

Providing confidence in standard based testing
through expertise and global partnering.

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SDL ATLAS

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TEXTILE TESTING SOLUTIONS

Instruments • Test Materials • Service

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WELCOME TO SDL ATLAS

SDL Atlas is pleased to provide this comprehensive catalog as a guide to our broad line of instruments, test materials, services and laboratory accessories.

Our goal is to provide confidence in standard based testing through expertise and global partnering. You will find that all of our products meet the highest quality requirements, conform to international standards, and provide a professional appearance for laboratories.

This catalog acts as an easy reference tool for anyone in the textile testing industry. Over 600 products can be found in these pages to create the most complete offering available in the industry. Testing categories include fiber, yarn, and fabric, as well as safety testing for textile applications. Also included is a full offering of test materials required to perform repeatable tests.

We invite you to visit our website, www.sdlatlas.com, to see the very latest updates and news and to use the enhanced search capabilities that can ease the search for the right products to meet a specific test.

OUR HISTORY

SDL Atlas is comprised of companies with a long history of service to the textile industry. SDL Atlas reflects the unification of Chicago-based Atlas Textile Test Products with SDL, a respected manufacturer and distributor of testing instruments. SDL Atlas also included Textile Innovators, a leading source of standardized test materials. By combining the strength and knowledge of these three companies, SDL Atlas is clearly the largest, most complete global source of textile testing, quality control and laboratory equipment.



Most of the SDL Atlas products featured in this catalog are designed and manufactured in our own facilities under rigidly controlled conditions. While highly skilled, veteran SDL Atlas craftsmen supply expertise in sheet metal work, welding and machining, other quality-conscious professionals focus on mechanical, electrical and electronic assembly. Our design and rapid prototyping yield high-performance, highly reliable products that deliver extended service with little or no required maintenance.



Martindale Assembly in Shenzhen, China

AFFILIATIONS

AFFILIATIONS WITH PROFESSIONAL BODIES, INSTITUTIONS AND RESEARCH INSTITUTES

Ongoing relationships with professional bodies within the global textile industry help to maintain our leading position in the manufacture, supply and service of textile testing and laboratory equipment. A selection of these bodies and our affiliation follows. We thank all of these organizations for the unwavering support we have received in the past and which we expect to continue in the future.



THE EUROPEAN DISPOSABLES
AND NONWOVENS ASSOCIATION
BRUSSELS, BELGIUM



THE TEXTILE INSTITUTE,
MANCHESTER, ENGLAND



THE BRITISH STANDARDS INSTITUTION
CHISWICK, LONDON, ENGLAND



THE UNIVERSITY
OF LEEDS



THE UNITED STATES DEPARTMENT OF
AGRICULTURE, NEW ORLEANS, USA



ITV DENKENDORF
INSTITUTE FÜR TEXTIL - UND
VERFAHRENSTECHNIK, DEKNENDORF



THE BRITISH TEXTILE MACHINERY
ASSOCIATION, MANCHESTER,
ENGLAND



AMERICAN ASSOCIATION OF
TEXTILE CHEMISTS AND
COLORISTS



THE INTERNATIONAL BUREAU
FOR THE STANDARDISATION OF
MAN-MADE FIBERS,
BRUSSELS, BELGIUM



THE UNIVERSITY OF MANCHESTER
INSTITUTE OF SCIENCE AND
TECHNOLOGY, MANCHESTER,
ENGLAND



THE INTERNATIONAL TEXTILE
MANUFACTURERS FEDERATION,
ZURICH, SWITZERLAND

SDL ATLAS TEST MATERIALS

Test Materials are a critical part of many textile tests. Each batch we produce is thoroughly tested to ensure conformity and consistency. All test materials supplied are of the highest quality and meet international standards. Our extensive inventory provides a single source solution, plus we offer technical expertise to assist in making testing efficient, precise and compliant.

SDL Atlas offers multifibers and detergents for wash fastness tests, crocking supplies, make weights, pilling supplies, specialized test materials for specific instruments and more. SDL Atlas also has a large selection of test materials for home appliance testing. These include DOE energy cloth, soiled cloth, and standard soil as a few examples.

SDL Atlas offers the broadest range of testing materials in the textile and home appliance testing markets. For more detailed information, see our TEST MATERIALS section on pages 144-156.

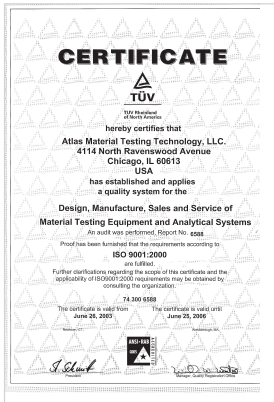


PRODUCTS

- **MULTIFIBER FABRICS**
- **STANDARD ADJACENT FABRICS**
- **DYESTUFF STANDARDIZATION**
- **ASSOCIATION OF HOME APPLIANCE MANUFACTURERS SUPPLIES**
- **BALLAST AND WASH STANDARDS**
- **SPECIALTY CHEMICALS FOR MANUFACTURING**
- **SOILED FABRICS**
- **AATCC QUALITY CONTROL AIDS AND SUPPLIES**
- **ISO QUALITY CONTROL AIDS AND SUPPLIES**
- **FLAMMABILITY TESTING**
- **ABRASION FABRICS AND OTHER ABRADENTS**
- **ASSOCIATED SERVICES**



We can supply any kind of fabric or have custom fabric made per customer's specifications upon request. Experts can provide consultancy and technical or skilled labor on a per hour basis.



To ensure the highest possible performance, every SDL Atlas product is subjected to complete testing and calibration. Our production centers around the world conduct tests and calibrations in full compliance with international standards. Upon completion, products carry applicable certifications such as CE, EMC and Machinery Safety Regulation.

The SDL International Group was the first in the Textile Testing and Quality Control Equipment Industry to be awarded ISO 9000 certification in March 1993. This means that all departments including manufacturing, service, sales and administration are continuously self-assessed and regularly checked by quality assessors to ensure that we provide you with the best quality products and service before, during and after the sales process.

SDL Atlas is a UKAS accredited calibration laboratory No. 0688. With fully trained technicians located in Europe, Asia, and North America, we are prepared to support our customers in maintaining their investment and their confidence in their test instruments.





Our service team reflects the SDL Atlas pledge to provide confidence in standard based testing through expertise and global partnering. Our own service technicians, located in the United States of America, England, Hong Kong, and throughout China, support customers directly as well as indirectly through our extensive representative service teams. In-factory trainings conducted every year ensure that our representative technicians are fully trained on the latest instruments.

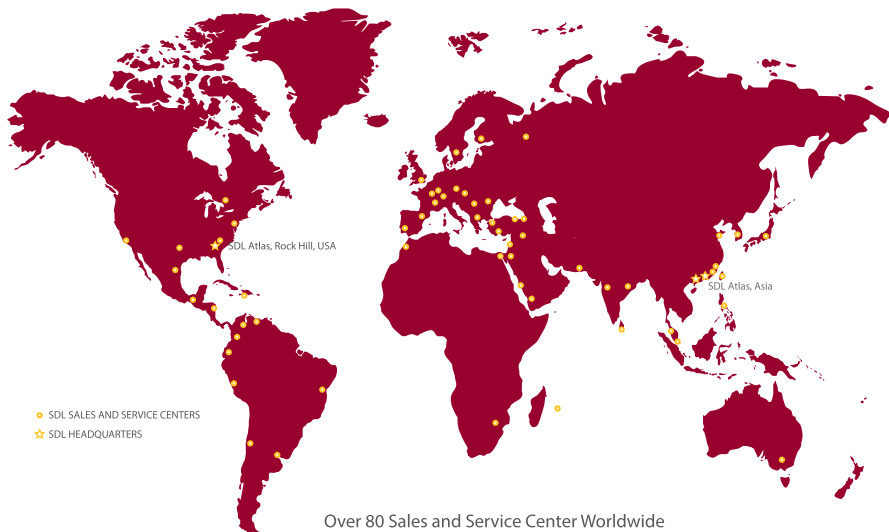
Calibration is a very important point for every laboratory. SDL Atlas technicians can perform UKAS (ISO 17025) calibration on a wide range of instruments and provide calibrations conforming to ISO 9000 on many others. These calibrations can extend to instruments not manufactured by SDL Atlas.



SALES NETWORK

An essential part of our service to our customers is the vast, expanding SDL Atlas network of sales representatives, agents and distributors. These dedicated professionals know our quality textile testing and laboratory equipment products best and provide valuable assistance and guidance in their applications to benefit customers.

The SDL Atlas network spans the globe with more than 80 staffed service centers and agents in nearly 100 countries. Most distributors maintain an inventory of spare parts, test materials and related test equipment accessories and can coordinate availability of installation and service engineers trained to our demanding standards.



Algeria	Croatia	Indonesia	Mauritius	Portugal	Thailand
Argentina	Cyprus	Israel	Mexico	Romania	Trinidad
Australia	Czech Republic	Italy	Morocco	Russia	Tunisia
Austria	Denmark	Ivory Coast	Namibia	Saudi Arabia	Turkey
Bangladesh	Dominican Republic	Jamaica	Nepal	Serbia	Uganda
Barbados	Ecuador	Japan	Netherlands	Singapore	UK
Belgium	Egypt	Jordan	New Zealand	Slovakia	United Arab
Bolivia	Falklands	Kenya	Nicaragua	South Africa	Mirates
Botswana	Finland	Korea	Nigeria	Spain	Ukraine
Brazil	France	Kuwait	Norway	Sri Lanka	Uruguay
Bulgaria	Germany	Lithuania	Oman	Sudan	USA
Cameroon	Greece	Luxembourg	Pakistan	Swaziland	Venezuela
Canada	Guatemala	Macedonia	Paraguay	Sweden	Vietnam
Chile	Hong Kong	Madagascar	Peru	Switzerland	Yemen
China	Hungary	Malawi	Philippines	Taiwan	Zambia
Colombia	India	Malaysia	Poland	Tanzania	Zimbabwe

FIBER TESTING





Contains all the equipment and test materials used in making fiber and yarn cross sections by the plate and modified cork methods recommended by AATCC.

SIZE

WEIGHT 1 kg / 2.2 lbs

DIMENSIONS 200 mm (w) x 150 mm (d) x 100 mm (h) /
8 in (w) x 6 in (d) x 4 in (h)

ORDERING INFORMATION

202159 Microscopy Cross Section Kit

202758 Dissecting/Pick Counting Needles with
Handle (Pack of 12)

STANDARDS:

AATCC20



Lint and Trash Analyzer MK2 (Cotton Model). To determine lint, trash and dust content within a sample of cotton fiber up to 100 grams. Also used to determine non-fiber content of synthetic fibers and to open and clean fibers for further testing. The analyzer uses the carding principle with air separation of lint and non-lint content.

Lint and Trash Analyzer MK2 (Wool Model). To determine vegetable and other foreign matter content in raw wool, wool tops and waste and preparation of samples for fineness testing. Also suitable for determining the yield of high value fibers such as cashmere and angora, as well as determining non-fiber content of long staple synthetic fibers.

SIZE

WEIGHT 100 kg / 220 lbs

DIMENSIONS 750 mm (w) x 1000 mm (d) x 600 mm (h) /
30 in (w) x 40 in (d) x 24 in (h)

STANDARDS:

ITMF

ORDERING INFORMATION

202586 Lint and Trash Analyzer (Cotton Model)

200770 Lint and Trash Analyzer MK2 (Wool Model)

203634 Primary Filter Assembly

203635 Secondary Filter Assembly

To produce fiber cross sections for microscopic examination, measurement and identification.

SIZE

WEIGHT	3 kg / 6.6 lbs
DIMENSIONS	75 mm (w) x 150 mm (d) x 100 mm (h) / 3 in (w) x 6 in (d) x 4 in (h)

ORDERING INFORMATION

105217	Precision Fiber Microtome
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STANDARDS:

ISO137	BS 2043	ASTM D2130	Woolmark TM 24	GB 10685
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Pressley Fiber Bundle Strength Tester

To determine the tensile strength of natural fibers. Includes 1 pair of clamps and spacer, torque vice and wrench, cutter, comb and tweezers. A 5 mg x 0.01 mg capacity balance is required but not included.

SIZE

WEIGHT	3.2 kg / 7 lbs
DIMENSIONS	330 mm (w) x 100 mm (d) x 125 mm (h) / 13 in (w) x 4 in (d) x 5 in (h)

ORDERING INFORMATION

104008	Pressley Fiber Bundle Strength Tester
104009	Clamps & Spacer (1 pair)
104010	Leather Clamp Facings (pack of 30)



STANDARDS:

ASTM D1445	ASTM D2524	BS 5116	ISO 3060
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Sliver and Roving Reel

Hand operated, to determine the linear density (count) of slivers and rovings. Fitted with roving bobbin stand, digital counter and precision cutter. Specify 1 meter or 1 yard circumference.

SIZE

WEIGHT	20 kg / 45 lbs
DIMENSIONS	270 mm (w) x 330 mm (d) x 600 mm (h) / 10.6 in (w) x 13 in (d) x 24 in (h)

ORDERING INFORMATION

300059	Sliver and Roving Reel Meter
300060	Sliver and Roving Reel Yard





To determine the oil or finish content of wool or synthetic samples by solvent percolation and evaporation. Suitable for fiber, yarn or fabric. Available with 1, 2 or 3 extraction units. To be fully compliant with Edana method ERT 155, it needs a large extraction tube- 12 mm (OD), 10 mm (ID). (Full title of new method is: DETERMINATION OF ACETONE EXTRACTABLE FINISH ON NONWOVENS).

SIZE

WEIGHT 4.4 kg / 9.7 lbs

DIMENSIONS 170 mm (w) x 170 mm (d) x 380 mm (h) /
7 in (w) x 7 in (d) x 15 in (h)

ORDERING INFORMATION

105265	Rapid Oil Extraction Apparatus Single
105266	Rapid Oil Extraction Apparatus Double
105267	Rapid Oil Extraction Apparatus Triple
105268	Foil Residue Trays (Pack of 50)



To determine the moisture content and regain percentage of textile materials. Drying is performed by circulation of warm air electrically heated, regulated by an electronic temperature controller (range 0°/140°C, accuracy $\pm 1^\circ\text{C}$). The material to be tested is dried within a metal container suspended from an electronic balance. Two successive weights of the same value determine the point at which moisture content can be calculated. Includes an electronic balance with 2200 g capacity and 0.01 g accuracy. The sample is weighed automatically by means of a basket connected to the balance.

SIZE

WEIGHT 130 kg / 286 lbs

DIMENSIONS 700 mm (w) x 980 mm (d) x 1350 mm (h) /
27.5 in (w) x 38.5 in (d) x 53.1 in (h)

ORDERING INFORMATION

300064	Moisture Regain Oven
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STANDARDS:

ASTM D1576	ASTM D2495	ISO 2060
ISO 6348	ISO 6741-1/2/3	

YARN TESTING



Y006

Electronic Yarn Count System



Consists of an electronic balance (220 grams x 0.001 grams) with internal and external custom software which calculates yarn, sliver and roving counts as well as fabric yield in various systems and provides statistics on any number of tests including totals, average, CV and SD. Includes cables and security data key, USB, and connects to any PC and printer. PC and Printer are not included.

SIZE

WEIGHT 5.8 kg / 13 lbs

DIMENSIONS 354 mm (w) x 100 mm (d) x 230 mm (h) /
14 in (w) x 4 in (d) x 9 in (h)

ORDERING INFORMATION

Y006 Electronic Yarn Count System

STANDARDS:

ASTM D1907 ASTM D2646 ASTMD3776 BS 2471 BS EN 12127 ISO 2060 ISO 3801 IWSTM 13 IWTO 22-82

Y016A

Mechanical Yarn Package Density Tester



To measure the hardness of yarn cones or beams of yarn or fabric. Suitable for loosely wound bobbins of synthetic fibers and closely wound natural fibers, yarns and threads. Analog scale from 0-100 with 5 mm diameter indenter (supplied in fitted box).

SIZE

WEIGHT 0.5 kg / 1.1 lbs

DIMENSIONS 58 mm (w) x 50 mm (d) x 110 mm (h) /
3 in (w) x 2 in (d) x 5 in (h)

ORDERING INFORMATION

303151 Mechanical Yarn Package Density Tester

Y038

Yarn Bulkometer



Simple device to define the volume occupied at a given pressure by the mass of a specified amount of the yarn. Unit of bulk = cm^3/g . The apparatus consists of a channel with graduated scales on each corner in which a skein is placed containing a known number of ends. A load of 500 g is applied to produce a pressure of 10 g per cm^2 .

SIZE

WEIGHT 1 kg / 2.2 lbs

DIMENSIONS 100 mm (w) x 75 mm (d) x 100 mm (h) /
4 in (w) x 3 in (d) x 4 in (h)

ORDERING INFORMATION

303506 Yarn Bulkometer

To determine the coefficient of friction of moving yarns and assess the need for lubrication or suitability for further processes (in fitted case).

Drive Unit, with friction tester mounting and tension device, to convert the portable yarn friction tester into a laboratory unit.

SIZE

WEIGHT 7 kg / 15 lbs

DIMENSIONS 400 mm (w) x 300 mm (d) x 220 mm (h) /
16 in (w) x 12 in (d) x 9 in (h)

ORDERING INFORMATION

Y096A Portable Mechanical Yarn Friction Tester

Y096B Drive Unit

STANDARDS:

ASTM D3108



Hair Scan Portable Yarn Hairiness Monitor

Y103C

For monitoring the quality of spun yarn or detecting broken filaments. The portable battery-powered unit uses an infrared detecting head, while low power circuitry ensures a long battery life, typically 10 hours. A two line intelligent display (LCD) shows the measurement time (seconds) and count. If the batteries are low on charge, a message will appear requesting the batteries to be charged.

Measurement time is selectable in increments of 5 or 10 seconds. Minimum is 5 seconds and the maximum is 95 seconds. For broken filament detection there is a continuous mode where the Hair Scan will monitor until the operator decides to finish. Measuring head can be fixed permanently in the threadline.

The Hair Monitor is supplied with a STANDARD measuring head size of 3 mm. This dimension was set many years ago by Shirley Institute for their Yarn Hairiness Meter first built in the 1960's. We also offer a range of heads from 1 mm to 5 mm that can be specified in increments of 0.1 mm with different dimensions between the yarn guide and the detecting hole.

It is important to specify a non-standard head requirement when ordering.



SIZE

WEIGHT 0.5 kg / 1 lb

DIMENSIONS 80 mm (w) x 35 mm (d) x 160 mm (h) /
3 in (w) x 1.5 in (d) x 6.5 in (h)

ORDERING INFORMATION

303158 Hair Scan Portable Yarn Hairiness Monitor. Non-Standard Heads are available by special order

Y219A**Wrap Reel - Hand Operated**

To produce skeins of yarn of a predetermined length and number of turns for count and/or strength testing. 1 meter, 1 yard or 54" circumference collapsible swift (specify). Complete with yarn package stand and pretension device, fitted with predetermined counter. Available in hand operated and electronic versions.

SIZE

WEIGHT	35 kg / 77 lbs
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DIMENSIONS	500 mm (w) x 650 mm (d) x 560 mm (h) / 20 in (w) x 26 in (d) x 22 in (h)
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ORDERING INFORMATION

105413	Wrap Reel Hand Operated (1 m)
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105414	Wrap Reel Hand Operated (1 yd)
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105415	Wrap Reel Hand Operated (54")
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STANDARDS:

ASTM D1907	ASTM D2260	DIN 53830	ISO 2060
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Y219B**Wrap Reel - Electronic****STANDARDS:**

ASTM D1907	ASTM D2260	BS 2010	DIN 53830
ISO 2060			

To produce skeins of yarn of a predetermined length and number of turns for count and/or strength testing. 1 Meter, 1 yard or 54" circumference collapsible swift (specify). Complete with yarn package stand and pretension device, fitted with predetermined counter. Available in hand operated and electronic versions.

SIZE

WEIGHT	45 kg / 99 lbs
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DIMENSIONS	500 mm (w) x 650 mm (d) x 560 mm (h) / 20 in (w) x 26 in (d) x 22 in (h)
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ORDERING INFORMATION

105405	Wrap Reel Electronic (1 m, 220V)
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105406	Wrap Reel Electronic (1 yd, 220V)
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105407	Wrap Reel Electronic (54", 220V)
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105410	Wrap Reel Electronic (1 m, 110V)
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105411	Wrap Reel Electronic (1 yd, 110V)
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105412	Wrap Reel Electronic (54", 110V)
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Y220B**Twist Tester - Electronic**

To determine yarn twist in single or plied yarns, quadrant type with auto stop & reverse for conventional or untwist/re-twist methods. Test length adjustable up to 50 cm / 20 inches for S & Z twist yarns.

SIZE

WEIGHT	16 kg / 36 lbs
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DIMENSIONS	1070 mm (w) x 300 mm (d) x 290 mm (h) / 43 in (w) x 12 in (d) x 12 in (h)
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ORDERING INFORMATION

105353	Twist Tester Electronic
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STANDARDS:

ASTM D1422	ASTM D1423	BS 2085	DIN 53832
ISO 2061	IWTO 25-70	ISO 17202	

To assess the evenness, hairiness, neps and other imperfections in a representative sample of yarn wound at a pre-determined pitch onto a tapered black board. Variable pitch traverse 8-19 wraps per centimeter, variable winding speed drive, with yarn package stand and 2 black anodized aluminium boards 225 x 600 x 155 mm dimensions. Assessment against photographic comparison standards (not included).

SIZE

WEIGHT	24 kg / 53 lbs
DIMENSIONS	910 mm (w) x 330 mm (d) x 530 mm (h) / 36.5 in (w) x 13 in (d) x 21 in (h)

ORDERING INFORMATION

201040	Yarn Examining Machine, 220V
403301	Yarn Examining Machine, 110V

STANDARDS:

ASTM D2255



ASTM Photographic Yarn Appearance Standards

Grades A,B,C,D (mounted). Specify No. 1-12, 12-24, 24-36, 36-50, 50-75, or 75-135 (English cotton count). Priced Individually.

SIZE

WEIGHT	1.2 kg / 2.5 lbs
DIMENSIONS	635 mm (w) x 10 mm (d) x 380 mm (h) / 25 in (w) x 0.4 in (d) x 15 in (h)

ORDERING INFORMATION

202059	Standards 1-12 count
202058	Standards 12-24 count
202057	Standards 24-36 count
202056	Standards 36-50 count
202055	Standards 50-75 count
202054	Standards 75-135 count

STANDARDS:

ASTM D2255



Size Concentration Refractometer

To determine the amount of starch or solids percentage in a sizing solution.

SIZE

WEIGHT	0.24 kg / 0.5 lbs
DIMENSIONS	20 mm (w) x 20 mm (d) x 170 mm (h) / 0.75 in (w) x 0.75 in (d) x 6.7 in (h)

ORDERING INFORMATION

200966	Size Concentration Refractometer
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Y225A

Yarn Count Converter



Conversion slide rule for all major yarn count systems. With metric/imperial equivalents on reverse, PVC wallet, supplied with SDL Atlas logo.

SIZE

WEIGHT N/A

DIMENSIONS 190 mm (w) x 75 mm (d) x 0 mm (h) /
7.5 in (w) x 3 in (d) x 0 in (h)

ORDERING INFORMATION

303164 Yarn Count Converter

Y226D

Warp Tension Meter



To determine correct tension for particular fabric qualities in weaving and preparation. Accurate and robust mechanical operation, dial readout 0-100 centesimal scale.

SIZE

WEIGHT 0.5 kg / 1 lbs

DIMENSIONS 150 mm (w) x 75 mm (d) x 100 mm (h) /
6 in (w) x 3 in (d) x 4 in (h)

ORDERING INFORMATION

201105 Warp Tension Meter

Y275A

Hand Operated Sample Carder



To prepare samples for further testing or to produce small quantity lends. Produces a fiber mat or web 200 x 500 mm.

SIZE

WEIGHT 6.5 kg / 14 lbs

DIMENSIONS 460 mm (w) x 250 mm (d) x 190 mm (h) /
18 in (w) x 10 in (d) x 7.5 in (h)

ORDERING INFORMATION

200978 Sample Carder

Y275B

Sample Spinner



Motorized hand-spinning system to produce trial yarns from top, sliver or fiber mat.

SIZE

WEIGHT 2 kg / 4.4 lbs

DIMENSIONS 260 mm (w) x 140 mm (d) x 215 mm (h) /
10 in (w) x 5 in (d) x 8 in (h)

ORDERING INFORMATION

200977 Sample Spinner



FABRIC TESTING



To determine recovery properties 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.

SIZE

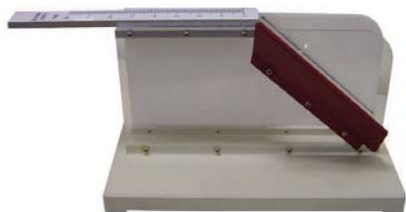
WEIGHT	3 kg / 6.6 lbs
DIMENSIONS	250 mm (w) x 200 mm (d) x 350 mm (h) / 10 in (w) x 8 in (d) x 12 in (h)

ORDERING INFORMATION

103894	Crease Recovery Tester
200924	Tissue Paper 200 mm x 300 mm (100 sheets)

STANDARDS:

AATCC 66	ISO 2313	M&S P22	BS EN 22313
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To determine the bending height, flexural rigidity and bending modulus of fabrics by simple procedures and calculations.

SIZE

WEIGHT	3.6 kg / 8 lbs
DIMENSIONS	350 mm (w) x 150 mm (d) x 200 mm (h) / 12 in (w) x 6 in (d) x 8 in (h)

ORDERING INFORMATION

104018	Fabric Stiffness Tester
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STANDARDS:

ASTM D1388	BS 3356	DIN 53362	ERT 50-2
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Designed for use in the leather industry and in the textile industry for coated fabrics and other soft materials. Deflection of the material while clamped above an aperture of a known diameter is measured when subjected to a specific load applied by a pin of a smaller diameter. The deflection is read on the analog or digital gauges. Available in analog (graduated in 0.1 mm divisions) or digital (displaying figures to 0.01 mm or 0.0005 inch) version.

SIZE

WEIGHT	5.5 kg / 12 lbs
DIMENSIONS	70 mm (w) x 490 mm (d) x 170 mm (h) / 3 in (w) x 19 in (d) x 7 in (h)

ORDERING INFORMATION

300769	Softness Tester - Analogue
201022	Softness Tester - Digital
300770	Software Package

STANDARDS:

ISO 17235	IUP 36
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Determines fabric stiffness using the ASTM circular bend test method. A plunger of 25.4 mm (1 in) diameter pushes the fabric through a 38 mm (1.5 in) diameter orifice for a distance of 57 mm (2.25 in) in 1.7 seconds, and the maximum force is recorded. Provided with pneumatic cylinder, controls and battery-operated digital force gauge (switchable) 50 kgf / 500 N / 100 lb or 25 kgf / 250 N / 50 lb with peak-hold facility.

SIZE

WEIGHT 22 kg / 48 lbs

DIMENSIONS 500 mm (w) x 500 mm (d) x 600 mm (h) /
20 in (w) x 20 in (d) x 24 in (h)

ORDERING INFORMATION

202544 Digital Pneumatic Stiffness Tester
(25 kgf / 250 N / 50 lb)

202543 Digital Pneumatic Stiffness Tester
(50 kgf / 500 N / 100 lb)

STANDARDS:

ASTM D4032

**Crimp Tester****M004**

To calculate the crimp in yarn affected by knitting or weaving, to determine actual yarn usage. Threads are removed from a strip of fabrics of known length, straightened by a tension, then measured in the straightened state. Two tension ranges available (0-35 g and 0-175 g) and test length is 120 cm (48 inches).

SIZE

WEIGHT 4 kg / 9 lbs

DIMENSIONS 1500 mm (w) x 80 mm (d) x 40 mm (h) /
60 in (w) x 3.5 in (d) x 1.5 in (h)

ORDERING INFORMATION

105676 Crimp Tester

STANDARDS:

ISO 7211

BS 2863

BS 2865

BS 2866

Woolmark TM 169





To determine the ballistic tearing strength of textiles, paper or board. Three interchangeable pendulums ranging from 8,000 to 64,000 Millinewtons (mN) can be selected seperately for multiple test method compliance.

SIZE

WEIGHT	15 kg / 33 lbs
DIMENSIONS	458 mm (w) x 190 mm (d) x 324 mm (h) / 18 in (w) x 7.5 in (d) x 12.8 in (h)

ORDERING INFORMATION

103988	Elmendorf Tearing Tester
103989	Pendulum A (8000 mN)
103990	Pendulum B (16000 mN)
103993	Additional Weight C (16000 mN)
103994	Additional Weight D (48000 mN)
103995	Calibration Weight A
103996	Calibration Weight B
103997	Calibration Weight C
103998	Calibration Weight D
103986	Cutting Blade
103987	Cutting Blade (M&S Supplier Only)

STANDARDS:

ASTM D1424	BS 4253 / 4468	DIN 53862
ISO 13937- 1/1974/4674- 2/9290	M&S P29	
Next 17	WSP 100.1.R3	GB /T 3917.1
INDA IST 100.1	TAPPI T414	JIS L 1096 Method D



The PowerTear is the most versatile Elmendorf tearing tester of its kind available. It is designed to provide accurate results while being easy to use. Paper, cardboard, plastic, textiles, and nonwovens are all materials that can be tested using the PowerTear. Electronic braking and two button release make the instrument safe while a rotary encoder, pendulum balance control, and a bearing on the release pin make it accurate and reliable. Lever clamps make sample loading faster and easier for the operator. The versatility of the PowerTear allows for a wide range of capability for testing both light and heavy weight materials.

- Test weights and check weights A-D included (8N, 16N, 32N, 64N)
- Test weight and check weight E available separately (128N)
- Lever clamps for quick and easy sample loading
- Rotary encoder provides greatest accuracy available
- Electronic braking system halts the pendulum after the test for user safety
- Seven units of measure from which to choose
- Ability to adjust zero balance of pendulum
- Solid base plate provides stable test platform and eliminates instrument shift
- Two hand release mechanism keeps operators safe
- Results display on the instrument's LCD display
- Software included for downloading and storing results



STANDARDS: TEXTILES

ASTM D 1424	DIN 53862	ISO 13937-1	ISO 4674-2	M&S P29	NEXT 17	AFNOR G07-149
JIS L 1096 Method D						

STANDARDS: NONWOVENS

ASTM D 5734	WSP 100.1.R3
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STANDARDS: PAPER

APPIA P 400	ASTM D 689	BS 4468	CSA D9	DIN 53128	EN 21974	GB/T 455
ISO 1974	JIS P 8116	PAPTAC D9	SCAN P11	SNV 198482	TAPPI T414	UNI 6444

STANDARDS: PLASTICS

ASTM D1922	GB/T11999	ISO 6383-2	JIS K7128-2	NFTS4 141
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SIZE

WEIGHT	85kg / 188lbs
DIMENSIONS	420mm(w) x 620mm(d) x 430mm (h) 16in (w) x 24in (d) x 17in (h)

ORDERING INFORMATION

M008HE	PowerTear Elmendorf Tester 220V/110V
107014	E Pendulum Kit - Extend Capacity to 128N
103999	Spare Cutting Blade



Powerful and intelligent, the HydroPro is designed to improve lab efficiency while meeting global standards. The compact design can reach 3 bars of pressure using standard lab compressed air. The quickest function allows users to perform other tasks during the first 80% of the standard test. An alarm indicates fail pressure is close and a technician should begin observing. The test area is well lit behind a clear shield for observing when droplets appear.

- Controller with easy test set up
- Maximum pressure 3 bar
- Quick Test feature saves technician time
- Automatic water refill between tests
- LED lighting of sample area
- Clear safety shield
- 100 cm² test head included

SIZE

WEIGHT	70 kg / 154 lbs
DIMENSIONS	480 mm (w) x 540 mm (d) x 600 mm (h) / 19 in (w) x 22 in (d) x 24 in (h)

ORDERING INFORMATION

INSTRUMENT

M018	HydroPro (Includes 100cm ² Test Head and Analysis Software)
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ACCESSORIES

100072	10 cm ² Test Head
100075	19.63 cm ² Test Head
100073	26 cm ² Test Head
100074	28 cm ² Test Head
100076	100 cm ² Test Head
100160	Pore Size Attachment (BS 3321)

STANDARDS:

AATCC 127	BS 3321	ERT 120-1	ISO 811
AFNOR G07-057	BS EN 20811	ERT 160-0	ISO 9073-16
JIS1092 A	ASTM D751	EN 343	GB/T 4744
IST 080.4 (01)	IST 080.6 (01)	WSP 080.6.R4 (12)	
ISO 16603 Part A	ISO 16603 Part B	ISO 16603 Part C	ASTM F1670
ISO 13994 Part A	ISO 13994 Part B	ISO 13994 Part C1	
ISO 13994 Part C2			

Swing arm cutting presses are ideally suited to cutting test samples from textiles, rubber and soft plastic prior to testing. Depending on resilience, several thicknesses can be cut at once with a cutting force of 20 tons. Control push buttons with time delay ensure complete operator safety. Maximum cutting area 18" (450 mm) x 36" (900 mm). Cutting dies of any shape and size can be supplied.

SIZE

WEIGHT 880 kg / 1936 lbs

DIMENSIONS 960 mm (w) x 900 mm (d) x 1425 mm (h) /
38 in (w) x 36 in (d) x 56 in (h)

ORDERING INFORMATION

201047 Hydraulic Sample Press SE20

200970 Spare Cutting Board



CutPro Sample Shredder

M020D

The CutPro is used for cutting samples into small pieces for chemical tests. This machine removes the time consuming labor of using scissors to cut up samples. It quickly and safely cuts samples into appropriate size pieces for chemical tests for formaldehyde, heavy metals, AZO dyes, among others. The machine has a static elimination system and a built in compressor with hose for cleaning between sample cuts to eliminate cross-sample contamination.

- Chemical test sample cutting done quickly & safely
- Samples cut in just two passes takes less than 20 seconds
- Blade has self-sharpening feature
- Static elimination system to keep debris from sticking
- Built in compressor and hose for cleaning between samples
- Powerful motor can handle all textiles as well as leather up to 4 mm thick
- Multiple sensors keep operators safe

SIZE

WEIGHT 55 kg / 121 lbs

DIMENSIONS 545 mm (w) x 375 mm (d) x 300 mm (h) /
21.5 in (w) x 14.7 in (d) x 11.8 in (h)

ORDERING INFORMATION

M020D CutPro Sample Shredder





The AirPerm makes air permeability testing much more affordable while maintaining confidence that test results meet international and retailer standards. Designed to meet air permeability standards for paper, textiles, and non-wovens, the AirPerm provides quick, straightforward results in the unit of measure of your choice.

- Long, sturdy clamping arm over large test table
- Single press clamping/test initiation
- Single press sample release
- Automatic measuring range selection
- Quick change of test heads
- Automatic test head detection
- 8 selectable units of measure
- Samples up to 8 mm thick

SIZE

WEIGHT	80 kg / 177 lbs
DIMENSIONS	900 mm (w) x 590 mm (d) x 1000 mm (h) / 36 in (w) x 24 in (d) x 40 in (h)

ORDERING INFORMATION

INSTRUMENT

M021A	Air Permeability Tester (Includes 20 cm² Test Head and Verification Plate for 20 cm² Test Head)
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ACCESSORIES

100200	5 cm² Test Head	100205	100 cm² Test Head
100201	20 cm² Test Head	100208	Optional Software
100202	25 cm² Test Head		
100203	38 cm² Test Head		
100204	50 cm² Test Head		



Test Head Selection						
STANDARD	100200* 5 cm²	100201 20 cm²	100202 25 cm²	100203 38 cm²	100204 50 cm²	100205 100 cm²
adidas TM 6.08		●				
ASTM D737	●			●		●
BS 5636	●					
DIN 53887		●			●	●
EDANA 140.1		●			●	
EDANA 140.2		●			●	
GB/T 5453	●	●			●	●
ISO 9237	●	●			●	●
JIS L 1096-A				●		
TAPPI T251				●		
WSP 70.1	●	●	●	●	●	●
Dense Samples						●

*20 cm² Test Head comes standard. Others are optional. Black dots denote preferred test head, red denotes acceptable alternatives.

Shirlastain Stains were originally developed to identify different fibers with an easy test. In fact, these stains have multiple applications in numerous industries. These include using Shirlastain A to detect coverage of silicone in Silicone Release Paper. Application of Shirlastain A to a sample of silicone release paper shows pinholes and voids within two minutes.

Shirlastain Fiber Identification Stains

Shirlastain A (500 ML - Liquid)

Shirlastain A (1 gallon - Liquid)

Shirlastain D (30 GM - Powder)

Contain separate bands of 12 principle fibers to assist in fiber identification. Shirlastain Educational Testing Kit. Ingredients and test materials for more than 40 tests with each Shirlastain type. Full instructions included.



ORDERING INFORMATION

200896	Shirlastain Multifiber Fabric (1 m)
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200941	Shirlastain A - 500 ml
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402236	Shirlastain A - 1 gallon
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200919	Shirlastain D - 30 g
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Fryma Fabric Extensiometer

M031

To simply and economically determine the stretch and recovery of textile fabrics, both knitted and woven. The apparatus consists of a loading frame with clamps and a screw tensioning device, two 3 kg loading weights and sample cutting templates.

SIZE

WEIGHT	12 kg / 26.5 lbs
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DIMENSIONS	230 mm (w) x 500 mm (d) x 100 mm (h) / 9 in (w) x 20 in (d) x 4 in (h)
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ORDERING INFORMATION

104016	Fryma Fabric Extensiometer
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Feather Touch Digital Thickness Tester

M034E

An inexpensive and accurate soft material thickness tester with counter balance designed to exert minimal load on sample through 1.129" (28.7 mm) diameter presser foot. Digital display of thickness up to 1/2" (13 mm) or 1" (25 mm). Supplied with a loading weight to provide a load of 0.6 psi (4.14 kPa). Other configurations available on application.

SIZE

WEIGHT	3 kg / 6 lbs
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DIMENSIONS	150 mm (w) x 125 mm (d) x 225 mm (h) / 6 in (w) x 5 in (d) x 9 in (h)
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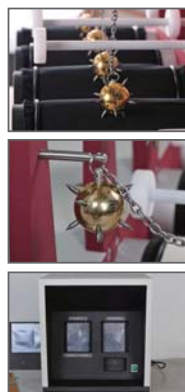
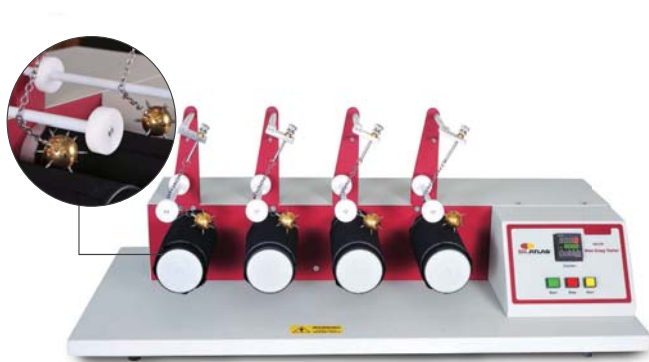
ORDERING INFORMATION

M034E	Feather Touch Digital Thickness Tester
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STANDARDS:

ASTM D1777





The ICI Mace Snag Tester is designed to test the snagging resistance of heavy duty fabrics used in apparel, upholstery, and automotive interiors. The instrument comes with a viewing assessment cabinet and standard photographs.

- Four test stations
- Countdown controller
- Viewing assessment cabinet included
- Standard photographs included
- Pre-mounted felt sleeves included

SIZE

WEIGHT 90 kg / 198 lbs

DIMENSIONS 1007 mm (w) x 508 mm (d) x 405 mm (h) /
40 in (w) x 20 in (d) x 16 in (h)

Viewing Cabinet 406 mm (w) x 600 mm (d) x 500 mm (h) /
(included) 16 in (w) x 24 in (d) x 20 in (h)

ORDERING INFORMATION

INSTRUMENT

M078 ICI Mace Snag Tester
(Viewing Cabinet included)

TEST MATERIALS

104047 Tungsten Carbide Points (pack of 12)

104048 Felt Sleeves (pack of 4)

104049 Snagging Assessment Photographs

STANDARDS:

ASTM D3939 GB/T 11047 JIS L1058



Determines the snagging and picking characteristics of knitted fabrics by tumbling fabric pillows containing a weighted bean bag within two separate test cylinders provided with eight pinned bars, rotating at 20 rpm for 100 revolutions. Provided with predetermined electronic counter.

**Bean bags not included, please order separately.

SIZE

WEIGHT 52kg / 114 lbs

DIMENSIONS 470 mm (w) x 330 mm (d) x 520 mm (h) /
18.5 in (w) x 12.9 in (d) x 20.4 in (h)

ORDERING INFORMATION

M079 Bean Bag Snag Tester

108211 Bean Bags (2 pack)

STANDARDS:

ASTM D5362

For carpet testing, with weight set 20-2000 GM/cm²,
presser foot 412 mm², range 0-25 mm x 0.01 mm.

SIZE

WEIGHT	20 kg / 44 lbs
DIMENSIONS	220 mm (w) x 210 mm (d) x 526 mm (h) / 9 in (w) x 8 in (d) x 21 in (h)

ORDERING INFORMATION

103925	Digital Thickness Gauge
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STANDARDS:

BS 4051	BS 4098	BS 4223	ISO 1765
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To measure and calculate the coefficient of drape by
tracing a shadow of the draped fabric on paper. Supplied
with three templates with paper rings with diameters
of 24 cm, 30 cm and/ or 36 cm (50 pcs each).

SIZE

WEIGHT	19 kg / 42 lbs
DIMENSIONS	500 mm (w) x 500 mm (d) x 500 mm (h) / 20 in (w) x 20 in (d) x 20 in (h)

ORDERING INFORMATION

106454	Fabric Drape Tester
106607	Paper Ring 24 cm Dia (Pack of 500)
106608	Paper Ring 30 cm Dia (Pack of 500)
106609	Paper Ring 36 cm Dia (Pack of 500)
106610	Spare Lamp

STANDARDS:

BS 5058	BS EN 9073	AFNOR G07-109	ERT 90-1
UNI 8279			





The QuickWash Plus gives fabric shrinkage information in a 12-15 minute test versus the 8-12 hours it takes a standard washer and dryer. This instrument is ideal for the factory floor and provides rapid, on the spot information on fabric in production so that the stenter frame, compactor, and sanforizer can be set to maximize fabric yield. This allows the user to bypass the standard wash and dry cycles that take so long thus significantly reducing labor in the lab.

How the QuickWash saves users money

- Eliminates unnecessary production costs of over-conditioning fabric
- Maximizes fabric yield
- Eliminates most standard washer and dryer cycles which reduces:
 - Labor
 - Water usage
 - Electricity usage
 - Detergent usage

A chambered basket is agitated at high speed during the wash, rinse, and extraction cycles. Samples are then subjected to a controlled flow of heated air which causes a tumbling action while an infrared sensor measures the samples' surface temperature.

- Touch screen controller
- 12-15 minute cycle time
- Quick results improve setup of finishing equipment
- Built to handle factory floor conditions
- Strong motor and drive shaft provide high speed agitation
- Safety interlock stops basket if cover is opened
- AATCC and ISO methods preprogrammed on controller

SIZE

WEIGHT	163 kg / 359 lbs
DIMENSIONS	690 mm (w) x 590 mm (d) x 640 mm (h) / 27 in (w) x 23 in (d) x 25 in (h)

ORDERING INFORMATION

INSTRUMENT

M222QW	QuickWash Plus
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ACCESSORIES

202585	Stainless Steel Table
200779	Automatic Dispensing System (up to 4 liquid detergents)
201162	Four Chamber Sample Basket - for heavy samples
203058	Electric Water Heater, 220V
403493	Electric Water Heater, 110V
200908	QuickWash Rule - M&S Standard
201052	QuickWash Template - M&S Standard

STANDARDS:

AATCC 187	ISO 23231	M&S P1D
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For conditioning textiles to consistent temperature and humidity for accurate color measurements. Allows user to set specifications based on temperature and humidity and achieve these conditions in minutes. Standard temperature and humidity settings 20 deg. C, 70 deg. F, 65% RH, variable settings as per chart require option M222RCV. Fabric sample size range up to 9" x 12" to 20 specimens per cycle depending on sample weight and size.

Capable of bringing fabric to normal conditioned state in minutes depending on fabric type and weight.

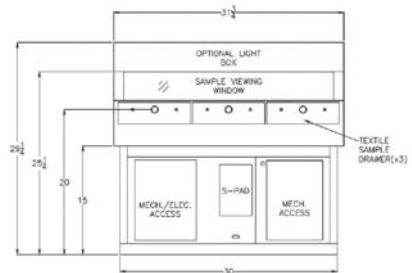
No Steam generator (reduces water and maintenance problems). Digital controller and output software allows real time graphs of RH and temperature on PC screen. Unique operating system allows temperature and humidity control within 0.5%.

Overhead lightbox option, D65 or other light sources available.

Full-width single drawer option available on request. Larger capacities and custom-built units available; custom to your requirements.

ORDERING INFORMATION

M222RC	Rapid Sample Conditioner
300818	Overhead Lightbox
200823	Variable Temperature & Humidity Option



SIZE

WEIGHT	137 kg / 300 lbs
DIMENSIONS	800 mm (w) x 850 mm (d) x 970 mm (h) / 32 in (w) x 33.5 in (d) x 38 in (h)

Standardized Dry Cleaning Machine

M223/3

Model 912S. 12 kg (28 lb). Standardized Dry Cleaning Machine as specified in international standards and by major fabric specifiers for durability and shrinkage testing. The machine is equipped with computer control with manual override and includes patented heat recovery, eco drying systems and self cleaning solvent tanks. Electrically heated, steam heating on request.

Built-in air compressor, requires cold water, drainage and 3 phase electrical supply only.

SIZE

WEIGHT	1120 kg / 2470 lbs
DIMENSIONS	1460 mm (w) x 2100 mm (d) x 2000 mm (h) / 58 in (w) x 83 in (d) x 79 in (h)

ORDERING INFO

M223/3	Standardized Dry Cleaning Machine
M223/3MS	Standardized Dry Cleaning Machine - M&S Specification



STANDARDS

AATCC 158	ISO 3175	M&S P66	M&S P67
NEXT 9A			

**SIZE**

WEIGHT 160 kg / 352 lbs

DIMENSIONS 720 mm (w) x 690 mm (d) x 1315 mm (h) /
28.5 in (w) x 27.5 in (d) x 52 in (h)

STANDARDS:

ISO 5077/6330 M&S P1 / P1A / P1B / P1C / P3A / P3B / P4 / P4A / P4B / P4C / P5A / P12 / P12A / P12B / P91 / P99A / P114 / P134 / P134A

IEC 456

NEXT TM 7 / 7A / 7B / 11 / 12 / 24 / 30 / 30A / 34 / 36A

Standard reference washing machine. Microprocessor controlled, up to 999 washing and drying programs can be designed as required, input via the keyboard and stored in memory. The unit is ready to work with BS, ISO, and IWS test programs.

Automatic Soap Dispenser for multiple washing-extracting cycles without intervention. Makeweights, stability templates and rules, reference detergents, bleaching agents and conditioners also available. See following specifications.

Individual memory cards for ISO, M&S, or other retailer test program for quick and easy test setting (Marks and Spencer cards are available for M&S accredited suppliers only).

ORDERING INFORMATION

M223CLS	Wascator FOM 71 LAB
201064	M&S Test Program (M&S Suppliers Only)
202805	ISO 6330:2000 Test Program
203603	ISO 6330:2012 Test Program
203753	H&M Test Program
M223B/H	Accessories and Consumables
204175	Electrolux Dryer T5130LAB



A standard domestic tumble dryer recommended by many fabric specifiers; 120 minute timer, 7 kg load, reversing action, 2 heat settings and 10-minute cooling time.

Precision Tumble Dryer with Digital Controller. A standard domestic tumble dryer which has been modified with the addition of an accurate electronic controller to control exhaust temperature to +/- 2° C and cycle time within one second. Capacity 7 kg, reversing action, 10 minutes cooling time.

SIZE

WEIGHT 29 kg / 64 lbs

DIMENSIONS 600 mm (w) x 600 mm (d) x 850 mm (h) /
24 in (w) x 24 in (d) x 30 in (h)

ORDERING INFORMATION

M223/1	Standard Tumble Dryer Domestic
M223/2	Precision Tumble Dryer Domestic with Digital Controller

STANDARDS:

ISO 6330 M&S P1A / P1B / P1C / P3A / P3B / P4 / P4A / P4B / P4C / P5 / P5A / P7 / P12 / P12A / P12B / P91 / P99A / P114 / P134 / P134A

NEXT TM 7 / 7A / 7B / 9 / 10 / 11 / 12 / 24 / 30 / 30A / 34 / 36A

ORDERING INFORMATION

403276	Type III Polyester Ballast, 30 x 30 cm
403468	Type III Polyester Ballast, 20 x 20 cm
201051	Stability Template and Shrinkage Rule. The stability template is used to cut fabric samples for determining dimensional changes after laundering or dry cleaning. Percentage shrinkage \pm can be read directly from the graduated scale over a 350 mm benchmark.
300834	Shrinkage Rule only for Wascator
201910	Shrinkage Rule only for Wascator. For Marks & Spencer suppliers only.
300835	Stability Template only for Wascator.
203309	Stability Template for Marks & Spencer suppliers only.
202139	AATCC Shrinkage Scale. A plastic template used to mark fabric with 10" or 18" benchmarks for determining dimensional changes after laundering or dry cleaning. Reads directly in percent change.
201020	Illuminated Viewing Board for Marks & Spencer suppliers only.
403237	ECE Phosphate Reference Detergent "B" to ISO 105 C06 (1997) - 2 KG
403238	ECE Phosphate Reference Detergent "B" to ISO 105 C06 (1997) - 15 KG
403235	ECE Non-Phosphate Reference Detergent "A" to ISO 105 C08 (2001) - 2 KG
403236	ECE Non-Phosphate Reference Detergent "A" to ISO 105 C08 (2001) - 15 KG
403239	IEC "A" Non-Phosphate Reference Detergent to IEC 60456 - 2 KG
403240	IEC "A" Non-Phosphate Reference Detergent to IEC 60456 - 15 KG
403408	TAED (Tetraacetylenediamine) - 250 gm
401149	Sodium Perborate Tetrahydrate 1 KG
403521	AATCC Reference Detergent with optical brightener. Reference detergent with optical brightener (10kg)
403522	AATCC Reference Detergent without optical brightener (10kg)
201129	Reference Fabric Conditioner (5 Liters). Larger quantities available





The Durawash 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 Durawash 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.

Control console features:

- Multi range timer with end of cycle audible alarm
- Automatic agitator shut off
- Temperature indication and control with an accuracy $\pm 0.25\%$ of controller range
- Display resolution 0.1 degree C.
- System control and calibration accuracy better than ± 1 degree C
- Solid state relay for silent switching, reliability and zero electrical noise
- Push button tank drainage with inline filter to a magnetically coupled drain pump for reliability

Other design features include:

- Process tank construction in high grade 316 stainless steel
- Lid interlock and latch for added safety
- Stainless steel bearing housing
- Industrial quality motor specifications
- Level protection to disable heating
- Easy access for servicing
- Free standing machine on lockable wheels

Electrical specifications and requirements: 230V, 50-60Hz, 1 phase, 2750W

ORDERING INFORMATION

M223DW

Durawash

STANDARDS

BS 7907

DIN EN TR 16792

M&S P5

M&S C15

Designed to meet AATCC Monograph M6, the Vortex M6 is a top loading washing machine engineered specifically for laboratory use to meet the LP1-2018 and M6 Monograph requirements by AATCC. The commercial grade washer is outfitted for precise control of bath temperature, water fill, agitation/spin speeds and times, and rinse volume. Custom wash programs can be saved in the controller for later use including wash cycles with durations running up to 80 hours and the ability to continuously run and repeat cycles. The robust design includes a porcelain coated steel washtub and a stainless steel wash basket. The Vortex M6 can be calibrated to ISO 9000 or 17025.

SIZE

WEIGHT 88.45 kg / 195 lbs

DIMENSIONS 650 mm (w) x 710 mm (d) x 1090 mm (h) /
25.5 in (w) x 28 in (d) x 43 in (h)

ORDERING INFO

403533 Vortex M6 220V/ 50/60

STANDARDS

AATCC M6, LP1, 88 B/C, 124, 130, 135, 142, 143, 150, 172, 179, 188, 191, 207



Designed to be a companion instrument to the Vortex M6. This commercial quality dryer is engineered to meet the parameters for AATCC home laundering test methods for 88B, 88C, 124, 130, 135, 142, 143, 150, 172, 179, and 188 as defined by the M6 Monograph and LP1-2018.

SIZE

WEIGHT 63 kg / 140 lbs

DIMENSIONS 682 mm (w) x 711 mm (d) x 1090 mm (h) /
27 in (w) x 28 in (d) x 43 in (h)

ORDERING INFO

403092 Vortex M6D, 220V, 50Hz

403093 Vortex M6D, 220V, 60Hz

403230 Vortex M6D, 240V, 60Hz

STANDARDS

AATCC 88B+C, 124, 130, 135, 142, 143, 150, 172, 179, 188, LP1-2018





Compatible with
RemoteAccess
Remote Instrument
Monitoring Application



The RotaPill Pilling and Snagging Tester offers numerous options for testing fabrics. From the standard ICI Pilling and Snagging Box to M&S drums to the Octagonal Snagging Drum, the RotaPill will make your testing reliable and easy. 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.

- Two sizes available – 2 or 4 stations
- Operates ICI Pilling/Snagging Box, Octagonal Snagging Drum, & M&S Pilling & Snagging Drum
- Drives can accommodate different boxes and drums simultaneously
- Snagging points can be mounted in the pilling boxes – no need for different boxes
- Touch screen controller has standard tests preloaded
- Count down timer lets operator know when test will finish
- Cork liners held by magnets for easy changing – no need to remove boxes
- One piece, molded ICI boxes

STANDARDS:

adidas TM 4.08	BS 5811	BS 8479	EN ISO 12945-1	GB/T 4802.3	IWSTM 152	M&S P18A
M&S P18B	M&S P18C	M&S P21A	Next 19	CAN/CGSB-4.2 No 51.1		

M227A SIZE *Included 2 Pilling Boxes*

WEIGHT	80 kg / 176 lbs
DIMENSIONS	830 mm (w) x 460 mm (d) x 720 mm (h) / 33 in (2) x 18.5 in (d) x 28.5 (h)

M227B SIZE *Included 4 Pilling Boxes*

WEIGHT	100 kg / 220 lbs
DIMENSIONS	830 mm (w) x 460 mm (d) x 935 mm (h) / 33 in (w) x 18.5 in (d) x 37 in (h)

ORDERING INFORMATION

INSTRUMENT

M227A	RotaPill Drive System - 2 station
M227B	RotaPill Drive System - 4 station

ACCESSORIES

107700	ICI Pilling & Snagging Box with cork lined plates and four tubes
101031	EasyMount Sample Mounting Jig
101035	Standard Sample Mounting Jig
101034	Octagonal Snagging Drum for BS 8479 includes four sample tubes with locking rings (requires 200947 felt for covering sample tubes)
106873	M&S Pilling & Snagging Drum with liner, step, and 8 sample tubes with locking rings
106883	M&S Sample Template for M&S Pilling Test
106891	M&S Sample Template for M&S Snagging Test
106897	Glass Bean Bags (set of 4) for M&S Drum
106894	Pinned Snagging Bars (set of 3) to convert one M&S Drum for Snagging

ASSESSMENT

M227G	PillGrade Automatic Pilling Grading System
M227C	Pilliscope Assessment Viewer
M227PAV	Universal Pilling Assessment Viewer
200999	M&S Holoscope Assessment Viewer
107608	Pilling Photographs (set of 15)

TEST MATERIALS

101026	Sample Tubes (pack of 4) – for ICI Pilling Box
101027	Unmounted Cork Linings (pack of 6) – for ICI Pilling Box
107701	Snagging Points (set of 6) able to be mounted in 107700 Pilling Box
106841	M&S Sample Tubes & Locking Rings (set of 8)
106885	M&S Liner & Step for M&S Pilling & Snagging Drum
200947	Felt for BS 8479 Octagonal Snagging Drum Test (1 m x 1.5 m)



The longstanding standard instrument for ASTM D3512, the SDL Atlas Random Tumble Pilling Tester has provided consistency in pilling tests for decades. Along with the critically important cork liner, our instrument and test materials have provided confidence that results achieved today match those from when the ASTM standard was first created.

- Available with two or four chambers
- Chamber air jets to assist tumbling
- Comes with standard impellers for ASTM D3512
- Other impellers available
- Cork liners supplied with Certificate of Conformity

SIZE

WEIGHT 61 kg / 134 lbs

DIMENSIONS 470 mm (w) x 402 mm (d) x 680 mm (h) /
18.5 in (w) x 16 in (d) x 27 in (h)

ORDERING INFORMATION

INSTRUMENT

M227R	Random Tumble Pilling Tester (2 chamber)
M227S	Random Tumble Pilling Tester (4 chamber)

ACCESSORIES

200895	Photographic Standards for ASTM (set of 5)
100938	Impeller, French (2 each)
107576	Impeller, German (2 each)
100935	Flapper Kit (modify two standard impellers), pack of 4

TEST MATERIALS

200771	Cork Liners (pack of 50)
202324	Cotton Sliver, Dyed 76 Grain (10 yards/9 meters)
400112	White Adhesive

STANDARDS:

ASTM D3512	ISO 12945-3	GB/T 4802.4
JIS L 1076-D	NF G07-132	DIN 53867



M227G Pillgrade



Pilling is defined by ASTM as "bunches of balls of tangled fibers which are held to the surface of a fabric by one or more fibers"



M227G Data Screen



How it works

SIZE

WEIGHT 12 kg / 26 lbs

DIMENSIONS 600 mm (w) x 600 mm (d) 600 mm (h) /
24 in (w) x 24 in (d) x 24 in (h)

ORDERING INFO

M227G PillGrade Automated Pilling Grading System

STANDARDS

ASTM D3512 ASTM D4970 ISO 12945-1

The PillGrade system is a 3D fabric scanning system that uses patent pending technology to objectively and repeatedly grade fabric swatches for surface properties. The system outputs pilling and fuzziness data, in addition to the 1.0-5.0 pilling grade according to both ASTM and ISO standards. PillGrade's unique approach to vision inspection enables the system to scan and grade fabrics of any weight, color and pattern.

Advantages:

- Ensures objective, repeatable grades
- Ensures agreement throughout textile supply chain
- Easy and fast (~5 seconds) to operate
- Correlates to ASTM & ISO grade scale
- Compiles production/supplier pill data
- Measures and grades fuzziness
- PillGrade also grades snags

Fabric Types & Sizes:

Any woven, nonwoven, knit, fleece, automotive, any blend or material.

Fabric patterns and colors are "invisible" to PillGrade. Specimen size range is 4" x 4" (10 cm x 10 cm) to 6" x 6" (150 mm x 150 mm)

Output:

- Printout (with area for attaching specimen)
- Excel data file (.csv format)
- PDF for e-mailing (with Acrobat installation)

Data:

- Quantity of pills
- Histogram of pill sizes
- Average pill size
- Pill density (pill/in² and pills/cm²)
- Fuzz loft
- Multiple specimen averaging test
- 1.0 - 5.0 pilling grade

PillGrade includes:

- Enclosure with rubber feet
- Motorized feed system
- Industrial CCD camera with optics
- LED back light module
- LED top light module
- Control electronics
- Control panel
- Control panel
- PillGrade software

SYSTEM REQUIREMENTS

POWER REQUIREMENTS:

Power requirements are to be specified at the time of order and are either 115 VAC @ 60Hz or 230 VAC @ 50Hz.

MINIMUM PC REQUIREMENTS:

DESKTOP PC:

- 5 GB HDD
- 1.5 GHz CPU
- 256MB RAM
- 3x USB ports
- Windows 7 or higher, 64 bit

LAPTOP PC* (LAPTOP CONNECTIVITY KIT IS REQUIRED):

- 5 GB HDD
- 1.5 GHz CPU
- 256MB RAM
- 3x USB ports
- Windows 7 or higher, 64 bit
- Monitor needs 1024 x 768 resolution or larger

*Use of a Dell laptop requires disabling the Dell cameras and drivers.

Viewer for the assessment of pilling on fabrics against 5 standard photographs with Halogen high incident angled illumination. 5 sided drum fitted with comparison photographs of knitted or woven fabrics not included but required.

Holoscope viewer for assessment of pilling on fabric with Holoscopic Viewing System. 5 sided Holograms with comparisons of knitted or woven fabrics not included but required.

SIZE

WEIGHT	6 kg / 13 lbs
DIMENSIONS	200 mm (w) x 380 mm (d) x 430 mm (h) / 8 in (w) x 15 in (d) x 17 in (h)

ORDERING INFO

M227C	Pilliscope Assessment Viewer
200955	Knitted Fabric Drum
200954	Woven Fabric Drum
201000	Snagging Drum - M&S only
200999	Holoscope Assessment Viewer for M&S
200953	Knitted Fabric Holoscope for M&S
200952	Woven Fabric Holoscope for M&S



STANDARDS

BS 5811	M&S P17	M&S P18A (Holoscope Only)
M&S P21A		

Universal Pilling Assessment Viewer

M227PAV

Suitable for all standards where the assessment of pilling on fabrics is necessary, whether against control fabrics or photographs. It uses D65 Artificial Daylight (with CWF optionally available).

Suitable for:

- Martindale Pilling
- ICI Pilling
- ICI Snagging
- Random Tumble Pilling
- Brush/Sponge Pilling

SIZE

WEIGHT	10 kg / 22 lbs
Overall	340 mm (w) x 240 mm (d) x 245 mm (h) / 14 in (w) x 9.4 in (d) x 9.6 in (h)
Viewing Area	340 mm (w) x 240 mm (d) x 165 mm (h) / 14 in (w) x 9.4 in (d) x 9.4 in (h)

ORDERING INFO

M227PAV	Universal Pilling Assessment Viewer
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STANDARDS

ASTM D3511	ASTM D3512	ASTM D3514	ASTM D4970	ASTM D5362	BS 5811	ISO 12945-1
NEXT 19	NEXT 26	SN 198525	ISO 12945-2	ISO 12945-3	Arcadia AG 26	
Woolmark TM 152		Woolmark TM 196				

Compatible with
RemoteAccess
Remote Instrument
Monitoring Application



Colorfastness to washing is easy and affordable with the Rotawash. Available in an 8 or 12 container model, this instrument can handle either the 550 ml or 1200 ml containers. Containers just press into place. The instrument is all stainless steel to provide years of reliable service in a wet environment. The touchscreen controller is preloaded with the most popular tests and provides information on when the test will be completed.

- Lower capacity alternative to Launder-Ometer
- Two sizes available – 8 or 12 container capacity
- All stainless steel
- Handles 550 ml and 1200 ml containers
- Touch screen controller with standard tests preloaded
- Able to program and save custom tests
- Timer tells operator when test will be finished
- Selectable languages English, Chinese, Spanish and Turkish
- Door safety switch stops rotor if opened
- Rotor jog button eases loading and unloading
- Flash light and beep to signify the completion of a test

STANDARDS: M228 / M228AA

AATCC 61	AATCC 86	AATCC 132	AATCC 190	GB/T 3921	GB/T 5711	GB/T 12490
ISO 105-C09	ISO 105-C10	ISO 105-D01	ISO 105-E03	ISO 105-E12	Woolmark TM7	Woolmark TM115
FTM S 191 Method 5622	M&S C4A	M&S C5	M&S C10A	M&S C11	M&S C26	M&S C37
						M&S C49A



SIZE

WEIGHT	110 kg / 243 lbs
M228B	630 mm (w) x 650 mm (d) x 1100 mm (h) / 24.8 in (w) x 25.6 in (d) x 43.3 in (h)
M228C	760 mm (w) x 650 mm (d) x 1100 mm (h) / 30 in (w) x 25.6 in (d) x 43.3 in (h)

ORDERING INFORMATION

INSTRUMENT

M228B	Rotawash - 8 Container Capacity
M228C	Rotawash - 12 Container Capacity

ACCESSORIES

103829	550 ml Container
103855	1200 ml Container

TEST MATERIALS

103856	Neoprene Container Seals for 550 ml Container (pack of 8)
103857	Neoprene Container Seals for 1200 ml Container (pack of 8)

ADDITIONAL ORDERING INFO FOR M228 / M228AA

ACCESSORIES

103852	Stainless Steel Balls (pack of 100)
107381	Stainless Steel Discs (pack of 25)

TEST MATERIALS*

103832	PTFE Container Seal for 550 ml Container (pack of 20)
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ISO

201205	Soap Powder – FBA Free (1 kg)
403278	Multifiber DW Adjacent Fabric (50 m roll)

AATCC

403522	AATCC Reference Detergent Without Optical Brightener (10 kg)
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M&S

201205	Soap Powder - FBA Free (1 kg)
403282	M&S Lyocell Multifiber (50 m roll)

*Please see the test material section (Page 144-156) for a more complete listing.

**SIZE**

WEIGHT 205 kg / 451 lbs

DIMENSIONS 1170 mm (w) x 650 mm (d) x 1182 mm (h) /
46 in (w) x 25.6 in (d) x 46.5 in (h)**ORDERING INFORMATION****INSTRUMENT**

M228AA Launder-Ometer

ACCESSORIES

103829	550 ml Container
103855	1200 ml Container
108510	Detachable Container Holder

TEST MATERIALS

103831	Neoprene Container Seals for 550 ml Container (pack of 20)
103833	Neoprene Container Seals for 1200 ml Container (pack of 20)
202650	Rubber Balls (pack of 200)
103834	PTFE Container Seal for 1200 ml Container (pack of 20)
403235	ECE Non-Phosphate Reference Detergent A (2 kg)
200882	Multifiber FA 2" x 2" Heat Sealed (1000 pieces)
403235	ECE Non-Phosphate Reference Detergent A (2 kg)

Compatible with
RemoteAccess
Remote Instrument
Monitoring Application

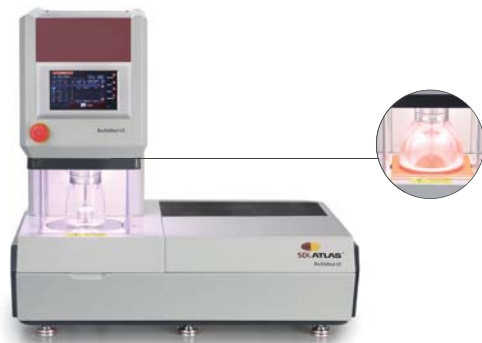


AATCC specified the Launder-Ometer as the only approved colorfastness to washing instrument for over 50 years. It has proven its reliability and durability over these many decades. The all stainless steel construction stands up to the hard environment of wet labs. The Launder-Ometer now comes with an automatic door and containers just press into place.

- AATCC specified instrument for more than fifty years
- Large 20 container capacity
- All stainless steel
- Handles 550 ml and 1200 ml containers
- Touch screen controller with standard tests preloaded
- Able to program and save custom tests
- Timer tells operator when test will be finished
- Selectable languages English, Chinese, Spanish, Turkish and German
- Automatic door
- Door safety switch stops rotor if opened
- Flash light and beep to signify the completion of a test

200 ml containers

ISO 105-C01	ISO 105-C02	ISO 105-C03	ISO 105-C04	ISO 105-C05	ISO 105-C06	ISO 105-C08
Woolmark TM177	Woolmark TM193	Woolmark TM199	Woolmark TM240	Woolmark TM241	FTM S 191 Method 5614	
M&S P3B	M&S P12A	M&S P137	Next 2	Next 2A	Next 3	Next 3A
					Next 5	JIS L 0844



The Autoburst is a hydraulic bursting tester with advanced testing controls. The instrument has automatic flow control allowing bursts to be achieved within the specified time of the standard. The advanced software provides diaphragm correction calculations for consistent results. These features, along with a maximum capacity of 6000 kPa (871 psi), make the Autoburst the most versatile burst tester on the market.

- Use for textile, nonwovens, paper, corrugated, plastic film and packaging
- Hydraulic pressure to 6000 kPa (871 psi)
- Touch screen controller (English, Spanish, Chinese, Turkish)
- Operate as a stand-alone unit or via a computer
- Most common standards are preprogrammed
- Quick change bells
- Diaphragm correction
- Automatic flow rate adjustment
- Software analysis for full results
- Distension measurement up to 70 mm
- Integrated safety shield

ORDERING INFORMATION

INSTRUMENT

M229 Autoburst Hydraulic Bursting Tester

ACCESSORIES

108419	30 mm Test Kit (7.06 cm ²)
108420	30.5 mm Test Kit (7.3 cm ²)
108421	31 mm ASTM Test Kit (7.55 cm ²)
108422	31.5 mm Test Kit (7.8 cm ²)
108439	35.7 mm Test Kit (10 cm ²)
108423	79.8 mm Test Kit (50 cm ²)
108424	112.9mm Test Kit (100cm ²)

TEST MATERIALS

101266 Rubber Diaphragms (pack of 10)



SIZE

WEIGHT 140 kg / 309 lbs

DIMENSIONS 810 mm (w) x 540 mm (d) x 790 mm (h) /
31.9 in (w) x 21.3 in (d) x 31.1 in (h)

STANDARD

	30.5 mm (7.3 cm ²)	31 mm (7.55 cm ²)	31.5 mm (7.8 cm ²)	35.7 mm (10 cm ²)	79.8 mm (50 cm ²)
ASTM D3786		•			
BS 3424-6-B	•		•	•	
EN 12332-2				•	
ERT 80-4-20			•		
FZ/T 01030	•				
ISO 13938-1	•			•	•
ISO 3303-B			•		
GB/T 7742.1					•
WSP 030.1.R3 (12)	•		•		
WSP 030.2.R3 (12)	•			•	•
Distension Height	39 mm	39 mm	39 mm	39 mm	70 mm

TEST HEAD SELECTION

*This list of standards is a partial listing of the most common textile standards.
The instrument can also be used for packaging, paper, plastic and foil.*



The PnuBurst provides unparalleled capabilities in a pneumatic bursting tester. Automatic flow control ensures bursts are achieved within the proper time according to standards. The instrument also provides diaphragm correction calculations to give accurate bursting pressures. A laser measurement system is used for distension height. The color touch screen controller provides full test controls including clamping pressure and Marks & Spencer controls. Included software captures all of the data from standard burst tests for analysis. An optional software allows users to program special sequences such as cyclic testing or stretch and hold testing. Stretch and hold can be set to hold a given distension or a given pressure. With a maximum capacity of 1500 kPa (200 psi), the PnuBurst is the most powerful pneumatic burst tester on the market.

- Maximum pneumatic pressure 1500 kPa (200 psi)
- Touch screen controller (English, Spanish, Chinese, Turkish)
- Operate as a stand-alone unit or via a computer
- Most common standards are preprogrammed
- Quick change bells
- Diaphragm correction
- Automatic flow rate adjustment
- Software analysis for full results
- Laser distension measurement up to 70mm
- Two button clamping for safety
- Integrated safety shield
- M&S approved

SIZE

WEIGHT	80 kg / 177 lbs
DIMENSIONS	480 mm (w) x 560 mm (d) x 805 mm (h) / 19 in (w) x 22 in (d) x 32 in (h)

ORDERING INFORMATION

INSTRUMENT

M229P	PnuBurst
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TEST MATERIALS

107676	Rubber Diaphragms (pack of 10)
107675	Rubber Diaphragms - Heavy Duty (pack of 10)

ACCESSORIES

108337	30 mm Test Kit (7.1 cm ²)
108339	30.5 mm Test Kit (7.3 cm ²)
108341	31 mm Test Kit (7.55 cm ²)
108343	35.7 mm Test Kit (10 cm ²)
108345	79.8 mm Test Kit (50 cm ²)
108347	80 mm Test Kit (50.3cm ²)
108349	113 mm Test Kit (100 cm ²)
104646	Air Booster/Regulator (if lab pressure is unable to achieve max pressure of 1500 kPa)
107712	Advanced Software (for running special test sequences)

STANDARD

TEST HEAD SELECTION

	30 mm (7.1 cm ²)	30.5 mm (7.3 cm ²)	31 mm (7.55 cm ²)	35.7 mm (10 cm ²)	79.8 mm (50 cm ²)	80 mm (50.3 cm ²)	113 mm (100 cm ²)
adidas 4.09					•		
ASTM D3786			•				
EDANA 80.4			•	•			
GB/T 7742.2		•			•		•
ISO 13938-2		•		•	•		•
M&S P27	•					•	
Next 22	•						
Woolmark TM29			•				
Distension Height	25 mm	31 mm	31 mm	31 mm	70 mm	45 mm	70 mm

Instrument can also be used for packaging, paper, plastic and foil.



The Bundemann provides a water repellency test for fabrics that come in contact with water during use such as rain jackets. Samples are mounted over a cup and are rubbed from underneath during the test. Three hundred precision stainless steel drop formers provide simulated rain falling from a height of 150 cm. Samples mount onto holders outside of the tester and then are easily set in place on top of the cups.

- Four test stations inclined at 15°
- Automatic sample wipers
- 300 Precision stainless steel drop formers
- Drip tray
- Easy mount sample holders
- Water flow meter
- Water filter

STANDARDS:

BS EN 29865

DIN EN 29865

ISO 9865

GB/T 14577

NF G07-058

SIZE

WEIGHT	177 kg / 390 lbs
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DIMENSIONS	760 mm (w) x 760 mm (d) x 2100 mm (h) / 30 in (w) x 30 in (d) x 83 in (h)
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ORDERING INFORMATION

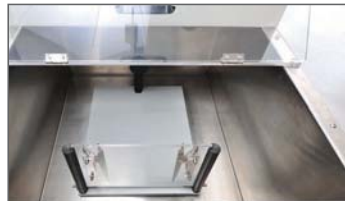
INSTRUMENT

M230	Bundemann Water Repellency Tester
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ACCESSORIES

103895	Bundemann Centrifuge, 220V
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108541	Bundemann Centrifuge, 110V
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The Rain Tester provides a water repellency test for fabrics with different intensities of water impact at specified water temperatures. Samples are mounted vertically while the simulated rain is sprayed horizontally. Samples are backed with a standard blotting paper that is weighed before and after the test. The Rain Tester provides precise control of the test through a color touch screen controller including water column height, water temperature, and test time.

- Color touch screen controller
- AATCC and ISO tests pre-programmed
- Water temperature control per standard requirements
- Test time controlled automatically
- Recycles test water
- Available with 1500 mm (60 in) or 2400 mm (94 in) column
- Water level maintained automatically in reservoir tank

SIZE

WEIGHT 150 kg / 330 lbs

DIMENSIONS 800 mm (w) x 740 mm (d) x 2450 mm / 3250 mm (h) / 32 in (w) x 29 in (d) x 97 in/128 in (h)

ORDERING INFORMATION

INSTRUMENT

M230D15 Rain Tester with 1500 mm column

M230D24 Rain Tester with 2400 mm column

ACCESSORIES

100798 2400 mm column to convert M230D15 to M230D24

TEST MATERIALS

202141 AATCC Blotting Paper 500 x 1000 mm (125 sheets)

300912 AATCC Blotting Paper 6"x 6"(100 sheets)

STANDARDS:

AATCC 35

BS EN ISO 22958

GB/T 23321



To determine colorfastness to water and perspiration of textiles. Provided with 2 stainless steel frames each with a capacity of 20 samples of 10 cm x 4 cm held between acrylic separator plates. Loading weights for BS, ISO and AATCC standards are included. An electric incubator is required but not included.

SIZE

WEIGHT	2.5 kg / 5 lbs (tester)
	3.6 kg / 8 lbs (tester with AATCC weight)
	4.1 kg / 9 lbs (tester with ISO weight)

DIMENSIONS	205 mm (w) x 76 mm (d) x 150 mm (h) /
	8 in (w) x 3 in (d) x 6 in (h) (tester without weight)

ORDERING INFORMATION

107854	Perspirometer Kit
105215	Acrylic Plates (Pack of 42) for Perspirometer
202538	Glass Plates & Petri Dishes M&S
300924	Plastic Dishes & Glass Plates
G209A	Oven/Incubator 33 Liters
G209B	Oven/Incubator 120 Liters
202683	Set of Chemicals for and ISO perspiration tests

STANDARDS:

AATCC 15/106/107/163	BS 1006	DIN 54005/54006/54007/54020	ISO 105-E01/E02/E04/X18	NEXT 4/4A
Woolmark TM 6/174/175	M&S C6/C7/C20B	Tesco TM137/01	GB/T 3922/5713/5714/18886	



To determine the colorfastness to water and perspiration in textiles. A stainless steel frame with a capacity of 20 samples of 10 cm x 4 cm held between acrylic separator plates, loading weights not included. Complies with AATCC and ISO test methods by adding on individual weights: 3.36 kg (8 lb) for AATCC, and additional weight 0.47 kg (1 lb) for ISO. An electric incubator is required, but not included.

SIZE

WEIGHT	2.5 kg / 5 lbs (tester)
	3.6 kg / 8 lbs (tester with AATCC weight)
	4.1 kg / 9 lbs (tester with ISO weight)

DIMENSIONS	205 mm (w) x 76 mm (d) x 150 mm (h) /
	8 in (w) x 3 in (d) x 6 in (h) (tester without weight)

ORDERING INFORMATION

105212	Perspiration Tester (Single Unit)
107839	Weight Set for AATCC and ISO Tests
105215	Acrylic Plates (Pack of 42) for Perspirometer
202683	Set of Chemicals for AATCC and ISO
G209A	Oven/Incubator 33 Liters
G209B	Oven/Incubator 120 Liters

STANDARDS:

AATCC 15/106/107/163	BS 1006	DIN 54005/54006/54007/54020	ISO 105-E01/E02/E04/X18	NEXT 4/4A
Woolmark TM 6/174/175	M&S C20B	Tesco TM137/01	GB/T 3922/5713/5714/18886	

To determine the surface wetting resistance of fabrics. Comprising of a metal framework allowing distilled water to be sprayed through a nozzle onto a test specimen at 45° and 150 mm below the nozzle. The appearance of the specimen is compared against an optional photographic scale.

SIZE

WEIGHT	5 kg / 11 lbs
DIMENSIONS	230 mm (w) x 250 mm (d) x 500 mm (h) / 9 in (w) x 10 in (d) x 20 in (h)

ORDERING INFORMATION

105346	Spray Rating Tester
202150	Photographic Rating Chart (AATCC)
102528	Spare Nozzle and Rubber Sleeve

STANDARDS:

ISO 4920	M&S P23	AATCC 22
Next 23	BS EN 24920	BS 3702
GB/T 4745	WSP 080.1.R4 (12)	IST 80.1 (01) 8.1





Many European and ISO flammability tests require apparel fabrics and vertically oriented fabrics to be tested with an instrument such as the AutoFlamm. This includes home textiles such as curtains or drapes and bedding or table cloths that will hang down from some furniture. This automated instrument has a motor driven gas burner and micro switches activated by trip threads. The AutoFlamm has clearly marked settings for the most common standards for easy set up. The handheld touchscreen controller has all of the most popular standards preprogrammed. An optional radiator assembly can also be added to meet BS EN 13772.

- Remote touch screen controller
- Motorized test activation
- Microswitches activated by trip threads
- Clearly marked settings for popular standards
- Optional radiator assembly

SIZE

WEIGHT 100 kg / 221 lbs

DIMENSIONS 560 mm (w) x 650 mm (d) x 1250 mm (h) /
22 in (w) x 26 in (d) x 49 in (h)

ORDERING INFORMATION

INSTRUMENT

M233B AutoFlamm

Includes:

- 6 pin frames & templates
- Filter paper holder
- 2 burners
- 1 pack of marker thread

STANDARD	Test Frame	Filter Paper	Marker Thread	Radiator Assembly	Burner	Gas Used
BS EN 13772: 2003	100467	100475	100477	100466	100474	Propane
BS 5438:1976 Test 1 & 2	100471				100473	Butane
BS 5438:1976 Test 3	100472		100477		100473	Butane
BS 5438:1989 Test 2	100472		100477		100474	Butane
EN ISO 15025:2002 & 2016	100470	100475			100474	Propane/Butane
EN ISO 6940:1995	100469/100467				100474	Propane/Butane
EN ISO 6940:2004	100469				100474	Propane/Butane
EN ISO 6941:1995 & 2003	100468		100477		100474	Propane/Butane
EN ISO 6941:2003	100468		100477		100474	Propane/Butane
EN 1101:1995	100469/100467				100474	Propane/Butane
EN 1102:1995	100468	100475	100477		100474	Propane/Butane
EN 1103:1995	100468	100476	100477			Propane

To determine the burning characteristics of textiles under controlled conditions. 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. Brushing Device including Nylon Brush is available per request.

SIZE

WEIGHT	27 kg / 60 lbs
DIMENSIONS	420 mm (w) x 260 mm (d) x 526 mm (h) / 17 in (w) x 11 in (d) x 21 in (h)

ORDERING INFORMATION

M233G	45° Automatic Flammability Tester
103805	Brushing Device and Brush
103800	Burner (pack of 5)
103806	Sample Holder (pack of 5)

STANDARDS:

ASTM D1230	CFR 16-1610	FTMS 191-5908	NFPA 702
GB/T 14644			





SIZE

WEIGHT	38 kg / 85 lbs
DIMENSIONS	340 mm (w) x 330 mm (d) x 840 mm (h) / 13.5 in (w) x 13 in (d) x 33 in (h)

Vertical Flammability Chamber for measuring the vertical flame spread for children's sleepwear, fabrics, other textile materials or resilient filling materials used in upholstered furniture. Comprises of a draft free stainless steel cabinet with glass observation panel window and back wall painted black for easy test viewing. Specimen holders, burner and associated hardware are dependent on the test standard and must be specified. Separate enclosure for manual gas controls is located away from the flame chamber for operator convenience.

Optional Automatic Gas Control System available including solenoid control gas valve and automatic ignition timer and controls.

ORDERING INFORMATION

M233M	Vertical Flammability Chamber
107210	Enhanced AGC with Non-Lingering Burner
105400	Manual Gas Control System
105395	Accessories for ASTM D6413 (formerly FTMS 191-5903.1)
105396	Accessories for 16 CFR 1615/1616 (Childrens Sleepwear)
105397	Accessories for CALIF TB-117-2000 (Resilient Filling Materials Vertical)

STANDARDS:

ASTM D6413	GB/T 5455	16 CFR Parts 1615
16 CFR Parts 1616	CALIF TB-117-2000	



For determining the ignitability of material combinations for upholstered seating. The test rigs are covered with the 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 cigarettes.

SIZE

WEIGHT	18 kg / 40 lbs
DIMENSIONS	450 mm (w) x 300 mm (d) x 450 mm (h) / 18 in (w) x 12 in (d) x 18 in (h)

STANDARDS:

BS 5852 PARTS 1 and 2	ISO 8191 PARTS 1 and 2
EN 1021 PARTS 1 and 2	

ORDERING INFORMATION

104025	Flammability Test Rig (Upholstery) to EU Standards
300949	Number 4 wooden crib (pack of 10)
300950	Number 5 wooden crib (pack of 10)
300951	Number 6 wooden crib (pack of 10)
300952	Number 7 wooden crib (Pack of 10)
104020	Burner Tube
104019	Cutting Templates
201012	450 x 450 x 75 mm low density foam ref VP45 (pack of 50)
201011	450 x 300 x 75 mm low density foam ref VP45 (pack of 50)
300954	450 x 150 x 75 mm low density foam ref VP45 (pack of 50)
201010	450 x 300 x 75 mm high density foam CM25H (pack of 50)
202640	450 x 150 x 75 mm high density foam CM25H (pack of 50)
201009	450 x 450 x 75 mm high density foam CM25H (pack of 50)



Compatible with
RemoteAccess
Remote Instrument
Monitoring Application



9-Position Martindale (Touch Screen)

INSTRUMENT AND FEATURES

The Martindale is a versatile instrument capable of multiple abrasion and pilling tests. It uses precision components to deliver the exact abrasion or pilling movement required by all international and retailer standards. The touch screen controller, with the most common functions accessible in one or two touches, makes this the easiest Martindale in the market to use. Our 9-position instrument is designed to conserve valuable bench space while providing maximum testing capacity.

- Touch screen controller with individual station counters
- Notification flash of the relevant station's lighting along with a notification beep indicates the end of a test
- Light weight motion plate and storage rack
- Multiple speeds can be used for custom tests
- Test head choices include standard abrasion, pilling, sock abrasion, leather abrasion, edge abrasion and many custom setups
- 6, 8, or 9 position base uses the least bench space of large martindales
- Available in a small four-position base
- Interface is Multi-lingual interface with display options in English, Chinese, Spanish and Turkish
- UKAS Calibration Certificate available upon request

INSTRUMENT ORDERING INFORMATION

		Width	Depth	Height	Weight
M235	4 Position Martindale	665 mm / 26 in	540 mm / 21.3 in	340 mm / 13.4 in	72 kg / 159 lbs
M235/3	6 Position Martindale	880 mm / 34.7 in	615 mm / 24.2 in	340 mm / 13.4 in	115 kg / 253 lbs
M235/8	8 Position Martindale	880 mm / 34.7 in	615 mm / 24.2 in	340 mm / 13.4 in	115 kg / 253 lbs
M235/9A	9 Position Martindale	880 mm / 34.7 in	615 mm / 24.2 in	340 mm / 13.4 in	115 kg / 253 lbs

INCLUDES

One per position - sample holder, 9kPa and 12kPa weights for standard abrasion tests, and standard mounting device.

Side Mounted Storage Rack available as an option for the 6, 8 and 9 head models.

ACCESSORIES ORDERING INFORMATION

105148	ISO Pilling Test Accessories (one position)
105153	Mounting Device for Pilling Sample
105151	Sock Abrasion Attachment (one position)
105158	Mounting Device for Sock Abrasion Sample
103911	38 mm Test Specimen Cutter
103916	140 mm Cutter for Abradent & Backing Felt
107703	Abrasion Station Enhancement Kit (one position)
107704	Acrylic Holder for Abrasion & Pilling Kits



4-Position Entry Level Model

STANDARDS: ABRASION

ARCADIA AG 32, 34, 35			ASTM D4966	BS 2543	BS 3424	BS 5690	EN 13770	EN 14325	EN 14465	
EN 14605	EN 15973	EN 16094	EN 388	EN 343	EN530	EN 943	GB/T 13775	GB/T 21196	IS 12673	ISO 12947
ISO 17704	ISO 17076-2	ISO 20344	ISO 26082-1	ISO 5470-2	IUP 48-2	IUP 53-1	IWTO40	JIS L1096	M&S P19	M&S P140
Next 18	PV 3975	SABS 1009	SFS 4328	SN 198529	VDA 230-211	VDA 230-212	Woolmark 112	ADIDAS 4.30		

STANDARDS: PILLING

ARCADIA AG 26	ASTM D4970	GB/T 4802.2	ISO 12945-2	M&S P17, 18C	Next 26	SN 198525	Woolmark 196
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STANDARDS: NON WOVEN

WSP 020.5.R3 (12)

For a complete list of Martindale Standards, visit www.sdlatlas.com

TEST MATERIALS ORDERING INFORMATION

403253	SM 25 Wool Abradant Fabric 5 meters
200910	Felt Discs, 90 mm for Pilling Test (pack of 20)
200971	Felt Discs, Woven 140 mm (pack of 20)
200947	Felt, Woven (1 m x 1.5 m) for ISO 12947, 12945-2, and BS 8479
200946	Felt Discs, Nonwoven 140 mm (pack of 20) for ASTM and M&S Standards
200945	Felt, Nonwoven (1 m x 1.5 m) for ASTM and M&S Standards
108179	Standard Backing Foam for Martindale (250 mm x 200 mm x 3 mm, pack of 25)
105136	Sample Retaining Rings - For Pilling Heads (Pack of 20)

107765	Klingspor PL31B Gritt 180 abrasive paper for EN388, pack of 50 sheets
200943	Silicon Carbide Paper Sheets, P180G for Coated Fabrics EN530 (pack of 25)
201077	Trizact Synthetic Abrasion Discs 35 Microns for controlled abrasion of synthetic fabrics, self-adhesive (pack of 25 - green)
203289	Trizact Synthetic Abrasion Discs 5 Microns for controlled abrasion of synthetic fabrics, self-adhesive (pack of 25 - orange)

EVALUATION ORDERING INFORMATION

204448	SM150 Photographs - IWVS & ASTM Pilling Tests (4 sets)
201015	EMPA Photographs - Woven
201016	EMPA Photographs - Knitted
300879	Pilling Photographs M&S P17 Method 1



The Circular Locus Tester swiftly tests surface deterioration and quality of fabrics (wool, chemical fiber, mixed, kitted and woven fabrics). Using an active friction system, fabric is rubbed against a nylon brush and abrasive or an abrasive only under controlled conditions. Results of the test are achieved in minutes. The relative motion of the locus specimen grip and the abrasive platform is a circle with a relative speed of 60 ± 1 r/min. The grip offers pressure to the specimen which is adjustable with a tolerance of $\pm 1\%$. For added control and safety, the machine is equipped with a self-stop switch. It can perform standards JJG 040-1990 and GB/T 4802.1-1997.

SIZE

WEIGHT	30 kg / 66 lbs
DIMENSIONS	500 mm (w) x 330 mm (d) x 270 mm (h) / 20 in (w) x 13 in (d) x 15 in (h)

ORDERING INFORMATION

105200	Circular Locus Tester
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STANDARDS:

JJG 040-1990	GB/T 4802.1 - 1997
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To cut out the circular test samples simply and accurately from materials including woven, nonwoven and knitted textiles, carpet, felts and foam. Individual circular cutters in various diameters are available for different test methods or application: 100 cm² (5 or 10 mm depth), 10 cm², 50 cm², 38 mm and 140 mm. All circular cutters are supplied with 12 spare blades and 1 cutting pad. Spare blades in packs of 100 pcs also supplied.

Manual Sample Cutting Set consists of a graduated cutting mat 60 x 45 cm, the yellow rotary cutter with one spare blade and a straight knife with snap-off blade and one spare blade.

SIZE

WEIGHT 2 kg / 4.4 lbs

DIMENSIONS 160 mm (w) x 160 mm (d) x 110 mm (h) /
6.5 in (w) x 6.5 in (d) x 4.5 in (h)

ORDERING INFORMATION**INSTRUMENTS**

200934	Manual Sample Cutter Set
103901	Cutter - 100 cm ² dia. x 5 mm depth of cut (supplied in Fabric Yield System M236/1)
103913	Cutter - 10 cm ² dia. x 5 mm depth of cut
103914	Cutter - 50 cm ² dia. x 5 mm depth of cut
103908	Cutter - 100 cm ² dia. x 10 mm depth of cut, for thicker structures like carpets and felts.
103911	Cutter - 38 mm dia x 5 mm depth of cut, for Martindale test sample and backing foam cutting

**INSTRUMENTS (CONTINUED)**

103916	Cutter - 140 mm dia x 5 mm depth cut, for Martindale abrasent fabric and backing felt cutting
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ACCESSORIES

103915	Spare blades for cutters: 103901, 103914 & 103916 (pack of 100)
103909	Spare blades for cutters: 103913 & 103911 (pack of 100)
103906	Spare blades for cutters: 103908 (pack of 100)
103899	Spare cutting pads (pack of 10), for all circular cutters

Fabric Yield Package

M236/1-2

M236/1 combines a circular sample cutter 100 cm² x 5 mm depth of cut, cutting pad and 12 spare blades, with a programmed battery-operated electronic balance to provide an accurate, portable system for determining fabric yield in g/m² and oz/yd². A sample of 100 cm² is cut and placed on the scale which is switchable from g/m² to oz/yd².

M236/2 combines a universal manual lever sample press with 68.35 mm (2.698 in) diameter die, ejector and 100 cutting pads, together with a programmed battery-operated electronic balance. Provides an accurate, portable system for determining fabric yield in g/m² and oz/yd². Eight (8) samples are cut across the fabric width and placed on the scale which is switchable from g/m² to oz/yd².

SIZE

WEIGHT 8 kg / 18 lbs

DIMENSIONS 200 mm (w) x 200 mm (d) x 200 mm (h) /
8 in (w) x 8 in (d) x 8 in (h)

ORDERING INFORMATION

M236/1	Fabric Yield Package (1 Sample)
M236/2	Fabric Yield Package (8 Samples)

**ORDERING INFORMATION (CONTINUED)**

103915	Spare blades for 103901 cutter in M236/1 (pack of 100)
103899	Spare cutting pads (pack of 10), for circular cutters
201110	Circular Die 68.53mm (2.698 in) dia. for U.S. Fabric Yield System
201140	Cutting pads for M236/2 (pack of 100)

STANDARDS:

ASTM D3776/2646

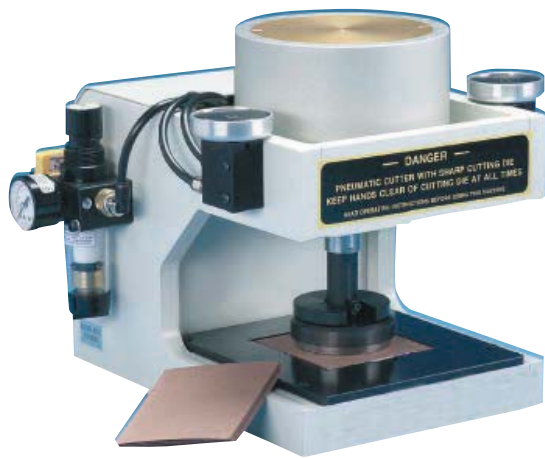
ISO 3801

BS 3424/2471

BS EN 12127

M&S P65/65A (for M236/1)

NEXT 20 (for M236/1)



Heavy-duty tabletop press with 125 mm (6 in.) bore air cylinder, 50 mm (2 in.) cutting depth and 152.4 mm x 152.4 mm (6 x 6 in.) cutting table. Pneumatic activation at 100 PSI (7 Bars) produces 1282 kg (2825 lb) of cutting force, which can easily cut through multiple fabric layers. Provided with automatic sample ejection and two hand control for safety and regulator filter. Completely air operated - no wiring required (laboratory standard compressed air supply required). Included 2.6974 inch die and 100 cutting pads (4.4424 or other special die shapes and sizes available on request).

SIZE	
WEIGHT	59 kg / 130 lbs
DIMENSIONS	450 mm (w) x 480 mm (d) x 450 mm (h) / 18 in (w) x 19 in (d) x 18 in (h)
ORDERING INFORMATION	
300993	Pneumatic Sample Press
300994	Circular Die 100 cm ² (113 mm / 4.44 in dia.) for European Fabric Yield System
201110	Circular Die 68.53 mm (2.698 in) dia. for U.S. Fabric Yield System
300995	Cutting Pads 6" x 6" (pack of 100)
G265	Silent Laboratory Compressor (Optional) Larger capacities available on request

STANDARDS:		
ASTM D3776/2646	BS 3424/2471	BS EN 12127
ISO 3801	M&S P6S/P6SA	



To determine the colorfastness and degradation due to the effects of sunlight on textiles. Standard model fitted with 500 watt mercury blended tungsten lamp, presettable timer and time elapsed counter. Can be fitted with type C & D sample holders within which humidity can be controlled using saturated salts.

Rapid Light Fastness Tester. Rapid fade model fitted with 400 watt mercury tungsten high power lamp with transformer, presettable timer and time elapsed counter. Can be fitted with type D sample holders.

SIZE

WEIGHT	23 kg / 51 lbs
DIMENSIONS	450 mm (w) x 480 mm (d) x 480 mm (h) / 18 in (w) x 19 in (d) x 18 in (h)

ORDERING INFORMATION

M237	Light Fatness Tester (Standard)
M237A	Light Fatness Tester (Rapid Fade)
104611	Cylindrical Cell (pack of 50)
104612	Water-cooled Cell
104936	Spare Lamp (Standard)
105664	Spare Lamp (Rapid Fade)
300267	Light Fatness Standards, grades 1-8

STANDARDS:

BS 1006 UK/TN

M238AA**Crockmeter/Rubbing Fastness Tester****STANDARDS**

AATCC 8/165	ISO 105 D02/ X12	M&S C8/C8A/ C25/C52
ASTM D6279	GB/T 3920/ 5712	NEXT 6/10

To determine colorfastness of textile to dry or wet rubbing, fitted with hand crank/counter. Provided with a steel specimen holder and 16 mm diameter test finger.

SIZE

WEIGHT	6 kg / 13 lbs
DIMENSIONS	160 mm (w) x 600 mm (d) x 215 mm (h) / 6.5 in (w) x 24 in (d) x 8.5 in (h)

ORDERING INFORMATION

103873	Crockmeter/Rubbing Fastness Tester
200877	Pre-cut Crocking Cloths, 50 x 50 mm (pack of 1000) AATCC Standard
403532	Pre-Cut Crocking Cloths, 50 x 50 mm (pack of 1000) ISO Standard
103871	Crockmeter Calibration Fabric (pack of 25)
103872	Emery Paper for Crockmeter (Pack of 25 sheets)
403232	Grey Scale (Staining) ISO/BS Standards
202161	Grey Scale (Staining) AATCC Standards

M238BB**Electronic Crockmeter****STANDARDS**

AATCC 8/165	ISO 105 D02/ X12	M&S C8/C8A/ C25/C52
GB/T 3920/ 5712	NEXT 6/10	

To determine the colorfastness of textiles to dry or wet rubbing. Motorized for frequent use and long run tests, fitted with digital electronic pre-settable counter for strokes up to 9999.

SIZE

WEIGHT	10 kg / 22 lbs
DIMENSIONS	220 mm (w) x 570 mm (d) x 250 mm (h) / 9 in (w) x 22.5 in (d) x 10 in (h)

ORDERING INFORMATION

M238BB	Electronic Crockmeter
108133	Sample holder with pins
108134	Light Weight Arm Kit downward force 175 g
108135	Mid Weight Arm Kit, downward force 300 g
200877	Pre - cut Crocking Cloths, 50x50 mm (pack of 1000) AATCC
403532	Pre - Cut Crocking Cloths, 50x50 mm (pack of 1000) ISO Standard
103871	Crockmeter Calibration Fabric (pack of 25)
103872	Emery Paper for Crockmeter (Pack of 25 sheets)
403232	Grey Scale (Staining) ISO/BS Standards
202161	Grey Scale (Staining) AATCC Standards

To determine the colorfastness of textiles to dry or wet rubbing particularly for printer fabrics. Applies 1134 grams of pressure on a 16 mm finger and rotate 1.125 turns clockwise then counter-clockwise. The operating handle is however turned in one direction only.

SIZE

WEIGHT	5.5 kg / 12 lbs
DIMENSIONS	250 mm (w) x 150 mm (d) x 250 mm (h) / 10 in (w) x 6 in (d) x 10 in (h)

ORDERING INFORMATION

M238E	Rotary Crockmeter
200877	Pre-Cut Crocking Cloths, 50 x 50 mm (pack of 1000) AATCC Standards
403532	Pre-Cut Crocking Cloths, 50 x 50 mm (pack of 1000) ISO Standards
103871	Crockmeter Calibration Fabric (pack of 25)
103872	Emery Paper for Crockmeter (pack of 25)
403232	Grey Scale (Staining) ISO/BS Standards
202161	Grey Scale (Staining) AATCC Standards

STANDARDS:

AATCC 116	ISO 105 X16
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Colorfastness/Rubbing (Gakushin) Tester

M238G

For evaluating a material's resistance to rubbing motion. Unit is a six station, benchtop machine which includes clamps for sample attachment to moving platen and clams for weighted rubbing arm for attachment of rubbing material. Cycle counter automatically stops machine at end of test cycles. Test samples are visually evaluated.

Includes two sets of test heads (6 heads each set) weighing 200 g and 500 g each, complete set of weights (6 each) of 100 g, 300 g, 400 g and 800 g which fit either test head. Each test arm is counterbalanced to offset arm weight. Suitable for dry and wet rubbing tests.

SIZE

WEIGHT	68 kg / 150 lbs
DIMENSIONS	225 mm (w) x 600 mm (d) x 270 mm (h) / 9 in (w) x 24 in (d) x 11 in (h)

ORDERING INFORMATION

M238G	Colorfastness/Rubbing (Gakushin) Tester
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STANDARDS:

JIS 10801, 0849, 0862, 1084 TR 396B	NES M0155
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M240C-M**Magnifying Piece Glasses/Pick Counters**

To determine the number of threads per cm or inch in textile fabrics.

STANDARDS:

ASTM D3775

BS EN 1049

ISO 7211

IWTO 39-87

ORDERING INFORMATION

201045	4" / 100 mm - Dual scale with traversing lens and pointer
200904	1" x 1" Square aperture, folding metal construction
202756	25 x 25 mm square aperture, folding metal construction
202773	10 x 10 mm square aperture, folding metal construction
202774	50 x 50 mm square aperture, folding metal construction
200921	25 x 25 mm square aperture, with traversing pointer and folding metal construction
202757	1" x 1" square aperture, with traversing pointer and folding metal construction
202758	Dissecting/Pick Counting Needles with Handle (pack of 12)

M240N-R**Calibrated Steel Rulers**

As specified in many International standards for the measurement of fabric width and length, also measurement and marking of fabric samples before or after testing. Supplied with ISO 17025 Calibration Certificates. Available in 12"/300 mm, 24"/600 mm and 39"/1000 mm lengths with metric and imperial markings. Flexible Steel tape measure 117"/3000 mm with ISO 17025 Calibration Certificate.

ORDERING INFORMATION

301073	Calibrated steel ruler 12"/300 mm with ISO 17025 certificate
201860(for Aisa)	
301075	Calibrated steel ruler 24"/600 mm with ISO 17025 certificate
203230(for Aisa)	
301077	Calibrated steel ruler 39"/1000 mm with ISO 17025 certificate
201861(for Aisa)	

M240X**Automatic Pick Counter**

For fast, convenient and accurate determination of the thread density of woven fabrics and loop density of knitted fabrics. It works with moving test specimens allowing thread density measurements taken directly at production machine or loom. Handy size and ability to determine extremely high thread densities makes it a state-of-the-art alternative to the traditional pick glass or other more cumbersome electronic counting systems.

Measuring range (mm or in) is from 8-300 threads/cm (20-750 threads/in) divided in 17 subranges approximately 1:1.5 wide. Test length is 29 mm (1.1in). Includes calibration check plate and RS232 data port. Optional stand available.

ORDERING INFORMATION

201075	Automatic Pick Counter
200986	Alignment Aid
200985	Power Adapter

SIZE

WEIGHT	0.2 kg / 2.2 lbs
DIMENSIONS	66 mm (w) x 32 mm (d) x 128 mm (h) / 2.6 in (w) x 1.25 in (d) x 5 in (h)

To distinguish between imperfections in fabric construction and streaking due to dyeing and finishing. By the controlled application of heat, pressure and cooling, a permanent impression of a test fabric is made from optical quality polystyrene film, allowing objective analysis of external imperfections without the confusion of color or pattern.

This instrument is produced in limited quantities so delivery times may vary.

SIZE

WEIGHT	27 kg / 59 lbs
DIMENSIONS	380 mm (w) x 460 mm (d) x 200 mm (h) / 15 in (w) x 18 in (d) x 8 in (h)

ORDERING INFORMATION

M242	Fabric Streak Analyser
202350	Transparent Plastic Film (Pack of 100)



Scorch/Sublimation Testers

M247

The Scorch Tester determines colorfastness and shrinkage to hot pressing and dry heat. This instrument is available in two different hot plate sizes. The top plate has a unique hinge and spring pin design to ensure even pressure across the sample. Each plate temperature is individually controlled and a timer is also integrated with the device.

- Two sizes available
- Individually controlled plate temperatures
- Temperature range Ambient - 230°C
- Balanced top plate for even pressure
- Integrated timer



SIZE

WEIGHT	16 kg / 35 lbs
DIMENSIONS	231 mm (w) x 440 mm (d) x 244 mm (h) / 9.1 in (w) x 17.3 in (d) x 9.6 in (h)

ORDERING INFORMATION

INSTRUMENT

M247A	Scorch / Sublimation Tester - 102 x 29 mm plates (4" x 1.13")
M247B	Scorch / Sublimation Tester - 125 x 125 mm plates (5" x 5")

STANDARDS:

AATCC 92	AATCC 114	AATCC 117	AATCC 133
GB/T 5718	GB/T 6152	ISO 105-P01	ISO 105-X11
JIS L 0850	JIS L 0879		

ASSESSMENT

202161	AATCC Grey Scale (Staining)
202162	AATCC Grey Scale (Color Change)
403232	ISO/BS Grey Scale (Staining)
403231	ISO/BS Grey Scale (Color Change)

TEST MATERIALS

G246F	Multifiber Fabric (see pages 152-153) FA (#10) or FAA (#10A) in uncut or cold cut form.
107889	Hot Press Kit for M247A
107893	Hot Press Kit for M247B
201186	Cotton Limbric 113 cm wide (1 meter)

M249

AATCC Accelerotor



STANDARDS:

AATCC 93	M&S P26	NEXT TM31
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To rapidly determine wet and dry abrasion resistance of flexible materials including textiles, paper, leather and plastics. Samples are rapidly tumbled within a cylindrical test chamber lined with an appropriate abrasion material. The tumbling action is provided by a propeller shaped rotor for a predetermined time at a predetermined speed. Can be specified with rotors and liners for AATCC tests or for Marks and Spencer Tests (Accredited Suppliers only).

SIZE

WEIGHT	15 kg / 34 lbs
DIMENSIONS	200 mm (w) x 450 mm (d) x 250 mm (h) / 8 in (w) x 18 in (d) x 10 in (h)

ORDERING INFORMATION

M249	AATCC Accelerotor
200948	Impeller, AATCC
201019	Impeller, M&S
202750	Fine Abrasive Liner (AATCC) - For Accelerotor - (Pack of 50) 500 grit Aluminum Oxide (Standard)
202346	Medium Abrasive Liner (AATCC) - For Accelerotor - (Pack of 50) 240 grit Aluminum Oxide (Special applications)
200905	Hard Abrasive Liner, M&S

M254

Steaming Cylinder with Integral Steam Generator



STANDARDS:

BS4323	ISO 3005	M&SP8	NEXT TM15
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Steaming Cylinder With Integral Steam Generator. To determine the shrinkage of unstressed fabric samples subjected to steaming in a closed chamber. Provided with a stainless steel fabric supporting frame to accommodate 4 samples and an automatic timer.

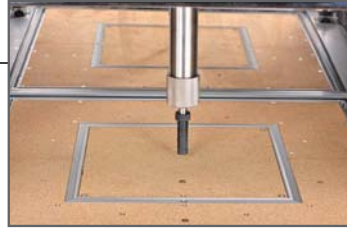
Steaming Stability Template. The Steaming Stability Template is suitable for use with steaming cylinders when testing fabrics for relaxation shrinkage. It is used to mark the fabrics before testing using a benchmark of 250 mm and to read shrinkage directly in percentage after testing.

SIZE

WEIGHT	45 kg / 98 lbs
DIMENSIONS	400 mm (w) x 600 mm (d) x 300 mm (h) / 16 in (w) x 24 in (d) x 12 in (h)

ORDERING INFORMATION

M254	Steaming Cylinder with Integral Steam Generator
105270	Steaming Stability Template
303257	Texpen Indelible Marking Pens, Yellow (pack of 6)
303255	Texpen Indelible Marking Pens, Black (pack of 6)



Often referred to as the “Skin Model”, the Sweating Guarded Hotplate (SGHP) measures thermal properties and water vapor resistance of fabrics and other materials under steady state conditions. The test simulates the heat and mass transfer process which occurs next to human skin.

The SGHP is a complete unit that has the hotplate and controls integrated into a chamber that is maintained at precise temperature, humidity, and airflow conditions. Being a purpose built instrument from the chamber to the hotplate to the controls, there is no integration issues that can come with using hotplates and chambers from different manufacturers.

The hotplate itself is another key feature of the SDL Atlas instrument. It is a sintered (porous) bronze plate that gives the best simulation of human skin versus other plates that have a distinct pattern of drilled holes.

SIZE

WEIGHT	500 kg / 1090 lbs
DIMENSIONS	1260 mm (w) x 950 mm (d) x 1800 mm (h) / 50 in (w) x 38 in (d) x 71 in (h)

ORDERING INFORMATION

INSTRUMENT

M259B	Sweating Guarded Hotplate
301101	Installation, Set-up, Operator Training

ACCESSORIES

202685	Calibrated Resin Board
106649	Edge Correction Foams (Pack of 10 thicknesses) 520 mm x 520 mm

TEST MATERIALS

106652	Cellophane Sheets (pack of 250) 540 mm x 540 mm
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- Purpose built instrument ensures integration of all controls
- Sintered bronze plate gives best simulation of human skin
- Hot plate size 250 mm x 250 mm
- Air flow maintained at 1 ± 0.05 m/s at 15 mm above working platform
- Individual temperature control of hotplate, side, and bottom guards
- Samples up to 70 mm thick can be tested
- Color touch screen controller
- Laptop computer and analysis software included

STANDARDS:

ASTM D1518	ASTM D1518-11a Option 2	ASTM F1868	EN 343	ISO 11092	GB/T 11048
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The aluminium lightweight gauge is designed to measure the thickness of leather and textiles. Different models includes:



Model J50, 10 mm x 0.01 mm measuring range, 50 mm throat depth, 30 mm dia. flat anvils

Model J100, 10 mm x 0.01 mm measuring range x 100 mm throat depth, 30 mm dia. flat anvils

Model J200, 10 mm x 0.01 mm measuring range x 200 mm throat depth, 30 mm dia. flat anvils

Model J200/30, 30 mm x 0.01 mm measuring range x 200 mm throat depth x 30 mm dia. flat anvils

SIZE

WEIGHT 0.3 / 0.45 / 1.1 kg - 0.7 / 1 / 2.5 lbs

ORDERING INFORMATION

202759	Portable Thickness Gauge Model J50
200996	Portable Thickness Gauge Model J100
202760	Portable Thickness Gauge Model J200
202761	Portable Thickness Gauge Model J200/30

To determine the resistance of textiles and textile composites (particularly performance fabrics) to water vapor penetration. The apparatus consists of 8 containers with water reservoirs, a standard permeable fabric cover, sample holder ring and precision drive system.

SIZE

WEIGHT 20 kg / 44 lbs

DIMENSIONS 1000 mm (w) x 450 mm (d) x 300 mm (h) /
40 in (w) x 18 in (d) x 12 in (h)

ORDERING INFORMATION

M261 Water Vapor Permeability Tester

200951 Standard Fabric 1000 x 1000 mm

STANDARDS:

BS 3424-34

BS 7209

ISO 8096



This water vapor permeability tester utilizes the inverted cup method. The PermaVape has six test stations over a bath that can be heated to the required temperature of 23°C and maintained evenly throughout the bath through a circulation pump. The test station platform is easily adjustable to ensure that the samples are immersed to the proper depth in the bath. Annex C of ISO 15496 gives detailed examples of why the inverted cup method is a more accurate test than the dry desiccant cup method. Each test requires two membranes which are test materials. The instrument is supplied with one package of membranes that contains 50 sheets.

SIZE

WEIGHT 20 kg / 44 lbs

DIMENSIONS 572 mm (w) x 450 mm (d) x 460 mm (h) /
23 in (w) x 18 in (d) x 19 in (h)

ORDERING INFORMATION

M261P PermaVape

107269 Membranes (pack of 50)

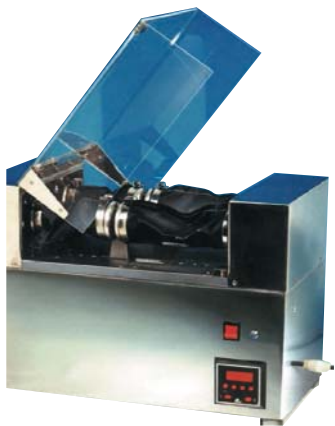
107078 Measuring Cup

107272 O-Ring (pack of 6)

STANDARDS:

ISO 15496





To test the degradation to water resistance of coated fabrics due to crumpling and flexing in use. The instrument tests a tube of fabric by simultaneous twisting it 90°, stretching and compressing the fabric. After completion of the test the fabric is tested for resistance to penetration by water. Fitted with an electronic predetermined counter with automatic stop at a predetermined number of cycles. Fitted with acrylic plastic interlock safety cover.

SIZE

WEIGHT	50 kg / 110 lbs
DIMENSIONS	520 mm (w) x 270 mm (d) x 400 mm (h) / 21 in (w) x 11 in (d) x 16 in (h)

ORDERING INFORMATION

203010	Crumpleflex Tester
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STANDARDS:

BS 3424.9	ISO 7854-1995
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Dual Head Model



Single Head Model

To determine the wear resistance of all kinds of structures including metals, paints, plated surfaces, coated materials, textiles, leather and rubber. Uses the X pattern of abrasion produced by a rotary action of abrasive wheels. Supplied with a full range of auxiliary weights, specimen holders, abrasive wheels and vacuum units, fitted with membrane keypad including a predetermined electronic counter. Single head and dual head models available.

Diamond Wheel Refacer. For refacing abrasive wheels used on the Taber Wear and Abrasion Tester.

Model 5000 Sample Cutter. The Rotary Sample Cutter cuts specimens of a correct configuration from the Taber Wear and Abrasion Tester.

SIZE: SINGLE HEAD

WEIGHT	20 kg / 45 lbs
DIMENSIONS	315 mm (w) x 391.2 mm (d) x 213.4 mm (h) / 12.4 in (w) x 15.4 in (d) x 8.4 in (h)

ORDERING INFORMATION

M270	Taber Wear & Abrasion Tester
M270A	Taber Dual Wear & Abrasion Tester
200854	Calibrase Wheels CS10
200853	Calibrase Wheels H18
200847	Refacing Discs S-11 (pack of 100)
301118	Specimen Plates S-16 (pack of 10)
200846	Specimen Cards S-36 (pack of 50)
200397	Wheel Refacer
301127	Sample Cutter

STANDARDS:

ASTM D3884	ISO 5470
ASTM D4685	DIN EN ISO 17076-1

To determine a fabric's ability to recover after wrinkling under a predetermined load for a set period of time. Set of 3-D plastic replicas are also available to grade fabrics but not included.

SIZE

WEIGHT 9.5 kg / 21 lbs

DIMENSIONS 150 mm (w) x 150 mm (d) x 330 mm (h) /
6 in (w) x 6 in (d) x 13 in (h)

ORDERING INFORMATION

200979 AATCC Wrinkle Recovery Tester

202149 Plastic Replicas (set of 5)

STANDARDS:

AATCC 128

ISO 9867



Flat Bed Press

M274

To determine the colorfastness of textiles of all kinds to domestic or industrial ironing. The instrument is formed by two parallel smooth plates; the upper plate warms and exerts a pressure of approximately 4 kPa on the specimen. The determination can be performed at different temperatures and in three ways:

Temperature is set according to the kind of fiber composing the specimen (Min to Max. temp: 70 - 200°C);

1. Dry ironing
2. Humid ironing
3. Wet ironing

SIZE

WEIGHT 10 kg / 22 lbs

DIMENSIONS 650 mm (w) x 510 mm (d) x 200 mm (h) /
26 in (w) x 20.5 in (d) x 8 in (h)

ORDERING INFORMATION

201092 Flat Bed Press

**STANDARDS:**

M&S P1A

Miele Rotary Ironer

M274A

Conveniently accesses the ironability of various fabrics. With certain modifications the Rotary Ironer is suitable for specific Marks and Spencer test methods but in this form is restricted to accredited M & S suppliers.

SIZE

WEIGHT 50 kg / 110 lbs

DIMENSIONS 1000 mm (w) x 420 mm (d) x 940 mm (h) /
40 in (w) x 17 in (d) x 37.5 in (h)

ORDERING INFORMATION

200988 Miele Rotary Ironer

203921 Miele Rotary Ironer, M&S

STANDARDS:

NEXT 24

M&S P91





To determine the abrasion resistance of fabrics when rubbed against a standard abradant or a wire mesh screen with a backward and forward motion over a curved surface. Of specific interest to automotive and furniture industry fabric manufacturers working to US standards. Motor driven with 4 abrasion heads and electronic digital counter to control the number of cycles.

- Modern ergonomic design
- Suction manifolds to connect to auxilliary vacuum cleaner
- Sealed transmission drive for quieter operation

SIZE	
WEIGHT	75 kg / 165 lbs
DIMENSIONS	500 mm (w) x 500 mm (d) x 600 mm (h) / 20 in (w) x 20 in (d) x 24 in (h)

ORDERING INFORMATION	
M278	Wyzenbeek Abrasion Tester
204819	Rubber pads (pack of 8)
204852	Wire mesh screens (pack of 4)
403356	Abradant Fabric #10 cotton duck - 60 in x 5 m

STANDARDS:
ASTM D4157



Conveyer Type Needle Detector is a free standing conveyORIZED digital Needle Detector for garments. Accepts non-metals and all approved non-ferrous zips and poppers. It will reject any ferrous or nickle contamination, typically staples and needle fragments equivalent to a 1.0 mm ferrous sphere. The unit has a belt speed of approximately 25 to 30 meters per minute and an aperture size of 24" (700 mm) width x 7" (175 mm) height. In case of a reject, belt stops with an audible alarm and signal light is activated. Full digital technology and control.

Flat Bed Needle Detector can detect the broken needles in sewn items placed on the flat detecting surface.

Portable Needle Detector easily detects the exact position of needle contamination in rejected garments to allow recycling. LED/Audible warning available.

ORDERING INFORMATION	
201886	Conveyer Type Needle Detector
201922	Flat Bed Needle Detector
201921	Portable Needle Detector
201701	Calibration Card Holding Rack without calibration cards
203665	Calibration Kit - Includes holding rack and two calibration cards

SIZE: CONVEYER TYPE	
WEIGHT	300 kg / 660 lbs
DIMENSIONS	1500 mm (w) x 920 mm (d) x 950 mm (h) / 60 in (w) x 36 in (d) x 37 in (h)

The UWT is used to test wear and abrasion resistance of fabrics for apparel, shoes, upholstery, automotive, and many other areas. The instrument, also known as a Stoll Quartermaster Abrasion Tester is designed to run numerous tests with five different possible setups.

- Inflated Diaphragm (included)
- Flex Abrasion (included)
- Frosting Attachment (optional) – This set includes a sample holder with a felt pad and a sample mounting device.
- Elastomeric Pad/Pilling Test (optional) – A special elastomeric base pad is attached to the specimen holder of the optional Frosting Attachment and another elastomeric friction pad is mounted on the abrasion head.
- Edge Abrasion (optional) – This sample holder provides three options of holding a sample for abrasion of an edge or a fold in a fabric.
- Requires Compressed Air



ASSESSMENT

202135	Three sets of 5 Photographic Standards for ASTM D 3514
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TEST MATERIALS

200241	Elastomeric Friction Pad and Base Pad
200253	Abradent, 320J (50 yd roll)
200255	Abradent, 600A (50 yd roll)
106390	Flex Bar, Carbide Tipped
106688	Verification Ribbon (50 yd roll)
301138	Preparation Fabric for ASTM D3514 (1 yd x 60" wide)
105861	Frosting Screen
106225	Diaphragm with Electrical Contact
106226	Diaphragm without Electrical Contact

SIZE

WEIGHT	32.6 kg / 72 lbs
DIMENSIONS	305 mm (w) x 635 mm (d) x 552 mm (h) / 12 in (w) x 25 in (d) x 21.8 in (h)

ORDERING INFORMATION

INSTRUMENT

M282	UWT Universal Wear Tester
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ACCESSORIES

105692	Frosting Attachment
105693	Edge and Fold Abrasion Clamp
G265	Silent Laboratory Compressor

ACCESSORY

STANDARD	Inflated Diaphragm (Included)	Flex Abrasion (Included)	Elastomeric Pad (Optional)	Frosting (Optional)
AATCC 119			•	•
AATCC 120	•			•
ASTMD3514			•	•
ASTM D3885		•		
ASTMD3886	•			
FED-STD 191A-5300		•		
FED-STD 191A-5302	•			
FED-STD 191A-5303			•	•
FLTM BN 112-01	•			
FLTM BN 112-03	•			
FZ/T 01121	•			
Hyuundai/Kia MS 200-20	•			
IST 20.1 (01)	•			
IST 20.2 (01)		•		
WSP 020.1R3 (12)	•			
WSP 020.2R3 (12)		•		



The Ozone Exposure Chamber provides a safe and reliable test environment to check textiles for colorfastness to ozone. The instrument includes a high output ozone generator, a touch screen controller, and closed loop control of the ozone concentration in the chamber. Up to twenty four specimens can be mounted on the rotating rack. The unit does not require a fume hood or exhaust piping because all exhaust from chamber passes through an ozone scrubber. For additional safety of the user, the chamber door has safety interlock so it can't be opened until the ozone is cleared and a negative chamber air pressure is maintained to ensure there are no leaks. User interface available in English, Spanish, Turkish, and Chinese.

- High output ozone generator - maximum 10 ppm
- Touch screen controller with four language options
- Closed loop control of ozone levels
- Can be programmed to warm up at set time
- LED lighting in chamber
- Large viewing window with UV blocking glass
- UV blocking glass on chamber door
- Ozone scrubber, door interlock, and negative chamber pressure provide safety
- Operating environment 20-25°C and 50-70% Rh
- Instrument does not need to be in a fume hood or connected to exhaust

SIZE

WEIGHT	50 kg / 110 lbs
DIMENSIONS	780 mm (w) x 480 mm (d) x 500 mm (h) / 31 in (w) x 19 in (d) x 20 in (h)

ORDERING INFORMATION

INSTRUMENT

M287B	Ozone Exposure Chamber Plus
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TEST MATERIALS

106494	Ozone Scrubber
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ASSESSMENT

202162	AATCC Grey Scale (Color Change)
403231	ISO/BS Grey Scale (Color Change)

STANDARDS:

AATCC 109	GB/T 11039.3	ISO 105-G03
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The MMT is the only instrument on the market that can precisely measure the liquid management properties of performance and technical fabrics, ensuring the comfort and protection that consumers demand.

To measure the dynamic liquid transport properties, a sample is placed horizontally in the instrument between the upper and lower sensors. These sensors are made of concentric rings of pins. A solution, representing perspiration, is dropped on the center of the upper facing (skin side) of the test sample. As the solution moves through and across the sample, the changes in electrical resistance are measured and recorded.

One 2-minute test gives a comprehensive profile of a fabric's performance, producing the following data:

- Overall Moisture Management Capability
- Accumulative One-Way Transport Capability
- Wetting Time for top and bottom surfaces
- Absorption Rate for top and bottom surfaces
- Max Wetted Radius for top and bottom surfaces
- Spreading Speed for top and bottom surfaces



STANDARDS

AATCC 195

GB/T 21655.2

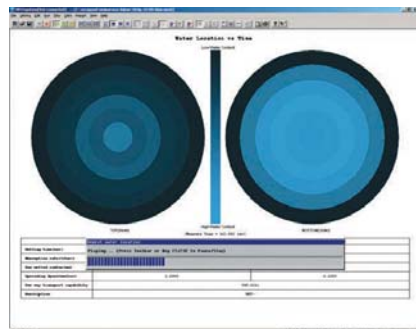
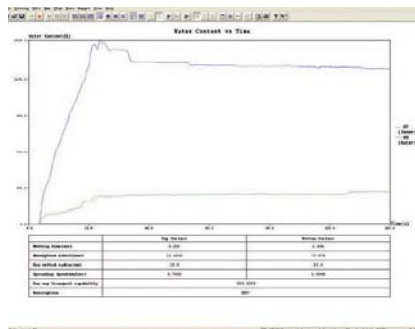
SIZE

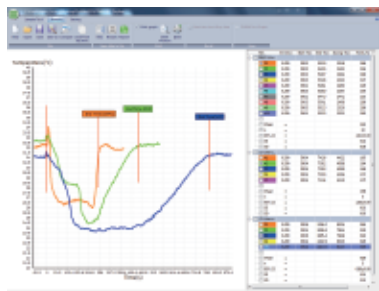
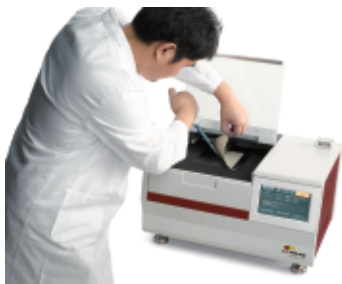
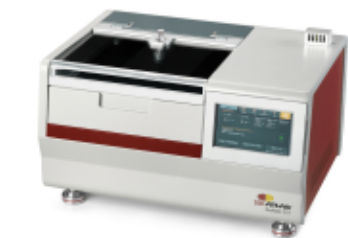
WEIGHT 27 kg / 59.5 lbs

DIMENSIONS 300 mm (w) x 420 mm (d) x 545 mm (h)
11.8 in (w) x 16.5 in (d) x 21.5 in (h)

ORDERING INFORMATION

M290 MMT (Moisture Management Tester)





DryRate 201 is a fully automated and advanced instrument with a heated metal plate, which simulates human skin starting to perspire at 37°C, that determines the drying rate based on evaporation rate from the fabric.

Automatic Mode

For the fully automated testing mode, the operator simply places the sample in the test area, and the instrument will automatically run the test including water dispensing and generate the results once completed. The operator can change the amount of water and air flow through the testing parameters.

Manual Mode

The manual test mode allows for the same change of air flow through the test settings with the added ability to perform manual water dosing as described in the AATCC 201 Test Method.

Test Results

All test results are included in test reports which can be displayed either directly on the instrument screen or on a connected computer for further analysis and comparison to previous tests.

- Operate as a stand-alone unit or via a computer
- Automatic and manual selection of water dosing
- Real-time display of ambient and chamber temperature & humidity on touch screen
- 7-inch capacitive touch screen controller to instantly set parameters and monitor test status and results
- Test data can be transmitted to the computer for real-time test curve display with automatic report
- Closed-loop control system (heated metal plate and air flow) secures consistent test conditions
- Accurate water volume determined by the built-in precision water pump
- Built-in high precision anemometer (air flow sensor) and infrared thermocouple probe
- Specialized software calculates the end time and drying rate R of each test
- Multiple test-curves overlay display for efficient comparisons of fabrics

STANDARD

AATCC 201

SIZE

WEIGHT 30 kg / 66 lbs

DIMENSIONS 570 mm (w) x 435 mm (d) x 345 mm (h)
22 in (w) x 17 in (d) x 13 in (h)

ORDERING INFORMATION

108191 DryRate® 201

To determine the fogging characteristics of automotive interior trim of textiles, plastic or leather. Fogging is the residue deposited on interior glass of chemicals released from materials under specific temperature conditions. It is a combination of a choice of 6-position horizon fog testing system / heating unit (AC or PC), cooling system and the accessory kit for the Gravimetric or Reflectometric test method.

Trim samples are placed in the beakers under a retaining ring and the beakers are sealed and standardized glass plates clamped by a cover plate. The samples are subjected to accurate cycles of heating and cooling after which access material amount on the glass plates (Reflectometric) or the material mass gathered on the foil (Gravimetric).

PC models equipped with large color LCD screen and quick navigation keypad which provides the real-time graphs with temperature ramping. Also multiple information or data displays are available.

SIZE

WEIGHT	43 kg / 96 lb
DIMENSIONS	590 mm (w) x 600 mm (d) x 425 mm (h) / 23.5 in (w) x 24 in (d) x 17 in (h)

STANDARDS:

SAE J1756



ORDERING INFORMATION

401995	Fogging Test Chamber PC-FTS
201127	Fogging Test Chamber AC-FTS
401996	Cooling unit, for 201127 Fogging Test Chamber AC-FTS
401997	Cooling unit, for 401995 Fogging Test Chamber PC-FTS
401998	Gravimetric Accessory Kit
401999	Reflectometric Accessory Kit
402000	10 Liter Bath Oil (Available only in US and Canada)

Dry Cleaning and Washing Cylinder

M292

To determine colorfastness to drycleaning and chlorinated pool water, to prepare samples for flammability testing. Comprised of stainless steel rotating test chamber of 7650 ml capacity, variable speed drive with digital timer and displays.

SIZE

WEIGHT	80 kg / 176 lbs
DIMENSIONS	720 mm (w) x 490 mm (d) x 620 mm (h) / 28 in (w) x 19 in (d) x 24 in (h)

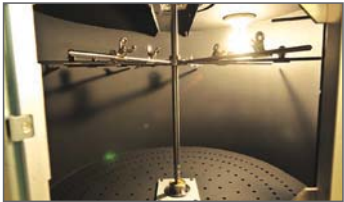
ORDERING INFORMATION

M292	Dry Cleaning and Washing Cylinder
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STANDARDS:

AATCC 162 16 CFR Part 1610





The Gas Fume Chamber tests the color fastness of textiles when exposed to atmospheric oxides of nitrogen caused by the combustion of gases. The instrument is equipped with a Bunsen burner and rotating rack. As the testing occurs over an extended time in an unobserved environment, a number of mechanisms have been incorporated to insure the safety of the operator including gas pressure regulation, unburnt gas detectors, extinguished flame alarm, and an interlocked flame ignition system among others.

- Rotating rack with large capacity
- Temperature controller to maintain chamber under maximum setting
- Chamber light and viewing window
- Multiple safety mechanisms built-in

SIZE

WEIGHT	140 kg / 309 lbs
DIMENSIONS	780 mm (w) x 670 mm (d) x 1110 mm (h) / 31 in (w) x 27 in (d) x 44 in (h)

ORDERING INFORMATION

INSTRUMENT	
M291	Gas Fume Chamber

TEST MATERIALS

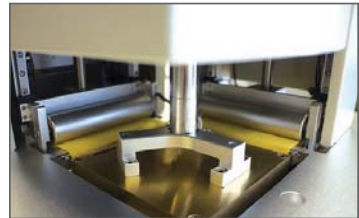
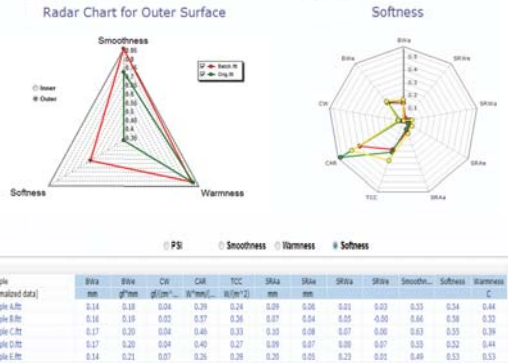
200213	Standard Fading Control (50 yard roll)
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ASSESSMENT

202162	AATCC Grey Scale (Color Change)
403231	ISO/BS Grey Scale (Color Change)

STANDARDS:

AATC 23	GB/T1 1039	ISO 105-G02
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The innovative FTT measures skin touch properties of textiles objectively and quantitatively. The comprehensive, sophisticated design of the FTT enables it to measure all the mechanical and surface properties of fabric in one simple test. Previously only possible on the very expensive and technically complicated Kawabata instruments, the FTT now makes hand measurement possible for everyone.

In just a five minute test the FTT measures:

- Thickness
- Compression
- Bending
- Roughness
- Friction
- Thermal Properties

These provide 18 indices for each side of the fabric, in both warp and weft directions, which are used to predict the subjective primary sensory indices (PSI) of hand feel and touch feel: Smoothness, Softness, Warmth and Total Hand/Touch Feel. These objective

measurements are valuable tools for product research and development. They can also be transferred to the QC Evaluation Software to create an electronic standard against which different lots of production fabrics can be measured. Much as a spectrophotometer is used for color, the FTT can measure, communicate, and compare fabric hand through a global supply chain.

SIZE

WEIGHT 85 kg / 188 lbs

DIMENSIONS 510 mm (w) × 600 mm (d) 840 mm (h) /
10 in (w) × 12 in (d) × 17 in (h)

ORDERING INFORMATION

INSTRUMENT

M293 FTT® (Fabric Touch Tester)

107740 QC Evaluation Software

TEST MATERIALS

Standard Materials for Standards Based Testing

BATCH AFTER BATCH.TEST AFTER TEST.

Each lot of test materials supplied by SDL Atlas is thoroughly tested to ensure conformity and consistency from batch to batch to provide our customers with the utmost confidence in their standards based testing. All of the test materials sold are of the highest quality and meet international standards.

We offer multifibers and detergents for wash fastness tests, crocking supplies, make weights, pilling supplies, specialized test materials for specific instruments and more. SDL Atlas also has a large selection of test materials for home appliance testing. These include DOE energy cloth, soiled cloth, and standard soil as a few examples.

SDL Atlas offers the broadest range of test materials in the textile and home appliance testing markets. Our extensive inventory provides a single source solution, plus we offer technical expertise to assist in making testing efficient, precise and compliant.



TEST
MATERIALS

For more information about SDL Atlas Test Materials, please see our **TEST MATERIALS** section, pages 144-156 for ordering information.





DYEING TESTING

D394**Laboratory Wringer/Padder****STANDARDS:**

AATCC 92

To evenly squeeze or extract excess liquid from fabrics. 12" (300 mm) working width with neoprene rollers 2 1/8" (54 mm) diameter. Drive speed 25 mm (1") per second. Dead weight loading up to 105 lb (50 kg) x 5 lb (2.3 kg). Detachable liquor trough (optional).

SIZE

WEIGHT	35 kg / 77lbs
DIMENSIONS	640 mm (w) x 250 mm (d) x 300 mm (h) / 25 in (w) x 10 in (d) x 12 in (h)

ORDERING INFORMATION

D394	Laboratory Wringer/Padder
400920	Optional Liquor Trough

D394A**Pneumatic Heavy Duty Padder Vertical (Model P-A0)****SIZE**

WEIGHT	340 kg / 748 lbs
DIMENSIONS	980 mm (w) x 560 mm (d) x 1500 mm (h) / 39 in (w) x 22 in (d) x 60 in (h)

ORDERING INFORMATION

D394A	Pneumatic Heavy Duty Padder Vertical
G265	Silent Laboratory Compressor (Optional) Larger capacities available on request

Heavy duty padder with stand, for all dyeing, impregnating and padding processes. Floor model.

The range comprises:

- Fix- revolving speed of 10 RPM
- Pneumatic load adjustment with 3-ton nip pressure at 5 kg/cm²
- Padding rollers of 70 Jshore hardness (optionally designed for special degree of hardness)
- Padding roller pressure adjustable independently on left/right side
- Safety devices include a safety rod which prevents incorrect handling, emergency button and a knee pedal to stop the machine operation
- 500 cc capacity fluid bed is supplied
- Suitable for discontinuous operation in conjunction with our Mini-Dryer or Mini-Tenter
- Air compressor can be supplied on request

D394B**Pneumatic Heavy Duty Padder Horizontal (Model P-B0)****SIZE**

WEIGHT	370 kg / 814 lbs
DIMENSIONS	1000 mm (w) x 600 mm (d) x 1160 mm (h) / 40 in (w) x 24 in (d) x 45.5 in (h)

Dyeing, Finishing and Impregnating Padder, similar to vertical padding model.

- Roller width 450 mm diameter 125 mm
- Pneumatic load adjustment
- Fabric speed 10 RPM (on request can be supplied with variable revolving speed system)
- Content of liquor trough approx 1000 cc
- Padding rollers of 70 shore hardness
- Safety device
- Air compressor can be supplied on request
- Suitable for discontinuous operation in conjunction with our Minidryer/Stenter

ORDERING INFORMATION

D394B	Pneumatic Heavy Duty Padder Horizontal
G265	Silent Laboratory Compressor (Optional) Larger capacities available on request

Dyeing , Finishing, Printing and Coating

Suitable for carrying out all Pad-Steam processes with saturated steam, offers the shortest distance between padding mangle and steaming chamber.

The range comprises:

- Horizontal type with two padding rollers, with pneumatic pressure application. Roller width 300 mm diameter 125 mm.
- Steaming chamber with fabric holding capacity of 6 M, with double glazed inspection window
- Adjustable fabric speed control, standard dwell time inside the steaming chamber from 20-120 sec with digital indication type
- Chemicals trough provided about 500 cc capacity with automatic drop-off and spray washing
- Water sealed bath with temperature regulator for automatic cooling control
- Temperature range between 98°C and 102°C with digital type
- Option for Steam generator
- On request PS-JS can be combined with 4-5 section washing machine
- Max. 600mm working width is available on request

SIZE

WEIGHT	320 kg / 704 lbs
DIMENSIONS	600 mm (w) x 1300 mm (d) x 1400 mm (h) / 24 in (w) x 52 in (d) x 56 in (h)

ORDERING INFORMATION

105219	Pad-Steam Range
G265	Silent Laboratory Compressor (Optional) Larger capacities available on request



Pad-Thermosol Range (Model PT-J)

D396

Thermosol range with infrared zone suitable for working out dye formulas and for research work.

Pad - Infrared ray heater - Intermediate dryer Thermosol. On this type of machine, the test fabric, padded by the horizontal pneumatic-type padder, is held on both ends by special clip bars; this complete sample holder is mounted on the chains which are running endlessly through the machine. The test fabric is first led through the infrared pre-heater, then the intermediate dryer and finally the thermosoling zone. After testing, the test fabric is taken off automatically from the carrying chains and drops down into the reserve box.

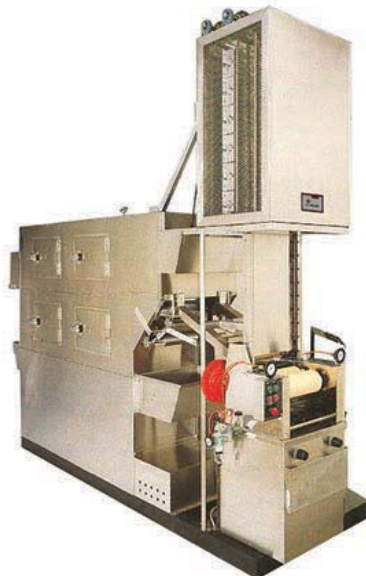
- Roller width 300 mm, diameter 125 mm.
- Dyestuff trough provided about capacity 100 cc x w

SIZE

WEIGHT	1600 kg / 3520 lbs
DIMENSIONS	1200 mm (w) x 3500 mm (d) x 2900 mm (h) / 48 in (w) x 140 in (d) x 114 in (h)

ORDERING INFORMATION

107668	Pad-Thermosol Range
G265	Silent Laboratory Compressor (Optional) Larger capacities available on request





Removes excess water from dyed or washed samples before hot air or line drying. 2000 g / 4.4 lbs. Capacity at 2850RPM.

- Removes 90% of moisture in 10-20 seconds
- Table or wall mounting for space saving
- Ideal for rapid color measurement

SIZE

WEIGHT	23 kg / 51 lbs
DIMENSIONS	380 mm (w) x 380 mm (d) x 600 mm (h) / 15 in (w) x 15 in (d) x 24 in (h)

ORDERING INFORMATION

300003	Laboratory Centrifuge
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To air-dry samples after centrifuging. Capacity 0.5 kg (1.1 lb). 1.5 kw/ 3 kw dual power hot air/ cold air with adjustable ventilation. Temperature sensing with electronic thermometer. Stainless steel interior construction.

SIZE

WEIGHT	30 kg / 66 lbs
DIMENSIONS	500 mm (w) x 270 mm (d) x 670 mm (h) / 20 in (w) x 11 in (d) x 27 in (h)

ORDERING INFORMATION

300005	Laboratory Hot Air Dryer
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Suitable for all drying, setting, baking and thermosoling processes. Table model.

- Sample size up to max. 36 cm x 42cm
- Automatic pin frame transport with preselectable dwell times from 10 sec. to 6 min.
- Electric heating 6KW; temperature range 20 -250°C with air circulating fan
- Specially-designed pin frame to hold all types of sample fabrics in length and/or width
- Suitable for discontinuous operation with padding mangle, type Air Pad

SIZE

WEIGHT	250 kg / 550 lbs
DIMENSIONS	650 mm (w) x 1046 mm (d) x 950 mm (h) / 26 in (w) x 42 in (d) x 38 in (h)

ORDERING INFORMATION

D398	Minidryer/Stenter
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Saturated and HT-Steamer, suitable for the chemical and dyestuff industry, finishing plants, research institutes and general textile industry. Basic design as minidryer, model R-3, owing the wide adjusting ranges regarding temperature, humidity, dwelling time. This apparatus can be used for

- Drying, curing and thermofixation 20°-250°
- Steaming with saturated steam 102°C±2°
- HT steaming at temperatures between 100°- 250°C
- Test fabric size max. 350 x 400 mm
- Automatic pin frame transport with preselectable dwell time from 10sec to 60min.
- The ceiling is slanted and an additional heating is fixed at the entrance slit in order to avoid formation of drop water
- Moisture controller with regulation 10-100% steam generator can be supplied on request
- - Suitable for discontinuous operation in conjunction with lab padder, type Air Pad

SIZE

WEIGHT	380 kg / 840 lbs
DIMENSIONS	660 mm (w) x 1620 mm (d) x 955 mm (h) / 26 in (w) x 64 in (d) x 38 in (h)

ORDERING INFORMATION

D398A	Minidryer/Stenter and Steamer
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The SDL ECO Infrared Lab Dyeing System is a state-of-the-art dyeing unit. Unit produces accurate laboratory sample dyeings with level and reproducible results and accommodates up to 20 positions with a low liquor ratio for synthetic and natural fibers.

The SDL ECO moves the beakers in a circular rotation with advanced infrared heating technology, eliminating glycol contamination and cumbersome beaker cleaning. Specially pressure-tested beakers offer maximum safety for atmospheric and high-temperature dyeing. The easy to operate multi-step controller makes operator error virtually impossible. Dyebatch temperature is measured directly by a PT-100 probe inside the beaker. Important process information is easily viewed during the dyeing process.

The SDL ECO is suitable for all types of substrates. It is ergonomically designed for fast, convenient use. State-of-the-art technology contributes to accurate temperature control and low energy consumption.

SDL ECO Infrared Lab Dyeing System.

- State-of-the-art technology at an affordable price
- Glycol-free infrared heating system
- Accurate temperature control
- Increased productivity of laboratory samples
- High temperature, safety tested pressure dyeing beakers
- Easy to operate multi step controller

Suitable for all fibers and substrates.

SIZE

WEIGHT	69 kg / 152 lbs
DIMENSIONS	570 mm (w) x 680 mm (d) x 670 mm (h) / 22.4 in (w) x 26.8 in (d) x 26.4 in (h)

ORDERING INFORMATION

300020	SDL ECO Infrared Lab Dyeing System with 150 cc Beakers
300023	with 300 cc Beakers
300027	with 500 cc Beakers
300030	with 1000 cc Beakers
202727	with 5 liter drum

An affordable sphere spectrophotometer, designed to give fast, precise and accurate color measurement information on textile materials.

Provides absolute and difference measurements for the following colormetric systems:[ΔX], Lab, YI1925, WI Taube, Delta cmc , Delta lab , DeltaWI73, $L^*a^*b^*$, Reflectance, WI98, MI, DeltaE00, Delta reflectance , DeltaWI Berger, $L^*C^*h^\circ$, Munsell Notation, WI73, MI6172, DeltaE94, DeltaYI98, DeltaWI Hunter, XYZ, Gray Scale, WI Berger, Gloss, DeltaXYZ, DeltaYI73, DeltaWI Stensby, Yxy, YI98, WI Hunter, Delta $L^*a^*b^*$, DeltaYxy, DeltaYI1925, DeltaWI Taube, $L^*u^*v^*$, YI73, WI Stensby, Delta $L^*C^*h^\circ$, Delta $L^*u^*v^*$, DeltaWI98, Averging, 555 Shade Sort, Verbal Difference, and Power Management. These values can be obtained from any of nine illuminants with 2 or 10 observer angle. 0-200% reflectance for measurement range.

Spectral range from 400 to 700 nm with 10 nm spectral interval (measured & output). Stores up to 1,000 standards with tolerances for easy pass/fail measurement. Status LED and Hi-Res color LCD display provide visual confirmation.

SIZE

WEIGHT	1.1 kg / 2.4lbs
DIMENSIONS	213 mm(w) x 91 mm (d) x 109 mm (h) / 8.5 in (w) x 3.6 in (d) x 4.3 in (h)

ORDERING INFORMATION

201977	Color and Shade Difference Meter
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STANDARDS:

ASTM E0313

Temperature Indicating Strips

D440

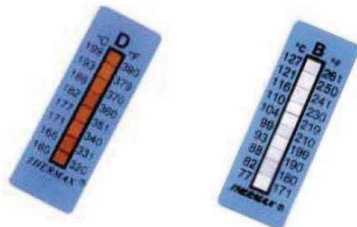
Color Changes to indicate maximum temperature achieved in textile processing. Self adhesive and unaffected by oil, water or steam. Ranges available from 40°C (105°F) to 26°C (500°F)

SIZE

DIMENSIONS	15 mm (w) x 45 mm (d) x 0 mm (h) / 0.6 in (w) x 1.75 in (d) x 0 in (h)
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ORDERING INFORMATION

202985	40-71°C / 105-160°F Temperature Indicating Strips (Pack of 100)
202986	71-110°C / 160-230°F Temperature Indicating Strips (Pack of 100)
202473	116-154°C / 241-309°F Temperature Indicating Strips (Pack of 100)
202340	160-199°C / 320-390°F Temperature Indicating Strips (Pack of 100)
202341	204-260°C / 399-500°F Temperature Indicating Strips (Pack of 100)





Combined with Magnetic Stirrer. Temperature control from 0-540°C, stirring speeds from 50-1500 rpm. Heating surface size 18.4 x 18.4 cm.

SIZE

WEIGHT	5kg /11 lbs
DIMENSIONS	287 mm (w) x 411 mm (d) x102 mm (h) / 11.3 in (w) x 16.2 in (d) x 4 in (h)

ORDERING INFORMATION

D441	Ceramic Hotplate / Stirrer
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Complete with stand and spindle set - direct display of viscosity in centipoise or millipascal/seconds, percent torque, spindle number and speed (18 speeds 0.3-100 RPM). Complete with set of spindles for low or medium viscosity, and hard carrying case. Measures viscosities of dye solutions, pastes, sizing compounds, lubricants or adhesives.

SIZE

WEIGHT	8kg /18 lbs
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DIMENSIONS	175 mm (w) x 75 mm (d) x 75 mm (h) / 7 in (w) x 3 in (d) x 3 in (h)
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ORDERING INFORMATION

203874	Digital Rotational Viscometer
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UNIVERSAL TESTING MACHINES



The ST series of electromechanical testing machines are designed to test a wide range of materials in tensions, compression, flexure, shear, and peel.

A variety of self-identifying loadcells are available at differing capacities that give precise applied load measurements from the smallest test specimen to ones that go to full machine capacity. Test machines become complete, powerful test systems with the addition of grips to hold the specimen, strain measurement instrumentation and Horizon Data Analysis software.

The benchtop range of ST models feature both single and twin column frames. The single column models have frame capacities of 1 kN (100 kgf / 200 lbf) and 5 kN (500 kgf / 1100 lbf), while dual column models are available in capacities of 10 kN (1000 kgf / 2200 lbf), 25 kN (2500 kgf / 5000 lbf), and 50 kN (5000 kgf / 11000 lbf), and are designed to test a vast range of materials and finished products.

New design allows rapid change of machine capacity from as little as 0.2% of the capacity of the smallest loadcell to the maximum frame capacity in a very simple process. Also, the machines can be operated at speeds ranging from a minimum of 0.001 mm/min (0.04 thousandths of an inch per minute) to a maximum of up to 1000 mm/min (40 inches per minute), depending on frame size, which accommodates a wide range of material and specimens.

Features

- Test frame can be extended by up to 254 mm / 10 inches (single column) or 400 mm / 16 inches (Twin column) to increase test area size
- Different system interface options are available: tethered handheld interface, wireless Bluetooth interface panel, or virtual machine controller.
- Meets or exceeds the requirements of national and international standards for material testing systems
- (Single column) or 8 (Twin column) full length T slots built into machine column to allow accessories to securely mount to the test frame
- Built-in pneumatic distribution ports that provide local air supply to pneumatic grips

ORDERING INFORMATION

204115	1ST Single Column Load Frame, 1 kN / 200 lbf capacity
402444	5ST Single Column Load Frame, 5 kN / 1100 lbf capacity
204116	10ST Twin Column Load Frame, 10 kN / 2200 lbf capacity
204117	25ST Twin Column Load Frame, 25 kN / 5000 lbf capacity
204118	50ST Twin Column Load Frame, 50 kN / 11000 lbf capacity
204129	HMC Handheld User Interface
204130	PROTERM Handheld User Interface
202803	Primary Platform for Horizon Software
203679 / 203410	Textiles Library for Horizon Software

All ST series can be used with selection of handheld interfaces or a virtual machine interface running on a connected PC.

The PROTERM model is the familiar handheld controller which is tethered to the machine by an articulated arm. With its larger, tactile, sealed keypad, this controller is ideal for operators who use gloves to load and upload specimens and prefer a push button keypad. It can be used for basic operation of the tester and can initiate a test, but must be used with Horizon software.

The HMC model is the wireless handheld interface which is connected to the machine by a Bluetooth link. This interface features an Android-based operating platform and can be used to control the machine by itself or in conjunction with Horizon software. Features three channel display of test machine channels and selectable multi unit display of channel values. Safe operating radius of a maximum of 10 m and will operate in 'safe' mode if the range is exceeded. Controls machine movement during test set up and initiates a test directly from the built-in control pad. Test procedure involving multiple steps can be set up and run directly on the HMC interface.

PROTERM

Required or Option	Option in support of testing machine crosshead positioning, specimen insertion and monitoring of machine status. ** Cannot be used to perform materials testing
Tactile Push Button Type	Black elastomeric keys with epoxy caps
Language	Supports global language character sets
Screen	Monochrome supertwist LCD 5 lines (3 live sources, 2 status lines)
Size (L x W x D)	192 x 128 pixels
	209 mm x 104.1 mm x 29.2 mm
	8.25 in x 4.10 in x 1.15 in
Weight	340 g / 0.75 lb



PROTERM



HMC

HMC

Required or Option	Option
Technology Platform	Android v.4.1.1 (Jelly Bean)
Language	Supports global language character sets
Touch Screen	Color touch screen, multi touch capacitive, rain resistant and inductive stylus
Display	141 mm diagonal super AMOLED 720 x 1280 pixels
Size (L x W x D)	232 mm x 99 mm x 29 mm
	9.1 in x 3.9 in x 1.14 in
Weight	442 g / 1 lb



1ST Testing Machine



5ST Testing Machine

TECHNICAL SPECIFICATIONS

Model		1ST	5ST
Capacity		1 kN / 100 kg / 200 lbf	5 kN / 500 kg / 1000 lbf
Maximum Sample Diameter		NA mm / NA in	NA mm / NA in
Load Cells		5N, 10N, 25N, 50N, 100N, 250N, 500N, 1kN	5N, 10N, 25N, 50N, 100N, 250N, 500N, 1kN, 2.5kN, 5kN
Distance between columns		NA mm / NA in	NA mm / NA in
Maximum Crosshead Travel (excluding grips)		755 mm / 30 in	755 mm / 30 in
Testing Speed Range	mm/min	0.001 to 1000	0.001 to 1000 to 2kN 0.001 to 500 to 5kN
	in/min	0.00004 to 40	0.00004 to 40 to 400lbf 0.00004 to 20 to 1000lb
Jog Speed		NA mm / NA in	NA mm / NA in
Return Speed	mm	0.001 to 1500	0.001 to 1500
	in	0.00004 to 60	0.00004 to 60
Resolution	mm	0.1	0.1
	in	0.000004	0.000004
Accuracy		+/- 0.005%	+/- 0.005%
Dimensions W x D x H	mm	511 x 467 x 1168	511 x 467 x 1168
	in	20 x 18 x 46	20 x 18 x 46
Weight	kg	46 kg / 101 lb	46 kg / 101 lb
Controller Interface	HMC	Y	Y
	Proterm	Y	Y
Software	Horizon	Y	Y

1. Load weighting system meets or exceeds the requirements of the following standards: ASTM E4, ISO7500-1, EN10002-2. It is recommended that systems are verified at installation in accordance with ASTM E4 and ISO 75001.

2. Strain measurement meets or exceeds the requirements of the following standards: ASTM E83, ISO9513 and EN 10002-4.



10ST Testing Machine



25ST Testing Machine



50ST Testing Machine

TECHNICAL SPECIFICATIONS

Model		10ST	25ST	50ST
Capacity		10 kN / 1000 kg / 2200 lbf	25 kN / 2500 kg / 5000 lbf	50 kN / 5000 kg / 11000 lbf
Maximum Sample Diameter		NA mm / NA in	NA mm / NA in	NA mm / NA in
Load Cells		5N, 10N, 25N, 50N, 100N, 250N, 500N, 1kN, 2.5kN, 5kN, 10kN	5N, 10N, 25N, 50N, 100N, 250N, 500N, 1kN, 2.5kN, 5kN, 10kN, 25kN	5N, 10N, 25N, 50N, 100N, 250N, 500N, 1kN, 2.5kN, 5kN, 10kN, 25kN, 50kN
Distance between columns		405 mm / 12 in	410 mm / 16 in	410 mm / 16 in
Maximum Crosshead Travel (excluding grips)		1100 mm / 43 in	1090 mm / 43 in	1065 mm / 42 in
Testing Speed Range	mm/min	0.001 to 1000 to 10kN	0.001 to 1000 to 10kN 0.001 to 500 to 25kN	0.001 to 500 to 20kN 0.001 to 250 to 50kN
	in/min	0.00004 to 40 to 2000lbf	0.00004 to 40 to 2000lbf	0.00004 to 20 to 4000lbf
Jog Speed		NA mm / NA in	NA mm / NA in	NA mm / NA in
Return Speed	mm	0.001 to 1000	0.001 to 1000	0.001 to 500
	in	0.00004 to 40	0.00004 to 40	0.00004 to 20
Resolution	mm	0.1	0.1	0.1
	in	0.000004	0.000004	0.000004
Accuracy		+/- 0.005%	+/- 0.005%	+/- 0.005%
Dimensions W x D x H	mm	729 x 506 x 1625	729 x 506 x 1625	729 x 506 x 1655
	in	29 x 20 x 64	29 x 20 x 64	29 x 20 x 65
Weight		130 kg / 287 lb	130 kg / 287 lb	163 kg / 359 lb
Controller Interface	HMC	Y	Y	Y
	Proterm	Y	Y	Y
Software	Horizon	Y	Y	Y

1. Load weighting system meets or exceeds the requirements of the following standards: ASTM E4, ISO7500-1, EN10002-2. It is recommended that systems are verified at installation in accordance with ASTM E4 and ISO 75001.

2. Strain measurement meets or exceeds the requirements of the following standards: ASTM E83, ISO9513 and EN 10002-4.

Universal Testing Machine 1ST special version is designed for low force/extension single fiber testing. Fitted with special 10 N / 1000 gf loadcell and lightweight pneumatic grips. Speed 0.001 to 1000 mm/min. Maximum 755 mm travel (Optional Tension Clips computer testing software is available for order separately). Extension resolution 0.001 mm. HMC wireless Bluetooth handheld controller included.

Please see Pages 87-89 for information on other grips/accessories for this device.

SIZE

WEIGHT	46 kg / 101 lbs
DIMENSIONS	511 mm (w) x 467 mm (d) x 1168 (h) / 20 in (w) x 18 in (d) x 46 in (h)

ORDERING INFORMATION

204173	F012 Single Fiber Strength Tester
200982	Tension Clips (Set)
202803	Horizon Testing Software (computer not included)

STANDARDS:

ISO 5070

BS 3411

BISFA



5ST Single End Yarn Strength Tester

Y263A

To determine the breaking load and extension of single yarns and threads up to 250 N, 25 kgf, 50 lbf or 100 N, 10 kgf, 20 lbf load range depending on choice of load cell (one or both may be ordered). Special-purpose version of 5ST single column universal tester provided with HT60 manual horn-type yarn grips. Speed 0.001 to 1000 mm / min. Maximum 755 mm travel (excluded grip). Extension resolution 0.001 mm HMC wireless Bluetooth handheld controller included.

Optional computer testing software is available for order separately.

SIZE

WEIGHT	46 kg / 101 lbs
DIMENSIONS	490 mm (w) x 450 mm (d) x 1140 (h) / 20 in (w) x 18 in (d) x 45 in (h)

ORDERING INFORMATION

Y263A	5ST Single End Yarn Strength Tester with HT60 Grips, excludes load cell
402445	100 N, 10 kgf, 20 lbf load cell (ST series)
402929	250 N, 25 kgf, 50 lbf load cell (ST series)
202803	Horizon Testing Software (computer not included)

STANDARDS:

ASTM D2256

BS 1932

ISO 2062





H5KL Fabric Testing Package

Package includes:

- Model H5kL, 5kN Universal Testing Machine
- 5kN replaceable load cell
- 100N replaceable load cell
- HT45 pneumatic operated grip with 25x25 mm rubber coated jaw faces & 25 x 75 mm rubber coated jaw faces
- HT401 safety grip controller
- Footswitch
- Horizon testing software
- Textile library with 500+ pre-programmed standards

Key specification

Force accuracy: $\pm 0.5\%$ of indicated load, Position accuracy: $\pm 0.01\text{mm}$, Speed: 0.001 to 1000 mm/min

Adaptable

- The Tinius Olsen series instruments are endlessly adaptable to the specific needs of the customer through a variety of options.
- A comprehensive selection of self identifying loadcells, grips and fixtures to hold the simplest to most complex samples
- T slots built into machine column to allow accessories to securely mounted to the test frame.
- Up to 4 connections can be made with the test frame via built-in accessory connection panels.
- Various system interface options available, from a familiar tethered handheld interface, a wireless Bluetooth interface panel, or virtual machine controller
- Frames can be modified by adding extra height to the test area by up to 400 mm

Solid Design

- The construction of the machine frame, leadscrews, and drive system make them unique
- Even at full capacity, these frames have excellent rigidity with negligible frame deflection.
- Can be operated at speeds ranging from a minimum of 0.001 mm/min to a maximum of up to 1000 mm/min

Versatile

- Grips and fixtures can be easily mounted securely with a simple locking pin
- Advanced lock pin design allows for rapid load cell change

All Tinius Olsen testing machines are powered by Horizon Software. This comprehensive software package features:

- Test Editor
- Tabbed Test and Recall Area Multiple Machine Control Output Editor
- Multilingual
- Method Editor
- Result Editor
- Test Method Library
- Multifaceted Security

STANDARDS:

AATCC 92 / 114	ASTM D3787	EN343	ERT20.2
ISO 9073-3 / 9073-4 / 9073-5 / 9073-18		IST 110.1(01)	
WSP 100.2.R3(12) / 100.3.R3(12) / 110.1.R4 / 110.4.R4 / 110.5.R4			

ORDERING INFORMATION

204858 SAFQ H5kL Fabrics Package



The L Series of electromechanical testing machines is designed to test a wide range of materials including, but not limited to: plastics, films, paper, packaging materials, filter material, adhesives, foils, food, toys, medical devices and components, in tension, compression, flexure and peel.

Testing machines are available in frame capacities of 1kN, 5kN, 10kN, 25kN and 50kN and are combined with a variety of grips and fixtures, extensometers and software to provide standard testing systems for a variety of applications.

At the heart of each system is the testing machine. Building on the quality and technology that is built into machines, we have developed the L Series of machines that communicate directly with a standard PC via a high speed RS232.

Robust construction of the loadframes comprising oil soaked precision leadscrews, high precision ball race bearings, high grade material for crossheads and current electronics, combined with our years of experience in machine construction results in these superior testing machines.

Flexibility and simplicity of use is also built into the design of these machines. Each machine features rapid change Z beam loadcells that allow quick and easy capacity reduction to an appropriate capacity for the test. These loadcells have a measurement accuracy of

+/- 0.5% of the applied load, from 2-100% of the loadcell capacity.

Each machine also features rapid grip change capability: a simple pinning technique means that the gripping fixtures can be changed for different test configurations extremely rapidly and easily.

Key features

- Suitable for tension, compression, flexure, shear and other tests to a maximum force of 50kN/11,000lbf.
- Primary system interface is a PC running Horizon Data Analysis software connected via RS232.
- System features local Jog Up, Jog Down and Stop buttons so the crosshead can be positioned for easy specimen loading.
- Meets or exceeds the requirements of national and international standard for materials testing systems.

Featured upgrades

- USB connectivity
- Sunken power connector to ease service
- Protective screen supporting panels on sides
- Air piped inside the machines to bottom and upper crossheads for supporting pneumatic fixtures

ORDERING INFORMATION

204858 SAFQ H5kL Fabrics Package

202915 SAFQ H10kL Fabrics Package



Model H5KL –5kN capacity
(500kg/1000lbf).



Model H10KL -10kN capacity(1,000kg/2,000lbf)

TECHNICAL SPECIFICATIONS

SPECIFICATIONS		5kL	10kL
Capacity	kN	5	10
	lbf	1,000	2,000
Test speed range	mm/min	0.001-1000 up to 2500N, 0.001-500 up to 5kN	0.001-1000
	in/min	0.00004-40 up to 500lb, 0.00004-20 up to 1,000lb	0.00004-40
Clearance between columns	mm	n/a	410
	in	n/a	16
Throat depth	mm	200	n/a
	in	8	n/a
Max crosshead travel	mm	750	1100
	in	29.5	43
Dimensions (HxWxD)	mm	1140 x 490 x 450	1600 x 650 x 450
	in	46 x 20 x 18	64 x 29 x 20
Weight	kg	50	115
	lb	101	287

1. Load weighing system meets or exceeds the requirements of the following standards: ASTM E4, ISO 7500-1, and EN 10002-2. It is recommended that systems are verified at installation in accordance with ASTM E4 and ISO 75001.

2. Strain measurement system meets or exceeds the requirements of the following standards: ASTM E83, ISO 9513 and EN 10002-4.

LOAD CELLS

STANDARD Z-BEAM	5N	10N	25N	50N	100N
Order Code	200574	200575	200576	200577	200578
Fitting	M6x1 (F)	M6x1 (F)	M8x1.25(F)	M8x1.25(F)	M8x1.25(F)

	250N	500N	1kN	2.5kN	5kN
Order Code	200579	200580	200581	200582	200583
Fitting	M8x1.25(F)	M8x1.25(F)	M8x1.25(F)	M8x1.25(F)	M12x1.75(F)

	10kN	25kN	50kN
Order Code	200584	200585	200586
Fitting	M12x1.75(F)	M16x2 (F)	M16x2 (F)



Standard Z Beam



Shear Web Load Cell

GENERAL PURPOSE PNEUMATIC GRIPS

Model (Max Load)	122-002 (5kN)	HT42 (500N)
Order Code	403451	200627
Minimum Load Cell	500N	50N
Replaceable Jaw Faces*		
25 x 25 mm rubber coated	200616	200626
25 x 50 mm rubber coated	200615	200625
25 x 75 mm rubber coated	200614	200624
25 x 100 mm rubber coated	300581	N/A
R3 x 75 mm line contact	200604	200621
HT 401 Pneumatic controller	200678	200678
Footswitch	200679	200678
Spare Rubber Sheet 150 x 150 mm	200690	200690



122-002

GENERAL PURPOSE MANUAL GRIPS

Model (Max Load)	HT40 (20kN)	121-014 (5kN)	121-003 (2kN)
Order Code	202595	203163	203161
Type	Heavy Duty	Medium Duty	Light Duty
Minimum Load Cell	500N	250N	50N
Replaceable Jaw Faces*			
25 x 25 mm rubber coated	300535	204067	Fixed Jaw Face* Includes 25 x 65 mm rubber coated
25 x 50 mm rubber coated	300536	300534	
25 x 75 mm rubber coated	300537	204066	
Largest rubber	300532 (50 x 100 mm)	204063 (50 x 80 mm)	

*other sizes and types of jaw face are available for selection



121-014

YARN/FILAMENTS GRIPS*

Model (Max Load)	121-013 (100N)	131-007 (1kN)	HT58 (100N)	HT57 (1.5kN)
Order Code	203162	203143	200603	202880
Minimum Load Cell	5N	25N	5N	500N
Operation	Manual	Manual	Pneumatic	Pneumatic

**LOOP BARS***

Model	S428	MER 150	S620	Universal
Order code	200637	300524	200636	ask for details
Dimension	Φ4 x 100mm	Φ4 x 75mm	Φ6.5 x 80mm	Φ4, 5, 6, 8, 10 & 13 x 120mm
Standard	BS4952	BS4952	ASTM D4964	General

**BRA WIRE ATTACHMENTS & BURSTING FIXTURES***

Model	BraWire (M&S)	BraWire (NEXT)	General Ball Burst Fixture
Order code	200650	202462	104948
Standard	M&S	NEXT	ASTM D3787, D6797, D751 EN 12232-1, GB/T 8878, 19976 FZ/T 01030



*other fixtures to suit specific application are available for selection



ATTACHMENT STRENGTH*

Model	Popper	Lower Clamp	Button Box
Order code	300454	203769	300457**
Standard	BS7907	BS7907	BS7907

**requires insert plate



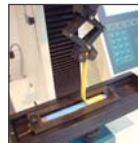
Model	Diamante lower	Diamante upper
Order code	300438	300439
Standard	BS7909	BS7909

**ZIPPER TESTING***

Model	S700	S435	HT23	S415
Order code	300757	300756	300444	300755
Test name	Element slippage	Element Pull off	Stop Holder	Slider Pull
Standard	BS 3084 ASTM D2061	BS 3084 ASTM D2061	BS 3084 ASTM D2061	BS 3084 ASTM D2061

**FRICTION & PILLING FIXTURE***

Model	FT200	PT180	PT190	PT1000
Order code	200653	200655	200654	99-1002037/1
Test name	Coef. of friction	180° Peel	90° Peel	Climbing Drum
Standard	ISO 8295 ASTM D1894			BS 5350 ASTM D1781



*other fixtures to suit specific application are available for selection

Building on our long history of providing solutions to an enormous variety of testing problems, we offer a comprehensive software program - Horizon, that makes testing simple, precise, and efficient. Horizon software goes far beyond data collection and presentation. It will help you automate your operations, from R&D to the charting and analysis of QC testing. Horizon provides a library of standard, specific, and application focused test routines that have been developed in close cooperation with our customers around the world and to the standards they are using.

Among the many valuable features offered by Horizon are:

a test routine library; simultaneous multiple machine control; test, output, method, and result editors; and multilayered security

Horizon also includes the following features:

- Generation of user customized reports
- Ability to recall, re-plot and rescale test curves
- User-configurable machine parameter and control settings
- Multiple layered security with individual log-ins for different assigned operator access rights
- Networking capabilities, ensuring identical test methods are used for multiple machine users; LIMS or EPR integration

Horizon is rich with capabilities that improve productivity and enable you to build, access, and use a modern, powerful materials testing database. It employs the latest Windows environments to create an intuitive user experience. Built-in tutorials, on-line help, and help desk access provide additional user support.

ORDERING INFORMATION

202803

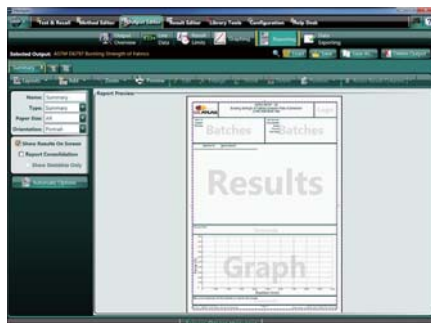
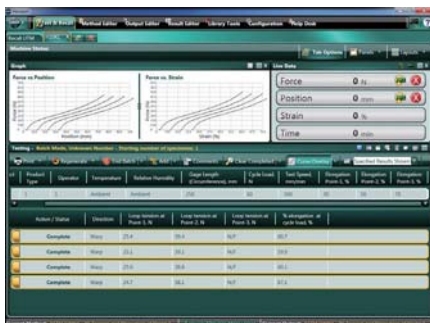
Horizon for Textiles Software Package



Methods Library



Pre-written Standard Methods



More than 550 pre-programmed textile test methods are embedded into the Unique Textile Software Package and more are added regularly. New methods approved for use by SDL Atlas and Tinius Olsen are downloadable on request.

Inclusion of methods within the software ensures tests are carried out using the correct parameters such as speed, pretension, gage length, units and report formats, among others. We work with most International Standards Organizations, Major Retailers (e.g. Marks & Spencer, NEXT...etc.) and Textile Manufacturers as well as Government and Military Specifiers.

If you or your organization is involved in writing or setting Textile Standards requiring the use of Universal testers and you are not included in our list, please contact us.

Horizon 10.2.1.0 Test Routines Database Test Methods Available

The test methods database for Horizon is continuously growing to cover more national/international/retailer specific testing standards. Please check with SDL Atlas for the latest full list of test methods.

Standard Type	Title	Test Type
AATCC	AATCC TM 136: 2003 Bond Strength of Bonded and Laminated Fabric	Tensile
ABNT	ABNT NBR 10334: 2003 Baby's Dummies (6-2) Structural Integrity	Tensile
ABNT	ABNT NBR 10334: 2003 Baby's Dummies (6-3) Biting Resistance	Compression
ABNT	ABNT NBR 10334: 2003 Baby's Dummies (6-4&5) Traction Resistance	Tensile
Adidas	Adidas TM 4.10: 2007 Tensile Strength - Strip Method	Tensile
Adidas	Adidas TM 4.11: 2007 Tensile Strength - Woven Fabrics (Grab method)	Tensile
Adidas	Adidas TM 4.12: 2004 Elongation and Resilience of Elastic Fabrics	Cycle
Adidas	Adidas TM 4.13: 2007 Seam Slippage - Woven Fabrics	Seam
Adidas	Adidas TM 4.14: 2006 Tear force of Woven Fabrics (Single tear)	Tear
Adidas	Adidas TM 4.15: 2006 Button Hole Tearing Strength - Rugby	Tensile
Adidas	Adidas TM 4.27: 2011 Elongation, Recovery and Modulus of Elastic Fabrics C-Clamp	Cycle
Arcadia Group	Arcadia Group AG101:2012 slide fasteners - Annex B	Tensile
Arcadia Group	Arcadia Group AG101:2012 slide fasteners - Annex C	Tensile
Arcadia Group	Arcadia Group AG101:2012 slide fasteners - Annex D	Tensile
Arcadia Group	Arcadia Group AG101:2012 slide fasteners - Annex E	Tensile
Arcadia Group	Arcadia Group AG101:2012 slide fasteners - Annex G	Tensile
Arcadia Group	Arcadia Group AG101:2012 slide fasteners - Annex H	Tensile
Arcadia Group	Arcadia Group AG101:2012 slide fasteners - Annex I	Tensile
Arcadia Group	Arcadia Group AG101:2012 slide fasteners - Annex J	Tensile
Arcadia Group	Arcadia Group AG105:2012 Seam strength	Seam
Arcadia Group	Arcadia group AG106:2012 Buttons - tension test	Tensile
Arcadia Group	Arcadia group AG109:2012 Strap strength and attachment	Tensile
Arcadia Group	Arcadia group AG111:2012 Buckle assembly attachment strength	Tensile
Arcadia Group	Arcadia group AG29:2012 Residual Extension of Knitted elastic fabrics	Tensile
Arcadia Group	Arcadia group AG36:2012 Tensile strength, seam slippage and strength	Seam
Arcadia Group	Arcadia group AG37:2012 Tensile strength using Grab method	Tensile
Arcadia Group	Arcadia group AG38:2012 Seam Method for fabrics containing Elastanes-fixed load	Seam
Arcadia Group	Arcadia group AG78:2012 Tear strength for Leather-Baumann	Tear
Arcadia Group	Arcadia group AG79:2012 Tear strength for Leather-Baumann single tear	Tear
Arcadia Group	Arcadia group AG80:2012 Toy safety standard EN71 part 1	Tensile
Arcadia dGroup	Arcadia group AG81:2012 Seam tensile properties of fabrics and made up textile articles	Seam

Standard Type	Title	Test Type
Arcadia Group	Arcadia group AG82:2012 Slippage resistance of yarns at seams in woven fabrics	Seam
AS	AS 2432: 2009 Baby's Dummies Appendix B - Shield Test	Tensile
AS	AS 2432: 2009 Baby's Dummies Appendix C - Protrusion Test	Compression
AS	AS 2432: 2009 Baby's Dummies Appendix D - Tensile Test	Tensile
AS	AS 2432: 2009 Baby's Dummies Appendix E - Compression Test	Compression
AS	AS 2432: 2009 Baby's Dummies Appendix F - Bite Test	Compression
AS	AS 2432: 2009 Baby's Dummies Appendix H - Tear Test	Tear
ASTM	ASTM D 2261 - 14 Tearing Strength of Fabrics - Tongue (Single Rip)	Tear
ASTM	ASTM D 3574 - 05 Procedure A - IFD Hysteresis Loss	Cycle
ASTM	ASTM D 3574 - 05 Procedure B - CFD Hysteresis Loss	Cycle
ASTM	ASTM D 3574 - 05 Test B1 - Indentation force deflection test	Compression
ASTM	ASTM D 3574 - 05 Test B2 - Indentation Residual gage length test	Compression
ASTM	ASTM D 3574 - 05 Test C - Compression force deflection test	Compression
ASTM	ASTM D 3574 - 05 Test E - Tensile test (Grip separation)	Tensile
ASTM	ASTM D 3574 - 05 Test F - Tear resistance test	Tear
ASTM	ASTM D 5169 - 98 (2010) Shear Strength of Hook and Loop Touch Fasteners	Tensile
ASTM	ASTM D 5170 - 98 (2010) Peel Strength of Hook and Loop Touch Fasteners	Peel
ASTM	ASTM D 1683-04: Failure in Sewn Seam of Woven Apparel Fabrics	Seam
ASTM	ASTM D 1683-11: Failure in Sewn Seam of Woven Apparel Fabrics	Seam
ASTM	ASTM D 1894-08: Static and Kinetic Coefficients of Friction of Plastic Film and Sheet	Tensile
ASTM	ASTM D 1938-08: Tear-Propagation Resistance of Highly Extensible Film	Tear
ASTM	ASTM D 1938-08: Tear-Propagation Resistance of Low-Extensible Film	Tear
ASTM	ASTM D 2061-07 (2013) 14.1 Chain Crosswise Strength	Tensile
ASTM	ASTM D 2061-07 (2013) 14.2 Element Pull-Off	Tensile
ASTM	ASTM D 2061-07 (2013) 14.3 Element Slippage, Lengthwise	Tensile
ASTM	ASTM D 2061-07 (2013) 22.2 Top Stop Holding	Tensile
ASTM	ASTM D 2061-07 (2013) 22.3 Bottom Stop Holding, Slider	Tensile
ASTM	ASTM D 2061-07 (2013) 22.4 Bottom Stop Holding, Crosswise	Tensile
ASTM	ASTM D 2061-07 (2013) 22.5 Bottom Stop Holding, Stringer Separation	Tensile
ASTM	ASTM D 2061-07 (2013) 22.6 Bridge Top Stop, Stringer Separation	Tensile
ASTM	ASTM D 2061-07 (2013) 30.1 Separable Pin, Pull-Off	Tensile
ASTM	ASTM D 2061-07 (2013) 30.2 Fixed Retainer, Pull Off	Tensile
ASTM	ASTM D 2061-07 (2013) 30.3 Separating Unit, Crosswise	Tensile
ASTM	ASTM D 2061-07 (2013) 39 Cushioned Compression Utility	Compression
ASTM	ASTM D 2061-07 (2013) 49.1 Slider Deflection and Recovery, Mouth	Tensile
ASTM	ASTM D 2061-07 (2013) 49.2 Slider Deflection and Recovery, Pull	Tensile
ASTM	ASTM D 2061-07 (2013) 74.1 Resistance to Pull-Off of Slider Pull	Tensile
ASTM	ASTM D 2061-07 (2013) 84.1 Resistance to Angular Pull-Off of Slider Pull	Tensile
ASTM	ASTM D 2061-07 (2013) 94.1 Holding Strength of Slider Lock	Tensile
ASTM	ASTM D 2256-09 Tensile Properties of Yarns Single Strand Method	Tensile
ASTM	ASTM D 2261-11 Tear Strength of Fabrics - Tongue (Single Rip)	Tear
ASTM	ASTM D 3822-07 Tensile Properties of Single Textile Fibres	Tensile
ASTM	ASTM D4964 - 96 Tension and Elongation of Elastic Fabrics (CRE)	Tensile
ASTM	ASTM D5034-08 Breaking Strength & Elongation of Textile Fabrics -Grab Strength	Tensile

Standard Type	Title	Test Type
ASTM	"ASTM D5035-06 (2008) Breaking Force and Elongation of Textile Fabrics (Strip Method)"	Tensile
ASTM	ASTM D5587 - 08 Tearing Strength of Fabrics - Trapezoid	Tear
ASTM	ASTM D434: Resistance to Slippage of Yarns in Woven Fabrics Using a Standard Seam	Seam
ASTM	"ASTM D434: 1995 Resistance to Slippage of Yarns in Woven Fabrics Using a Standard Seam"	Seam
ASTM	ASTM D624-00: Tear Strength of Vulcanized Rubber	Tear
ASTM	ASTM D790-10: Flexure - Strain From Position	Flexure (achieved by compression)
ASTM	ASTM D882 - 12: Tensile Properties of Thin Plastic Sheeting	Tensile
ASTM	ASTM D903-98: Peel or Stripping Strength of Adhesive Bonds	Peel
ASTM	ASTM D6614 - 07 Stretch Properties of Textile Fabrics - CRE	Tensile
ASTM	ASTM D751 - 06 (45) Adhesion of Coating to Fabric	Peel
ASTM	ASTM D882-10: Tensile Properties of Thin Plastic Sheeting	Tensile
ASTM	ASTM F963 - 11 Toy Safety (8-10) Compression Test	Compression
ASTM	ASTM F963 - 11 Toy Safety (8-9) Tensile Removal of Components	Tensile
ASTM	ASTM F963 - 11 Toy Safety (8-9-1) Seams in Stuffed and Bean-Bag toys	Seam
BS	BS 3424-5: 1982 Coated Fabrics - Part 5: Method 7A Median Value Tongue Tear	Tear
BS	BS 3084: 2006 Slide fasteners - Annex J Open-end fastener single stringer	Tensile
BS	BS 3084: 2006 Slide fasteners - Annex B Strength of Puller Attachment	Tensile
BS	BS 3084: 2006 Slide fasteners - Annex C Strength of closed end	Tensile
BS	BS 3084: 2006 Slide fasteners - Annex D Strength of top stop	Tensile
BS	BS 3084: 2006 Slide fasteners - Annex E Strength of Open-end faster box	Tensile
BS	BS 3084: 2006 Slide fasteners - Annex G Lateral strength of fastener	Tensile
BS	BS 3084: 2006 Slide fasteners - Annex H Lateral strength of open-end attachment	Tensile
BS	BS 3084: 2006 Slide fasteners - Annex I Strength of slider locking device	Tensile
BS	BS 3424-5: 1982 Coated Fabrics - Part 5: Method 7A Median Value Tongue Tear	Tear
BS	BS 4162: 1983 Section 4 - Strength of Buttons	Tensile
BS	BS 5131 Section 5.11: 1981 Footwear - Strength of buckle fastening assemblies	Tensile
BS	BS 7505: 1995 Bandages (1) - Elastic properties of Flat non-adhesive fabric	Cycle
BS	BS 7505: 1995 Bandages (2) - Elastic properties of Flat non-adhesive fabric	Cycle
BS	BS 7505: 1995 Bandages (3A) - Elastic properties of Flat non-adhesive fabric	Cycle
BS	BS 7505: 1995 Bandages (3B) - Elastic properties of Flat non-adhesive fabric	Cycle
BS	BS 7505: 1995 Bandages (3C) - Elastic properties of Flat non-adhesive fabric	Cycle
BS	BS 7505: 1995 Bandages (3D) - Elastic properties of Flat non-adhesive fabric	Cycle
BS EN	BS EN 388: 2003 Protective gloves - puncture resistance	Compression
BS EN	BS EN 863: 1996 Protective clothing - Puncture resistance	Compression
CFR	16 CFR 1500 Toy Safety (5x) Bite Test	Compression
CFR	16 CFR 1500 Toy Safety (5x) Compression Test	Compression
CFR	16 CFR 1500 Toy Safety (5x) Tension Test	Tensile
	Compression with Hysteresis to Target Displacement	Compression

Standard Type	Title	Test Type
	Compression with Hysteresis to Target Force	Compression
DIN	DIN 53 354: 1981 Artificial Leather Tensile Test	Tensile
EN	EN 12771: 1999 Footwear - Outsoles - Tear strength	Tear
EN	EN 1400: 2013 (E) (8-3-2) Shield in Compression	Compression
EN	EN 1400: 2013 (E) (8-3-2) Shield in Tension	Tensile
EN	EN 1400: 2013 (E) (9-1-2 as per 9-7-2-2) Post Impact Resistance Tensile with Break	Tensile
EN	EN 1400: 2013 (E) (9-2) Puncture Resistance	Compression
EN	EN 1400: 2013 (E) (9-3 as per 9-7-2-2) Post Tear Resistance Tensile with Break	Tensile
EN	EN 1400: 2013 (E) (9-4) Knob, Plug and-or cover retention	Tensile
EN	EN 1400: 2013 (E) (9-5-2) Biting Endurance	Compression
EN	EN 1400: 2013 (E) (9-6-2 as per 9-7-2-2) Post Rotation Endurance Tensile with Break	Tensile
EN	EN 1400: 2013 (E) (9-7-2-2) Tensile Test with break	Tensile
EN	EN 14350-1: 2004 (6-3-1) Child use and care articles - Tear resistance	Tear
EN	EN 14350-1: 2004 (6-3-2) Child use and care articles - Tensile	Tensile
EN	EN 14350-1: 2004 (6-7) Child use and care articles - Security/Retention	Tensile
EN	EN 14350-1: 2004 (6-8) Child use and care articles - Flexibility	Cycle
EN	EN 14372: 2004 (6-2-3) Child Cutlery and Feeding Utensils - Tensile	Tensile
EN	EN 14372: 2004 (6-2-4) Child Cutlery and Feeding Utensils - Tear resistance	Tear
EN	EN 14372: 2004 (6-2-5) Child Cutlery and Feeding Utensils - Strength/Rigidity	Tensile
EN	EN 14704-1: 2005 Elasticity of fabrics - Part 1: Strip Tests (Fixed Elongation)	Cycle
EN	EN 14704-1: 2005 Elasticity of fabrics - Part 1: Strip Tests (Fixed Load)	Cycle
EN	EN 15598: 2008 Terry fabrics - resistance to pile loop extraction	Tensile
EN	EN 29073-3: 1992 Determination of Tensile Strength & Elongation	Tensile
EN	EN 60811-1-1: 1995 Insulation and sheathing materials of electric cables	Tensile
EN	EN 71-1: 2005 + A9: 2009 Toy Safety - Compression test (8.8)	Compression
EN	EN 71-1: 2005 + A9: 2009 Toy Safety - Tension test (8.4)	Tensile
EN	EN 71-1: 2009 Toy Safety - Pull and Hold	Tensile
EN	EN 993-6: 1995 MOR (3pt) for Dense Shaped refractory products	Flexural
EN	EN 993-6: 1995 MOR (3pt) for Dense Shaped refractory products with MOE	Flexural
EN ISO	EN ISO 13934-1: 1999 Textiles - Maximum Breaking Force and Elongation (Strip method)	Tensile
EN ISO	EN ISO 13934-2: 1999 + 13935: 1999 + 13936-1: 2004 Seam Properties	Tensile
EN ISO	EN ISO 13934-2: 1999 + 13935-2: 1999 + 13936-1: 2004 Seam Properties	Seam
EN ISO	"EN ISO 13934-2: 1999 Textiles-Tensile properties of fabrics maximum force -Grab Method"	Tensile
EN ISO	EN ISO 13934-2: 2014 Textiles - Maximum force using the Grab method	Tensile
EN ISO	EN ISO 13935-2: 1999 + 13936-2: 2004 Seam Properties (Modified)-Fixed Load	Seam
EN ISO	EN ISO 13936-1: 2004 Slippage Resistance - Fixed Opening Method	Seam
EN ISO	EN ISO 13936-2: 2004 Slippage Resistance - Fixed Load Method	Seam
EN ISO	EN ISO 13937-2: 2000 Tear force of trouser-shaped test specimens (Single tear method)	Tear
EN ISO	EN ISO 13937-3: 2000 Tear force of wing-shaped test specimens (Single tear method)	Tear

Standard Type	Title	Test Type
EN ISO	EN ISO 13937-4: 2000 Tear force of tongue-shaped test specimens (Double tear test)	Tear
EN ISO	EN ISO 1421: 1998 Rubber- or Plastics-coated fabrics - Method 1: Strip - Tensile strength and elongation at break	Tensile
EN ISO	EN ISO 1421: 1998 Rubber- or Plastics-coated fabrics - Method 2: Grab - Tensile strength and elongation at break	Tensile
EN ISO	EN ISO 2062: 1995 (2009) Yarn from Packages Breaking force and Elongation	Tensile
EN ISO	EN ISO 2411: 2000 Adhesion of Rubber- or Plastic-Coated Fabrics	Tensile
EN ISO	EN ISO 3376: 2002 Leather - Tensile Strength and Extension	Tensile
EN ISO	EN ISO 3377-1: 2002 Leather - Tear load Pt1 Single edge tear	Tear
EN ISO	EN ISO 3377-2: 2002 Leather - Tear load Pt2 Double edge tear	Tear
EN ISO	EN ISO 3386-1: 1997 Polymeric or cellular flexible compression - Pt1 Low density	Compression
EN ISO	EN ISO 3386-1: 1997 Polymeric or cellular flexible compression (Auto) - Pt1 Low density	Compression
EN ISO	EN ISO 3386-2: 1998 Flexible cellular polymeric materials compression - Pt2 High density	Compression
EN ISO	EN ISO 4674-1 (A) Rubber- or plastic coated fabrics Tear resistance - Tongued (double tear)	Tear
EN ISO	"EN ISO 4674-1 (B) Rubber- or plastic coated fabrics Tear resistance - Trouser-shaped (single tear)"	Tear
EN ISO	EN ISO 5079: 1996 Textile Fibres - Breaking force and elongation at break	Tensile
EN ISO	EN ISO 9073-4: 1997 Textiles - nonwovens Tear resistance	Tear
EN ISO	EN ISO 9073-5: 2008 Textiles - nonwovens - Part 5 penetration resistance (Ball Burst)	Compression
Fiat	Fiat Auto 50423: 1985 Compression of Expanded cellular materials	Compression
Fiat	Fiat Auto 50441-01 Tensile Loading Test - Fabrics and water repellant fabrics	Tensile
Fiat	Fiat Auto 50442 Tear Test on Slit Specimen	Tear
FINAT	FINAT TM 9: 2001 Loop tack	Tensile
Ford	Ford BN 119-01 Seam Strength of Textile Trim materials	Seam
Ford	Ford BN 151-05 180 Degree Peel Adhesion Strength of Laminates	Peel
GAP	GAP Inc S1033 Stretch & Recovery - Foundation or Swimwear Fabric method	Cycle
GB/T	GB/T 19976-2005 Textiles - Bursting Strength - Steel Ball	Compression
Generic	Generic 180deg peel	Peel
Generic	Generic climbing drum peel	Peel
Generic	Generic compression - Force vs. Position	Compression
Generic	Generic Compression - Force vs. Time	Compression
Generic	Generic Compression - Set Initial Platen to Zero and Park Separation	Compression
Generic	Generic Compression - Stress vs. Strain (from Position)	Compression
Generic	Generic Compression Cycle	Compression
Generic	Generic Compression to Load - multicycle	Compression
Generic	Generic Compression with Deflectometer - Force vs. Deflection	Compression
Generic	Generic Flexure 3PT	Compression
Generic	Generic Flexure 3PT - MOE, MOR	Compression
Generic	Generic Flexure 3PT with Deflectometer - MOE, MOR	Compression
Generic	Generic Flexure 4PT	Compression
Generic	Generic Flexure 4PT - MOE, MOR	Compression
Generic	Generic Friction (Peel method)	Peel

Standard Type	Title	Test Type
Generic	Generic Paper Test (Horizontal Extensometer Air Bearing Test)	Tensile
Generic	Generic Peel or Tear - First and Last Peak with Margins	Peel/Tear
Generic	Generic Peel or Tear - Whole Trace	Peel/Tear
Generic	Generic Spring Compression	Compression
Generic	Generic Step Loading with hold - Compression	Compression
Generic	Generic Tensile - Force vs. Position	Tensile
Generic	Generic Tensile - Force vs. Position (With Energy)	Tensile
Generic	Generic Tensile - Force vs. Time	Tensile
Generic	Generic Tensile - Force vs. Time (Including All Rates)	Tensile
Generic	Generic Tensile - r Value on Horizontal	Tensile
Generic	Generic Tensile - Stress vs. Strain (from Position with Modulus Force/Length)	Tensile
Generic	Generic Tensile - Stress vs. Strain (from Position)	Tensile
Generic	Generic Tensile - Stress vs. Strain (Manual Machine, Position Disabled)	Tensile
Generic	Generic Tensile - Stress vs. Strain using Environmental Chamber	Tensile
Generic	Generic Tensile - True Stress & Strain	Tensile
Generic	Generic Tensile on Horizontal	Tensile
Generic	Generic Tensile on Horizontal without Clamp or Preload Segments	Tensile
Generic	Generic Tensile with Laser Extensometer	Tensile
Generic	Generic Tensile with Video Extensometer (Embedded)	Tensile
Generic	Generic Tensile with Video Extensometer (External)	Tensile
Generic	Generic Yarn Tensile	Tensile
GMW	GMW3010 Tensile and Elongation Properties	Tensile
GMW	GMW3010 Tensile and Elongation Properties (Ext)	Tensile
GMW	GMW3320 Laminate Bond Strength	Peel
GMW	GMW3326 Tearing Strength of Textile Materials by Trapezoid Method	Tear
Green Textile	Green Textile ASTM D2261 - 11 Tearing Strength of Fabrics - Tongue (Single Rip)	Tear
Green Textile	Green Textile ASTM D4533-91 Trapezoid Tearing Strength of Geotextiles	Tear
Green Textile	Green Textile ASTM D5034 Breaking Strength & Elongation - Grab Test	Tensile
Green Textile	Green Textile TSL 5100 G 4.32 Toyota Circular Modulus.	Tensile
ISO	ISO 10319: 2008 Tensile Properties of Geotextiles by the Wide-Width Strip Method	Tensile
ISO	ISO 11644: 2009 Leather - Test for Adhesion finish	Adhesion
ISO	ISO 34-1: 2004 Rubber - Tear Strength (Method B or C)	Tear
ISO	ISO 36: 2005 Rubber - Adhesion to Textile Fabrics	Peel
ISO	ISO 6133-1981 Rubber and Plastics - Tear and Adhesion Strength	Tear
ISO	ISO 6916-2: 2001 Annex B Deflection of Flexible Mouldings and Extrusions	Compression
ISO	ISO 8124-1: 2009 Toy Safety (5-24-6-1) Tension Test	Tensile
ISO	ISO 8124-1: 2009 Toy Safety (5-24-6-2) Seams in Stuffed and Bean-Bag toys	Seam
ISO	ISO 8124-1: 2009 Toy Safety (5-24-6-3) Pompoms tension test	Tensile
ISO	ISO 8124-1: 2009 Toy Safety (5-24-6-4) Protective components	Tensile
ISO	ISO 8124-1: 2009 Toy Safety (5-24-7) Compression Test	Compression
ISO	ISO 9863-1: 2005 Geosynthetics - Method B Thickness at three pressures (Single layers)	Compression
LS&CO	LS&CO ASTM D1683-11: Failure in Sewn Seams of Woven Apparel Fabrics	Seam
LS&CO	LS&CO Breaking Strength - Grab Method (ASTM D5034)	Tensile

Standard Type	Title	Test Type
LS&CO	LS&CO Method 11: 1999 Beltloop Attachment Strength	Tensile
LS&CO	LS&CO Method 25B: 2005 Button or Fastener attachment Strength	Tensile
LS&CO	LS&CO Method 39: 2003 Sundries Testing - Hasp Strength	Tensile
LS&CO	LS&CO Method 50: 2004 Sundries Testing - Internal Waistbands	Tensile
LTD	LTD 03: 2010 Stretch fabrics - Power and Recovery	Tensile
LTD	LTD 06: 2009 Elastics - Load, Elongation & Recovery	Tensile
LTD	LTD 07: 2009 Bra band elongation	Tensile
LTD	LTD 10: 2009 Comfort value - Seamless garments load and elongation	Tensile
LTD	LTD 11: 2009 Length-Width seamless fabrics in tube and garment form load and elongation	Tensile
LTD	LTD 14: 2009 Hook and Eye pull out strength	Tensile
LTD	LTD 15: 2009 Clear elastics load, elongation & tensile strain	Tensile
LTD	LTD 16: 2009 Bra Hook to Eye attachment strength	Tensile
LTD	LTD 17: 2009 Hooks, clasps, rings and slides strength	Tensile
LTD	LTD 19: 2009 Four pound load and elongation of seamless tubes and garments	Tensile
LTD	LTD 23: 2009 Wire Casing - Pin Penetration	Tensile
LTD	LTD 24: 2009 Seam stretchability of Knitted garments	Seam
LTD	LTD 26: 2009 Functional jewelry breaking strength	Tensile
LTD	LTD 27: 2009 Bra Underwire Extension	Tensile
M&S	M&S P11: 2001 Tensile Strength	Seam
M&S	M&S P115: 2006 Security of Attachment (Handbags and Belts) - 20kgF	Tensile
M&S	M&S P115: 2008 Security of Attachment of Accessories to Garments - 10kgF	Tensile
M&S	M&S P115A: 2006 Security of Attachment of Poppers to Garments - 10kgF	Tensile
M&S	M&S P115B: 2009 Test to failure Security of Attachment of Accessories to Garments	Tensile
M&S	M&S P115C: 2009 Test to failure Security of Attachment of Poppers to Garments	Tensile
M&S	"M&S P115H: 2008 Security of Attachment of Handles and Straps on Handbags and Laptop bags"	Tensile
M&S	M&S P11A: 2004 Tensile Strength - Bra Wire Casing	Tensile
M&S	M&S P11B: 2006 Tensile Strength of Rings and Sliders	Tensile
M&S	M&S P12: 2006 Fabric Slippage	Seam
M&S	M&S P122: 2001 Strength of Buttons	Tensile
M&S	M&S P124: 2007 Security of Attachment of Component Parts of Fabric Covered Buttons	Tensile
M&S	M&S P12A: 2007 Fabric Slippage (including all Stretch Wovens) - Fixed load	Seam
M&S	M&S P12B: 2007 Garment Seam Slippage and Seam Strength - Fixed Load	Seam
M&S	M&S P12C: 2006 Garment Slippage	Seam
M&S	M&S P13: 2004 Peel Bond Strength	Tensile
M&S	M&S P13A: 2004 Peel Bond Strength for Handbag and Belt Fabrics	Tensile
M&S	M&S P14: 2004 Extension and Modulus of Elastomerics	Tensile
M&S	M&S P141: 2003 Single Stringer Top Stop Test	Tensile
M&S	M&S P14A: 2004 Extension and Modulus of Stretch Laces	Tensile
M&S	M&S P14C: 2001 Extension and Modulus of Bare Rubber Tapes	Tensile

Standard Type	Title	Test Type
M&S	M&S P15 part 1: 2004 Extn and Residual Extn of Stretch Woven Fabrics	Tensile
M&S	M&S P15A:2003 Extension, Modulus and Residual Extension of Stretch Fabrics	Tensile
M&S	M&S P15B: 2001 Recoverability of stretch leggings (Knee bagging)	Tensile
M&S	M&S P35: 2001 Bauman Tear Strength	Tensile
M&S	M&S P42: 2004 Single Tear Strength	Tensile
M&S	M&S P43: 2004 Breaking Load & Extension of Woven and Coated Fabrics	Tensile
M&S	M&S P70: 2001 Strength testing of Sewing Threads	Tensile
M&S	M&S P98: 2008 Tear Strength Wing Rip	Tensile
NEXT	NEXT Method 16: 2006 Grab Strength and Seam Slippage of Woven Fabrics	Seam
NEXT	NEXT Method 16a: 2006 Seam Slippage of Garment Production Seams	Seam
NEXT	NEXT Method 21: 2009 Extension and Modulus	Tensile
NEXT	NEXT Method 21a: 2006 Extension and Recovery	Cycle
NEXT	NEXT Method 25: 2006 Resistance to Tearing - Wing Rip	Tear
NEXT	NEXT Method 27: 2006 Breaking Strength and Elongation (Ravelled Strip)	Tensile
NEXT	NEXT Method 36: 2006 Bra Wire Casing	Tensile
NEXT	NEXT Method 37: 2006 Button Strength	Tensile
NEXT	NEXT Method 42: 2006 Attachment Strength of Components and Embellishments	Tensile
NEXT	NEXT Method 45: 2006 Handle Attachment Strength	Tensile
NEXT	NEXT Method 46: 2006 Strength of Belt Buckles	Tensile
NFG	NF G 30-102B Medical Hosiery	Tensile
PSA	PSA D11 1157: 2001 Adhesives and Trim materials 180° peel	Peel
Renault	Renault D41 1029: --D Tensile Strength - Textiles, Coated Textiles and Leather	Tensile
Renault	"Renault D41 1126: --D Tearing Fabrics, Plastified Fabrics, Plastic Strips, Carpets and Leathers"	Tear
Renault	Renault D41 1588: --F Tensile Seam Strength of Filling materials	Tensile
Renault	Renault D45 1124: --C Residual deformation of Textiles and Coated Textiles	Tensile
SATRA	SATRA PM141: 1994 Footwear - Breaking force of Buckles - three point bend	Tensile
TOIHM	TOIHM 0001: 2011 Tensile Strength & % Elongation	Tensile
TOIHM	TOIHM 0001: 2011 Tensile Strength & % Elongation (corrected GL)	Tensile
TOIHM	TOIHM 001 Textiles-Tensile properties of fabrics maximum force -Grab Method	Tensile
TOIHM	"TOIHM 002 Textiles -Maximum Breaking Force and Elongation (Strip method) corrected GL"	Tensile
TOIHM	TOIHM 003 Textiles -Components Strength	Tensile
TOIHM	TOIHM 004 Textiles Attachment Strength of Accessories	Tensile
TPJLR	TPJLR 52.058: 2009 Adhesive Bond Strength - 90° or 180° Peel	Peel
TPJLR	TPJLR 52.417: 2009 Seam Strength of Textile Trim Materials	Seam
TPJLR	TPJLR 52.425: 2011 Trapezoid Tear Strength	Tear
Volkswagen	Volkswagen AG PV 3946 Upholstery material - Seam properties	Seam
Volkswagen	Volkswagen AG PV 3955 Upholstery Cover Material - Seam Slippage; Woven Fabrics	Seam
Volvo	Volvo STD 1024 - 2851 Interlaminar strength	Tensile
Volvo	Volvo STD 423 - 0035 Tensile Strength of Seams	Tensile



SCHAP
Products

SCHAP



SDL Atlas is the sole and exclusive distributor of this equipment outside the United States of America.

Schap, is a leading designer and manufacturer of Testing and Evaluation equipment for the Seating Industry. Their equipment tests performance, endurance, and validation of seating and related components. Components tested include textiles, foam, leather, steel frames, and complete seats. Their instruments serve the automotive, aerospace, and furniture seating industries.

William Schap, founder and company president, started the business over 30 years ago as a customer-design and build firm. Over the years, many of his inventions became standard products in the industry.

The Wyzenbeek Abrasion Tester for Textile & Leather is a four station oscillatory abrasion tester used to determine abrasion resistance of fabric, vinyl, leather, stitched seams, and other materials. Each station holds a specimen taut and utilizes contoured foam pads to apply pressure while an abradant (typically duck cloth or wire mesh screen), which is affixed to the oscillating drum, abrades the specimens for a prescribed number of cycles.

Each of the 4 stations have individual specimen tension and pad pressure settings.

- Robust mechanical components are constructed of Aluminum and Solid Stainless Steel
- Durable Powder Coat and Anodized finishes
- High Quality THK Precision Bearings
- Open air construction prevents overheating from friction
- Programmable count-up controller with automatic stop
- Adjustable jog and test speed controls
- Supply voltages vary and must be specified at time of purchase
- High quality brushless electric motor
- 1 year manufacturer's warranty

STANDARDS:

ASTM D3597 ASTM D4157



ORDERING INFORMATION

401869	Wyzenbeek Abrasion Tester 110 V
202883	Wyzenbeek Abrasion Tester 220 V
204706	Wyzenbeek Calibration Tool Kit without Mark 10 Force Gauge
204704	Wyzenbeek Calibration Tool Kit with Mark 10 Force Gauge
204703	Wyzenbeek Drum Clamp Arm Upgrade Kit
204702	Wyzenbeek Variable Speed ASTM Compliance Kit
204701	Wyzenbeek Counter Retrofit Kit
204699	Wyzenbeek Sample Template
204698	Wyzenbeek Steel Knife Sample Rule Die
204697	Wyzenbeek Steel Sample Rule Die
403356	Abradant Fabric #10 Cotton Duck
204852	Wyzenbeek Abrading Mesh Screens (4 screens)
204819	Rubber Pads (pack of 8)
203383	Wyzenbeek Chrysler Conversion Kit

Veslic Colorfastness Abrasion Tester

402354 204695

Veslic Colorfastness Abrasion Tester is designed for determining colorfastness to rubbing tests (similar to crocking) of leather, finished textiles, and other materials.

Features three stations that can be individually set to 500 g or 1,000 g loads, and up to 25% stretch may be applied to the specimens once they are clamped to the oscillating test bed. Each station has an adjustable depth holder for felt test pads, and can accommodate other test pads of the same size.

Felt pads are used for colorfastness and marring evaluations. Tests may be performed either dry or wet (typically DI water or synthetic perspiration is used). Test specimens and the felt test pieces are evaluated for change in color utilizing standard gray scales in a light booth. Other test pads may be used in place of the felt to simulate events such as the sole of a shoe rubbing on a leather upper as in the case of a wearer crossing their legs and resting one shoe on top of the other.

In addition to felt and rubber pads, abrasive papers, cotton fabric, or other similar rubbing elements may be used with some modifications to the pad holders.



ORDERING INFORMATION

402354	Veslic Colorfastness Abrasion Tester 110 V
204695	Veslic Colorfastness Abrasion Tester 220 V

STANDARDS:

BS 1006 UK-LG	DIN 5339	EN ISO 11640
IUF 450	SLF 450	



Noise cover for use with Taber Abrasion Tester. Also available in 2 station version.

ORDERING INFORMATION

204693	Single Station Taber Abrasion Tester Cover
204694	Two Station Taber Abrasion Tester Cover



Single station abrasion (fiber fluff) tester is designed to perform tests on materials in accordance with Toyota Specification TIS 01208-00F21.

Used for evaluating a leather sample's ability to resist abrading. The cycle speed is 70 CPM (adjustable) with a 20 mm operating stroke. It includes a blank polished stainless steel oscillating table (double stick tape attachment), a removable (for weight verification) aluminum 95 mm sample disc that weighs 0.5 Kg (double stick tape attachment) and an overhead pass-through sample disc retaining system.

The control system includes a programmable cycle counter with automatic stop.

STANDARDS:

TIS 01208-00F21

Flexometer evaluates the flexural fatigue resistance of leather, composites, vinyl, surface finishes, and other materials.

Up to twelve specimens are folded and clamped between fixed lower clamps and oscillating upper clamps. Each cycle flexes a crease in the specimen to evaluate the specimen's propensity to crack, similar to the crease that forms in a shoe's upper that flexes during walking.

Features:

- Mechanical components are constructed of non-corrosive aluminum and stainless steel
- Durable powder coat and anodized finishes
- Precision ball and needle bearings
- Operates at ambient temperature
- Programmable count-up controller with automatic stop
- Adjustable jog and test speed controls
- Vented protective cover protects operator hands from pinch points
- Supply voltages vary and must be specified at time of purchase
- High quality brushless electric motors



ORDERING INFORMATION

204734	12 Station Bally Flex Tester Ambient Condition 110 V
204735	12 Station Bally Flex Tester Ambient Condition 220 V
204740	Bally ISO Arm Upgrade Kit for 12 Stations

STANDARDS:

ASTM D6182	BS 3144: METHOD 13	DIN 53351	EN ISO 540	EN ISO 13512	EN ISO 20344
EN ISO 5402	IUP 20	NF G 62-010	NIKE G11	SLP 14	TSL 510

6 Station Dry Fog Tester

204788 204789

Dry Fog Tester is designed for simulating environments where fogging may occur.

The Made in the USA fog tester uses six beakers to accommodate a range of test samples and permits the use of less expensive square glass plates for all tests. The cooling and heating systems use reliable solid state technologies to eliminate the mess and expense of thermal fluids while still providing excellent thermal control and maximum uptime.

Solid state silicon heaters give you the reliability and dependability you need and expect. Clear digital displays allow the operator to see the test status. The hinged pop-up lid makes for easy test setup, sample change over, and clean up time. This results in a lower competitive purchase price, dependable operation and lower operating costs.

The operating specifications include dry heated test wells with a range of 50 °C to 120 °C, Condensing plates with a temperature range of 20 °C to 40 °C. The set points are calibrated to within 0.5 °C and the set point repeatability is ± 0.2 °C.

Dry Test Environment

- Oil-free design– No expensive thermal fluids
- Use 400 ml (with adapter) and 1 liter beakers
- Quick sample change-over, no need for cleanup
- Low operating costs
- Safely change over test samples without oil burns
- Small desktop footprint



ORDERING INFORMATION

204788	6 Station Dry Fog Tester - 220 V
204789	6 Station Dry Fog Tester - 110 V
204790	Glass Test Plate Holding Rack - small
204791	Glass Test Plate Holding Rack - large
204792	Shipping Crate for Dry Fog Tester
204793	Shipping Crate for Hart Dry Fog Tester
204794	Desiccant Cabinet
204795	6 Station Cooler

STANDARDS:

DIN 75201	DIN EN 14288	EN 14288	GME 60326
GMW 3235	HES D6508	ISO 17071	ISO 6452
MS 300-54	PV 3015	PV 3920	SAE J1756



STANDARDS:

JIS 10801	JIS 0849	JIS 0862	JIS 1084 TR 396B
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ORDERING INFORMATION

301062	Gakushin Colorfastness Rubbing Tester 110 V
401976	Gakushin Colorfastness Rubbing Tester 220 V

For evaluating a material's resistance to rubbing motion. Unit is a six station, bench-top machine which includes clamps for sample attachment to moving platen and clams for weighted rubbing arm for attachment of rubbing material. Cycle counter automatically stops machine at end of test cycles. Test samples are visually evaluated. Includes two sets of test heads (6 heads each set) weighing 200 g and 500 g each, complete set of weights (6 each) of 100 g, 300 g, 400 g and 800 g which fit either test head.

Each test arm is counterbalanced to offset arm weight. Suitable for dry and wet rubbing tests.

403165	Gakushin Flat Plate
204709	Gakushin Rub Heads - 200 Grams
204710	Gakushin Rub Heads - 500 Grams
204711	Gakushin Weights - 300 Grams
204712	Gakushin Weights - 500 Grams
204713	Gakushin Weights - 800 Grams
204714	Gakushin Weights - 1200 Grams
204715	Gakushin Weights Tray



STANDARDS:

AATCC 8	AATCC 16
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ORDERING INFORMATION

204717	Portable Manual Rotary Crock Tester
103881	Crockmeter Attachment Clips – pack of 5
103880	Crockmeter Finger
200878	Crockmeter Fabric for American Standards

Compact and easily fits in a standard brief case or backpack. A linear abrasion tester that is lightweight and portable and meets the standard crocking test specifications for finger size, force (weight), and stroke, plus it can be used on a variety of materials from fabrics to plastic test plaques.

This tester is used to determine the amount of color transferred from the surface of a colored material to other surfaces by rubbing also known as a rubfastness or colorfastness method. The replaceable acrylic rub finger is keyed to prevent rotation during testing.

The stroke is controlled by the slot in the tester base, the load is controlled by the calibrated weight, and the position on the sample is controlled by the serrated edge that keeps the tester in place.

This kit also comes with a bottle of de-ionized water, and several samples of test cloth.

Key Features:

- Body and weight are constructed of solid stainless steel
- Small, portable, fits in a briefcase
- 16 mm acrylic finger rub heads

Compact abrasion tester easily fits in a standard brief case or backpack. A linear abrasion tester that is lightweight and portable and meets the standard crocking test specifications for finger size, force (weight), and stroke, plus it can be used on a variety of materials from fabrics to plastic test plaques.

This tester is used to determine the amount of color transferred from the surface of a colored material to other surfaces by rubbing. The replaceable acrylic rub finger is keyed to prevent rotation during testing.

The stroke is controlled by the slot in the tester base, the load is controlled by the calibrated weight, and the position on the sample is controlled by the serrated edge that keeps the tester in place.

This kit also comes with a bottle of de-ionized water, and several samples of test cloth.

STANDARDS:

AATCC 8 AATCC 16



ORDERING INFORMATION

204716	Portable Manual Crock Tester
103881	Crockmeter Attachment Clips – pack of 5
103880	Crockmeter Finger
200877	Crockmeter Squares for American Standards

6 Station Pilling Tester

204720 204719

Station Pilling Tester is designed to evaluate the textile pilling, fabric pilling, woven material pilling or leather abrasion resistance.

Test samples are typically rubbed against known abrasants such as nylon brush, sponge, or Velcro for a set number of cycles and then compared to industry test standards (such as ASTM D3512) or standards developed in your own lab to document the degree of pilling.

This tester is designed for use in conjunction with Standard Test Kits (See Below) which can be configured with various abrasants, or test materials and test weights.

One or more of the following Test Kits must be added:

- Fabric Kit for ASTM 3511
- Leather Kit for Ford BN 108-14
- Fabric Kit for Ford 108-03

Features

- Mechanical components constructed of non-corrosive aluminum and solid stainless steel
- Durable powder coat and anodized finishes
- Precision ball and needle bearings
- Programmable count-up controller with automatic stop
- Adjustable jog and test speed controls
- Vented Protective Cover protects operator hands from pinch points
- Supply voltages vary and must be specified at time of purchase
- High quality brushless electric motors



ORDERING INFORMATION

204720	6 Station Pilling Tester 110 V
204719	6 Station Pilling Tester 220 V
204722	6 Station Pilling Tester with all options 110 V
204721	6 Station Pilling Tester with all options 220 V
204724	Sponge Plate for 6 Station Pilling Tester
204725	Velcro Plate for 6 Station Pilling Tester
204726	Wood Plate for 6 Station Pilling Tester
204727	Round Sample Plates for 6 Station Pilling Tester
204728	Flat Sample Holder for 6 Station Pilling Tester
204729	25 Pound Pilling Tester VWeight
204730	FORD BN 108-14 Kit for 6 Station Pilling Tester
204731	ASTM 3511 Kit for 6 Station Pilling Tester
204732	FORD BN 108-03 Kit for 6 Station Pilling Tester
204733	O Ring Installation Tool for 6 Station Pilling Tester

204718

Hand Pilling Brush



Hand Pilling Brush features a finished wood handle and 4 brushes identical to those required in the ASTM D3511 fabric pilling test.

This accessory is ideal for testing small samples for quality control purposes. Use the brush to check a section of material or to test material already cut and prepared for installation.

The degree of fabric pilling is evaluated by comparing the tested specimens with visual standards, which may be actual fabrics or photographs of fabrics, showing a range of pilling resistance. The observed resistance to pilling is reported using an arbitrary rating scale.

STANDARDS:
ASTM D3511

204753 204754

Scott Crease Flex Tester



To determine the degree of finish peeling, crazing, and raveling due to roll flexing. The tester features adjustable clamp distance, stroke length, and test load to meet a variety of test specifications. One set of clamps oscillates perpendicular to the clamps that apply the pressure to the specimens. Set the clamp distance prior to installing specimens. Zero the stroke when clamping the specimens.

The clamps that apply pressure are then cranked towards the oscillating clamps to apply the prescribed force. The force applied to the specimen is indicated by either the standard spring gauge or the highly recommended load cell option. The test is started after the required number of cycles is entered in the count-up controller. Upon completion of the test, the specimens are inspected for signs of visible damage.

STANDARDS:

GMVV 3217	JIS L1096	JIS K6404-6
NES M7081 SEC 15.2	NES M0155 SEC 17	
NES M0602 SEC 18.2	TSL 5101G SEC. 3.29	
TSL 5100G SEC 4.7		

ORDERING INFORMATION

204752	Scott Crease Flex Tester 110 V
204753	Scott Crease Flex Tester 220 V
204754	Load Washer and Digital Display for Scott Crease Flex Tester

Features:

- Mechanical components constructed of aluminum and solid stainless steel
- Durable powder coat and anodized finishes
- Precision ball and needle bearings
- Programmable count-up controller with automatic stop
- Adjustable jog and test speed controls
- Adjustable stroke and clamp distance
- Optional load cell interface for monitoring test force on specimen during test
- Vented protective cover protects operator hands from pinch points
- Supply voltages vary and must be specified at time of purchase
- High quality brushless electric motors

To evaluate the flexural fatigue resistance of leather, composites, vinyl, surface finishes, and other materials.

Specimens are folded and clamped between fixed lower clamps and oscillating upper clamps. Each cycle flexes a crease in the specimen to evaluate the specimen's propensity to crack, similar to the crease that forms in a shoe's upper that flexes during walking.

The tester operates between ambient temperatures and -30 °C. The optional, integrated freezer has a scissor lift and control panel all mounted to a steel tubular base. The freezer is integrated into the controller to maintain the desired temperature. The tester is raised and lowered via an electric scissor lift located inside the freezer. An external push button pendant is located outside the freezer to operate the lift.

To operate, the operator lowers the tester down into the freezer, sets the desired temperature, soak time and cycle counts and presses the cycle start push button. When the freezer reaches the desired temperature set point it starts the soak timer. When the soak time is complete the tester automatically starts and runs until the desired cycle counts are reached. A flashing red light located on the control panel indicates the test is complete.

A selector switch is provided to disable the temperature display and soak timer. This allows the tester to run in ambient lab conditions as well.

The tester is available in four stroke and drum diameter configurations:

Hyundai Newark Flex Tester Configuration:

- Speed: 450 RPM
- Stroke: 1.270 CM
- Drum Diameter: 2.540 CM

GM Newark Flex Tester Configuration:

- Speed: 500 RPM
- Stroke: 3.175 CM
- Drum Diameter: 3.810 CM

Hyundai & Newark Combined Configuration:

- Utilizes a 50/50 combination of Hyundai and Newark functionality

ISO Configuration

- Optimized for ISO 7854 Section B

STANDARDS:

ASTM D2097	GM 9216P	GM 9226P
ISO 7854	MS 300-05	TPJLR 52.413
TSL 5101G SEC. 3.14.2B		



Cold Capable Newark Flex Tester Features:

- Mechanical components are constructed of non-corrosive aluminum and stainless steel
- Durable powder coat and anodized finishes
- Precision ball and needle bearings
- Operates to -30 °C
- Programmable count-up controller with automatic stop
- Adjustable jog and test speed controls
- Vented protective cover protects operator hands from pinch points
- Supply voltages vary and must be specified at time of purchase
- High quality brushless electric motors

ORDERING INFORMATION

204748	14 Station Ambient Condition Hyundai Newark Flex Tester 110 V
204749	14 Station Ambient Condition Hyundai Newark Flex Tester 220 V
204750	14 Station Ambient Condition GM Newark Flex Tester for Hyundai & Newark Configuration 110V
204751	14 Station Ambient Condition GM Newark Flex Tester for Hyundai & Newark Configuration 220V



Cold Capable Newark Flex Tester Features:

- Mechanical components are constructed of non-corrosive aluminum and stainless steel
- Durable powder coat and anodized finishes
- Precision ball and needle bearings
- Operates to -30 °C
- Programmable count-up controller with automatic stop
- Adjustable jog and test speed controls
- Vented protective cover protects operator hands from pinch points
- Supply voltages vary and must be specified at time of purchase
- High quality brushless electric motors

STANDARDS:

ASTM D2097	GM 9216P	GM 9226P
ISO 7854	MS 300-05	TPJLR 52.413
TSL 5101G SEC. 3.14.2B		

ORDERING INFORMATION

204744	14 Station Cold Condition Newark Flex Tester 110 V
204745	14 Station Cold Condition Newark Flex Tester 220 V
204746	14 Station Cold Condition Newark Flex Tester for Hyundai & Newark Configuration 110V
204747	14 Station Cold Condition Newark Flex Tester for Hyundai & Newark Configuration 220V

To evaluate the flexural fatigue resistance of leather, composites, vinyl, surface finishes, and other materials.

Specimens are folded and clamped between fixed lower clamps and oscillating upper clamps. Each cycle flexes a crease in the specimen to evaluate the specimen's propensity to crack, similar to the crease that forms in a shoe's upper that flexes during walking.

The tester operates between ambient temperatures and -30 °C. The optional, integrated freezer has a scissor lift and control panel all mounted to a steel tubular base. The freezer is integrated into the controller to maintain the desired temperature. The tester is raised and lowered via an electric scissor lift located inside the freezer. An external push button pendant is located outside the freezer to operate the lift.

To operate, the operator lowers the tester down into the freezer, sets the desired temperature, soak time and cycle counts and presses the cycle start push button. When the freezer reaches the desired temperature set point it starts the soak timer. When the soak time is complete the tester automatically starts and runs until the desired cycle counts are reached. A flashing red light located on the control panel indicates the test is complete.

A selector switch is provided to disable the temperature display and soak timer. This allows the tester to run in ambient lab conditions as well.

The tester is available in four stroke and drum diameter configurations:

Hyundai Newark Flex Tester Configuration:

- Speed: 450 RPM
- Stroke: 1.270 CM
- Drum Diameter: 2.540 CM

GM Newark Flex Tester Configuration:

- Speed: 500 RPM
- Stroke: 3.175 CM
- Drum Diameter: 3.810 CM

Hyundai & Newark Combined Configuration:

- Utilizes a 50/50 combination of Hyundai and Newark functionality

ISO Configuration

- Optimized for ISO 7854 Section B

To evaluate the flexural fatigue resistance of leather, composites, vinyl, surface finishes, and other materials.

Specimens are folded and clamped between fixed lower clamps and oscillating upper clamps. Each cycle flexes a crease in the specimen to evaluate the specimen's propensity to crack, similar to the crease that forms in a shoe's upper that flexes during walking.

The tester operates between ambient temperatures and -30 °C. The optional, integrated freezer has a scissor lift and control panel all mounted to a steel tubular base. The freezer is integrated into the controller to maintain the desired temperature. The tester is raised and lowered via an electric scissor lift located inside the freezer. An external push button pendant is located outside the freezer to operate the lift.

To operate, the operator lowers the tester down into the freezer, sets the desired temperature, soak time and cycle counts and presses the cycle start push button. When the freezer reaches the desired temperature set point it starts the soak timer. When the soak time is complete the tester automatically starts and runs until the desired cycle counts are reached. A flashing red light located on the control panel indicates the test is complete.

A selector switch is provided to disable the temperature display and soak timer. This allows the tester to run in ambient lab conditions as well.

The tester is available in four stroke and drum diameter configurations:

Hyundai Newark Flex Tester Configuration:

- Speed: 450 RPM
- Stroke: 1.270 CM
- Drum Diameter: 2.540 CM

GM Newark Flex Tester Configuration:

- Speed: 500 RPM
- Stroke: 3.175 CM
- Drum Diameter: 3.810 CM

Hyundai & Newark Combined Configuration:

- Utilizes a 50/50 combination of Hyundai and Newark functionality

ISO Configuration

- Optimized for ISO 7854 Section B



Cold Capable Newark Flex Tester Features:

- Mechanical components are constructed of non-corrosive aluminum and stainless steel
- Durable powder coat and anodized finishes
- Precision ball and needle bearings
- Operates to -30 °C
- Programmable count-up controller with automatic stop
- Adjustable jog and test speed controls
- Vented protective cover protects operator hands from pinch points
- Supply voltages vary and must be specified at time of purchase
- High quality brushless electric motors

STANDARDS:

ASTM D2097	GM 9216P	GM 9226P
ISO 7854	MS 300-05	TPJLR 52.413
TSL 5101G SEC. 3.14.2B		

ORDERING INFORMATION

204743	6 Station Cold Condition Newark Flex Tester System
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STANDARDS:

FORD BN 106-02	GMW 3405	NES M0154
SAE J1531	TPJLR 52.414	TSL 51016 SEC 3.7
TSL 5100G SEC 4.22		

ORDERING INFORMATION

204755	Seam Fatigue Tester 110 V
204756	Seam Fatigue Tester 220 V

To evaluate the strength of sewn seams in fabric, leather and vinyl.

A specimen is installed into a station with a clamp spacing distance as required by the appropriate test specification. A 29.4 N (3 kgf/6.6 lbf) weight is attached to each outer clamp carriage and an adjustable shelf is incorporated for test specifications that require the load to be relieved during each test stroke. At the completion of testing, the sample is evaluated for tearing, hole elongation and thread breakage.

One or two stations can be tested at a time.

Seam Fatigue Tester for Fabric, Vinyl & Leather Features:

- Mechanical components are constructed of non-corrosive Aluminum and Solid Stainless Steel
- Durable Powder Coat and Anodized finishes
- Precision ball and needle bearings
- Programmable count-up controller with automatic stop
- Adjustable jog and test speed controls
- Adjustable weight shelf height
- Adjustable clamp separation distance
- Vented Protective Cover protects operator hands from pinch points
- Supply voltages vary and must be specified at time of purchase
- High quality brushless electric motors



STANDARDS:

GMW 3211	GMW 3262	SAE J855
TSL 5101G	TSL 52064	TSL 5710G

To evaluate the propensity for a leather or fabric to develop a permanent stretch.

The Stretch and Set Extension Tester for Fabric & Leather – Manual Version automatically lifts the sample with the appropriate load for the designated length of time, then carefully lowers the weight and sample back onto the platform.

Features:

- Manufactured from non-corrosive Aluminum and Stainless Steel.
- Nickel plated weights can be supplied to meet the test requirements which include: 5.1 Kg, 8 Kg, 10 Kg, 10.2 Kg, and 12.25 Kg
- Custom clamps and test weights available.

ORDERING INFORMATION

204757	Manual Stretch and Set Tester
204761	Stretch and Set Weight 8 Kg
204762	Stretch and Set Weight 5.1 Kg
204758	Stretch and Set Weight 10 Kg
204760	Stretch and Set Weight 10.2 Kg
204759	Stretch and Set Weight 12.25 Kg

To evaluate the propensity for a leather or fabric to develop a permanent stretch.

The Power Stretch and Set Tester is designed to reduce operator induced errors to improve the accuracy of test results. The operator installs the specimen and sets the timer.

Features:

- Manufactured from non-corrosive Aluminum and Stainless Steel.
- Nickel plated weights can be supplied to meet the test requirements which include: 5.1 Kg, 8 Kg, 10 Kg, 10.2 Kg, and 12.25 Kg
- Custom clamps and test weights available.

ORDERING INFORMATION

204763	Powered Stretch and Set Tester
204761	Stretch and Set Weight 8 Kg
204762	Stretch and Set Weight 5.1 Kg
204758	Stretch and Set Weight 10 Kg
204760	Stretch and Set Weight 10.2 Kg
204759	Stretch and Set Weight 12.25 Kg



STANDARDS:

GMW 3211	GMW 3262	SAE J855
TSL 5101G	TSL 52064	TSL 5710G

Powered Stretch and Set Tester- 3 Station

204764

To evaluate the propensity for a leather or fabric to develop a permanent stretch.

The operator installs the specimen and sets the timer. The tester lifts when the switch is activated to go up and continues until the upper limit switch is reached. The timer on the 3 Station Powered Stretch and Set starts as soon as the weight is lifted and continues while the weight is in upward motion. When the designated length of time expires, an audible tone signifies that a length measurement should be taken (manually).

Features:

- Manufactured from non-corrosive Aluminum and Solid Stainless Steel.
- Nickel plated weights can be supplied to meet the test requirements which include: 5.1 Kg, 8 Kg, 10 Kg, 10.2 Kg, and 12.25 Kg
- Custom clamps and test weights available.
- Please specify voltage when ordering

STANDARDS:

GMW 3211	GMW 3262	SAE J855
TSL 5101G	TSL 52064	TSL 5710G



ORDERING INFORMATION

204764	3 Station Powered Stretch and Set Tester
204761	Stretch and Set Weight 8 Kg
204762	Stretch and Set Weight 5.1 Kg
204758	Stretch and Set Weight 10 Kg
204760	Stretch and Set Weight 10.2 Kg
204759	Stretch and Set Weight 12.25 Kg



GENERAL TESTING



The phenolic yellowing test is used to predict if white or pastel colored fabrics or garments will yellow during shipping or storage.

The SDL Atlas Phenotest test materials are produced, tested, and packaged to assure reliable service in use. The impregnated papers, which come in quantities of 30, 100, or 150, are supplied with a Certificate of Conformance and a batch number. They are packed in a vacuum-sealed bag that can be resealed after opening.

The control fabric is also tested to ensure that it will turn yellow to indicate that a test was performed successfully. The BHT-free polythene film is precut to make use easy.

ORDERING INFORMATION

TEST MATERIALS

107345	Impregnated Test Papers 100 mm x 75 mm (pack of 30)
107346	Impregnated Test Papers 100 mm x 75 mm (pack of 100)
106432	Impregnated Test Papers 100 mm x 75 mm (pack of 150)
203038	Control Fabrics (pack of 30)
107650	BHT-free Polythene Film 400 mm x 200 mm (pack of 100)

ASSESSMENT

403232	ISO/BS Grey Scale (Staining)
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INSTRUMENT

105211	Perspirometer Kit (see M231)
200929	Glass Plates 100 x 40 x 3 mm (set of 10)
G209A	Oven/Incubator (30 liters)
G209B	Oven/Incubator (120 liters)

STANDARDS:

adidas 5.10	Arcadia AG 16	ISO 105-X18
M&S C20B	Next 43	

G003

Water Purification System



"Select Analyst" self-contained main water purification systems produce laboratory water equivalents to double distilled quality. Supplied complete with an internal (20L) or external (50L) reservoir on a selective basis, with a water quality indicator and installation kit. Units up to a capacity of 500 liters per day available. LCD touch screen panel for easy menu navigation providing fingertip diagnostic functionality.

Typical Water Quality:
Inorganics residue: > 1M Ω cm
pH: Neutral
Bacteria: >99% Rejection²
TOC: < 50 ppb

SIZE

WEIGHT	28 kg / 13 lbs (shipping)
	46 kg / 20 lbs (working)
DIMENSIONS	440 mm (w) x 560 mm (d) x 750 mm (h) /
	18 in (w) x 22 in (d) x 30 in (h)

ORDERING INFORMATION

204102	Analyst Water Purifier 20L/Day at 12L/Hr (Internal Tank)
204103	Analyst Water Purifier 50L/Day at 12L/Hr (External Tank)

STANDARDS:

BS 3978	ISO 3696
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G037A/B/D

Indelible Textile Marking Pens



Available in fine, medium and broad ball-tips to cover all fabric types. Selection depends on the surface structure of fabrics; the finest tip used on fine, tightly woven fabrics, and the broadest on open, coarse fabrics. The inks are totally resistant to all textile processes including dry cleaning. Colors available: yellow, black, blue, orange, red and white.

ORDERING INFORMATION

G037A	Texpen Indelible Textile Marking Pens. Fine (Pack of 6). Specify yellow, black, blue, orange, red or white
G037B	Dalomarker 2T Indelible Textile Marking Pens. Medium, general purpose (pack of 6). Specify yellow, black, blue, orange, red or white
G037D	Dalomarker 4T Indelible Textile Marking Pens. Broad general purpose (Pack of 6). Specify color

SIZE

WEIGHT	0.5 kg / 1.1 lbs
DIMENSIONS	100 mm (w) x 100 mm (d) x 150 mm (h) / 4 in (w) x 4 in (d) x 6 in (h)

To determine the speed and freeze motion of reciprocating or rotating objects. Battery operated with external battery and charger; 40 to 35,000 flashes/min, 350 Lux at a distance of 50 cm, xenon-long life flash tube, 0 - 359 phase shift adjustment, $\pm 0.1\%$ reading accuracy. Optional external trigger. Controls flashrate by input from measured object.

SIZE

WEIGHT 0.25 kg / 0.55lbs

DIMENSIONS 185 mm (w) x 120 mm (d) x 120 mm (h) /
7.5 in (w) x 5 in (d) x 5 in (h)

ORDERING INFORMATION

300102 Digital White-Light Stroboscope

300103 Spare Flashlamp



Pocket Stroboscope

G105F

For taking non-contact RPM measurements and inspecting moving parts. Handheld with LCD display, NiMH battery, 1200 Lux flash at a distance of 20 cm to the object, $\pm 0.01\%$ reading accuracy, ± 1 RPM resolution, Flash range 30 - 12500 FPM. May be externally triggered.

SIZE

WEIGHT 0.5 kg / 1.1 lbs

DIMENSIONS 240 mm (w) x 65 mm (d) x 40 mm (h) /
9.5 in (w) x 3 in (d) x 2 in (h)

ORDERING INFORMATION

300105 Pocket Stroboscope

300106 Spare Xenon flash tube



Electronic Laser Tachometer

G106

Professional model laser optical/contact tachometer kit in fitted hard case with unique inverting display and laser optical system offering best performance for all applications with a range up to 2 meters (80 inches). Contact adaptor allows surface measurement of revolutionary and linear speeds. 3-99999 RPM capacity, product counter and timer, on target indicator and low battery indicator. Disposable battery powered, yarn length/speed adaptor available.

SIZE

WEIGHT 0.35 kg / 0.75 lbs

DIMENSIONS 250 mm (w) x 100 mm (d) x 50 mm (h) /
10 in (w) x 4 in (d) x 2 in (h)

ORDERING INFORMATION

201073 Electronic Laser Tachometer



STANDARDS: G201 A

16 CFR CPSC USA ASTM F963(USA)

EN 71 (Europe)

The SDL Atlas Group has developed the most comprehensive range of Child-related products testing equipment available in the world today in collaboration with major commercial testing organizations and end users. The Products have been designed to comply with international safety standards.

G201A 1-3 Sharp Point Tester

To determine whether accessible sharp points on child-related products are likely to cause injury. If the accessible sharp point penetrates a specified depth into the small rectangular opening of the tester, the LED is illuminated to indicate that the point is unacceptably sharp. Child-related products intended for use by children under 8 years old are subject to this requirement before or after use and abuse testing

ORDERING INFORMATION

105342	ASTM Sharp Point Tester With Weight
105343	EN Sharp Point Tester With Weight
201800	ISO 17025 Certificate, Sharp Point



G201A 1-3 Sharp Point Tester

G201A 4-6 Sharp Edge Tester

To determine whether accessible edges on child-related products are likely to cause injury. A self adhesive PTFE tape is attached to a mandrel, which is then rotated for a single 360- degree revolution along the accessible edge being tested. If the tape is cut in half or longer in length (approx. 13 mm), the edge is identified as a hazardous sharp edge. Child-related products intended for use by children under 8 years old are subject to this requirement before or after use & abuse testing.

ORDERING INFORMATION

202062	Sharp Edge Tester, 220V
203280	Sharp Edge Tester, 110V
403498	T-Tape MIL for Sharp Edge Tester
201802	ISO 17025 Certificate, Sharp Edge

G201A 7-8 Accessibility Probes

To determine whether any part or component of a child-related products can be contacted by the probe. The probe simulates the finger of the infant or child touching the accessible points or edges of a child-related products, which may then be subject to tests of sharp points or sharp edges. Accessibility probes are designed for two age groups.

ORDERING INFORMATION

202076	Accessibility Probe A (0-36 months)
202075	Accessibility Probe B (37-96 months)

G201A 9-10 Small Parts Cylinder

To determine whether child-related products and other articles intended for use by children under 3 years old present choking, aspiration, or ingestion hazards because of small parts. If any objects can fit completely into the cylinder without compressing & in any orientation, it is defined as a "Small Part". Its internal dimensions simulate the fully expanded throat of a child under 3 years old.

ORDERING INFORMATION

105272	Small Parts Cylinder (Metal)
105273	Small Parts Cylinder (Plastic)
201803	ISO 17025 Certificate, Small Part



G201A 9-10 Small Parts Cylinder

M289 Button Impact Tester

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

ORDERING INFORMATION

201085	Button Impact Tester
303637	ISO 17025 Certificate, Button Impact Tester

G201A 11-16 Torque Test Kit

To determine whether components of child-related products can be removed by a certain torque force. A torque-measuring device is used in conjunction with a torque clamp to record the applied force. Any projection, part or assembly of a child-related products that a child can grasp with at least the thumb and forefinger or the teeth shall be subject to the torque test.

ORDERING INFORMATION

201905	Torque Gauge 9BTG
105335	Torque Clamp (Central Screw Type)
105334	Torque Test Clamp (Standard)
105336	FlatVise Clamp
201944	TableVise
200786	ISO 17025 Certificate, Torque Gauge

G201A 17-26 Tension Test Kit

To determine whether the components of child-related products can be removed by tensile force. A force gauge is used in conjunction with a clamp to record the force applied. Any projection, part or assembly of a child-related product that a child can grasp with at least the thumb and forefinger or the teeth shall be subject to the tension test.

ORDERING INFORMATION

201737	Push/Pull Gauge Fb-20K
201733	Push/Pull Gauge Fb-50LB
201730	Push/Pull Gauge Fb-200N
105322	Three Pronged Clamp
105323	Two Pronged Clamp with Screw
105702	Seam Test Clamp
105325	Long NoseVise Grip
105326	GeneralVise Grip
201727	ISO 17025 Certificate, Push/Pull Gauge

G201A 27-28 Impact Flooring Medium

A standardized surface onto which a child-related product can be dropped from a certain height to simulate possible damage which may occur by falling from a crib, table or counter top or other impact situations. After testing, the child-related product is examined for possible hazards such as sharp edges, sharp points and small parts.

ORDERING INFORMATION

201979	US Impact Medium (set of 9)
202069	EN Impact Medium



G201A-21



G201A-23



105273



G201A-29 Bite Test Clamp

G201A 29-30 Bite Test Clamp

Simulates a child biting the accessible area of child-related products. The child-related product is then tested to ascertain whether or not any hazards result from the bite test such as sharp points/sharp edges/small parts.

ORDERING INFORMATION

105276	Bite Test Clamp
201804	ISO 17025 Certificate, Bite Test

G201A 31 Compression Head

To simulate the subjecting of a child-related product to mechanical damage through compressing or other action likely to be performed by a child. After testing, the product may be tested for sharp edges, sharp points & small parts.

ORDERING INFORMATION

202060	Compression Head for Force Gauge
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G201A 32-33 Flexure Tester

To determine whether metallic wires or materials used for stiffening or retention of form in child-related products can be easily bent or broken. Potential hazards of sharp points and sharp edges.

ORDERING INFORMATION

202071	US Flexure Tester (set of 2)
202070	EN Flexure Tester (set of 2)

G201A 34 Test Fixture for Small Balls

To determine whether loose balls in child-related products intended for children under 36 months will pass entirely through the test fixture under the influence of their own weight and without compression. A ball which can pass through the test fixture is determined to be a "Small Ball".

ORDERING INFORMATION

105277	Test Fixture for Small Balls
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G201A-34 Test Fixture for Small Balls

G201A 35-37 Rattle Text Fixtures

To determine whether rattles for infants of up to 18 months old present choking or suffocating hazards. The rattle is placed in the opening of test fixture. If any part of the rattle can pass through the opening without being pushed or pulled, the rattle has failed. For other rattles incorporating nearly spherical, hemispherical or circular flared ends, a Supplemental Rattle Test Fixture is available.

ORDERING INFORMATION

202074	Rattle Test Fixture (Oval)
202073	Supplemental Rattle Fixture
201805	ISO 17025 Certificate, Rattle Test

G201A 38 Pacifier Test Fixture

To determine whether the pacifiers for infants present choking or suffocating hazards, A pacifier is placed centrally in the opening of test fixture. The nipple is subjected to a tensile force of lbs and held for 10 seconds. If the shield is pulled through the fixture, the pacifier has failed.

ORDERING INFORMATION

202072	Pacifier Test Fixture
--------	-----------------------

G201A 39 1 kg Impact Tester

To simulate the mechanical damage through an impact action likely to be performed by a child. Assessment of sharp edges, sharp points and small parts may be carried out after impact.

ORDERING INFORMATION

202061	1 KG Impact Tester
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The Snap Tester is used to determine the holding or breaking strength of prong-ring attached snap fasteners onto garments. The instrument consists of an Upper Snap Clamp, a Lower Fabric Clamp and Force Gauge mounted on a stand. The snap component is gripped by the Upper Snap Clamp and the garment is fixed to the Lower Fabric Clamp. By turning the Top Flywheel, the operator can apply a specific force and the holding force or the breaking strength can be recorded.

The Snap Tester has become a standard for safety testing in children and infant garments. Nike, AMC, Target, Federated, C&A, Hennes & Mauritz and GAP have specifically adopted the tester throughout their supply chains.

The standard package complies with the test requirements of most retailers. Please contact a member of the SDL Atlas sales team for configuration options to meet your specific needs.

SIZE: Standard / Gap / H&M

WEIGHT 23 kg / 50 lbs

DIMENSIONS 225 mm (w) x 280 mm (d) x 735 mm (h) /
9 in (w) x 11 in (d) x 29 in (h)

SIZE: NIKE

WEIGHT 27 kg / 60 lbs

DIMENSIONS 225 mm (w) x 280 mm (d) x 735 mm (h) /
9 in (w) x 11 in (d) x 29 in (h)



105290



105303



105294

-Continues on the next page

Order Code	Item Description ★ = Included ○ = Optional X = Not Available	Manual Package	Snap Tester			Snap Rite	Application
		Standard Package	GAP	H&M	NIKE		
G201M	SnapRite	X	X	X	X	★	
105283	Snap Tester W/FB-30 K	★	X	X	X	X	Standard Package
108540	Snap Tester W/FB-30 K for GAP INC	X	★	X	X	X	Kids & baby machine attached hardware
105284	Snap Tester W/FB-30 K for H&M	X	X	★	X	X	Snap/Buttons/Garment Accessories
105286	Snap Tester W/FB-100 lb for NIKE	X	X	X	★	X	Snap/Buttons/Garment Accessories
Fixtures & Accessories							
201736	Force Gauge FB - 30 K	★	★	★	X	X	Displays force up to 30 kg capacity
201732	Force Gauge FB - 100 lb	X	X	X	★	X	Displays force up to 100 lb capacity
105310	Bench Top Stand with Plate for GAP	★	★	X	★	X	Accurate force application
105311	Bench Top Stand with Plate for H&M	X	X	★	X	X	Accurate force application
105303	Lower Fabric Clamp - Washer	★	★	★	★	X	To grip fabric sample with consistent force to avoid slippage
107109	YKK Lower Fabric Clamp - Rubber Cushion (Ligne 12 - 16)	○	○	○	○	X	Includes mounting plate for manual Snap Testers
106936	YKK Lower Fabric Clamp (linge 12 - 16)	X	X	X	X	★	For SnapRite
105320	Calibration Weight - 15 lbs	★	★	★	★	X	To verify the accuracy of force gauges
105288	Upper Snap Clamp - General	★	★	★	★	X	For female snap parts (For Snap Fastness & Hat Top Buttons in GAP Test Method)
105294	Upper Stud Clamp	★	★	★	★	★	For male snap parts (For Rivets & Burrs in GAP Test Method)
105300	Lower Grasp Button Kit	★	★	★	★	X	Accessory for lower fabric clamp for jean buttons, large buttons up to 30 linge
105301	Upper Grasp Button Kit	★	★	○	★	○	For jean buttons and 4 hole buttons
105290	Upper Snap Clamp (Capacity 100 lb)	○	X	X	★	○	For large female snaps up to 100 lb capacity
105295	Upper Stud Clamp (Capacity 100 lb)	○	X	X	★	○	For large male snaps up to 100 lb capacity
105338	Extended Peg Hook	○	X	X	★	○	Hook for zipper pulls w 105339 & 105304
105339	Zipper Pull Tab Test Fixture	○	X	X	★	X	To hold zipper pulls w 105338 & 105304
105328	Seam Clamp 4" with Screw Connector	○	X	X	★	X	To grip side tabs / bows / tassels
105356	Two Pronged Clamp with Screw Connector	○	X	X	★	X	Two prongs for D-rings & zipper stops
105329	4WR Locker Plier	○	★	X	★	X	For small metallic decor such as Applique
105304	Vise for Snap Tester	○	★	X	★	X	Lower vice grip for different sample size
105313	Special Back Plate for SafQ Stand	○	★	○	★	X	To extend the maximum travelling height of force gauge when use w Seam Clamp or Locker Plier
105341	Goggles	○	○	★	★	○	Eye protection
107593	Lower Grasp Button Kit Ligne 16-30	○	X	X	X	○	Optional - requires 107109
108357	Metal Wire Fixture for Trousers Hook	○	★	X	X	X	Design to test for trousers hook
108509	Non-Stretchable Thin Strap for Bar (10 Meter Roll)	○	★	X	X	X	Gripped by Locker Plier & Vise for testing bar
108508	Non-Stretchable Rope for Eyelet (10 Meter Roll)	○	★	X	X	X	Gripped by Locker Plier & Vise for testing eyelet

All above parts could be purchased individually if full package is not required.

***Remarks:**

Standard Package also complies with the test requirements of other retailers such as Levi's, AMC, Target, Federated, C&A, and M&S amongst many. H&M Package (G201AA2) also includes Small Part Cylinder (Plastic) (G201A9) & Long Nose Vise Grip (G201A23) & Three Pronged Clamp (G201A20). Nike Package (G201AA3) is for testing of snaps/ buttons and garment accessories only. To comply with Nike's Safety Requirements, additional equipment should be ordered as follows:

105272 Small Parts Cylinder (Metal)

105273 Small Parts Cylinder (Plastic)

105277 Small Balls Fixture

105342 ASTM Sharp Point Tester with Weight

101905 Torque Gauge Model 9 BTG

105335 Torque Gauge (Central Screw Type)

201944 Table Vise



105301



105304

Motorized instrument for determining the holding or breaking strength of snap fasteners onto garments. The motorized device eliminates operator variability such as application of the load, consistent holding force at the top end, precision hold times, and provides more accurate measurements via a load cell and digital display. The force range up to 50 kgf (100 lbf, 500 N) with travel distance at 100 mm (4"). Selective hold loads with 15 lb, 17 lb, 21 lb and 90 N by dead weight system and up to 99 sec hold time for testing.

The SnapRite is supplied with an Upper Snap Clamp (Linge 12-16), Upper Stud Clamp, and a Lower Fabric Clamp. Capability can be enhanced with clamps and accessories for testing of other Snaps, Jean Buttons, Four Hole Buttons and Garments Accessories such as Zippers, Bows, Appliqué, Toggles, Hooks/Bars, and D-Rings, amongst others.

The detachment of a snap or other part may be classed as small parts; while broken small parts may require sharp point and sharp edge testing. As a result, additional testing equipment may be recommended, such as:

Small Parts Cylinder (G201A9-10)

Sharp Point Tester (G201A1-3)

Sharp Edge Tester (G201A4-6)

Button Impact Tester (M289)

SIZE

WEIGHT	40 kg / 88 lbs
DIMENSIONS	410 mm (w) x 450 mm (d) x 780 mm (h) / 16 in (w) x 17 in (d) x 30 in (h)

ORDERING INFORMATION

G201	Snap Rite
105301	Upper Grasp Button Kit
105290	Upper Snap Clamp (Capacity 100 lb)
105295	Upper Stud Clamp (Capacity 100 lb)
105338	Extended Peg Hook
105329	4VVR Lock Pliers
105304	Vice for Snap Tester
105341	Goggles
107664	General Upper Snap Toggle Clamp (ligne 16-21)
107666	General Upper Snap Toggle Clamp (ligne 21-30)
107593	Lower Grasp Button Kit (ligne 16-30)



STANDARDS:

ASTM D7142-2	CFR 1500.52/53	ASTM F 963
EN 71 Part 1	GB/T 6675	ISO 8124
M&S P115A		

**SIZE**

WEIGHT	0.2 kg / 0.5 lbs
DIMENSIONS	76 mm (w) x 45 mm (d) x 164 mm (h) / 3 in (w) x 2 in (d) x 6.5 in (h)

STANDARDS:

M&S C7	M&S C11	M&S C59
EN 1413	NEXT TM33	

To perform pH, ORP and temperature measurement with automatic calibration, temperature compensation and buffer recognition. Test range from -2 to 16pH, ± 699.9 mV; ± 1999 mV and -20 to 120°C / -4 to 248°F with accuracy at ± 0.01 pH, ± 0.2 mV; ± 1 mV and $\pm 0.4^\circ\text{C}$ / $\pm 0.8^\circ\text{F}$.

Automatic one or two point calibration function with three memorized buffer values (pH 4.01, pH 7.01 and pH 10.01).

ORDERING INFORMATION

201219	Digital pH/Temperature Meter
201220	Electrode Holder and Cantilever Stand
200968	Buffer Solutions 20ml, 10 each pH 4, 7 and 10, Ready Prepared in Sachets

**SIZE**

WEIGHT	0.2 kg / 0.5 lbs
DIMENSIONS	75 mm (w) x 100 mm (d) x 200 mm (h) / 3 in (w) x 4 in (d) x 8 in (h)

To measure the pH of any surface, wet or dry. Can detect acid or alkali residues in 15-30 seconds. Reads from 0-13 pH with included color chart. Long lasting, use for thousands of individual tests. Also measures pH of solutions when used with a neutral surface such as glass or porcelain. Supplied in packs of 3 mechanical pencils and 2 charts.

ORDERING INFORMATION

201122	Surface pH Pencils (pack of 3)
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Handheld model with large multi-level LCD display that shows both pH and temperature simultaneously. pH range is from -2.0 to 16.0 pH with a 0.1 pH resolution and an accuracy of ± 0.1 pH. It also features a replaceable electrode with a stainless steel round connector.

SIZE

WEIGHT	0.01 kg / 0.02 lbs
DIMENSIONS	40 mm (w) x 26 mm (d) x 163 mm (h) / 1.6 in (w) x 1 in (d) x 6.5 in (h)

ORDERING INFORMATION

201106	Pocket pH Meter
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Electronic/battery operated (700 hours continuous). -40 to + 140°C x 0.1°C, LCD Display, teflon-coated hinged probe, pocket clip.

SIZE

WEIGHT 0.05 kg / 0.1 lbs

DIMENSIONS 30 mm (w) x 20 mm (d) x 150 mm (h) /
1.2 in (w) x 0.8 in (d) x 6 in (h)

ORDERING INFORMATION

201109 Pocket Temperature Meter



Buffer Solutions for pH Calibration

All pH meters should be calibrated periodically using standardized solutions at different pH levels. The buffer produced in accordance with ISO 3696/BS3978 standards. 3 Bottles of pH 4.01, 7.01, 10.01 with 500ml each.

SIZE

WEIGHT 0.6 kg / 1.3 lbs

DIMENSIONS 50 mm (w) x 5 mm (d) x 125 mm (h) /
2 in (w) x 0.25 in (d) x 5 in (h)

ORDERING INFORMATION

200968 Buffer Solutions, 3 Bottles of pH 4.01,
7.01, 10.01 with 500ml each.



© EQUICORPS

Electronic High Temperature Thermometer

For accurate measurement of superheated surfaces, gases and liquids. With the Thermocouple K-Type roller surface probe and general purpose probe (liquids and gases) - 50°C to 199.9°C and 200 to 1350°C, with accuracy $\pm 0.2^\circ\text{C}$. Battery operated with 1600 hours of battery life, LCD display with max/min temperature memory, hold facility and switchable $^\circ\text{C}/^\circ\text{F}$ readout.

SIZE

WEIGHT 0.25 kg / 0.55 lbs

DIMENSIONS 80 mm (w) x 36 mm (d) x 150 mm (h) /
3 in (w) x 1.5 in (d) x 6 in (h)

ORDERING INFORMATION

300119 Electronic High Temperature Thermometer





150 g x 0.01 g - Portability with precision. Large LCD display, AC adapter or battery operation, tactile switching, net wt and stability indication, auto shutoff, 100 mm dia. SS pan, auto calibration, includes calibration weight, programmed for grams/sq meters and ounces/sq yard.

SIZE

WEIGHT 1 kg / 2.2 lbs

DIMENSIONS 145 mm (w) x 210 mm (d) x 170 mm (h) /
6 in (w) x 8 in (d) x 7 in (h)

ORDERING INFORMATION

G204 150 g x 0.01 g

STANDARDS:

M&S C4A / C5 / C7 / C10 / C10A / C26 / C49A / P3B / P4B / P5 / P5A / P25 / P53 / P65

NEXT 2A / 6 / 12 / 30



The economical way to weigh with precision. Wide viewing angle color touchscreen display with dual USB and RS232 interface. Large stainless steel pan, sealed front panel and spill ring. Draft shield available for specific models.

SIZE

WEIGHT 6 kg / 13 lbs

DIMENSIONS 355 mm (w) x 230 mm (d) x 340 mm (h) /
14 in (w) x 9 in (d) x 13.5 in (h)

ORDERING INFORMATION

300128 220 g x 0.001 / ± 0.001, 13 cm dia. pan, with Draft Shield

300130 420 g x 0.001 / ± 0.001, 13 cm dia. pan, with Draft Shield

300131 620 g x 0.001 / ± 0.01, 17.5 x 19.5 cm pan

300132 1520 g x 0.001 / ± 0.01, 17.5 x 19.5 cm pan

300133 2200 g x 0.001 / ± 0.01, 17.5 x 19.5 cm pan

300134 4200 g x 0.001 / ± 0.01, 17.5 x 19.5 cm pan

Code	300128	300130	300131	300132	300133	300134
Capacity (g)	220	420	620	1520	2200	4200
Readability / Repeatability (g)	0.001 / ±0.001		0.01 / ±0.01			
Pan size (mm)	13 (dia)		17.5 x 19.5			
Draft Shield available	Yes		No			

STANDARDS:

M&S C4A / C5 / C7 / C10 / C10A / C26 / C49A / P3B / P4B / P5 / P5A / P26 / P53

NEXT 2/6 / 7 / 7A / 7B / 9 / 10 / 11 / 12 / 30 / 36A



Explorer Electronic Analytical and Top Pan Balances. Sealed housing, auto calibration, USB and RS232 interface, programmable readout mode, large color touch-screen display. Draft shield available for specific models.

SIZE

WEIGHT	7 kg / 15 lbs
DIMENSIONS	230 mm (w) x 393 mm (d) x 350 mm (h) / 9 in (w) x 15.5 in (d) x 14 in (h)

ORDERING INFORMATION

200870	120 g x 0.0001 / 0.001 gm, 9 cm dia. pan, with Draft Shield
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ORDERING INFORMATION (continued)

300136	220 g x 0.001 g, 13 cm dia. pan, with Draft Shield
202521	420 g x 0.001 g, 13 cm dia. pan, with Draft Shield
300139	620 g x 0.001 g, 13 cm dia. pan, with Draft Shield
300141	2200 g x 0.01 g, 13 cm dia. pan
300142	4200 g x 0.01 g, 19 x 20 cm dia. pan
300145	6200 g x 0.01 g, 19 x 20 cm dia. pan
300146	10200 g x 0.01 g, 19 x 20 cm dia. pan

Code	200870	300136	202521	300139	300141	300142	300145	300146
Capacity (g)	120	220	420	620	2200	4200	6200	10200
Readability / Repeatability (g)	0.0001 / 0.001	0.001			0.01	0.01		
Pan size (mm)	9 (dia.)	13 (dia.)			13 (dia.)	19 x 20 cm		
Draft Shield available	Yes			No		No		

STANDARDS:

M&S C4A / C5 / C7 / C10 / C11 / C26 / C37 / C49A / P3B / P4B / P5 / P5A / P26 / P53

NEXT 2 / 2A / 6 / 7 / 7A / 7B / 9 / 10 / 11 / 12 / 30 / 36A

Electronic Thermohygraph

G206

To determine and chart temperature and relative humidity over a selected period. Dual chart switchable, 1 day or 7 days with quartz clock, drive charts and pens 0-40°C, 0-90% RH.

SIZE

WEIGHT	3 kg / 7 lbs
DIMENSIONS	336 mm (w) x 148 mm (d) x 295 mm (h) / 13.4 in (w) x 5.9 in (d) x 11.8 in (h)

ORDERING INFORMATION

201696	Electronic Thermohygraph
201697	Charts 1 or 7 days (pack of 50)
300153	Felt Tip Pens (pack of 4)

STANDARDS:

ERT 60-1

ASTM D1776



G206D**Electronic Temperature and Humidity Recorder**

A more accurate and sophisticated recorder than G206. Air is drawn over the sensing elements by an electrically driven fan. The mechanism allows a rapid reaction transfer to the circular chart of small changes in temperature and humidity. 7 day charts (100 supplied), electronic clock, and pens. 0-40°C, 20-100% RH.

SIZE

WEIGHT 10 kg / 22 lbs

DIMENSIONS 370 mm (w) x 170 mm (d) x 360 mm (h) /
15 in (w) x 6.5 in (d) x 14.5 in (h)

ORDERING INFORMATION

300156 Electronic Temperature and Humidity Recorder

202591 Charts 7 Day (pack of 100)

300161 Felt Tip Pens Red (pack of 3)

202921 Felt Tip Pens Green (pack of 3)

STANDARDS:

ERT 60-1

M&S PG

ASTM D1776

G207**Whirling Hygrometer**

To determine relative humidity and temperature. With relative humidity slide rule and carrying case -15°C to +40°C

SIZE

WEIGHT 0.3 kg / 0.7 lbs

DIMENSIONS 230 mm (w) x 30 mm (d) x 145 mm (h) /
9 in (w) x 1.2 in (d) x 6 in (h)

ORDERING INFORMATION

G207 Whirling Hygrometer

STANDARDS:

ERT 60-1

G207A**Digital Relative Humidity & Temperature Meter**

Battery operated 0-60°C x 1%, 15-90% RH x 2%, liquid crystal display, fitted case. Optional calibration kit available.

SIZE

WEIGHT 0.3 kg / 0.7 lbs

DIMENSIONS 200 mm (w) x 200 mm (d) x 75 mm (h) /
8 in (w) x 8 in (d) x 3 in (h)

ORDERING INFORMATION

300162 Digital Relative Humidity & Temperature Meter

300164 Calibration Kit

STANDARDS:

ERT 60-1

A set of two clear acrylic holders to mount yarn or fabrics for microscopic viewing. The fabric holder can be used to look at a cut or folded edge.

SIZE

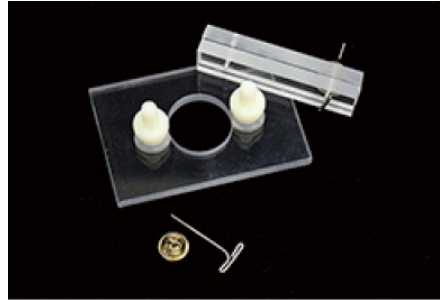
WEIGHT	0.2 kg / 0.4 lbs
DIMENSIONS	75 mm (w) x 50 mm (d) x 25 mm (h) / 3 in (w) x 2 in (d) x 1 in (h)

ORDERING INFORMATION

300167	Microscopy Yarn and Fabric Holder Set
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STANDARDS:

M&S PG	ERT 60-1
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Precision Monocular Microscope

G208A

For the examination of textiles up to 1000 times magnification. Eye pieces 10x, objectives 4x, 10x, 40x and 100x, 12V/20W Halogen illumination with intensity adjustment, 45° inclined Monocular head with 360° rotatable head, coarse and fine focusing, vertical travel range 27 mm.

SIZE

WEIGHT	4 kg / 8.8 lbs
DIMENSIONS	220 mm (w) x 300 mm (d) x 420 mm (h) / 9 in (w) x 12 in (d) x 17 in (h)

ORDERING INFORMATION

204434	Precision Monocular Microscope
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Precision Trinocular Microscope

G208B

For the examination of textiles up to 1000 times magnification. Eyepieces 10x, objectives 4x, 10x, 40x, 100x, 6V/30W quartz Halogen illumination with intensity control, 30° inclined Trinocular head with 360° Swiveling eyepiece tubes, coaxial coarse and fine focusing with 2 micron minimum increment with tension adjustment, vertical travel range 20 mm. Large mechanical stage with travel range 76 x 50 mm.

SIZE

WEIGHT	4 kg / 8.8 lbs
DIMENSIONS	220 mm (w) x 300 mm (d) x 420 mm (h) / 9 in (w) x 12 in (d) x 17 in (h)

ORDERING INFORMATION

300169	Precision Trinocular Microscope
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Precision binocular sliding head microscope 30°inclined and built-in digital live imaging chip. Widefield 10x eyepieces and achromatic super contrast objectives for total magnification of 4x, 10x, 40x and 100x. Coaxial mechanical stage with slide holder, 3W LED illumination with intensity control. Includes powerful image analysis software capable of capturing images, on-screen measure, storage and retrieval (support PC-Windows 8/10 and MAC-OSX).

ORDERING INFORMATION

204434	Compound Digital Microscope System
204440	As G208B1, add Polarising Set fitted and calibrated
204441	20 watt, spare bulb
300183	Advanced Digital Microscope Software V3.2 - For use with G208B1 and G208F2



Digital stereo zoom binocular head microscope, 45° inclined with built-in high resolution CCD Camera and video capture card allows output to suitable PC via USB port (cable included). Wide field 10x eyepieces, 4:1 zoom ratio, magnification range from 1X to 4X and pole type stand with large working base. Frosted glass stage plate, 10W halogen incident. Supplied with software, USB, S-Video & RCA cable, dust cover and calibration slide.

ORDERING INFORMATION

204435	Stereo Zoom Digital Microscope System
300183	Optional Advanced Software V3.2

G208E**Portable Microscope**

Gives unparalleled sharp and brilliant vision with wide field of view with 30x magnification. Build-in light and easy focusing system. Operated by 2 standard 1.5 V batteries.

SIZE

WEIGHT 0.7 kg / 0.15 lbs

DIMENSIONS 50 mm (w) x 22 mm (d) x 140 mm (h) /
2 in (w) x 0.9 in (d) x 5.5 in (h)

ORDERING INFORMATION

300173 Portable Microscope

G208F/F1**Stereo Zoom Microscope**

45° trinocular head microscope to examine the textile with large viewing area and provides sharp, three-dimensional images. 0.7 - 4.5x magnification with stepless adjustment, eyepieces 10x, and 1:6 zoom rate. Compact R2GG stand with halogen incident and transmitted light.

SIZE

WEIGHT 4 kg / 8.8 lbs

DIMENSIONS 220 mm (w) x 300 mm (d) x 420 mm (h) /
9 in (w) x 12 in (d) x 17 in (h)

ORDERING INFORMATION

300174 Stereo Zoom Microscope with Trinocular Head

STANDARDS:

NEXT 18B / 18A / 18

M&S 19C / 19A / 19

G208G**Stereo Microscope**

45° binocular stereo microscope with Greenough zoom optical system. Widefield eyepieces 10x, 0.75x-4.5x magnified range and 1.6 zoom ratio. Compact R2GG stand with halogen incident and transmitted light.

SIZE

WEIGHT 4 kg / 8.8 lbs

DIMENSIONS 220 mm (w) x 300 mm (d) x 420 mm (h) /
9 in (w) x 12 in (d) x 17 in (h)

ORDERING INFORMATION

300180 Stereo Microscope

STANDARDS:

M&S P19 / P19A / 19C

NEXT 18 / 18A / 18B

Dual purpose for both perspiration and oven-dry tests with high accuracy. 33 liter or 120 liter capacity. Dual temperature ranges and scales (Oven: 40-250°C , Incubator: 40-100°C) with 2 shelves. Direct reading hydraulic temperature control and safety thermostat with warning indicator. Other sizes, temperature ranges and accuracies available upon request.

SIZE: 33 Liters

WEIGHT 20 kg / 44 lbs

DIMENSIONS External
420 mm (w) x 430 mm (d) x 580 mm (h) /
17 in (w) x 17.5 in (d) x 23 in (h)

Internal
310 mm (w) x 300 mm (d) x 350 mm (h) /
12.5 in (w) x 12 in (d) x 14 in (h)

**SIZE: 120 Liters**

WEIGHT 45 kg / 99 lbs

DIMENSIONS External
600 mm (w) x 580 mm (d) x 810 mm (h) /
24 in (w) x 23 in (d) x 32.5 in (h)

Internal
480 mm (w) x 460 mm (d) x 550 mm (h) /
19 in (w) x 18.5 in (d) x 22 in (h)

ORDERING INFORMATION

G209A Combined Laboratory Oven and Incubator,
33 liters

G209B Combined Laboratory Oven and Incubator,
120 liters

STANDARDS:

M&S C6 / C7 / C10 / C11

AATCC 15

Lightmeter

G210L

Lightweight and compact design, ideal for measurement of a wide range of lighting types with easy, one-hand operation. Removal sensor for remote reading with protection cover. Provides selectable lux or foot-candle units for display and features a 3 1/2 digit backlit LCD and HOLD function.

SIZE

WEIGHT 0.2 kg / 0.4 lbs

DIMENSIONS 100 mm (w) x 25 mm (d) x 150 mm (h) /
4 in (w) x 1 in (d) x 6 in (h)

ORDERING INFORMATION

201153 Lightmeter





SIZE: COLOR CHEX 60

WEIGHT	30 kg / 66 lbs
DIMENSIONS	710 mm (w) x 410 mm (d) x 565 mm (h) /
(Overall)	28 in (w) x 16 in (d) x 22 in (h)
DIMENSIONS	710 mm (w) x 360 mm (d) x 380 mm (h) /
(Viewing Cavity)	28 in (w) x 14 in (d) x 15 in (h)

SIZE: COLOR CHEX 120

WEIGHT	78 kg / 172 lbs
DIMENSIONS	1300 mm (w) x 630 mm (d) x 810 mm (h) /
(Overall)	51 in (w) x 25 in (d) x 32 in (h)
DIMENSIONS	1260 mm (w) x 570 mm (d) x 590 mm (h) /
(Viewing Cavity)	50 in (w) x 22 in (d) x 23 in (h)

ORDERING INFORMATION

G210/60	ColorChex 60 Color Assessment Cabinet
G210/120	ColorChex 120 Color Assessment Cabinet
G210/45	45-Degree Fixed Table for ColorChex Assessment Cabinet

STANDARDS:

ISO 105-C01 / C02 / C03 / C04 / C05 / C06 / C07 / C08 / C09 / X11	ASTM D1729	BS 950 PART 1			
NEXT 1 / 2 / 3 / 3A / 4 / 4A / 5 / 6 / 7 / 7A / 7B / 9 / 9A / 10 / 18A / 18B / Color Assessment		ANSI/ANSI	CIES 16	CIES X0.12	
AATCC 8 / 15 / 16 / 23 / 61 / 109 / 116 / 117 / 132 / 133 / 190					

Cost saving alternative for your Assessment Cabinet requirements. New high specification/low cost option to conventional light booths. With illuminant A and Horizon sunlight as standard, 3 other fluorescent light sources can also be specified, including D65 (CRI 98), TLD84 and UV. Light booths comply with BS 950 Part 1 and 16 CIES, X0.12.

Preset with programmable-sequence lighting and individual lighting life record function. Optional selection for remote control function of light source selection.

FUNCTIONAL FEATURES:

- Pre-heat time setting (10 seconds) for fluorescent
- Usage record (by on / off) for individual fluorescent
- Individual lighting life record function and over-time alarm
- Programmable-sequence lighting function
- Interlocking function for three light sources: D65, TLD84 and UV
- Optional light sources (change the name on display panel through program setting)
- Remote control of light source selection (Optional)

Switch Code	Lamp Options	
D65	Artificial Daylight D65	Correlated color temperature is 6500K. Within the tolerances prescribed in BS950: Part 1, Illuminant for color matching appraisal. Specified for most applications where there is a need to maintain color consistency and quality. Conforming highly to the CIE specifications, for accurate color matching.
TLD84	Narrow-Band Fluorescent	Narrow Band Triphosphor Fluorescent lamps. Correlated color temperature of 4000K. Used as an European Point of Sales Illuminant.
A	Illuminant 'A' (Inc A)	Correlated color temperature 2856K. Required by BS 950: Part 1 as a test for metamerism (CIE Illuminant 'A'). Used to check for color flaring. This is particularly important for those shades containing red and yellow coloring matters.
H	Horizon Daylight	Home lighting with correlated color temperature is 2300K.
UV	Ultra-Violet Blacklight (UV)	Use to detect the presence of Optical brightening Agents and/or Fluorescent dyes. Therefore it is useful when assessing white and Fluorescent shades to check the level present and its evenness.

For the visual assessment of color under controlled, standard light conditions. Cabinets incorporate a digital control panel, which includes features such as auto sequence, servicing indicator, warm up, power save, data recording and optional dimming. The new look control panel is also ergonomically designed to allow the user more comfort. Illuminants can be chosen as follows:

D65 VeriVide "Artificial Daylight" fluorescent lamps conforming to Standard Illuminant D6500.

D652 Additional level of "Artificial Daylight" for colors of low reflectance factor.

830 & 840P15 Philips Triphosphor fluorescent lamps. Often chosen as a "Point of Sale" illuminant.

F Filament (domestic) lighting and as a test for metamerism.

UV Ultraviolet light to reveal the presence of fluorescent dyes and bleaches.



WEIGHT

CAC60	25 kg / 55 lbs	CAC120	50 kg / 110lbs
CAC60-5	25 kg / 55 lbs	CAC150	55 kg / 122 lbs

ORDERING INFORMATION

G210A	Verivide Color Assessment Cabinet CAC60
G210A5	Verivide Color Assessment Cabinet CAC60-5
G210B	Verivide Color Assessment Cabinet CAC120
G210B5	Verivide Color Assessment Cabinet CAC120-5
G210C	Verivide Color Assessment Cabinet CAC150
G210C5	Verivide Color Assessment Cabinet CAC150-5
G210J	45 Degree Fixed Angle for Verivide Color Assessment Cabinets
300215	Spare Lamps CAC60 (1 set)
300216	Spare Lamps CAC60-5 (1 set)
300218	Spare Lamps CAC120 (1 set)
300219	Spare Lamps CAC120-5 (1set)
300220	Spare Lamps CAC150 (1 set)
G210G5	Spare Lamps CAC150-5 (1 set)

DIMENSIONS		Width		Depth		Height	
		mm	inch	mm	inch	mm	inch
CAC60	Overall	710	28.5	540	21	545	22
	Viewing Cavity	680	27	495	20	360	14
CAC60-5	Overall	710	28.5	540	21	545	22
	Viewing Cavity	680	27	495	20	360	14
CAC120 & CAC120-5	Overall	1290	52	620	25	755	30
	Viewing Cavity	1260	50	590	23.5	570	22.5
CAC150 & CAC150-5	Overall	1560	62.5	620	25	755	30
	Viewing Cavity	1530	61	585	23.5	570	22.5

STANDARDS:

M&S C1 / C2 / C48 / P4C / P19C	BS 950	DIN 6173	NEXT 1 / 2 / 3 / 3A / 4 / 4A / 5 / 6 / 7 / 7A / 7B / 9 / 9A / 10 / 18A / 18B / Color Assessment
AATCC 8 / 15 / 16 / 23 / 61 / 109 / 116 / 117 / 132 / 133 / 190	ISO 105-C01 / C02 / C03 / C04 / C05 / C06 / C07 / C08 / C09 / X11		

G210N7

ColorChex Color Assessment Cabinet



STANDARDS:

ASTM D1729 / D4966	BS 950 PART 1	DIN 6173
ANSI ANSI	AATCC 8 / 15 / 16 / 23 / 61 / 109/ 116 / 117 / 132 / 133 / 165 / 190	

Cost saving alternative for your Assessment Cabinet requirements. The ColorChex N7 creates the perfect alternative to natural daylight. It allows color assessment to be carried out in accordance with Standards ASTM D 1729, BS 950 Part 1, DIN and ANSI.

The ColorChex Color N7 incorporates "illuminant A", in accordance with CIE standards and Horizon light sources. It has been designed to meet the needs of the American market with American retailers and manufacturers often specifying Horizon light. The ColorChex N7 contains five light sources that can include a selection of CIE illuminants, point of sale illuminants, UV, Illuminant A and Horizon.

The unit has a new design feature eliminating the need for screws when assembling the cabinet. The unit slots together, making it easier to assemble, and making it suitable for transporting if required. Other features include a built-in time elapsed meter for scheduling the replacement of individual lamps, membrane switching with electronic ballasts, and a specially selected white reflector.

SIZE

WEIGHT	25 kg / 55 lbs
DIMENSIONS	660 mm (w) x 315 mm (d) x 456 mm (h) / 26 in (w) x 12.6 in (d) x 18 in (h)

ORDERING INFORMATION

G210N7	ColorChex N7 Assessment Cabinet
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G210VB

VeriVide Viewing Board



ORDERING INFORMATION

G210VB	VeriVide Viewing Board
201035	Suitable for AATCC Test Methods using 4 foot lamps
203077	Mobile stand for VeriVide Viewing Board

STANDARDS:

AATCC 128 / 143	AATCC 88B/88C/124
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For the evaluation of smoothness in appearance of flat fabric and seams, and the retention of pressed creases. Evaluation is performed using a standard lighting and viewing area by rating the appearance of specimens in comparison with appropriate reference standards. Lighting and evaluation should be carried out in a darkened room, using the equipment light source only. Any ambient light reflected could interfere with the rating results.

Viewing board incorporates either 2400 mm (8 ft) or 1200 (4 ft) Cool White lamps. The unit is switched and incorporates high frequency electronic control gear and can be either wall or mobile trolley mounted. May be built to customer specifications.

SIZE

WEIGHT	62 kg / 137 lbs
DIMENSIONS	1830 mm (w) x 270 mm (d) x 1830 mm (h) / 72 in (w) x 11 in (d) x 72 in (h)

PANTONE Textile Color System communicates color choices with ease and efficiency. Quickly pinpoint shades within each color group with over 2300 shades to choose from arranged chromatically.

Color Swatch Files.

The ultimate creative tool for those who need immediate access to over 2,300 textile color swatches. Three-volume set contains all colors in a 2" x 2" removable swatch format. Designers can create solid color palettes and combine for yarn dye and print combinations.

Color Planner - Cotton.

Compact reference book contains over 2,300 textile colors dyed on 100% cotton chips (5/8" x 5/8"). This easy desktop reference is the ideal color locator for those who need to make quick color decisions.

Color Specifier-Paper.

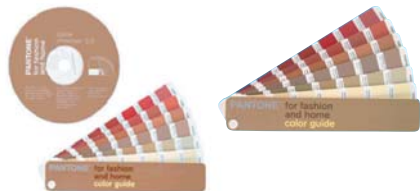
Features six larger-sized, tear-out chips for each color, 7 colors per page. The large format provides greater visualization, ideal for attaching to design sketches.

Color Specifier Replacement - Paper.

Individual replacement page contains 7 Pantone colors on page, with 6 tear-out chips for each color for easy removal.

Color Guide.

New larger-sized portable color-on-paper fan deck contains over 2,100 textile colors chromatically arranged for optimum viewing. Easy to bring along for sample shopping, client or vendor meetings and on-site reviews.



ORDERING INFORMATION

200216	Pantone Color Specifier – Paper
200265	Pantone Color Planner - Cotton
203523	Pantone Color Swatch Files - Cotton
200217	Pantone Color Guide - Paper
203524	Pantone Specifier Replacement paper Pages - Single Page

G210M

Farnsworth-Munsell 100 Hue Test Kit

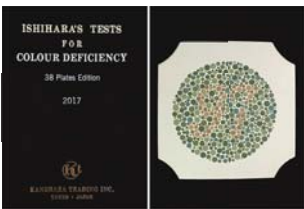


For determination of color vision anomalies and color aptitude. An essential test for technologists and assessors in color and color difference. Consists of four trays, each containing a segment of 85 color reference disks mounted in recessed area of individual black plastic caps. Color vision anomalies and color aptitude are detected by the ability of testee to place color caps in hue order. Score sheet yields numerical and graphical results. Color reference size is 1/16" (12 mm) diameter. Furnished with instruction manual and pad of 100 score sheets. Complete in fitted wooden case.

SIZE	
WEIGHT	5 kg / 11 lbs
DIMENSIONS	550 mm (w) x 150 mm (d) x 75 mm (h) / 22 in (w) x 6 in (d) x 3 in (h)
ORDERING INFORMATION	
201941	Farnsworth-Munsell 100 Hue Test Kit

G210N

Ishihara Color Blindness Test Chart Kits



A general and more rapid test for workers in textiles and other color-dependant industries. 38-plate version bound into book form, with instructions.

SIZE	
WEIGHT	200 g / 0.4 lbs
DIMENSIONS	100 mm (w) x 25 mm (d) x 150 mm (h) / 4 in (w) x 1 in (d) x 6 in (h)
ORDERING INFORMATION	
204601	Ishihara Color Blindness Test Chart Kits

G211

Electronic Moisture Meter



To determine the moisture content percentage of fiber, yarns and fabrics, natural, synthetics and blends.

In the microprocessor, 17 measurement scales are stored to be used for testing different materials. For others, the absolute value of electric conductivity (0-100) must be converted, referring to the special conversion tables provided.

Supplied with 1 connecting table, conversion scales, electrode holders, 3 electrodes for spools & bobbins, hanks and fabrics, fitted with a carrying case.

SIZE	
WEIGHT	0.3 kg / 0.6 lbs
DIMENSIONS	83 mm (w) x 160 mm (d) x 300 mm (h) / 3.2 in (w) x 6.2 in (d) x 11.8 in (h)
ORDERING INFORMATION	
202818	Electronic Moisture Meter
202819	Calibration Kit

To determine the moisture content percentage of fiber, yarns and fabrics, natural, synthetics and blends.

- Easy to use Aqua Boy textile moisture meter TEM-I for many applications and quick measurements
- Multiple scale for direct readings for wool, rayon and cotton, as well as 0 – 100 scale for comparison tables used for other materials like Polyester, Polyamide and many material mixtures
- A wide choice of needles, knives, rollers and surface electrodes for many applications
- High accuracy and reproducibility



ORDERING INFORMATION

200865	Electronic Moisture Meter
200859	Stab Electrode
204373	Knife Electrode
200860	Roller Electrode
204374	Continuous Run Electrode
200862	Surface Electrode
203729	Calibration Kit

Analog Moisture Meter (Carton Paper & Card Boxes) - Aqua Boy

204545

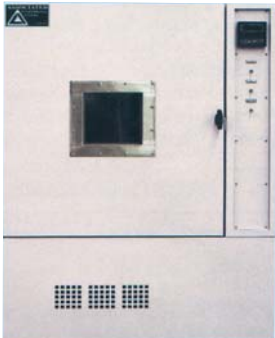
Portable textile moisture meter with analog display.

- Easy to use the moisture meter for many applications and quick measurements for paper, cardboard, pure lint cotton, jute, sisal, leather, grain, cacao, raw coffee and tea
- A wide choice of needles, knives, cup and surface electrodes for many applications
- High accuracy and reproducibility



ORDERING INFORMATION

204545	Analog Moisture Meter(Carton Paper & Card Boxes)
204546	Knife Electrode 280 mm long
204638	Calibration Kit



For the conditioning of samples prior to testing, provides conditions from 20% to 98% RH +/-2 with 0°C to 94°C +/- 0.5°C, or -20°C to 94°C +/- 0.5°C.

Three capacities available:

	Height	Width	Depth
1.5 cu.ft/42 liters, Internal	325 mm	350 mm	325 mm
	13 inch	14 inch	13 inch
5.8 cu.ft/165 liters, Internal	600 mm	500 mm	450 mm
	24 inch	20 inch	18 inch
10 cu.ft/280 liters, Internal	750 mm	600 mm	600 mm
	30 inch	24 inch	24 inch

Provided with
Manual Digital Set - Digital Indicating Controller for temperature and humidity. Stainless steel shelf - 2 positions. Forced air circulation. 2 inch access port and plug on left wall. Self-contained heating, refrigeration and steam generator humidifier. Vapor-tight welded stainless steel interior.

Optional Extras:
2 - channel automatic programmer with ramp and soak facilities.

Self-contained recirculating humidity system with 6-gallon (24-liter) reservoir - (eliminates need for piped de-ionised or de-mineralized water). Extra stainless steel shelf.

Note:
Custom-designed and built chambers of any required capacity up to room size, with conditions down to - 20°C are available. Quotations on request.

ORDERING INFORMATION

G212D1	Laboratory Conditioning Chamber 1.5 cu ft /42 liters
G212D2	Laboratory Conditioning Chamber 5.8 cu. ft / 165 liters
G212D3	laboratory Conditioning Chamber 10 cu. ft / 280 liters
401860	Channel Automactic Programmer
202854	Recirculating Humidity System
202855	Extra Stainless Steel Shelf

Allows samples to gradually absorb laboratory conditions prior to testing. Consists of 4 heavy duty mesh shelves coated in white nylon, and 4 post supports with adjustable shelf locking devices chromium-plated steel.

SIZE:

WEIGHT	37 kg / 82 lbs
DIMENSIONS	1200 mm (w) x 600 mm (d) x 1525 mm (h) / 48 in (w) x 24 in (d) x 60 in (h)

ORDERING INFORMATION

303549	Conditioning Shelving Unit
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**STANDARDS:**

M&S C4A / C5 / C6 / C7 / C10 / C10A / C37 / C49A / P1A / P1B / P1C / P3A / P4 / P4B / P5 / P5A / P7 / P66 / P99A NEXT 2/2A/5/12

AATCC/ISO Gray Scales

G246A

For assessment of change in color and staining in colorfastness testing 1-5 steps with half steps, in wallet

SIZE

WEIGHT	50g
DIMENSIONS	80 mm (w) x 230 mm (d) / 3 in (w) x 9 in (d)

ORDERING INFORMATION

403231	ISO/BS Grey Scale (Change in Color)
403232	ISO/BS Grey Scale (Staining)
202162	AATCC Grey Scale (Change in Color)
202161	AATCC Grey Scale (Staining)

**STANDARDS:**

NEXT 1 / 2 / 3 / 3A / 4 / 4A / 5 / 7A / 7B / 8 / 9 / 9A / 18 / 18A / 18B	M&S C4A / C6 / C7 / C9 / C9A / C10 / C10A / C11 / C12A / C13 / C14 / C26 / P4C / P19C
ISO 105-A02 / B01 / B02 / B04 / B06 / C01 / C02 / C03 / C04 / C05 / C06 / C07 / C08 / C09 / D01 / 02 / E01 / E02 / E03 / E04 / E07 / E08 / E09 / E11 / E12 / E13 / E14 / G02 / G03 / N03 / N04 / P01 / X05 / X11 / X12 / X16	GB/T250

AATCC/ISO Light Fastness Standards

G246C-CC

Blue wool fabric (pack of 8 graded 1-8) to meet ISO/BS standards. Dimensions for each piece 240 mm (9 1/2") x 150 mm (6")

AATCC Light Fastness Standards.

ORDERING INFORMATION

403274	Light Fastness Standards ISO/BS (pack of 1-8)
G246CC	Light Fastness Standards AATCC

**STANDARDS:**

AATCC 16	BS 1006	ISO 105-B01 / B02 / B04 / B06	M&S C9 / C9A	NEXT 1
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G246E

Assessment and Grading Masking Sets



To mask non-relevant sample areas in color assessment tests.

SIZE

DIMENSIONS 170 mm (w) x 50 mm (d)
7 in (w) x 2 in (d)

ORDERING INFORMATION

403243 Assessment and Grading Mask

STANDARDS:

BS 1006 NEXT 1 NEXT Color Assessment

G246H

AATCC Chromatic Transfer Scale, Nine Step



The AATCC 9-Step Chromatic Transference Scale is used to visually evaluate color transfer or staining. The scale has five hues (red, yellow, green, blue and purple plus gray), all selected from the Munsell Book of Color.

ORDERING INFORMATION

202163 Chromatic Transfer Scale, Nine Step

STANDARDS:

AATCC 61 / 117 / 133 / EP8

G246J

AATCC Crease Appearance Replicas



Five plastic replicas representing crease appearance with five being the best and one being the least crease retention after laundering. With storage case.

SIZE

WEIGHT 200 g / 0.45 lbs
DIMENSIONS 380 mm (w) x 90 mm (d) x 400 mm (h) /
15 in (w) x 3.5 in (d) x 15.5 in (h)

ORDERING INFORMATION

202156 Crease Appearance Replicas

STANDARDS:

AATCC 88C / 143 M&S P134 / 134A

Six plastic replicas used to visually evaluate the smoothness of fabrics after laundering. With storage case.

SIZE

WEIGHT	2 kg / 5 lbs
DIMENSIONS	380 mm (w) x 90 mm (d) x 390 mm (h) / 15 in (w) x 3.5 in (d) x 15.5 in (h)

ORDERING INFORMATION

202158	Smoothness Appearance Replicas
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STANDARDS:

AATCC 124 / 143	ISO 7768	M&S P91 / P134 / P134A
NEXT 24 / 30 / 30A		



Used to visually evaluate smoothness of seams after laundering.

SIZE

WEIGHT	1 kg / 2.2 lbs
DIMENSIONS	380 mm (w) x 90 mm (d) x 390 mm (h) / 15 in (w) x 3.5 in (d) x 15.5 in (h)

ORDERING INFORMATION

202157	Seam Smoothness Photographs (set of 2)
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STANDARDS:

AATCC 88B / 143	ISO 7770	M&S P134 / P134A
NEXT 30A	JIS L 1905	



When a sample is observed to have lost color or have changed color during washing, this may be due to the effect of washing or the effect of the presence of optical brightener on the sample. This can be assessed using the fluorescence suppressor.

Both the tested and untested samples are placed side by side. The fluorescence suppressor is then placed over the 2 samples. If the observed difference is not present when viewed through the fluorescence suppressor, the change in shade or color loss is due to the effect of optical brightener.

SIZE:

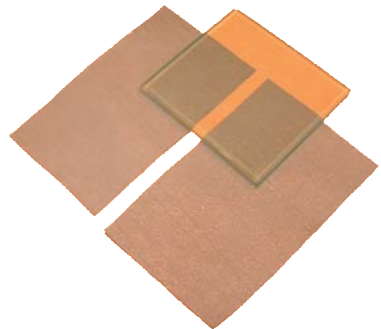
WEIGHT	350 g / 0.65 lbs
DIMENSIONS	120 mm (w) x 110 mm (d) x 10 mm (h) / 5 in (w) x 5 in (d) x 0.4 in (h)

ORDERING INFORMATION

201196	Fluorescence Suppressor
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STANDARDS:

M&S P5





As the fastness of dyeing depends on the depth of color, it is necessary to specify standard depths when making comparisons. Dye manufacturers' pattern cards refer to these depths in fastness ratings for their products.

ISO standard depths are illustrated in a range of 6 steps each from 2/1 to 1/25 depth over a range of 18 hues plus 2 navies and 2 blacks.

ORDERING INFORMATION

201193	ISO Standard Depth Scales
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STANDARDS:

AATCC EP4	BS 1006	ISO 105-A01
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For evaluating fabrics tested to method TM 130 for oily soil release during home laundering.

ORDERING INFORMATION

202155	AATCC Stain Release Replicas
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STANDARDS:

AATCC 130



Light weight magnifier with an all-metal construction, LED light source, and a flexible spring-balanced arm, supplied with a 3 diopter glass lens and cloth cover.

SIZE

WEIGHT	3.2 kg / 7 lbs
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DIMENSIONS	570 mm (w) x 170 mm (d) x 500 mm (h) /
	22.4 in (w) x 6.7 in (d) x 19.7 in (h)

ORDERING INFORMATION

200993	LED Illuminated Magnifier
300339	Spare Lamp 22 watt

SDL Atlas is a supplier of all recognized test methods and standards in original copyright form. Recommended lists of standards for textiles for any particular application are available on request. Ask for a quotation on any world standard, advising standard number, year and title.

ORDERING INFORMATION

G253/001 AATCC Technical Manual, including All Test Methods (Latest Available Edition)

G253/002 ASTM Book of Textile Standards and Test Methods (Volumes 07.01 and 07.02, Latest Available Edition)



Silent Laboratory Compressor

G265

Suitable for the provision of instrument quality compressed air with silent operation. Maximum pressure 8 bars (120 psi), tank size 25 L (6.6 U.S. gallons), maximum displacement 32 liters/minute (1.13 cubic feet/minute). Noise level 45 dB(A) at 1 meter. Supplied complete with intake air filter, outlet air/oil filter/regulator and fittings. Larger capacities available, details on application.

SIZE

WEIGHT 33 kg / 74 lbs

DIMENSIONS 380 mm (w) x 380 mm (d) x 550 mm (h) /
15 in (w) x 15 in (d) x 22 in (h)

ORDERING INFORMATION

G265 Silent Laboratory Compressor



TEST MATERIALS





TEST MATERIALS

Standard Materials for Standards Based Testing

Consistent Quality

Test Materials

Batch after Batch. Test After Test.

Each lot of test materials supplied by SDL Atlas is thoroughly tested to ensure conformity and consistency from batch to batch to provide our customers with the utmost confidence in their standards-based testing. All of the test materials sold are of the highest quality and meet international standards.

SDL Atlas offers the broadest range of test materials in the textile and home appliance testing markets. Our extensive inventory provides a single source solution, plus we offer technical expertise to assist in making testing efficient, precise and compliant.

We offer multifibers and detergents for wash fastness tests, crocking supplies, make weights, pilling supplies, specialized test materials for specific instruments and more. SDL Atlas also has a large selection of test materials for home appliance testing. These include DOE energy cloth, soiled cloth, and standard soil as a few examples.

CERTIFICATE OF CONFORMANCE

Date of Issue: 08/01/2018
Product: ISO Crockmeter Squares
Part Number: 403086
Batch: 18H212

We hereby certify that the above product has been evaluated according to appropriate standards and conforms to the specifications as outlined in:

ISO 105-F09, 105-X12, 105-D02, M&S C8, C8A, C25, ISO 20433:2012

Our Guarantee: Each batch of test materials supplied by SDL Atlas is tested through rigorous internal inspections to ensure conformity and consistency in order to provide our customers with the utmost confidence in their standards-based testing.

Approved Signatory:
Rick Stanford
SDL Atlas, General Manager

Providing confidence in standard based testing through expertise and global partnering.
www.sdlatlas.com

Each item comes with an official Certificate of Conformity detailing the compliance to standards while consistency is ensured by archiving every tested sample – logging and documenting every lot.

DETAILED TEST REPORT COLORFASTNESS TO CROCKING: CROCKMETER METHOD

AATCC Test Method 8-2013

14.5 Crockmeter Test Cloth should meet the following specifications:

Fiber	100% 10.3 – 18.8 mm combed cotton staple with no optical brightener present
Yarn	15 tex (40/1 cotton count), 5.9 turn/100m "2"
Thread Count	For greige fabric: 32 x 5 warp ends/cm; 33 ± 5 picks filling/cm
Weave	1/1 plain
Finished Fabric	Desized and bleached with no optical brightener or finishing material present
pH	7 ± 1
Mass/100 meter	100 ± 3 g finished
Whiteness	W = 78 ± 3 (Method 110)

Specs	AATCC Test Method 8	Target with Tolerance	Result
Greige Fabric			
Fiber	100% 10.3 – 18.8 mm combed cotton staple with no optical brightener present	100% Cotton	YES
		10.3 – 18.8 mm staple	YES
		Combed	YES
		No Optical Brightener	YES
Yarn	15 tex (40/1 cotton count), 5.9 turn/100m "2"	15 tex (40/1 cotton count)	YES
		5.9 turn/100m	YES
Thread Count	For greige fabric: 32 x 5 warp ends/cm; 33 ± 5 picks filling/cm	32 ends/cm	32 ends/cm
Weave	1/1 plain	1/1	YES
Finished Fabric			
pH	7 ± 1	AATCC TM 81	6.9
Mass/100 meter	100 ± 3 g finished	100 ± 3 g finished	99 grams/m²
Whiteness	W = 78 ± 3 (Method 110)	AATCC TM 110	W = 78



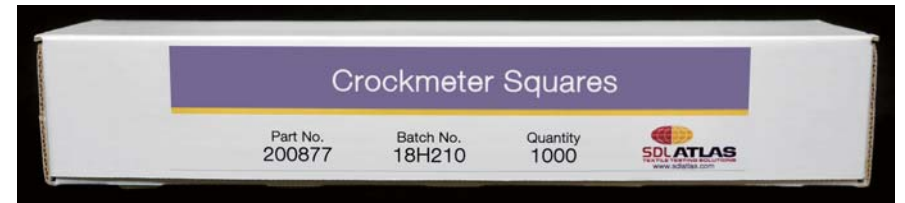
3040 Arway Drive Rock Hill, SC 29734 • Phone: 803-328-0110 • Fax: 803-328-0121
www.sdlatlas.com • info@sdlatlas.com

Crockmeter Test Materials

Test Materials

SDL Atlas manufactures high quality Pre-Cut Crocking Cloth for all major international standards including AATCC, ISO, Next, and M&S standards. We also supply Verification Fabric, Green Felt and Emery Paper for your convenience.

Each lot of Crocking Test Materials supplied by SDL Atlas is thoroughly tested to ensure conformity and consistency from batch to batch to provide our customers with the utmost confidence in their standards-based testing.



Ordering Information

Crockmeter Squares for American Standards	200877
2" x 2" 1,000 pieces	
Crockmeter Fabric for American Standards	200878
per meter	
Crockmeter Squares for European Standards	403532
2" x 2" 1000 pieces	
Crockmeter Fabric for European Standards	403011
per meter	
Verification Fabric 2" x 6" 25 pieces	103871
Green Felt 2" x 2" 100 pieces	201059
Emery Paper 25 sheets	103872



2" x 2" Crocksquare

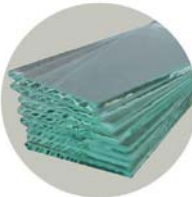


Crocksquare mounted

The Phenotest was developed to assess the potential of light textiles to yellow while in its package. SDL Atlas provides the necessary Test Materials for performing phenolic yellowing tests for ISO, AATCC, Next and M&S Standards.



Phenotest Test Materials



Ordering Information

Impregnated Test Paper, pack of 30	107345
Impregnated Test Papers 100 mm x 75 mm (pack of 100)	107346
Impregnated Test Paper, pack of 150	106432
Phenotest Control Fabric, pack of 30	203038
Phenotest BHT-Free Plastic Film, pack of 15	106930
Phenotest Glass Plates, pack of 10	200929
Film Cutting Template	201053



ISO Phenotest in preparation

SDL Atlas manufactures a variety of ballast and wash loads for shrinkage and durability testing. In addition, we carry a full range of detergents for wash and colorfastness tests.



100% Cotton Ballasts



ECE and IEC Detergents



AATCC Detergents

Ballast Ordering Information

Type III Polyester Ballast, 20 x 20 cm	403468
Type III Polyester Ballast, 30 x 30 cm	403276
AATCC Type I Ballast 100% Woven Cotton, 36 x 36 in	401357
AATCC Type III Ballast 50/50% Woven Polyester Cotton, 36 x 36 in	401359
Underwriters Laboratories (UL) 2157 100% Cotton Ballast, Double Hemmed - 22" x 34"	403380
Underwriters Laboratories (UL) 2157 100% Cotton Ballast, Double Hemmed - 10" x 10"	401365

Detergent Ordering Information

ECE Non-Phosphate Reference A Detergent - 2 kg	403235
ECE Non-Phosphate Reference A Detergent - 15 kg	403236
ECE Phosphate Reference B Detergent - 2 kg	403237
ECE Phosphate Reference B Detergent - 15 kg, For ISO C06	403238
IEC Non-Phosphate Reference A Detergent - 2 kg	403239
IEC Non-Phosphate Reference A Detergent - 15 kg	403240
TAED (Tetraacylethylenediamine) - 250 gm	403408
Perksheen Detergent, 1 Gallon	201061
Sodium Perborate Tetrahydrate, 1kg	401149
AATCC 1993 Reference Detergent with optical brighter, 10kg	403521
AATCC 1993 Reference Detergent without optical brighter, 10kg	403522
AHAM Standard Detergent Formula 3 - per kg, For AHAM HLW-I	203107

SDL Atlas provides the necessary Test Materials for performing all major test methods for Pilling and Snagging tests using the RotaPill Pilling and Snagging Tester and the Random Tumble Pilling Tester.

Our high quality items such as cork liners, cotton sliver, sample tubes, templates, mounting jigs and much more provide confidence that results achieved will remain consistent from test to test.



RotaPill Test Materials



Random Tumble Pilling Tester with Cork Liners

Ordering Information

Random Tumble Pilling Tester Test Materials	
Cork Liners (50 pack)	200771
Cotton Sliver (9 meters)	202324
White Adhesive	400112
RotaPill Test Materials	
Sample Tubes (pack of 4)	101026
Unmounted Cork Linings (pack of 6)	101027
Snagging Points (set of 6)	107701
M&S Sample Tubes & Locking Rings (set of 8)	106841
M&S Liner and Step for Pilling & Snagging Drum	106885
Felt for Octagonal Snagging Drum Test	200947



RotaPill box with Cork Linings and Sample Tubes



Cork Liners



Cotton Sliver



White Adhesive



Sample Tubes

SDL Atlas supplies a wide variety of Test Materials designed specifically for testing on the Martindale Abrasion and Pilling Testers. From standard abrasion and pilling tests to performing specialty tests for everything from flooring, gloves, socks, polished surfaces and more, our Test Materials will ensure that each test performed is reliable every time.



Martindale Test Materials



Martindale Abrasion and Pilling Tester ready to perform abrasion testing



Abradant Fabric Cut to Size

Ordering Information		
SM25 Wool Abradant Fabric, 5 meters		403253
Felt Discs, 90 mm (pack of 20)		200910
Felt Discs, Woven 140 mm (pack of 20)		200971
Felt Discs, Nonwoven 140 mm (pack of 20)		200946
Felt, Woven, 1 m x 1.5 m		200947
Felt, Nonwoven, 1 m x 1.5 m		200945
Standard Backing Foam		108179
Sample Retaining Rings (pack of 20)		105136
PL31B Grit 180 Abrasion Paper (50 sheets)		107765
Silicon Carbide Paper (pack of 25)		200943
Trizact Synthetic Abrasion Discs, Green, 35 Microns (pack of 25)		201077
Trizact Synthetic Abrasion Discs, Orange, 5 Microns (pack of 25)		203289

Other abrasants can be supplied to meet any testing needs. Contact a SDL Atlas Test Materials Expert for more information.

SDL Atlas supplies multifiber fabric in a variety of sizes to meet all AATCC and ISO standards for assessing color transfer in colorfastness testing. Available in Cold Cast, Heat Sealed and Overcast, each box of multifiber supplied by SDL Atlas is thoroughly tested to ensure conformity and consistency from batch to batch to provide our customers with the utmost confidence in their standards-based testing. AATCC multifiber is sold pre-cut by the box or in 45" (115 cm) rolls by the meter.

Our DW and LW multifiber meet international and retailer standards and have been accepted by labs and retailers as a substitute for other existing brands.



Stained Multifiber from Rotawash Container



Each box comes with a Certificate of Conformance



Close-Up of SDL Atlas Multifiber



Box of Multifiber Pieces



Multifiber by the Roll

Ordering Information		
AATCC FA #10 - Six filling stripes with 2-inch repeat, Filament Acetate, Bleached Cotton, Spun Nylon 6.6, Spun Polyester, Spun Acrylic, Worsted Wool. Available in Heat Sealed (HS), Cold Cut (CC), or Overcast (OE) finishing.		
45" (115 cm) by the Meter		200883
2" X 2" FA -1000 pieces		200882 (HS), 203064 (CC), 401725 (OE)
2" X 4" FA -1000 pieces		300294 (HS), 300292 (CC), 401718 (OE)
2" X 6" FA -1000 pieces		300297 (HS), 300295 (CC), 300296 (OE)
ISO & M&S FAA #10A - Six filling stripes with 10-cm repeat, Filament Acetate, Bleached Cotton, Spun Nylon 6.6, Spun Polyester, Spun Acrylic, Worsted Wool. Available in Heat Sealed (HS), Cold Cut (CC), or Overcast (OE) finishing.		
45" (115 cm) by the Meter		200881
4 cm X 10 cm FAA -1000 pieces		200879 (HS), 300298 (CC), 400890 (OE)
5 cm X 10 cm FAA -1000 pieces		300302 (HS), 300300 (CC), 400891 (OE)
ISO TV - For High Temperature Wash Testing. Six components yarn stripes, each measuring 15 mm. Consisting Filament Triacetate, Bleached Cotton, Spun Nylon 6.6, Spun Polyester, Spun Acrylic & Spun Viscose		
4 cm X 10 cm -1000 pieces		300317
5 cm X 10 cm -1000 pieces		300319
10 Meter Roll		200828
ISO DW - Six components yarn stripes, each measuring 15 mm. Consisting Filament Diacetate, Bleached Cotton, Spun Nylon 6.6, Spun Polyester, Spun Acrylic & Worsted Wool		
4 cm X 10 cm -1000 pieces		300286
5 cm X 10 cm -1000 pieces		300287
4 cm X 10 cm -250 pieces		403279
5 cm X 10 cm -200 pieces		403280
10 Meter Roll		403277
50 Meter Roll		403278
LW - For M&S and Retailer Methods. Six component yarn stripes, each measuring 15 mm. Consisting Regenerated Cellulose, Bleached Cotton, Spun Nylon 6.6, Spun Polyester, Spun Acrylic & Worsted Wool		
10 Meter Roll		403281
50 Meter Roll		403282

In addition to the items specifically mentioned here, SDL Atlas provides the most diverse variety of Test Material available from a single source. These pages show just a small sampling of what else we offer. For more information on SDL Atlas Test Materials, or to request a quote, contact an SDL Atlas solutions expert today.



Pre-stained Fabrics



Replacement Cutting Blades



Ball Bearings for Colorfastness Testing



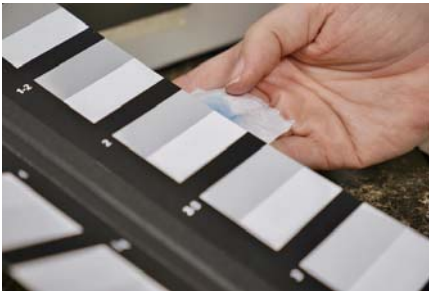
MMT Control Fabric



Universal Wear Tester Testing Materials



Bursting Verification Fabric



Gray Scales for Staining and Color Change



Flammability Test Materials



Wooden Cribs



Specialty Fabrics



Lightfastness Test Materials



Snagging Test Materials



Bursting Diaphragms

To download a complete Test Materials Brochure, visit our website at www.sdlatlas.com.

For over 60 years, the SDL Atlas companies have been providing confidence in standard based testing through expertise and global partnering. Our customers can be assured that they are making informed decisions based on accurate test results.

SDL Atlas experts work closely with standards committees and retailers on development of standards. Our engineers develop instruments to meet these standards. Our service team calibrates the instruments to exacting UKAS and internal standards. High quality test materials that are consistent from batch to batch are also produced and distributed by SDL Atlas.

Fabrics and Test Materials

Test Materials are a critical part of many textile tests. SDL Atlas produces and distributes a complete line of test materials. Each batch is thoroughly tested to ensure conformity and consistency from batch to batch.

Our test materials offerings include:

- Multifiber
- Cork Liners
- Abradents
- Phenolic Yellowing
- Detergents
- Ballasts
- Crocking Fabric



Calibration & Service

- UKAS calibration
- ISO calibration
- Service support
- Factory trained representatives
- SDL Atlas service technicians

SDL Atlas is a UKAS accredited calibration laboratory No. 0688. With fully trained technicians located in Europe, Asia, and North America, we are prepared to support our customers in maintaining their investment and their confidence in their test instruments.

Providing confidence in standard based testing
Through expertise and global partnering

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