual moving clamping jaw.

Intended amount of pre-tension can applied on the sample yarn.(0 to 500g).

At the end of the process, the initial length of the sample and the length after pretensioning are displayed digitally on the screen. (max 1250 mm).

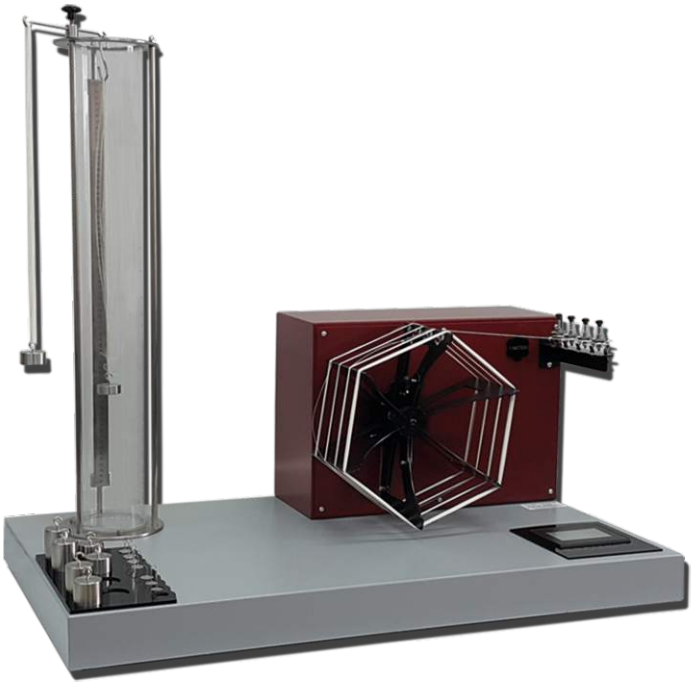
Its available differend size.

Values can display on PC or printed with RS323 mini-printer.

Standards	ISO 72-11-5, ISO 7211-3, ASTM D3883

I-014W

CRIMP PERCENTAGE TESTER



Water

Air

The device ,used for to determine the percentage of crimp of textured synthetic yarns. Deliberately, suitable for nylon textured yarns for stockings. Equipped with a Plexiglas cylinder to be filled with water, skein holder millimetre bar with 1 mm accuracy.

Pretension weights and an automatic wrap reel for single yarn are supplied with device.

Pretension weights with double hook: 3 g, 4 g, 5 g, 6 g, 7 g, 8 g, 9 g, 10 g Pretension weights with single hook: 100 g, 150 g, 200 g, 250 g, 300 g, 350 g, 400g, 450 g, 500 g

Standards	BS 6663

I-016

SHRINKAGE TESTER

Device is used to measure the crimp parameters for texture yarns. It is fully automatic and PC controlled.

It has 36 positons and every positon has 2.5 cN pretension. Maximum speed is 8.000 mm/min. Applied load can be chosen 2.5 to 2500 cN. Load applies automaticly. Length measurement accuracy is 1 µm.

The Dry Air Heating Cabinet is provided with the device. The temperature range of the heating cabinet can be set between ambient temperature and 300 ° C. The hinge allows the hanger assembly to be easily mounted

Standards	ASTM D4031, ASTM D2259, DIN 53866, DIN 53840, EN 14621

YARN FRICTION TESTER

This machine determines the friction coefficient of yarns during the friction to metal surface.

This machine calculates the fricticton coefficient of yarns by friction angle of 360°. The speed of the machine is between 0-200 m/min. The pre-tension is adjusted by pretensioner. Yarn delivery is provided by bobbin creel. And this machine has a waxing unit.

Pretension can see on the screen. And, pretension value can calculate on the PLC screen.

Standards	ASTM D 3108, TS 7475

Fabric Testing

K-001

FABRIC STRENGHT TESTER

It used to measure the strength of fabrics and similar products. The maximum strength is 5 kN or 50 kN. It has value reading features for the maximum force applied during tear-up moment. The device saves the tear-up/ break-up resistance of the sample pressed via jaws upon kgf or Newton value.

The tear-up operation is conducted automatically through an adjustable engine. The device has lengthening measurement features (with 0,01 mm precision). Together with the device, a set of jaws is provided. The movement length except for jaws is 1000 mm.

The device's measurement is electronic load cell. USB connection data output is standard. The computer, program and printer is optional.

K 001-DC-5 : 5 kN Strenght Tester

K 001-DC-50 : 50 kN Strenght Tester

Standards		
FABRIC STRENGTH		
ASTM D 5034	ISO 5081	ISO 9073-3
ASTM D 5035	M&S P11	ISO 3376
ISO 13934-1	M&S P11A	ISO 14704
ISO 13934-2	M&S P11B	M&S P43
ISO 1421	M&S P11C	NEXT TM 27
NEXT TM 36		
TEAR STRENGTH		
ASTM D 5587	ISO 13937-2	ASTM D 2212
ASTM D 2724	ISO 13937-3	ASTM D 5735
ASTM D 2261	ISO 13937-4	NEXT TM 25
ISO 11644		
BS 3424:Part 5		
SEAM STRENGTH & SEAM SLIPPAGE		
ISO 13935-1	ASTM D 5822	ASTM D 434
ISO 13935-2	M&S P12	ASTM D 1633
ISO 13936-1	M&S P12A	M&S P12C
ISO 13936-2	M&S P12B	NEXT TM 16

K-001D

PULL TESTER

Digital

Analog

Capacity: 10-20-50 kgf
Excluding jaw motion path: 180 mm.
That's a type of desktops model. Easy to use.
It is used in the experiment of pulling breakage the specimens.
It has digital or analog indicator.
There is the possibility of changing Newton or kg

K-001A: Analog Pull Tester

K-001D: Digital Pull Tester

Standards	En71 Part 1, CFR 1500, ISO 8124, M&S P115

K-002

LIGHTBOX-COLOR ASSESSMENT CABINET

It is used to perform color evaluation and color comparisons under standard light sources. Together with D65 daylight, which offers the best alternative to natural daylight, there are other models offering numerous light sources such as TL84, D50, TL83, F-INCA, UV and U30. The device has an electronic controller on which, the lamp life and its features can be observed.

Models with 4 or 5 light sources are available and can be ordered with observation areas of 60- 120 and 150 cm. Desktop and suspension type models are available.

We also have light cabinets in different sizes and specifications

Standards

AATCC 61,133,132,117,116 ,109,8, 15,16,23,190,ASTM D1729,BS 950 PART 1, ISO 105-C09,C05,C01,C02,C03,C04,C06,C07,C08,X11,NEXT 18,8B,18A,10,9A,9,7B,7A, 7,6,5,4A,4,3A, 3,2

K-003

CREASE RECOVERY TESTER

It is used to analyze the fabric's folding recovery angle. According to standards, it is used to measure the angle which occurs following the lifting of the pressure applied on the folded fabric.

Standards	ISO 22313, BS EN 22313, EN 22313, NF G07 110, AATCC 66, M&S P22

K-004

FABRIC STIFFNESS TESTER

ASTM D1388

ISO 4604

It is used to determine the stiffness of the bending and torsion of the fabric. It is a full set with bending analyse ruler and pusher slide

Standards	ASTM D1388, BS 3356, DIN 53362, ERT 50-2, TS1409, ISO 9073-7, ISO 4604

K-005

PNEUMATIC FABRIC STIFFNESS TESTER

Fabric Testing Equipment

It used to determine the fabrics hardness according to the ASTM Circular Bending Testing Method. The maximum measurement value is 50 kgf.

It has fixation features at the maximum value and the device runs with Standard pressurized air.

Device has USB computer output.

Standards	ASTM D4032

K-029

DRAPE TESTER

It is used to determine the fabrics drape coefficient by scanning the shade of the draped fabric on a paper, the drape coefficient is calculated. There are two different models, including computer-controlled and manual.

K029-A : Drape Tester (with camera and PC control)

K029-M : Manuel Drape Tester

Standards	BS 5058/EN 9073 , UNI8279 , AFNOR G07-109 , ERT90-1 , ISO9073-9, TS 9693

K-006

ELMENDORF TEARING TESTER

It is used to measure ballistic tear strength of the textlematerials, paper and paperboard by its micro-processor vertical moving pendulum.

There are die-cuttings,cutters used for sample preparation. It has 800(A)-1600(B)-3200(C)-6400(D)-12800(E)cN pendulums.

İt is possible to see the results and statistical information of the pendulum and the number of samples used on the touch screen at the end of each test by chosing the units mN,cN,N, g,kg,oz and lb as the unit of teaaring strenght.

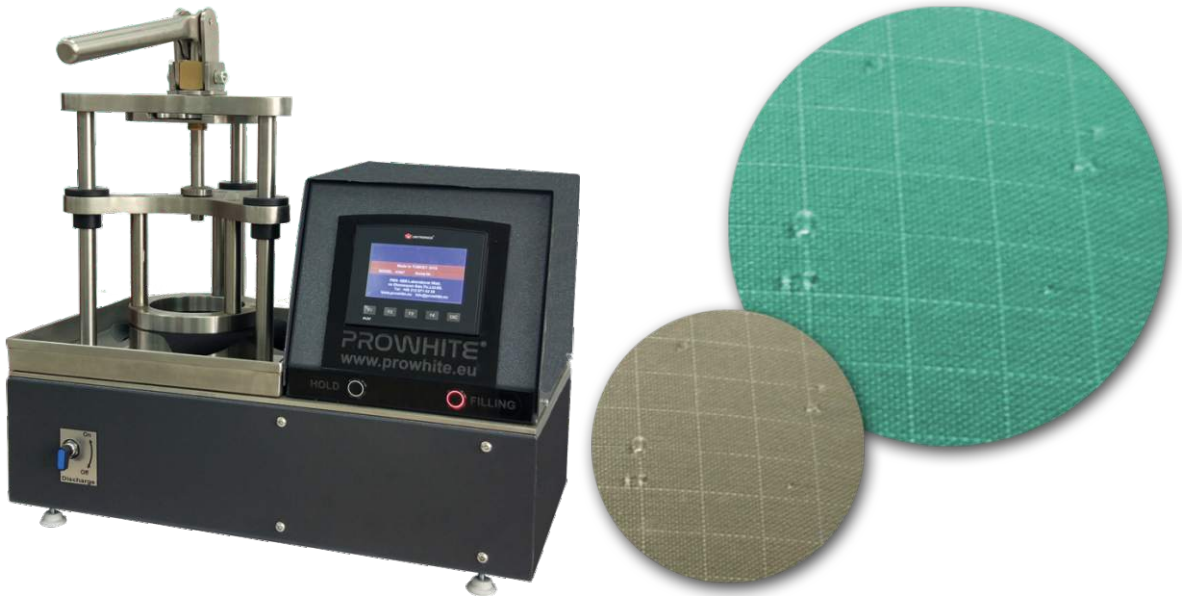
The USB output on the device is available as standart.

Standards

BS 4253, BS EN ISO 13937-1, BS 4468, ASTM D1424, DIN 53862, M&S P29, ISO 9290, ISO 4674-2, ASTM D5734, NF 609-149, ISO 9073-4, ASTM D689, DIN 53128, EN 21974, ISO 1974, JID P8116, TAPPI T414, SCAN P11

K-007

HYDROSTATIC HEAD TESTER



Device is determined the waterproofing properties of the fabrics by the hydrostatic pressure method.The device is primarily designed for thick fabrics The hydrostatic test headcovered with the fabric allows the water permeability of the fabric to be measured.The fabric sample is exposed to water pressure increasing at a constant rate from one surface under standard conditions until 3 drops of water have passed .Water press in the third place where the water passes recorded. the speed of pressure increase and the unit of measurement can be changed on the touch screen.

The sample area is 100 cm^2.According to different standards, the sample area can be ordered in different sizes.

Standards

AATCC 127,AFNOR G07-057, ASTM D751 ASTM F1670,BS 3321, BS 3424-26, BS 3424-26,BS EN 20811, EN 343,ERT 120-1 ERT 160-0, GB /T 4744, ISO 811, ISO 9073-16, ISO 16603 PART A, ISO 16603 PART B, ISO 16603 PART C, ISO 13994 PART A, ISO 13994 PART B, ISO 13994 PART C1, ISO 13994 PART C2,JIS L1092-A, WSP 080.6.R4 (12)

K-008

AIR PERMEABILITY TESTER

The device is designed to determine air permeability in fabrics. It is used in all types of fabrics, including industrial fabrics, nonwoven fabrics and textile products with air permeability.

20 cm^2 sample holders and calibration plate are supplied with the device as a standard.

Possibility of decreasing pressure up to 2500 pa.

Air permeability can be recorded in different units of measurement. It can be controlled from its digital screen. Test methods are installed on screen according to many different standards and new standard entry can be easily done.

5-25-38-50-100 cm^2 sample holders can be provided upon request.

Fabric Testing Equipment

Standards

Bs5636, EN ISO 9237, DIN 53887, ASTM D737, ASTM D3574, TAPPI, T251, AFNOR G07-111, EDANA 140.1

K-009

FABRIC EXTENSIOMETER

It is used to determine recovery of fabrics due to tension. A marking template, and a marking pen is given as a standard.

There is a digital load indicator.

Standards	BS 4294, BS EN 14704-1, EN 14704-2

K-010M

THICKNESS GAUGE

Fabric Testing Equipment

It is used to determine the thickness of textiles and textile products under a certain pressure. Applied Pressure 0.1 to 2000 gram force .

Thickness Measurement 0.01 to 50 mm. Thickness Measurement accuracy is 0,01 mm. Device has a presser foot 50.5 mm.

It has touch screen controller and PC software. (PC Software given with device)

Pressure feet of 5 cm^2, 10 cm^2 and 20 cm^2 can be supplied as an optionally.

All controls on the device can be done via the touch screen without PC. Device has USB port as standart for computer communication.

Computer , printer and PC Software can be supplied as an optionally

Standards	TS 7128, EN ISO 5084, ISO 9073-2, TS 1534-3, EN ISO 2286,3, ISO 5084, ISO 2286-3, ASTM D1777, TS EN ISO 9073-2

K-010P

PORTABLE THICKNESS GAUGE

It is use to determine the material thickness of all textile fabrics. For its technical features , it has a depth jaw of about 120 mm and a measuring 0 to 10 mm .For its resolution, it has a rating of 0,01 mm.It has a lifting tool. The measuring units can be mm or inch

K-011

ICI PILLING TESTER

It is used for determination of pilling and stitching caused by normal clothing conditions on fabric.
The polyurethane sample tubes are in complete set with the fence, marking template, cutting apron, sample band.
Speed and direction of rotation can be adjusted according to different test methods.
ICI Bead cans, special cylindrical bead cans and snagging cans can also be supplied.

K-011x2 : 2 Positions ICIPilling Tester
K-011x4: 4 Positions ICI Pilling Tester

Standards	BS 5811, NEXT19, BS EN ISO 12945-1, IWSTM 152, M&S P18, P18A, P18B, P21A

K-011R

RANDOM TUMBLE PILLING TESTER

Fabric Testing Equipment

It is used for the determination of surface pilling, pilling and dulling tendency in fabrics.

Stainless steel and impact crushers rotate separately in aluminum chambers

At this time, the test fabric wall must be protected and they are returned by the stimulus system. Pressurized air is given to help the rotation.

K-011Rx2 : 2 Positions RT Pilling Tester

K-011Rx4: 4 Positions RT Pilling Tester

Standards	ISO 12945-3, ASTM D 3512, DIN 53867, NF G07-121, JIS L 1076

K-017

MARTINDALE ABRASION AND PILLING TESTER

Fabric Testing Equipment

The Martindale is designed to analyze the abrasions, pilling and resistance of fabrics toward different surfaces. It has an electronic controller and upward plate has lifting system. There are also other models with 4–6–8–9–12 test units.

Test kits for etching and pilling can be configured separately.

Optionally, socks, gloves, sample cutters, felts, evaluation photographs, support foams, abrasive fabrics and emery's can be supplied.

USB communication port is available as standard.

Standards

ISO 5470, BS 3424/5690, BS EN ISO 12947-1/12945-2, ASTM 4966/4970, NEXT 18, M&S P17/P19/P19B, IWTO 40-88, IS 12673, JIS L1096, BS EN 388/530, SN 198525, 198529

K-012P

BURSTING TESTER-PNEUMATIC

The device is used to determine the burst strength of the fabrics and the burst surface tension. With the device, knitted, woven fabrics and non-woven surfaces ensure the determination of the blasting strength of fabrics produced by laminating fabrics and other techniques. The device provides the expected performance level (up to a maximum of 1000 kPa) for the garment in general.

Hydraulic blasting device is more suitable for textile materials suitable for high explosion resistance. A standard 50 cm^2 test head is provided with the appliance.

Optionally 7.1 cm^2, 7.3 cm^2, 7.55 cm^2, 10 cm^2 or 100 cm^2 test heads can be supplied.

USB communication port is available as standard. Computer, printer and software are available as an option.

Standards	ISO 13938-2/3689/3303/2758/2960, DIN 53861, BS 3137/4768, ASTM 3786, ERT 80-4-20

K-012H

BURSTING TESTER-HYDRAULIC

The device is used to determine the burst strength of the fabrics and the bursting surface tension.

With the device, the bursting resistance of fabrics made of knitted fabrics, woven fabrics and non-woven surfaces, laminating fabrics and other techniques is determined.

The device generally provides the expected performance level (up to a maximum of 7000 kPa) in ready-made clothing. The hydraulic blasting device is more suitable for special textile materials where high burst strength is required.

A standard 50 cm^2 test head is provided with the appliance. Optionally, 7.1 cm^2, 7.3 cm^2, 7.55 cm^2, 10 cm^2 or 100 cm^2 test heads can be supplied.

USB communication port is available as standard. Computer, printer and software are available as an option.

Standards	ISO 13938-1/13938-2/3689/3303/2758/2960, DIN 53861, BS 3137/4768

K-012B

BALL BURSTING TESTER

Fabric Testing Equipment

The device is used for the determination of the bursting strength and the bursting surface tension of fabrics showing a high degree of elongation at break. With the device, knitted, woven fabrics and non-woven surfaces ensure the determination of the blasting strength of fabrics produced by laminating fabrics and other techniques.

The device generally provides the expected performance level (up to a maximum of 7000 kPa) in ready-made clothing. The hydraulic blasting device is more suitable for special textile materials where high burst strength is required.

With the device Standard steel balls with a diameter of 25.4 mm and a test head with a diameter of 44.45 mm are give.also Different ball and test heads can be supplied separately

USB communication port is available as standard. Computer, printer and software are available as an option

Standards	ASTM D3787 - 15, ASTM D6797 - 07, ISO 3303-1, ISO 9073-5

K-013

CROCKMETER

Manual

Auto

The crockmeters are used for color precision testing, with the method of color change at the sample and staining of the accompanying fabric by fricting the textile materials to the other accompanying fabric. The samples are fricted to the dry, un-dyed and cotton accompanying fabric.

The staining ratio of the accompanying fabric is evaluated upon the staining gray scale. The automatic model has an digital controller and an engine.

Manual models are also available.

K013-A : Automatic Crokmeter

K013-M : Manuel Crokmeter

Grey Scale

Standards	ISO 105 X12/D02 BS 1006 D02 AATCC 8/165, NEXT 6, M&S C8, BS 4655

K-013R

ROTARY CROCKMETER

Fabric Testing Equipment

It used especially on printed fabrics to determine the color fastness and the color precision by dry or wet friction.

It is able to turn 1.125 clockwise and then counterclockwise, 1134 grams of pressure is applied on a 16 mm in diameter.

The arm function movement is only one sided.

Grey Scale

Standards	AATCC 116 ISO 105 X 16

K-014

PERSPIRATION TESTER

Fabric Testing Equipment

This device is used to determine the textile materials' color variation against water, sea water and sweat. The single unit sweat precision testing device includes a stainless steel trunk and 21 acrylic separation plates of 115 x 60 mm.

20 samples generally of 100 x 40 mm size are inserted between the plates under a load of 5 kg plates.

Different models, with other loads used in accordance with AATCC standards are available

Incubator

Grey Scale

Standards

AATCC 15/106/107/165, ISO 105 , BS 1006, BS EN 20105, DIN 54005/54006/54007/ 54020, IWSTM 6,174,175, NEXT 4

K-015

SPRAY RATING TESTER

The spraying method is applied to the device to determine the resistance of the fabric to water and water wetting of any fabric that has been water impervious or water repellent.

A cylinder is attached and sprayed with a certain volume of distillate or completely deionized water on a test piece placed at a certain distance below the central spray head and at an angle of 45 ° C.

The appearance of the wetting grade test piece is determined by comparing it with the defined standards and photographs

Standards	ISO 4920, BS EN 24920, BS 3702, AATCC 22, M&S P23, NEXT 23

K-036

BUNDESMANN WATER REPELLENCY TESTER

Bundesmann Rain Tester used for determination of water repellency of fabrics to the rain-shower method. Test specimens of the fabrics under test are simultaneously exposed to a simulated heavy rain shower. The water repellency of the fabric is assessed by comparison of the wet fabrics to a standard chart.The water absorbed by the specimens is determined after the test is over which is the measure for resistance to wetting.

It consists of 4 specimen holders of 100mm diameter cups. Rain is produced by 300 pieces nozzle and falls down from 1500 mm height from the fabrics. It is set with the centrifuge device.

Standards	ISO 9865, DIN 53888, BS EN 29865, GB/T 14577

K-018

LIGHT FASTNESS TESTER

Light Fastness Tester is used to determine the color fastness of all kind of textile materials, plastic, paper and similar products under artificial daylight. It is also used to test white or optically polished products.

The sample is laid together with prepared blue wool under the artificial light. The sample is then compared with the reference wool to determine the color fastness.

There are 24 sample holders.

The device has a touch screen control panel.

Test methods are showed on screen according to many different standards and new standard entry can be easily done. ds and new standard entry can be easily done.

Fabric Testing Equipment

Standards

ISO 105-B02, ISO 105 B04, ISO 105 B07, NF G07-012-2, NF EN ISO 105-B02/AFNOR, BS 1006 UK/TN, AATCC 16, AATCC 169, M&S C9, M&S C9A, ASTM G155

K-018M

LIGHT FASTNESS TESTER - BENCH TYPE

Light Fastness Tester is used to determine the color fastness of all kind of textile materials, plastic, paper and similar products under artificial daylight (XENON).

It is also used to test white or optically polished products.

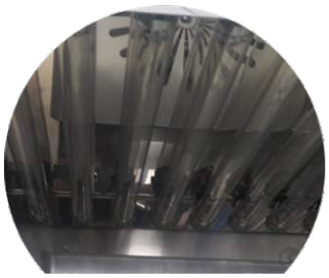
The sample is laid together with prepared blue wool under the artificial light.The sample is then compared with the reference wool to determine the color fastness.

Standards

ISO 10977, ISO 11431, ISO 11979-5, ISO 4049, ISO 4892-1, ISO 4892-2, ISO 7491, ISO/DIS 24443, DIN EN ISO 4892-2, ASTM D3424, ASTM D5071, ASTM D6695, ASTM G151, ASTM G155

K-030

UV TEST BOX



Test cabin for simulating color and property change by exposing products of plastics, paper, textile etc. to UV and / or D65 light.

The products to be tested with the device can be tested for D65 (25.000 lux), UVA + (20 mW / cm^2), UV-A (10 mW / cm^2), UV-B mW / cm^2). In addition, the service life of the lamps can be observed on the device.

Standards	EN ISO 4892, ASTM D1148

K-035

ULTRAVIOLET ACCELERATED WEATHEROMETER

The device is used to simulate the damage caused by the sunshine, rain and dew on objects quickly and reliably.

The device can be compose the damage that will occur in a long period, within very short time.

Device can also process to variable loop with uv light and humidity at high temperature to sitimule outside accelerated condition. special uv lamps are used to illuminate the effects of the sunlight. Special UV lamps are used to simulate the effects of sunlight, also simulated with dew and rain, water vapour and water spray.USB connection data output is standart.

The computer program and printer is optional.

Standards	ASTM G154, SAE J2020, EN 927-6, GSB AL 631, ISO 16474-3, ASTM D4329, ISO 4892-3, ASTM G53, BS 27282

K-019

SAMPLE CUTTER

The circular sample cutting apparatus allowing 100 cm^2 of precise cutting is offered as a set together with 1 bulk device support and 4 bulk device razors.

According to standard sizes different sample cutters are available

Model	Specimen Area	Sample Diameter	Cutting Depth
K-019-10	10 cm^2	36 mm.	5 mm.
K-019-12	12 cm^2	38 mm.	5 mm.
K-019-50	50 cm^2	80 mm.	5 mm.
K-019-100	100 cm^2	113 mm.	5 mm.
K-019-154	154 cm^2	140 mm.	5 mm.

Standards ISO 3801, ASTM D3776/2646, BS 3724/2471, BS EN 12127, M&S P65/65A, NEXT 20

K-020

FABRIC YIELD KIT

Fabric Testing Equipment

It is a full set with 100 cm² circular sensitive cutter, digital scale, pads and auxiliary blades.

Model	Specimen Area	Sample Diameter	Cutting Depth
K-019-10	10 cm²	36 mm.	5 mm.
K-019-12	12 cm²	38 mm.	5 mm.
K-019-50	50 cm²	80 mm.	5 mm.
K-019-100	100 cm²	113 mm.	5 mm.
K-019-154	154 cm²	140 mm.	5 mm.

Standards ISO 3801, ASTM D3776/2646, BS 3724/2471, BS EN 12127, M&S P65/65A, NEXT 20

K-022

TEXTILE MICROSCOPE

They are designed for microscopic examinations and classifications of fibers, yarns, fabrics such as textile materials.

- Projection microscope
- Binocular textile microscope
- Trinocular textile microscope with PC outlet
- Digital camera

It is possible to watch samples simultaneously on PC monitor, take picture and measure the diameter, area, and count from pictures.
You can save results of measurement as reports.

K-023

SUSPENDERS DRYING OVEN

It is used for the drying and fixation after dyeing and washing the fabric samples. The drying operation can be done at the desired time and temperature.

The maximum temperature is 250 C°.

An alarm system warns the operator at the end of the heating process.

4 stainless steel hanger shelves of 600 mm x 450 mm are also included.

Optionally, pins and adjustable frames are available to hold the samples.

K-024

SUBLIMATION TESTER

Fabric Testing Equipment

It is used to determine the color precision and shrinkage of all kind of textile fabrics against dry heat and hot pressing.

Device has an electronic heating controller.

Weight of the upper plate was organized by relevant standards.

Temperature is between 20–230 C°.

K-021-1 : 102 x 29 mm. Single plate

K-024-2 : 125 x 125 mm. Single plate

K-024-3 : 102 x 29 mm. Five plates models are available

Standards	ISO 105 P01,AATCC 92/114/117/133,EN ISO 105-X11,NF G07-019-11,M&S C13,M&S P10

K-027

FABRIC PH MEASUREMENT DEVICE

Fabric and similar textile products, it is a device used to prepare extract to make pH measurements fast and reliably.

It facilitates pH measurement operations before and after painting.

Temperature range can be adjusted between the ambientntemperature and 95 °C.

Sample measurement space is 52 cm^2.

The process time can be set between 30 sec and 6 min.

99 different programs can be saved.

USB communication port is available as standard. All transactions can be viewed online from the computer screen. The results of the process can be output via the printer or also stored in the computer environment at the same time.

K-032

WATER VAPOUR PERMEABILITY TESTER

Fabric Testing Equipment

It is used to determine the resistance of the water vapor permeability on textile materials (particularly frequently used clothing fabrics) .

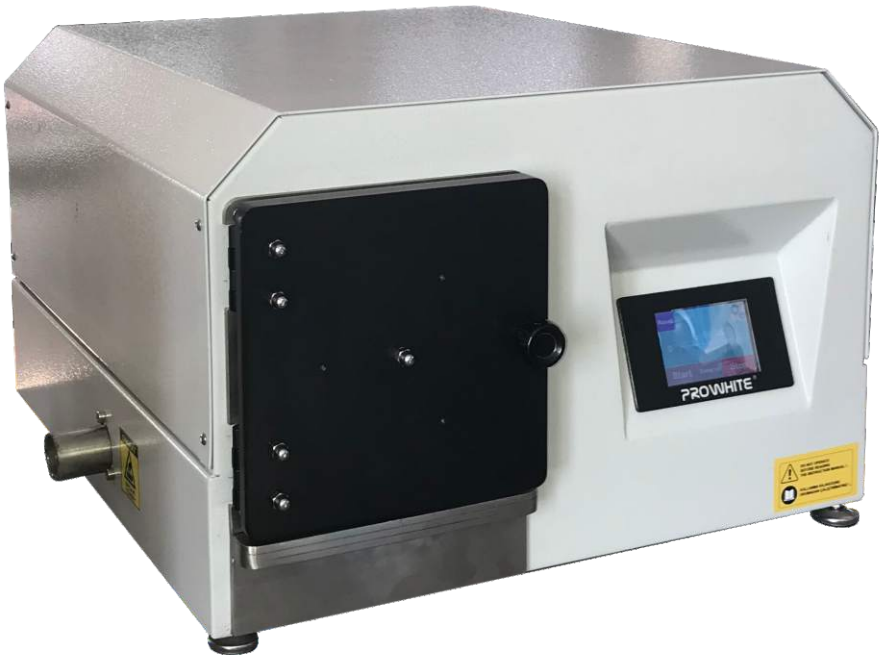
Device has 8 water tank containers, a standard leakage fabric case, sample holder rings and a definite value operating system

Standards	BS 7209, BS 3424

K-033

STEAMING CYLINDER

Fabric Testing Equipment



It is used to determine the shrinkage of free stress fabrics samples that were subjected to steaming in a closed area. Device has an automatic timer and 4 sample injectors with a stainless steel fabric support.
The fixing plate steam is used along with the steam rollers while testing the shrinkage laxity of fabrics. The plate is used to determine the shrinkage percentage by marking the fabrics on pre-test on a 250 mm bench and evaluate the shrinkage percentage after the test.
The device's measurement is electronic load cell

Standards	ISO 3005, BS 4323, M&S P8, NEXT 15

K-034

WRINKLE RECOVERY TESTER

Fabric Testing Equipment

This device is used for final appearance fixation of fabrics wrinkled.It can be also applied to outerwear of any kind of fiber or fiber mixture including woven fabrics and wool blends.

These given with device

2,0kg 1,0kg (one piece) and 0,5 (two pieces)

And AATCC 3 wrinkles,look-up table set of picture

Standards	AATCC 128, ISO 9867, ENKA 3061

K-037

SEWABILITY TESTER

The device tests its sewability without regard to sewing conditions or operator skills without the need for any kind of fabric. Pinprick force measurement is performed with the device. The value in cN can be read and converted to different units of measurement. Pinprick performance can be tested at different speeds.

USB connection data output is standart. The computer program and printer is optional.

K-038

CUT RESISTANCE TESTER

Fabric Testing Equipment

The device measures the durability of gloves and protective materials by applying low-strength cuts.

The device has a rotating circular blade with a diameter of 45 ± 0.5 mm and a thickness of 3 ± 0.3 mm. The force applied by the blade to the fabric is 5 ± 0.05N.

The circular blade has an experimental workbench moving in a variable horizontal direction.

The rotary circular knife moves 50 mm on above the test sample under 5 N pressure.

There is a digital counter on the device that can measure the number of cycles required to disconnect the test sample.

Standards	TS EN 388, TS EN ISO 13997


Carpet Testing

H-001

CARPET THICKNESS GAUGE

Carpet Testing Equipment

It is used to determine the thickness of textiles and textile products under a certain pressure. Applied Pressure 0.1 to 2000 gram force .

Thickness Measurement 0.01 to 50 mm. Thickness Measurement accuracy is 0,01 mm. Device has a presser foot 50.5 mm.

It has touch screen controller and PC software .(PC Software given with device)

Pressure feet of 5 cm^2, 10 cm^2 and 20 cm^2 can be supplied as an optionally.

All controls on the device can be done via the touch screen without PC. Device has USB port as standart for computer communication.

Computer , printer and PC Software can be supplied as an optionally.

Standards	TS 7128, EN ISO 5084, ISO 9073-2, TS 1534-3, EN ISO 2286,3, ISO 5084, ISO 2286-3, ASTM D1777, TS EN ISO 9073-2

H-002

TUFT WITHDRAWAL TENSOMETER

This device used to determine the adhesive force of fringes of pile yarn floor. In 20 grams readability, a maximum capacity of 5 kg or 10 kg is available.
It is easy to use as models with analogue and digital display.

H002–05: Tuft Withdrawal Tensometer (5 kg) (A-Analogue, D-Digital)
H002–10: Tuft Withdrawal Tensometer (10kg) (A-Analogue, D-Digital)

Standards	BS 5229, ISO 4919

H-003

COURTAULDS TETRAPOD WALKER

It is used to determine the degree of preservation of the appearance of the carpet produced by tapping or tufting method. The test sample is placed inside the rotating drum of the device in such a way that the pile is inside and free-acting tetrapod foot is placed on. At the end of a certain number of rotations, the change in appearance that occurs on the surface is detected.

H 003-1 : Single drum test device

H 003-3 : Three-drum test device

Standards	ISO 6131, ASTM D 5251

H-004

HEXAPOD TUMBLE TESTER

Hexapod Tumbler Carpet Tester, for the evaluation of appearance retention of carpets, with or without padding or underlay.

The weighted steel hexapod with 6 polyurethane feet tumbles within a rotating and re-versing drum lined with the specimen under test for 2000 revolutions (1 hour) , removed, vacuumed and repeated for a total of 6 times before final assessment.

Standards	ISO 6659, ISO/IB 9405, BS ISO 10361, BS EN 1471

H-005

CARPET PILE THICKNESS GAUGE

It measures the height of the pile on the floor of all carpets and floor linings with cut or looped pile.

Measurement range is between 0-30mm.

Measurement presicion is 0,01mm.

The device is a digital display.

It is given with polyurethane plate and spare needles.

Standards	ISO 10834

Footwear&Leather Testing

D-001

ELASTOMERS ABRASION TESTER

This device used to determine the abrasion resistance structures of elastomer material (shows sole, etc).

Cylinder diameter: 150 mm.

Cylinder length: 500 mm

40 cycles , cycles / min.

Test specimens diameter 16 mm.

It has a touch screen. The value set at the desired test stops at ± 0.1 meter accuracy.

The test path can be selected from 1 meter to 40 meters.

Used sandpaper size is 400x500 mm

Standards	DIN 53516 / DIN EN ISO 20344 / EN 12770

D-002

LEATHER FASTNESS TESTER

This machine is designed to carry out a rub fastness test on the surface of leather to determine the amount of ‘marring’ of the leather surface or the finish and to assess the amount of color transfer from the sample to the rubbing pad. For determining the colorfastness of leather.

The colorfastness is assessed by checking change in color of the specimen and stain of the felt after rubbing the specimen. Both dry and wet tests can be made by this machine, which has the memory function. So it is designed for the resistance of all shoe priming and without priming to abrasion. so as to determine their abrasive resistance.

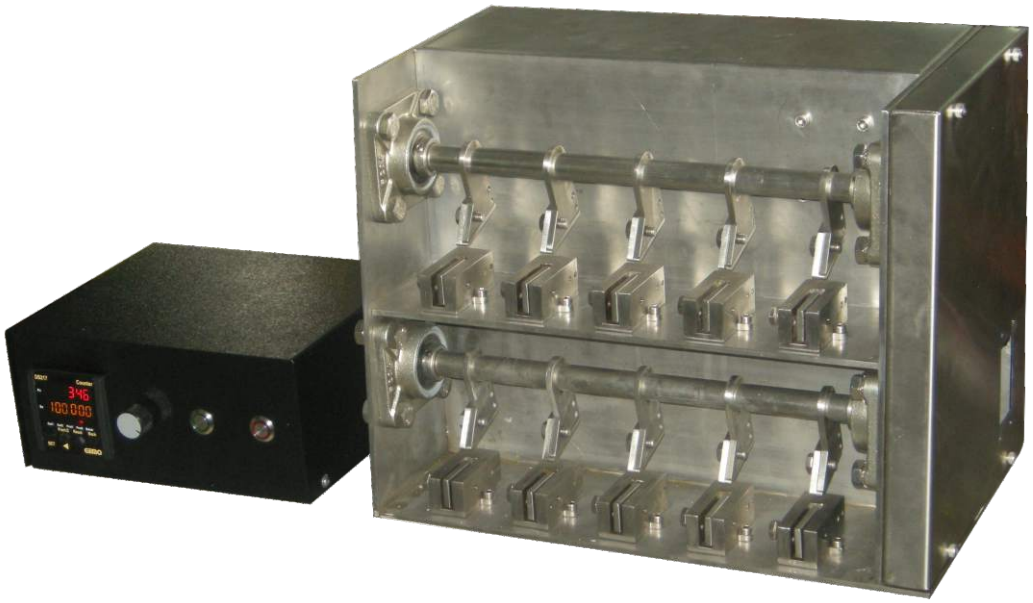
This device has a touch screen control panel40 meters.

Used sandpaper size is 400x500 mm

Standards	DIN EN ISO 11 640 / DIN 53 339

D-003

FLEXOMETER - COLD ENVIRONMENT TESTER



This device is used to detect the resistance of the covering layers on the skin surface during continious folding and breaking. 12 pieces of leather can be tested at the same time on the tester. The device is command by a touch-screen control unit.

The control unit and the test parameters can be changed as desired. Up to -25 ° C can be tests with this device

Standards	DIN 53351

D-004

SAND BATH

Machine's used areas are : Laboratories of research, Food, Medicament, chemical, outomotive sectors.

The device heatable from 50 ºC to until 300 ºC and device's heater plate.

It s long trials invulnerable.

Sand box is made of aluminum.

Heaters are embedded in the device. So fast warm up.

The device is proof to heat out, through reflectors..

And device's heat controls make with digital thermostat

K-017

MARTINDALE ABRASION AND PILLING TESTER

The Martindale is designed to analyze the abrasions, pilling and resistance of fabrics toward different surfaces. It has an electronic controller and upward plate has lifting system. There are also other models with 4–6–8–9–12 test units.

Test kits for etching and pilling can be configured separately.

Optionally, socks, gloves, sample cutters, felts, evaluation photographs, support foams, abrasive fabrics and emery's can be supplied.

USB communication port is available as standard.

Standards	ISO 5470, BS 3424/5690, BS EN ISO 12947-1/12945-2, ASTM 4966/4970, NEXT 18, M&S P17/P19/P19B, IWTO 40-88, IS 12673, JIS L1096, BS EN 388/530, SN 198525, 198529

H-001

LEATHER THICKNESS GAUGE

It is used to determine the thickness of textiles and textile products under a certain pressure. Applied Pressure 0.1 to 2000 gram force .

Thickness Measurement 0.01 to 50 mm. Thickness Measurement accuracy is 0,01 mm. Device has a presser foot 50.5 mm.

It has touch screen controller and PC software .(PC Software given with device)

Pressure feet of 5 cm^2, 10 cm^2 and 20 cm^2 can be supplied as an optionally.

All controls on the device can be done via the touch screen without PC. Device has USB port as standart for computer communication.

Computer , printer and PC Software can be supplied as an optionally.

Standards	TS 7128, EN ISO 5084, ISO 9073-2, TS 1534-3, EN ISO 2286,3, ISO 5084, ISO 2286-3, ASTM D1777, TS EN ISO 9073-2

D-005

DROP TESTER

It allows cartons, luggage cases, suitcases and electrical equipment and packages to take precautions to effectively protect the products of the manufacturer against damage that may occur during transportation, by detecting the damage that the materials inside are falling.

During the fall, the carrier rotates to provide the packaged materials to fall. It can test the deformation, faces, edges and corners of the product.

Washing&Dyeing Testing

Y-001

VERTICAL PADDER

It is used for compression operations post dyeing and washing of the fabrics. It has cylinders of 350 mm or 500 mm wide located vertically. The cylinder hardness is 70 shores.

The fabric's passage speed can be set between 1 and 40 m/min. The compression pressure of the cylinders can be set between 2 and 6 bars. There's a balance adjustment system enabling equal pressure. It has squeezing safety locks between the rolls. It has a showering roll washing system.

Cloth wrapping apparatus and waiting station can be included as an option.

Y-002

HORIZONTAL PADDER

It is used for compression operations post dyeing and washing of the fabrics. It has cylinders of 350 mm or 500 mm wide located horizontally. The cylinder hardness is 70 shore.

The fabric's passage speed can be set between 1 and 40 m/min. The compression pressure of the cylinders can be set between 2 and 6 bars. There's a balance adjustment system enabling equal pressure. It has squeezing safety locks between the rolls.

It has a showering roll washing system. Cloth wrapping apparatus and waiting station can be included as an option.

Y-003

MINIDRYER/STENTER

It is used for drying and fixation after dyeing and washing the fabric samples. To fix the fabric samples, there are models with pins and adjustable frames.

The drying operation can be done at the desired time, temperature and airing speed. The sample is automatically released after the process.

Maximum temperature is 250 C° and the maximum sample size is 350 mm x 350 mm

Y-004

MINIDRYER/STENTER AND STEAMER

It is used for drying and fixation after dyeing and washing the fabric samples. Saturated steam is applied on the fabric with internal generator (220 C°). Full interior of cabin is stainless steel. To fix the fabric samples, there are models with pins and adjustable frames. The drying operation can be done at the desired time, temperature and airing speed.

The sample is automatically released after the process.

Maximum temperature is 250 C° and the maximum sample size is 350 mm x 350 mm.

Y-005

BOBBIN DYEING MACHINE

Laboratory type pressurized (max. 3 bars) yarn bobbin dyeing machine. Capacity of dyeing 1–5 bobbins at the same time.

Max bobbin diameter is 220 mm; max bobbin length is 400 mm. It is available to work with 1/10 float range. Heat capacity up to 140 C°.

Heater and cooler speed can be adjusted.

It has a PLC controller and all works automatically.

Y-006

LABORATORY TYPE STEAMER

It is used for drying, steaming and fixing fabrics, fiber, yarn and similar products.

Saturated steam is given on the fabric with internal generator (220 C°). Interior cabin is made of stainless steel.

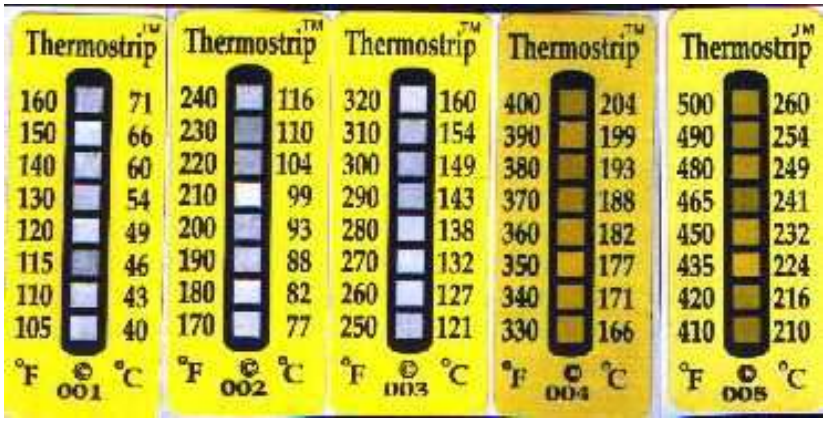
Frames with needles to stabilize sample are available.

Drying operation can be adjusted at the desired time, temperature and air speed.

Maximum temperature is 250 C°; maximum sample diameter is 350 mm x 350 mm.

Y-007

TEMPERATURE INDICATING STRIPS



The stripes are sticked on a surface where heat determination is made according to the stripe turning from white to irreversible black. The stripes are of 10 different kinds according to heat gap.

It is easy to use for the determination of heat between 40–260 C°.

It is easy to stick on the surface.

The other options is;

No 1: 40°C-71°C

No 2: 77°C-116°C

No 3: 121°C-160°C

No 4: 166°C-204°C

No 5: 210°C-260°C

K-002

LIGHTBOX-COLOR ASSESSMENT CABINET

It is used to perform color evaluation and color comparisons under standard light sources. Together with D65 daylight, which offers the best alternative to natural daylight, there are other models offering numerous light sources such as TL84, D50, TL83, F-INCA, UV and U30. The device has an electronic controller on which, the lamp life and its features can be observed.

Models with 4 or 5 light sources are available and can be ordered with observation areas of 60- 120 and 150 cm. Desktop and suspension type models are available.

We also have light cabinets in different sizes and specifications

Standards

AATCC 61,133,132,117,116 ,109,8, 15,16,23,190,ASTM D1729,BS 950 PART 1, ISO 105-C09,C05,C01,C02,C03,C04,C06,C07,C08,X11,NEXT 18,8B,18A,10,9A,9,7B,7A, 7,6,5,4A,4,3A, 3,2

Y-008

WASHING AND DRY CLEANING FASTNESS MACHINE

It is used for washing and dry cleaning fastness tests of dyed fabrics in laboratories.

with a microprocessor control unit, the test are carried out an increasing temperature of 2 °C /min to maximum of 98 °C

The rotational speed preferably is 40 ±2rpm)

The tube capacitiy can be chosen as 550 cc or 1200cc

The tube amount can vary from 4-6-8-12

Test methods are loaded on screen according to many different standards and new standard entry can be easily done

Standards

AATCC 61,86,132,190,GB 3921,5711,12490,ISO 105-C01,C05,D01,E12,E03,C09,C08, C06,C04,C03,C02,C10,M&S C4A,P12A,P137,C49A,C37,C26,C11,C10A,P3B,C5,C12A, NEXT 2,2A,3,3A,5

Y-009DW

GARMENT AND PRINTED FABRIC DURABILITY TESTER

The Durability Tester simulates the conditions necessary to meet leading chain stores standard garment and fabric durability tests.

The process control systems provide excellent accuracy and repeatability. The physical performance of the durability tester is compatible with that of the "Hoovermatic" Twin Tub and complies with the Marks and Spencer Fabric Durability (C15) and Print Durability (P5) methods of test.

USB connection data output is standard.

Standards	BS 7907, DIN 16792, M&S P5 M&S C15

Y-011

TUMBLER TYPE PIECE OF FABRIC DYEING MACHINE

It makes dyeing operations under atmospheric pressure.

Maximum machine capacity is 5 Kg

Maximum heat: 98 C°. Working pressure is 3 bar and flote range 1/10. Circulation pomp is 2 bars. Extension pot volume: 4lt. Speed of heating is 4 C°/ min. Cooling speed is 100 lt/hr. Maximum water expense is 75 lt/hr.

Y-012

SAMPLE DYEING MACHINE

The sample dyeing machine is used in textile laboratories for sample dyeing. It is able to perform dyeing operations at a range between environment heat and 140 C°. The dye tubes complete the process in the bath tank, at the fluid (oil) environment, with the microprocessor controlling unit, at the desired temperature, time and setting values.

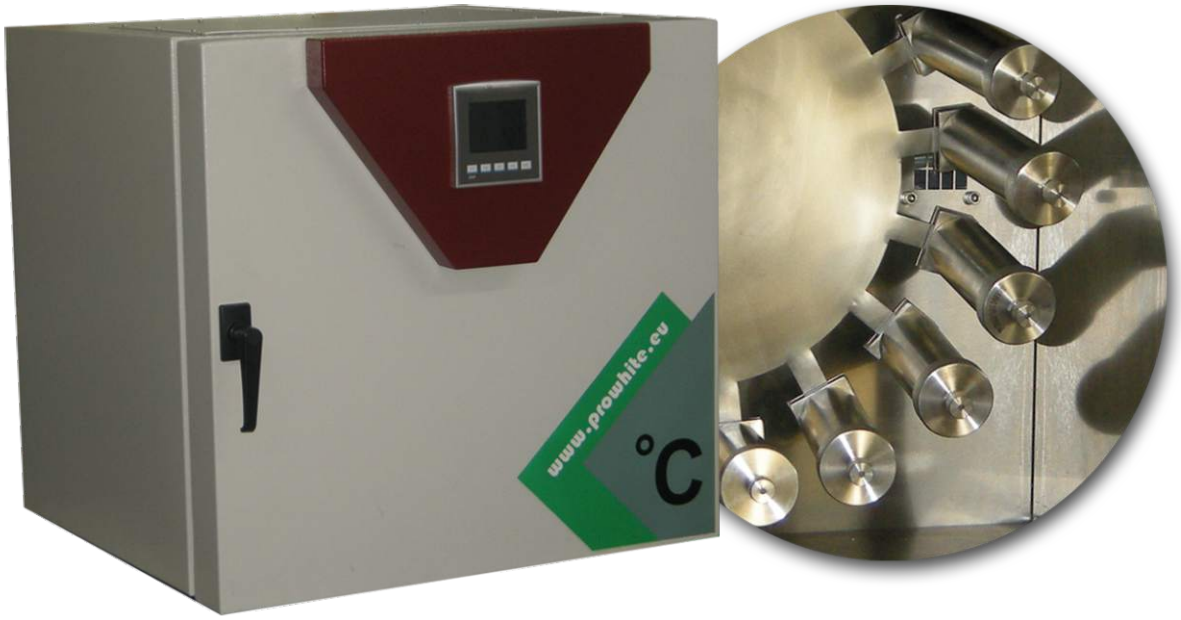
The machinery performing atmospherical and polyester dyeing offers ease to the user with its desktop usage. It includes temperature-time controlling computer. The controller has 999 different programs and each program has 99 steps.

The dyeing recipes are saved to the microprocessor's memory at once and whenever needed, it is run again by choosing the program number.

Accordingly the machinery operates its heating – cooling - alarm outputs to pursue the program steps and at the end of the program, warns the operator. Upon request, microprocessors with larger memories can be installed.

Y-013

INFRARED SAMPLE DYEING MACHINE



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Accordingly the machinery operates its heating – cooling - alarm outputs to pursue the program steps and at the end of the program, warns the operator.

Different models with 12-16-24 tubes are available.

Tube capacity can be selected as 200-300-500 cc.

SHRINKAGE TESTER

Standart referans çamaşır makinesidir. Mikroişlemci kontrollü olup, tuş takımından isteğe göre, 999 adede kadar yıkama ve kurulama programı oluşturulabilir ve kaydedilebilir.

Programlar, ISO, BS ve IWS test standartları olarak düzenlenebilir. Ağırlıklar, boyut şablonları ve cetvelleri, referans deterjanlar, beyazlatıcılar ve yumuşatıcılar da emin edilebilir.

USB communication port is available as standard. Computer, printer and application program are available as an option

SENSITIVE DRUM DRYERS

Professional dryer which meets ISO6330 standard. Durable mechanical construction, designed for professional use. Dedicated drying programs for standard additional programs fornormal bulk drying.Stainless steel front & stainless steel drum. Accurate control of exhaust air temperature.High heating power meaning quick drying.

– Large display and one control knob for easy program selection
– Language selection
– Service program for adjustment of parameters
– USB connection

Residual Moisture Control for an accurate drying result and a low energy consumption.Reversing drum for less tangling of large items.Reversable door hanging for a convenient laundry flow.Easy access to vital parts for simple servicing from the top and rear

Y-016

BOBBIN DRYING OVEN

It is used for the drying and fixation of the yarn bobbins following the washing and dyeing process.

A movable drying rack where the bobbins are placed is available.

The drying operation can be set at the desired time and temperature.

An alarm system warns the operator at the end of the heating process.

The maximum heating capacity is 250 C°.

Y016-8 : 8 Bobbin capacity drying oven.

Y016-40: 40 Bobbin capacity drying oven.

Y-017

SUSPENDERS DRYING OVEN

It is used for the drying and fixation after dyeing and washing the fabric samples. The drying operation can be done at the desired time and temperature.

The maximum temperature is 80 C°.

An alarm system warns the operator at the end of the heating process.

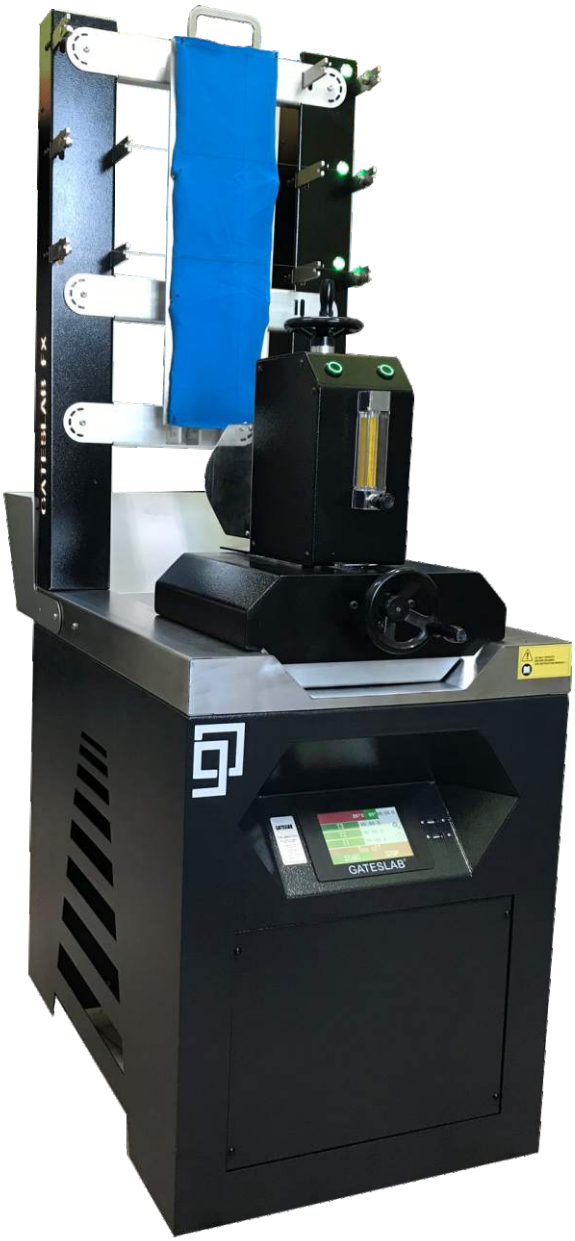
4 stainless steel hanger shelves of 600 mm x 450 mm are also included.

Optionally, pins and adjustable frames are available to hold the samples.

Flammability

F-001

VERTICAL FLAMMABILITY



Vertical Flammability Tester used to measure flame splash properties in protective clothing classified against heat and fire.

Also it can applied for toys, curtains, covers and upholsterys. Incombustibility testes with special apparatus.

Through the touch screen controller and PC communication you can add different test methods.ch structure, etc) used as clothes, drapery and upholstery in the samples fired from the edge at 45 ° position.

Standards	ISO 6940, ISO 6941, BS 5438, ISO 15025

F-002

NFPA 701 FLAMMABILITY

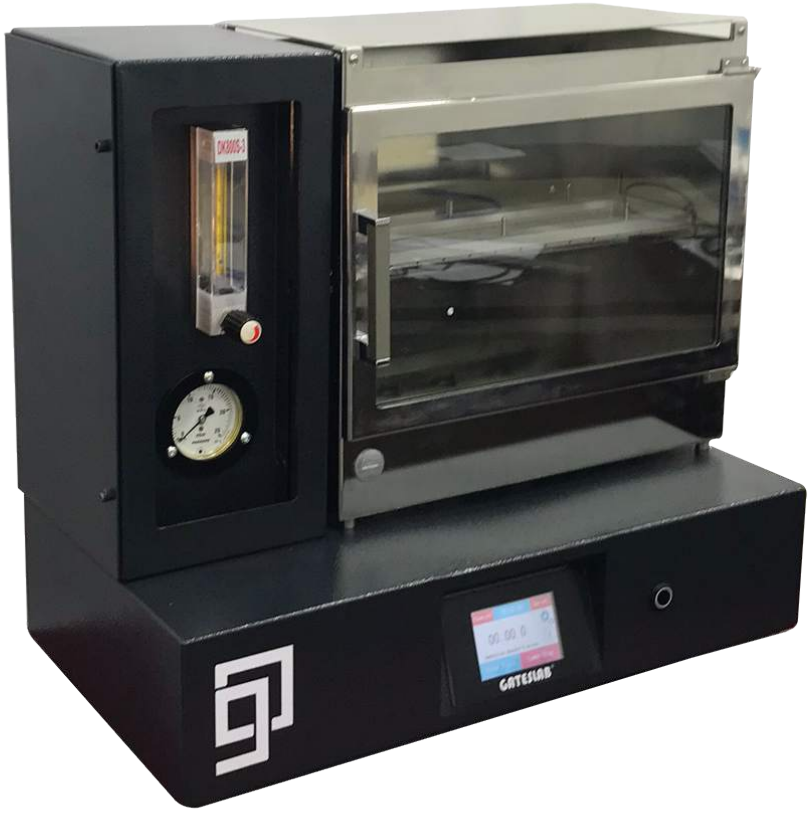
Flammability Tester

NFPA 701 Flammability Tester, to determine the ignition resistance properties of draperies and other hanging fabrics according to test method NFPA 701 Test Method 1, and it is suitable for single-layer or multi-layer fabrics, but not suitable for fabrics with density larger than 700g/m² (21oz/yd²)

Standards	NFPA 701:2004 Test Method 1

F-003

HORIZONTAL FLAMMABILITY



Horizontal Flammability Tester is used to determine the comparative burn rates and resistance of textiles, particularly those for automotive and air craft interiors use.

It is designed stainless steel cabinet with observation window, sample holder and burner.

Standards	ASTM D 5132, ISO 3795 SAE J369, FAR Part 25 Appendix F Part I, RENAULT D45 1333, FMV SS 302 JIS D 1201

F-004

BLANKET FLAMMABILITY

The blanket burning tester is used to determine fire resistance properties of blanks.Many different test methods can be installed help with touch screen control unit and computer connection.

Standards	ASTM D 4151

F-005

45° FLAMMABILITY

It is used to determine the flame propagation properties(flame propagation speed, destructed length, duration of torch burning and so on) of single- or multi-component textile products(coated, quilted, multi-layered sandwich structure, etc) used as clothes, drapery and upholstery in the samples fired from the edge at 45 ° position.

Standards	ASTM D 1230, TS 6344, NFPA 702, 16 CFR 1610

F-006

UL 94

The horizontal, vertical and angled combustion tester is used to determine the combustion characteristics of certain flame-exposed plastics and films. UL 94 test method is about fire security.It used to classify plastics in electric tools.

Also can be applied different flammability testes with special apparatus. Through the touch screen controller and PC communication you can add different test methods.

Standards

Horizontal Burning Test;HB (ASTM D 635, IEC 60695-11-10)
Vertical Burning Test:V-1,V-2,V-3 (ASTM D 3801 , IEC 60695-11-10, IEC60695-11-2)
Horizontal Burning Foamed Material Test: HBF,HF-1,HF-2 (ASTM D 4986 , ISO 9772)
Thin Material Vertical Burning Test :VTM-0,VTM-1,VTM-2 (ASTM D 4804 , ISO 9773)
Vertical Burning Test; 5VA or 5VB (ASTM D 5048 or IEC 60695-11-20) for plaque

F-007

CRITICAL (LIMITING) OXYGEN INDEX

The Limit Oxygen Index Tester is used in the determination of the minimum oxygen concentration required to be present in the nitrogen-oxygen mixtures for the continuation of the flushes of the test specimens in the veritacal position under certain test conditions.Device automatically adjusts the oxygen-nitrogen concentration.So operator errors are reduced to a minimum and consistency is ensured between tests. Through the touch screen controller and PC communication you can add different test methods.

Standards	ISO 4589, ASTM D 2863

F-008

FLAMMABILITY TEST RIG (UPHOLSTERY)

For determining the ignitability of material combinations for upholstered seating. The test rigs are covered with standard foam and the fabric under test. The assembly is then ignited using one of the standard ignition sources and the combustion process is monitored.

Includes large and small test rig, timer, flow meter.

Optional accessories include foam pads, wooden cribs, burner tube, cutting templates, and standard cigarette

Standards	BS 5852 PARTS 1-2, ISO 8191 PARTS 1-2

M1-503 FIRE RESISTANCE TESTER

The electrical burner test is the reaction to fire main test for M classification of building and fitting materials. It is used mainly for flexible materials with a thickness lower than or equal to 5 mm.

This test allows the M1 to M3 classification, if there is no holing without inflammation or with short time inflammation, nor inflamed or not dripping. It is also employed to study the burning behaviour of industrial fabrics according to NF EN 14115

Standards	NF P 92-503

F9-504

M1-504 FIRE RESISTANCE TESTER

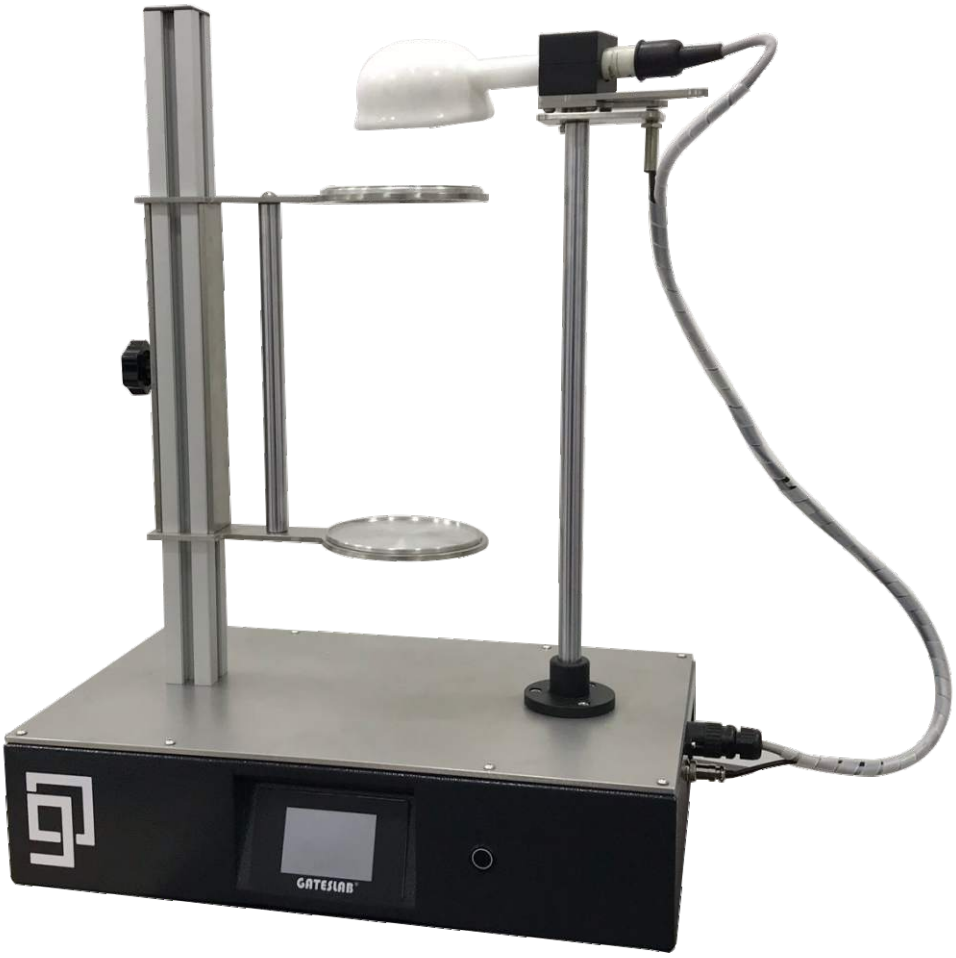
The flame persistency test is a reaction to fire complementary test for M classification of building and fitting materials. It is used for flexibleand rigid materials of any thickness which develop holes without combustion or with short time combustion during the main test.

This test allows to classify the material in M1, M2 or M3 categories. In case of combust or not dripping, the final classification will be made after the dripping test (NF P 92-505).

The flame propagation test is performed with the same apparatus and is used for M4 classification of flexible and rigid materials of any thickness

Standards	NF P 92-504

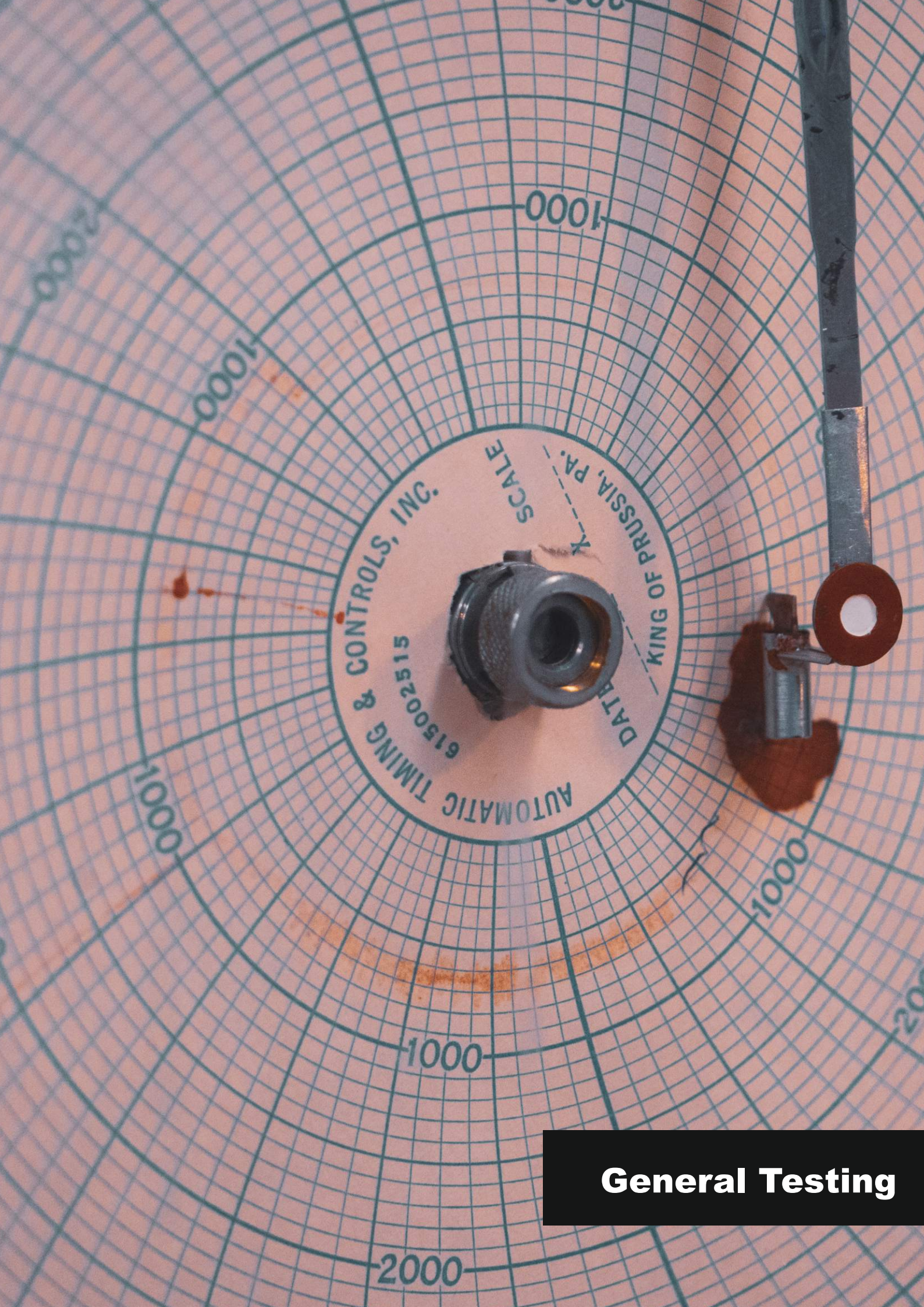
M1-505 FIRE RESISTANCE TESTER



NF P 92-505 test is a reaction to fire complementary test for M classification of building and fitting materials. It is used for thermalmelting materials for which some inflamed or not dripping, were noticed during the main test (electrical burner test or epiradiator cabinet) or even during the complementary flame persistency test.

This test allows to maintain or to lower the classification obtained at the main test or at the complementary flame persistency test.

Standards	NF P 92-505



General Testing

G-001

TEMPERATURE AND HUMIDITY RECORDER

Processor : Quad Core 64-bit 1.4GHz A53/ARMv8

RAM : 1GB LPDDR2 SDRAM

Wireless LAN : Dual band 2.4 + 5 GHz 802.11.b/g/n/ac

Ethernet : 300Mbps Gigabit, PoE Line Compatible

Bluetooth : Low Energy 4.1/4.2

Memory : Micro SD Cart Input + USB Memory Support

Video : HDMI, DSI Screen Port + CSI Camera Port

Audio : 4 pin 3.5 mm Audio + Composite Video Port

USB : 4 x 2.0 + Micro USB 5V/2,5A Power Input

Accuracy : ±2% RH / +-0,5°C

Moisture Measurement Range : 0 ~ 100% RH

Operating Temperature : -20°C ~ 80°C

Recording data at every 10 second

Database Connection

Instant analysis of local network data on the browser

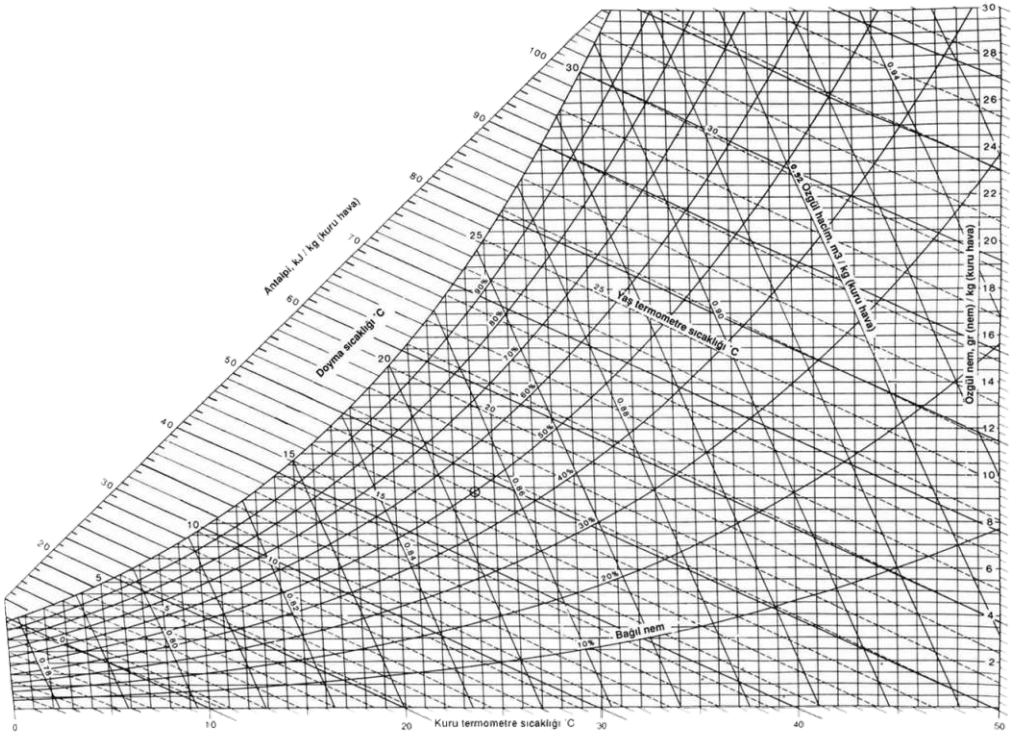
Portable

Remote accessible machine interface

Capable of storing data for the last 5 years (can be increased)

BRANDISH TYPE HUMIDITY METER

It is used to measure the temperature and relative humidity. It is a set with relative humidity ruler. Brandish type humidity measurements are the most sensitive measurement devices.



MOISTURE ANALYZER

Perfect for routine moisture analysis, moisture analyzer is simple to setup, easy to use by operators of all skill levels and cleans up quickly.

Setting drying method time and temperature is quick using the keypad and LCD backlit display. Product is features a compact design, thus requiring minimal space.

Ideal for food, agriculture, chemical, pharmaceutical and other applications that require measurements up to 0.01% 0.001 g.

Product has a capacity of 90 g allowing for analysis of larger sample sizes.

PHMETER

Easy-to-use, functional, portable, desktop and area type PH meters for textile, water, waste water, research, quality control and all laboratory practices. It is offered as a set with the standard calibration liquids. Glass or epoxy electrode variations are available according to the using process.

G005-C: Pocket size PH meter

G005-P: Portable type PH meter

G005-M: Table type PH meter

CONDUCTIVITY METER

Combining all of the features from the benchtop pH and conductivity meter into one multi-meter, makes testing pH, ORP, conductivity, salinity, TDS, resistivity, temperature a seamless process.

A user-friendly bench meter with an innovative design, including an adjustable standalone electrode holder and large backlit LCD display.

A 99-item memory for pH and/or conductivity measurements makes for efficient data documentation.

RS232 interface allows for connection to external devices for data storage or transfer.

HOT PLATE

It is a hot plate which is used in main laboratory tests. It is possible to supply as 400x600mm, 300x450mm and 300x300mm surface. Heating gap is 50...300 C°. The hot plate surface is aluminum or can be of stainless surface.

Available to supply with analog thermostat or digital controller.

G007–3030: 300x300mm (A Analog, D Digital)

G007–3045: 300x450mm (A Analog, D Digital)

G007–4060: 400x600 mm (A Analog, D Digital)

HEATING MAGNETIC MIXER

Heating magnetic mixers are used for homogeneous format mixing and heating of the samples in Industrial, R&D, University and Medical laboratories. The mixing speed and temperature can be controlled separately.

Temperature controller can be set between 50…250 C°. Analog or digital controller models are available. The temperature can be controlled more precisely in some models, by connecting an external thermometer.

Heating magnetic mixers with 1-10 mixing station are available.

MAGNETIC MIXER

Contactless magnetic mixers without heater for sensitive laboratory operations. Speed setting is between 100…1000 r/min. Mixing capacity is 1, 5 lt.

Speed can be adjusted. It is made by stainless steel.

Models with 1–2–6 and 12 mixing point are available.

MECHANICAL MIXER

Mechanical mixer with sensitive rotation controller. The mixing time and speed can be set by the digital speed controller. Different axles for different operations and different mixing capacities are available. Mixing speed can be adjusted between 50 and 2000 RPM, and mixing time can be adjusted between 00.01 and 99.99 min. Possibility of ordering different capacities as 1–5 and 50 lt.

SHAKER

It is used to shake liquids homogeny in different shapes and volumes. 2 different types: liner shake and circular shake. Special fasten sticks to put Erlenmeyer.
Volumetric flasks etc... steady. Shaking speed can be set and possible to shake max. 10 kg.

VISCOMETER

Synchronized rotation viscometer with electronic engine is a practical way to measure the flow characteristics of liquids. The device is used to measure viscosity according to rotation procedure. It is a set with a special bag, spindle set of 4 pcs, low viscosity measuring spindle and user's guide.

Measuring gap is between 10 to 100.000 cp, rotor speed can be selected as 6, 12, 30, or 60 rpm. Models with digital controller for different operations and different measuring gaps are also available.

ELECTRONIC PIPETTE

Single and multi channel pipettes, pipette tips, boxes and accessories, ergonomic Rainin pipettes are designed to meet user's needs. In order to assure accuracy and precision the Rainin ergonomic pipettes were calibrated one by one and have ISO 9001 Quality Control Certificate.

Rainin single and multi channel pipette system is Standard and provides ease of use with its variety of all kind of filter tips.

With its proper design it provides ease of use with one hand and can be used for long hour without causing fatigue.

Multi channel pipettes were designed with 8, 12 and 24 channels. The pipette tips can be removed very easily with a mechanical system. Battery power up to 12–14 hours and displayed on digital screen

G-024

OVEN & STERILIZER & INCUBATOR

It is designed for dry sterilization, drying and heating processes in industrial, R&D, university, medical and textile laboratories.

The temperature can be adjusted from +5 to 250 C°. It has a programmable PID microprocessor control system. Temperature and time settings can e controlled with digital display on the device.

The inner part is made of stainless steel and is resistant to chemical materials.

Models of 53-115-240-400-720-840 liters capacity are available.

MELT FLOW INDEXER MFI

With the device; Method A: Melt Flow Rate measurement, Method B: Melt Volume Flow Rate measurement. Measurement can be made according to ISO 1133 standard Method A and Method B.

The device has a 4.3 color touch screen. The desired inspection temperatures are fast and there is PID temperature control for the actual start-up.

Automatic cutting knife with +/- 0.01 reaction time is available. Cutting knife speed and cutting range can be changed on the screen.

Temperature range: + 100 ° C to + 400 ° C

Temperature Accuracy: ± 0.1 ° C

There are protective lid and warning symbols on the device that will prevent hot sample spatter.

The special cleaning kit is supplied with the appliance.

Weights given as standard together with device: 1 unit of 0.325 kg, 1 unit of 1.2 kg, 1 unit of 2.16 kg, 1 unit of 5 kg, 1 unit of 5 kg (to complete 10 kg)

Optional Weight: 25kg. a completion weight set.

USB communication port is available as standard.

AIR CONDITIONS AND CONDITIONING CABIN

Ideal design for creating artificial conditioning, seed germination, plant growing and storing samples of resistance tests towards artificial climate conditions in all type of laboratories such as textile, plastics, chemical, medical, construction, research and agricultural laboratories.

The interior is made from stainless steel. The temperature, humidity, daylight, UV lighting parameters can be adjusted at the desired time by prescribing on the digital controller.

All transactions can be viewed and changed at any stage. Easy using panel, homogeny heat and humidity distribution via heater cooler serpentines with forced air circulation.

Temperature range: -10...+50 C°.

Humidity range: 20%Rh...99%Rh.

Light (Optional): Daylight (5500...6500 Kelvin)

UV-A, UV-B, UV-C

AIR CONDITIONS FOR CONDITIONING

Accurate temperature and humidity-controlled air conditions for conditioning that has been designed for Industry, R&D, University, Medical and textile laboratory tests of compliance with the standards of environmental conditions, ACREDITATION conditions of supply.

Temperature Range : 10...50 °C (± 2 °C)

Humidity Range : 20...99 % rH (± 2 % rH)

G019-125 : Maximum 125 m^3conditioning capacity.

G019-300 : Maximum 300 m^3 conditioning capacity.

LABORATORY BALANCES

Laboratory scales show the weighing result in a range of 1 to 5 digits (0.00001g) after the comma.
Accurate and accurate weighing is the first and most important step of a laboratory application. You can increase the chance of getting accurate results in all the analyzes that are started by making repeatable and accurate measurements.
You need reliable weighing from medicine to cosmetics, from food to plastic sector, at every stage of production, quality and R & D.

some of our references

Gamatest
LABORATUVAR HİZMETLERİ

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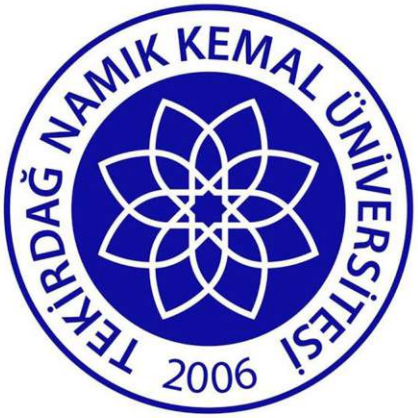
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CHT TEKSTİL
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COLORMETRİX
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EKOTEN TEKSTİL
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ELİF PLASTİK
ELİTLER GRUP
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EMI DEVELOPPEMENT
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OVAOLUKLU

OZON TEKSTİL
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ÖZDEMİR KONFEKSİYON
ÖZDURAK PAMUK
ÖZER TEKSTİL
ÖZGÜR MATBAA
ÖZKAN AYDIN
ÖZTEK TEKSTİL
ÖZYİĞİT TEKSTİL
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PANCO TEKSTİL
PANDA AYAKKABI
PAYTEKS
PEDSA PLASTİK
PELSAN TEKSTİL
PENTAKİM
POLİKİM
POLİMAR İPLİK
POLİTEM
POST FASHION
POZİTİF DİJİTAL
PRESTİJ MENSUCAT
PUKKA GİYİM
RAFTEL KİMYA
RAVAGO
RB KARESİ
RE GRUP
REDOKS
REMAR TEXTİL
RENCO KOMPOZİT
RN TEKSTİL
ROYAL HALI
SANCAK ÖRME
SANOVEL - ARVEN
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SÜZER MENSUCAT
ŞAHDEM TEKSTİL
ŞAHİN ÖRME
ŞAHİNLER SUNİ DERİ
ŞİRİKÇİOĞLU
ŞİŞECAM
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TAYEKS
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TİMTAŞ
TNE TEKSTİL
TOFAŞ
TRAKYA CAM
TREDİN TEKSTİL
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