

ADVANCED

TESTING TECHNOLOGIES









Packaging Testing Technologies

Universal Testing Machines Universal Force Test Systems Box Compression Tester and Package Drop Tester Film Permeability Tester Adhesion Testers Leak Tester Digital Elmendorf Tearing Tester Hot Tack Tester / Heat Seal Tester **Torque & Force Testers** Drop Dart Impact Tester Ink Rub Tester Coefficient of Friction Tester - COF Tester - Peel Tester Specific Gravity Tester - Densimeter Film and Paper Thickness Gauges Spout Insert & Sealing Machine Other Packaging Testing Technologies



About Qualitest

Qualitest is a global contender and one of the top-ranking manufacturers and suppliers of testing technologies worldwide. With our extensive portfolio of state-of-the-art and competitively priced testing machines, systems and software, we supply standard or customized solutions for many test, measurement and quality control tasks required in the world of modern materials testing.

The key products from Qualitest range include hardness testers, universal testing machines, metallography, materials testing equipment, spectroscopy, microscopy, portable testers, and instruments for testing metals, plastics, rubber, textiles, paper, paint, cement, concrete and packaging materials, as well as technologies for NDT/Ultrasonic, surveying, automotive, aerospace, mining, oil/gas/pipe industries, gold & Jewel-lery applications and much more.

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Universal Testing Machine

Universal Testing Machine - QM-Series

www.WorldofTest.com/universal-testing-machine-qm-series

The QM-Series Universal Testing Machine is loaded with technical features, ergonomic design and is produced with the highest quality as a benchmark. This instrument is suitable to be used in: Production lines, where the operator has to be fast and efficient, and accurately control the test, Testing lab environments, where using the advanced software, the users can analyze the test data, have full control on processing, filing, and test management.

A Universal Testing Machine (UTM) is used to test both the tensile and compressive strength of materials. Universal Testing Machines are named as such because they can perform many different varieties of tests on an equally diverse range of materials, components, and structures. Most UTM models are modular, and can be adapted to fit the customer's needs.

Universal Testing Machines can accommodate many kinds of materials, ranging from hard samples, such as metals and concrete, to flexible samples, such as rubber and textiles. This diversity makes the Universal Testing Machine equally applicable to virtually any manufacturing industry.

The UTM is a versatile and valuable piece of testing equipment that can evaluate materials properties such as tensile strength, elasticity, compression, yield strength, elastic and plastic deformation, bend compression, and strain hardening. Different models of Universal Testing Machines have different load capacities, some as low as 2 kN and others as high as 3,000 kN.



QM-Series Universal Testing Machine Range

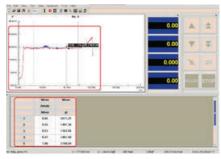
QM-Series Oniversal resulty machine hange									
Model / Specs for QM-Series	QM-2	QM-5	QM-10	QM-20	QM-50	QM-100	QM-200	QM-300	QM-500
TOT QIVI-Series									
Capacity (kN)	2	5	10	20	50	100	200	300	500
Total Cross- head Movement (mm)	400 or 8	300	650 or 1,100	800 or 1,200	1,000 or 1,100	1,000	1100	1100	1200

Q-SOFT Control Software

QSOFT is the software used to control the Universal Testing Machine. The QM-Series unit and the software are designed to accommodate a wide variety of testing needs. The software has a variety of preset programmed test cycles for compression, tensile, and cyclical testing to meet a range of testing standards

This software has the following capabilities:

- Selection of communication language
- Setting of test methods
- Test execution
- Analysis of the results
- Printing of the certificates
- Graphic post-analysis of the tests
- Statistical analysis of the tests





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Universal Testing Machines - Q-Series www.WorldofTest.com/universal-testing-machines-q-series

The Q-Series Universal Testing Machines range is designed for quick and reliable tensile, compression, flexural (bending), shear, peel, fatigue cycling, and constant load tests on metals, composites, alloys, rigid plastics and films, elastomers, textiles, paper, board and finished products.

"The Q-Series" is the Fastest Growing Universal Testing Machine/ UTM Line Worldwide with Unbeatable Price/ Performance Ratio and an industry first

We offer a comprehensive range of Universal Testing Machines with capacities from 2.5kN (500 lbf) up to 2,000kN (400,000 lbf). The Q-line provides very high value to its users, as it is designed with advanced technology for easy operation and data retrieval and manipulation - at a very reasonable price, very efficient and comprehensive support with Qualitest's professional after sales service team.



Q-Series Universal Testing Machine Range									
	Bench Models								
Model	ESM303	Q2.5	Q5	Q10	Q25	Q50	Q100		
Capacity kN	1.5	2.5 (1 column)	5	10	25	50	100		
Capacity Ibf	300	550	1,100	2,200	5,500	11,000	22,000		

Universal Force Test Systems

Motorized Force Test System - MT-Series

www.WorldofTest.com/motorized-force-test-system-mt-series

Meeting ASTM D882 & ASTM D3354 Standards

Full-Featured Force Test Stands for Film and Paper

In the past, film extruders, paper producers, converters, and woven/non-woven fabric producers have had the choice of test stands and universal test machines which are either value-priced peak-force-only machines, or expensive computer-operated integral-load cell machines. Now you can have the best of both worlds in a single instrument. The series MT-1500, a simple to use computer operated tester, with Quality Control software for automatic calculation and graphical display of break, elongation, yield, modulus, and other, tension and compression force information.

Improved Film & Paper Quality, Increased Profit Margins

The Series 1500 Precision Force Test Stand is a proven tool for more closely controlling nominal and peak strength and elongation characteristics to speed your:

• Research and development of new film and paper products, converted materials,

wovens/non-wovens, fabrics and textiles.

- Inspection of incoming film and paper products
- In-process checks to ensure on-spec product for converting operations& Quality-control



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Programmable Motorized Force Test Systems - ESM 303

www.WorldofTest.com/programmable-motorized-force-test-systems-esm-303

The ESM303 is a highly configurable single-column force tester for tension and compression measurement applications up to 300 lbF [1.5 kN], with a rugged design suitable for laboratory and production environments. Sample setup and fine positioning are a breeze with available FollowMeTM force-based positioning - using your hand as your guide, push and pull on the force gauge or load cell to move the crosshead at a variable rate of speed.

With generous travel, clearance, and depth dimensions, a wide range of tests can be performed, including break testing, cycling, limit testing to a load or distance, load holding, elongation testing, tensile testing, compression testing, and more. Satisfy various test methods through an easy-to-use menu, allowing the configuration of test speed, force and distance limits, cycling, preload, and many other functions, all protected by a password. Save up to 50 profiles to accommodate a range of test methods.

When the ESM303's clearance is insufficient for the application, its modular mechanical design allows for singleand double-column extensions. Modularity extends to the controller functions as well. Individual functions, such as travel measurement, cycling, load holding, etc., may be purchased either upfront or enabled in the field through an activation code. This a-la-carte platform allows for custom configuration as appropriate for the application and budget.

Electronic Tensile Tester - QT-ETT

www.WorldofTest.com/electronic-tensile-tester-qt-ett

ASTM D828, ASTM E4, ASTM D882, ASTM D1938, ASTM D3330, ASTM F88, ASTM F904, ISO 37, JIS P8113

QT-ETT tensile testing equipments are specially designed considering tensile testing requirements for flexible materials that are commonly used in product packaging to study different properties of materials. This instrument utilizes Qualitest's latest embedded control system and operating software, with user-friendly operating interface and intelligent data management system.

Applications

QT-ETT tensile testing equipments can be used to perform different type of tests like traction, stripping, sealing, tear, compression, bending, and cutting strength of plastic film, composite film, plastic tapes, soft packaging material, rubber sheets, paper, non-woven fabrics and other packaging materials, widely used in industries related to production of plastic films, packaging, pharmaceuticals, food, inspection agency, research institutes etc. to study properties of materials and finished products.

List of basic tests that can be performed using QT-ETT

- Test of Tensile Strength and Elongation Rate
- Test of Tensile Strength at Break
- Tear Resistance Test
- Seal Performance Test
- 90 Degree Peel Test
- 180 Degree Peel Test
- Compression Test of Plastic Bags
- Fastness Performance Test









Box Compression Tester and Package Drop Tester

Box Compression Tester - QT-BCT-K20

www.WorldofTest.com/box-compression-tester-qt-bct-k20 ASTM D 642, ASTM D 4169, TAPPI T804, ISO 2872, ISO 12048, JIS Z0212

Compressive resistance is one of the properties used to evaluate the ability of packages, boxes, and containers to successfully withstand the compressive forces they are subjected to during storage and distribution. The test gives a clear understanding of deformation under compressive force.

Box Compression Tester QT-BCT-K20 is used to determine compression strength and estimate stacking test of heavy transport packages and boxes to estimate the loading ability and deformation under different loading conditions to ensure the safety of product inside the box while transportation.

Box Compression Tester - 7001 Series

www.WorldofTest.com/box-compression-tester-7001-series

Meeting TAPPI-804, JIS-Z0212

The 7001-Series advanced Box Compression Testers are PC-controlled systems primarily used in the packaging industry for determination of the compression strength of cartons, containers, cardboard boxes, etc. The top model 7001-DS is driven with AC servo motor for ideal and smooth control of speed from 0.001 to 200mm/min. The model 7001-D is the lower cost hydraulic microcomputer system with U25 indicator for general testing purposes.

Packaging Compression Tester – QT-PCT-500 www.WorldofTest.com/packaging-compression-tester

ASTM D 642, ASTM D 4169, TAPPI T804, ISO 2872, ISO 12048, JIS Z0212

It is very important to evaluate compressive resistance of packaging material before its selection for maintaining product shape, quality while its transportation, distribution and handling in bulk. QT-PCT-500 is used to evaluate compressive resistance of small sized packages, boxes, and containers to analyze whether specific packing can successfully withstand the compressive forces they are subjected to during storage and distribution. The test gives a clear understanding of deformation under compressive force.

Packaging Compression Tester QT-PCT-500 can also used to determine compression strength of filled packages and estimate stacking criteria of for product packages and boxes to estimate the loading ability and deformation under different loading conditions to ensure the safety of product inside the box while transportation.





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Package Drop Tester

www.WorldofTest.com/package-drop-tester

The Package Drop Tester - PDT-II Series simulates the drop/fall of the packaged finished products to evaluate their damages. All the rhombohedrons, angles and faces of the package container can be tested. So that the manufacturer can know how to take measures effectively to protect products against damage during transportation. During dropping, the carrier will rotate to allow the packed products to fall freely. It can test the faces, edges and corners of the product, with small vibration, and stable and reliable operation.

Film Permeability Tester

www.WorldofTest.com/film-permeability-tester

Gas Permeability Tester - QT-GPT

www.WorldofTest.com/gas-permeability-tester-qt-gpt

ASTM D1434, ISO 15105-1, ISO 2556, JIS K7126-A

Gas Permeability Tester- QT-GPT-500 is used to test the gas transmission rate (GTR) of packaging material by differential pressure method.

This instrument is generally used to measure transmission rate of Oxygen (O2), Nitrogen (N2), Carbon dioxide (CO2), and other Non-inflammable and non-etchant gases through and packaging container so as to ensure the quality of material inside package is maintained as required.

Oxygen Permeability Tester - QT-OPT-201

www.WorldofTest.com/oxygen-transmission-rate-tester

ASTM D3985, ASTM F2622, ASTM F1307, ASTM F1927, ISO 15105-2, DIN 53380-3, JIS K7126-B

Oxygen Permeability Tester - QT-OPT-201 is ideal for industrial application laboratory testing of material for Oxygen permeability testing for quality control, research and development on plastic, metal, paper and rubber materials that are generally used as packaging materials for storage, preservation or transportation of perishable and oxidizable materials.

It can also be used for research laboratories to evaluate and define permeability behaviour of material.







Oxygen Permeability Tester - QT-OPT-210

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WW.WORLDOFTEST.COM

www.WorldofTest.com/oxygen-permeability-tester-qt-opt-210

ASTM D3985, ASTM F1927, ASTM F1307, ASTM F2622, ISO 15105-2, DIN 53380-3, JIS K7126-B

Oxygen Permeability Tester - QT-OPT-210 is ideal for advanced Oxygen permeability testing for quality control, research and development on plastic, metal, paper and rubber materials that are generally used as packaging materials for storage, preservation or transportation of perishable and oxidizable materials.

It is used for research laboratories to evaluate and define oxygen permeability behaviour of material. The built in software performs complicated data analysis and displays the relations in the form of graphs and data tables which significantly reduces the time to determine the permeability rate and relations between different output parameters of a variety of test subjects.

It is fully equipped with high level of accuracy and precision with reliable data output required for research analysis and Quality Control testing.

Water Vapor Permeability Tester - QT-WVP

www.WorldofTest.com/water-vapor-permeability-tester-qt-wvp

ASTM E96, ASTM D1653, ISO 2528, DIN 53122-1, TAPPI T464, JIS Z0208

Water Vapor Permeability Tester QT-WVP-300 series is used to test the water vapor transmission rate (WVTR) of a wide range of materials by Gravimetric Method. It is ideal for advanced water vapor permeability testing for research and development companies and has the reliability, speed, versatility and accuracy required for Quality Control testing.

Special feature of its 12 chamber adoptability for independent as well as average testing of similar or different samples allow flexibility to user for expansion considering the number of testing chambers without purchasing a whole set of new instrument. User can perform average testing of similar samples as well as independent testing simultaneously.

Wide range of testing can be adopted by additional external fittings for packaging container, bags, pouch, bottle, can, bowl, aluminum coated containers, and many other packaging containers.

Water Vapor Permeability Tester – QT-WVP-200

www.WorldofTest.com/water-vapor-transmission-rate-tester

ISO 15106-3, DIN 53122-2

Water Vapor Permeability Tester QT-WVP-200 series is used to test the water vapor transmission rate (WVTR) of a wide range of materials by Electrolytic Method. It is ideal for advanced water vapor permeability testing for research and development companies and has the reliability, speed, versatility and accuracy required for Quality Control testing.

It uses state of the art automation technology to delivers accurate performance with faster test results. Its user friendly interface enables a new user to adapt easily.

Qualitest offers the highest quality Electrolytic detection sensor in the market with the lowest replacement cost. The built in software performs complicated data analysis and displays the relations in the form of graphs and data tables which significantly reduces the time to determine the permeability rate and relations between affecting parameters with variety of test subjects.









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Adhesion Testers

www.WorldofTest.com/adhesive-tape-ink-transfer-testing

Adhesive Tape - Roller Pressing Machine - QT-AD-RPM

JIS C2107, JIS Z0237

This instrument is used to applying a layer of ink from adhesive tape to test sample by pressing the test sample and printed adhesive tape together, this operation is conducted under controlled condition with controlled load, rolling speed, rolling time, etc. Which then is separate by Disk Peeling tester to determine the optimum conditions for transferring ink from adhesive tape to sample material.

Adhesive Tape - Disk Peeling Tester - QT-AT-DPT

After the Printed adhesive tape is bonded with sample using Adhesive Tape Roller Pressing Machine, this instrument is used to strips off the adhesive tape from test sample using Disk Peeling Tester with controlled force and speed allowing transfer of ink from adhesive tape to sample. Then the sample and adhesive tape is observed for the status of ink layer stripped of to determine the ink fastness properties and bonding strength to determine the optimum conditions for transferring ink to a sample material. Disk Stripping Tester is used to test the ink layer bonding strength of printed plastic film, composite film, cellophane, glass paper etc. that utilize the intaglio printing technique. Furthermore it can also be used to test adhesion condition of surface layers formed by the techniques of vacuum coating, surface coating, composite technology and lamination.

Tape Retentivity Tester www.WorldofTest.com/tape-retentivity-tester

Use roller to roll one end of the tape in order to adhere to testing plate, hang a specified load on its lower end. Measure the distance of slide of the tape after a certain time. If it drops during testing, record it's time to evaluate tape's retention.

Leak Tester

Leak Tester - QT-LT-V (Negative Pressure Method) www.WorldofTest.com/leak-tester-qt-lt-v

ASTM D 3078

Leakage testing of pressurized packages is very important part of product manufacturing and preservation of product to maintaining its quality till consumption of product for industries which deal with food, beverages, pharmaceuticals, personal care etc.

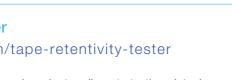
Leakage Tester - QT-LT-V is used to test the hermetic sealing quality and performance of packaging bags, bottles, cans, etc.

It can also be used to test seal performance of specimens after compression tests, fall tests and other destructive testing methods.

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Leakage and Seal Strength Tester - QT-LT-P (Positive Pressure Method)

www.WorldofTest.com/leakage-and-seal-strength-tester-qt-lt-p

ASTM F1140, ASTM F2054, ISO 11607-1, ISO 11607-2

Qualitest Leakage Tester QT-LT-P tests the hermetic seal quality, strength, joint/disengaging force, performance, compression and burst resistance of packaging bags, bottles, flexible packages, cans covers etc., used in food industries, beverage, pharmaceuticals, and personal care and so on. These test methods provide rapid means of evaluating tendencies for package failure when the package is exposed to a pressure differential.

Digital Elmendorf Tearing Tester – QT-DET www.WorldofTest.com/elmendorf-tear-strength-tester

ASTM D1922, ASTM D1424, ASTM D689, ISO 13937-1, ISO 6383, ISO 1974, GB/T16578.2-2009, GB/T 455, TAPPI T414

QT-DET Digital Elmendorf Tearing Tester takes the Elmendorf method and is used to determinate tearing resistance property of films, sheets, flexible PVC, PVDC, waterproof films, woven materials, polypropylene, polyester, paper, cardboard, textile and non-woven, etc.

Hot Tack Tester / Heat Seal Tester

Heat Seal Tester - QT-HST-E

www.WorldofTest.com/heat-seal-tester-qt-hst-e

ASTM F 2029

Qualitest QT-HST-E is heat seal testing equipment specially designed to simulate heat sealing condition and affecting parameters for determination of heat sealing ability of plastic films, composite films, coated paper, and other sealing films under specified sealing conditions.

The heat sealing ability of materials is a function of temperature, pressure and duration of temperature and pressure applied for creating a seal and greatly affected by the factors of melting point, thermal stability, fluidity and thickness. The optimal heat seal ability parameters can be obtained accurately and efficiently.

Gradient Heat Seal Tester - QT-GHS

www.WorldofTest.com/gradient-heat-seal-tester-qt-ghs

ASTM F2029, QB/T 2358, YBB 00122003

Gradient Heat Seal Tester is professionally designed for the precise measurement of five groups of sealing temperature, time and pressure. Gradient Heat Seal Tester is for the determination of the heat seal ability of a surface, or sealant layer of films, laminates, composites and polymers etc. How well the material heat seals is expressed quantitatively as seal strength as a function of the sealing conditions of temperature, time and pressure. It conforms to standards of ASTM F2029, QB/T 2358 and YBB 00122003.









Hot Tack Tester - QT-HTT www.WorldofTest.com/hot-tack-tester-gt-htt

ASTM F1921, ASTM F2029

QT-HTT Hot Tack Tester is used to test adhesive or peeling strength of packaging films used for heat seal packaging material.

This device is compatible to test the different types of thermoplastic films sealing at different temperature, pressure and at controlled speed to evaluate different application criteria for packaging materials considering the environmental conditions for actual application.

Hot tack tester measures the strength of heat seals formed between thermoplastic surfaces of flexible webs, immediately after the seal has been made and before it cools to room temperature. It simulates packaging and sealing environment and enables to analyse its effects on seals.

Motorized and Manual Test Stands For Torque & Force Tests

www.WorldofTest.com/test-stands

We offer one of the industry's most extensive line of test stands for force and torque measurement applications. Our test stands come in a variety of sizes and load capacities, most of which are available in vertical and horizontal configurations. You can choose a motorized test stand for precise speed control with repeatable results or an economical manual test stand for less demanding applications.

Digital Force Gauges

Qualitest offers a wide range of force gauges for a virtually limitless number of tension and compression testing applications. The force gauges are fully featured force gauges with data outputs, computer control capabilities, and superior accuracy while the gauges are simpler solutions appropriate for less demanding applications. The gauges may be handheld or used with a test stand and gripping fixtures to create a complete testing solution.

Digital Torque Tester www.WorldofTest.com/digital-torque-tester-qt-dtt-10

ASTM D2063, ASTM D3198, ASTM D3474

QT-DTT-10 is specially designed instrument to effectively and efficiently measure the torque retention properties of container or continuous thread closure systems of various packaging containers with varied designs. It is best suitable for packaging development and engineering evaluation of various designs of packaging containers and its quality control.

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Film and Paper Thickness Gauges

Film Thickness Tester - MX-Series

www.WorldofTest.com/mx-series-film-thickness-tester

In the past, film and paper producers and converters have had the choice of caliper gauges which were either value-priced thickness-only machines, or expensive computer-operated machines. Now you can have the best of both worlds in a single instrument. The MX-series MicroGauges are simple to operate, stand-alone or PC-operated testers with optional Quality Control software for automatic calculation and graphical display of thickness profiles, statistics, and other information.

High Precision Electronic Thickness Meter - QT-ETM

www.WorldofTest.com/high-precision-electronic-thickness-meter

ISO 4593, ISO 534, ISO 3034, ASTM D645, ASTM F 2251, ASTM D374, ASTM D1777, TAPPI T411, DIN 53105, DIN 53353, JIS K6250, JIS K6328, JIS K6783, JIS Z1702, BS 3983, BS 4817

QT-ETM is a simple to use stand-alone and/or computer operated thickness tester, with optional Quality Control software for automatic calculation and graphical display of thickness profiles, statistics, and other information.

QT-ETM is best suitable instrument to perform thickness measurement or comparative measurement analysis of thin films of thickness 0 to 1.5mm with high accuracy of $\pm 0.1 \mu m$.

Thickness Tester - CX-Series

www.WorldofTest.com/thickness-tester-cx-series

The Thickness Tester - CX-1020 revolutionized capacitance film thickness gauging with the introduction of our patented AutoCal[™] concept - by adding an absolute (contact) measurement probe with the capacitance sensor, the Thickness Tester - CX-1020 is self-calibrating. No more need to create detailed recipes to recall calibration information. Accidental operator errors are reduced, accuracy is increased, because different polymers and blends require different calibration values.

On-Line Film Thickness Measurement Systems

www.WorldofTest.com/line-film-thickness-measurement-systems

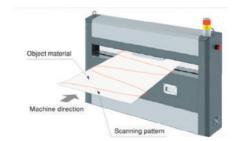
X-Ray Non-Contact On-Line Thickness Gauge System for Plastic Film

The modern production process requires faster and more accurate quality control technologies to improve the overall quality and ensure optimized production parameters. Qualitest's On-line non-contact and non-destructive X-ray measurement and control system improves the quality of your products by providing real-time feedback of absolute or deviation from target thickness measurements.

The benefit of high speed measurement and vital statistical data is optimized production control; which leads to cost reduction and productivity increase for plastic sheet, film, foil or plastic coating production lines.

Qualitest On-line Film Thickness measurement systems are offered in three different standard precision ranges and are available in both O-Attenuation Calculation shaped and C-shaped frames. The standard effective scanning width is 59 inches (1500mm). Qualitest also offers customized solutions to meet most production requirements.

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Packaging Testing Technologies



Drop Dart Impact Tester

Drop Dart Impact Tester for Plastics Film

www.WorldofTest.com/drop-dart-impact-tester-plastics-filmt

Drop Dart Impact Tester - ASTM D1709

Series DX-8000 Dart Impact testers Full-Featured models for Film and Sheet

The Model DX-8285A Drop Dart Impact tester with Pneumatic Sample Clamp and Pneumatic Dart release Mechanism

We offer the Series DX-8000, a simple to use stand-alone, non-instrumented tester, for measuring impact resistance of film, sheet, and laminated materials.

Improved Film and Sheet Quality, Increased Profit Margins

The Series 8000 Dart Impact Tester is a proven tool for more closely controlling nominal and peak strength characteristics to speed your:

- Production and additives settings and adjustments
- Research and development of new film and sheet products
- Inspection of incoming film and sheet products
- In-process checks to ensure on-spec product for converting operations

Falling Dart Impact Tester - QT-FDIT

www.WorldofTest.com/falling-dart-impact-tester-qt-fdit

ASTM D1709, ISO 7765-1, JIS K7124

It is important to understand the impact resistance of packaging materials for since it will be subjected to impacts during transportation and loading. It is widely used in R&D departments, laboratories, packaging industries, inspection agencies, and film manufacturing units etc. to determine the maximum energy that their products can withstand without failure.

QT-FDIT determines the energy required for plastic films and foils to fail under the impact of a free falling dart under specific conditions. This energy is expressed in terms of the weight of the dart falling from a specified height which would result in 50% failure of specimens tested.

Ink Rub Tester

www.WorldofTest.com/ink-rub-tester Ink Rub Tester - QT-iRT

Rub resistance describes the ability of printed material to withstand marking, scuffing or smudge during handling in conversion, packaging, transportation, distribution and use. QT-IRT simulates a similar environment to test the rub resistance on printed materials.

It is used to analyze the life of label by creating actual environment of application to evaluate abrasion resistance of surface coating layer of printed material.

It simulates the actual working environment of product and helps to identify the quality and printing method to be used for printing of label based on application of product and its working environment.











Ink Rub Tester - QT-RT

ASTM D5264, TAPPI T830

QT-RT Ink Rub Tester is designed to evaluate the scuffing or rubbing resistance of printed or coated surface of paper, paperboard, film, laminates, substrates, etc.

Coefficient of Friction Tester - COF Tester - Peel Tester www.WorldofTest.com/coefficient-friction-tester-cof-tester Coefficient of Friction Testers - FX-7000 Series

Our line of Coefficient of Friction Test instruments, can be configured to suit your individual needs for economical, quality control testing of Friction properties of film products. Each instrument is designed for ease of use and maintenance, while meeting the standards for ASTM testing. Films, Paper, and Foils can be tested with these instruments along with Heat or Chemical Seals.

Coefficient of Friction Tester – QT-COF Series

ASTM D1894-01, ISO 8295, TAPPI 816

Testing for frictional properties of materials is very important to evaluate technical indexes that are to be controlled meet requirements for production to achieve product quality to meet product performance requirement. Qualitest QT-COF Series is specially designed instruments to evaluate frictional properties of materials to evaluate & measure those indexes effectively and efficiently.

The coefficient of friction COF, is determined by the ease with which two surfaces slide against each other. The dimensionless value of the coefficient of friction is the ratio of the force required to slide the surfaces to the force perpendicular to the surfaces. A lower friction coefficient indicates that the surfaces are smoother - there is less resistance to the sliding motion.

Friction Peel Tester - QT-FPT

ASTM D1894, ISO 8295, TAPPI T816, GB 10006

QT-FPT Friction/Peel Tester can be used to test coefficient of static and kinetic friction of plastic films, sheets, rubber, paper and paper board, PP woven bags, fabrics, metal-plastic composite belts for communication cable, conveyor belts, wood, coatings, brake pads, windshield wipers, shore materials and tires. By measuring the smoothness of a product, the fastest running speed of packaging line can be realized.









Specific Gravity Tester – Densimeter

www.WorldofTest.com/specific-gravity-tester-densimeter

Densimeter - EW-300SG

www.WorldofTest.com/densimeter-ew-300sg

Features:

- Only 10 seconds to measure density and volume.
- Ideal machine for interval testing in a production line.

Densimeter - MD-300S

www.WorldofTest.com/densimeter-md-300s

Features:

- Popular model with resolution of 0.001g/cm3. (Upgraded from previous model MD-200S)
- Compact body and accurate density measurement for solid and liquid samples.

Densimeter - SD-200L

www.WorldofTest.com/densimeter-sd-2001

Features:

• Top precision model with density resolution of 4 decimal places for both Solid and Liquid.

• Suitable for plastic pellets, films, rubbers , fabric, advanced materials, and liquid density in the field of medical, food, and chemical that require accuracy.

Densimeter - MDS-300

www.WorldofTest.com/densimeter-mds-300

Features:

• Easy density measurement of not only solid and liquid sample density, but added functionality to measure powder density with resolution of 0.001g/cm3 and reference value of 0.0001g/cm3.

• Newly designed sensor and auto-weighing function for improved accuracy and working efficiency

Densimeter - MDS-3000

www.WorldofTest.com/densimeter-mds-3000

Features:

- Measuring capacity up to 3kg
- Wide measuring capacity enables to measure the samples without cutting, and calculates an average density for the whole sample.

TESTING TECHNOLOGIES

- Sensor & water tank size can be customized depending on the sample size.
- Easy and convenient "auto-weighing function" as a standard feature.



JUALITES

WW.WORLDOFTEST.COM











Other Packaging Testing Technologies Film Heat Shrink Tester - FHST-140

www.WorldofTest.com/film-heat-shrink-tester-fhst-140

ASTM D2732

QT-FHST-140 is designed to evaluate the heat shrinking property of plastic materials and films. The application of heat causes plastic films to rapidly contract; this effect can be used for sealing and packaging application.

This instrument is used for determination of heat shrinking performance and dimensional stability of various plastic films, tubes, hard PVC films for tablets, and packaging sheets.

Testing shrinking property of a film before actual packaging ensures that, it is suitable for a particular packaging application and establishes the correct temperature for packaging without affecting quality of product and material inside the package.

Film Impact Tester - QT-FIT-3J

www.WorldofTest.com/film-impact-tester-qt-fit-3j

ASTM D3420

The impact resistance of films is obtained by measuring the energy consumed by hemispheric impact head to make films rupture under controlled impact conditions to evaluate the impact resistance of material and its effects.

RCT Ring Crush Tester

www.WorldofTest.com/rct-ring-crush-tester

This tester is used for testing the ring crush strength of the paperboard. With the proper accessories (optional), it's also available to test the column compress and adhesion strength of the corrugated board. It is equipped with a precise ball screw, which drives the compression platen steadily along the guide track to compress the specimen. A high accurate load cell detects the compression signal via the analyses of test program to display the test results on the indicator.

MIT Folding Endurance Tester

www.WorldofTest.com/mit-folding-endurance-tester

MIT Flex Tester – MIT Folding Endurance Tester

The MIT Flex Tester – MIT Folding Endurance Tester is used for determining the folding endurance strength of paper and paperboard using hang type weight method.





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Packaging Testing Technologies

Paper Die Cutter

www.WorldofTest.com/paper-die-cutter

TAPPI-T409, JIS-P8113

The Paper Die Cutter is used for preparing the standard specimens for ring crush test, tensile test or others. The precise cutting mechanism with a sharp blade is helpful to make your specimen easily.

Strip Sample Cutter

www.WorldofTest.com/strip-sample-cutter

Dual Blade for Tensile Samples

The model DT1010 is a dual-blade sample cutter designed for laboratory and plant floor use. It features high-quality hardened ground steel blades and a heavy-duty base. Available in a variety of configurations, for precision cutting of strips of plastic film, plastic sheet, paper, laminations, foils, and other sheet materials

Opacity Meter Model RT-6000 www.WorldofTest.com/opacity-meter

Quick, Easy Measurement of Relative Opacity for Film and Packaging Products Ideal for the laboratory or plant floor, the Opacity Meter model RT-6000 is a simple to use, off line instrument that indicates relative opacity of plastic film, paper, laminates, printed packaging and other materials. With a single pass of the light source through your material, the system measures relative light transmission on a scale of 0 to 100 Opacity Units, representing perfectly transparent to purely opaque materials, respectively.

Minimum Film Formation Temperature Tester

www.WorldofTest.com/minimum-film-formation-temperature-tester

DIN 53787 - DIN 53 366 - ASTM D 2354 - ASTM D 1465 - ISO 2115 - ISO/DIS 4622

Test instrument with a ground hard-chrome plated metal plate as a measuring plate for depositing the specimens. By heating and cooling the measuring plate any variable temperature gradient within the range of -30°C to +250°C can be produced and kept constant for any given period.

The measuring plate is equipped with 20 temperature sensors. The temperature can be controlled by the integrated electronic temperature measuring instrument with a digital display and measuring-point selector over the entire range.

TESTING TECHNOLOGIES

Automatic Bursting Strength Tester

www.WorldofTest.com/automatic-bursting-strength-tester

This type of Digital Bursting Strength tester is able to test bursting resistance of the specimen automatically. As soon as you place the specimen, machine will automatically perform detection, testing return, calculation, and saving / printing out test data.













Spout Insert & Sealing Machine - QT-Pack-SX

www.WorldofTest.com/spout-insert-sealing-machine

Qualitest spout sealing machine is automatic PLC controlled machine specially designed for mass production of packages with spouts and heat sealed packages.

It is a fully automatic system consists of heat sealing system, spout input system, and bag input system, bag output system, and central control system mounted on single base frame from module. All systems are equipped with electronic sensors and relays to work cordially for efficient and quality manufacturing of packaging bags.

It is applied to a variety of spouts and bags of different diameters and lengths, such as standing-up bags, 3-side sealing bags.

Features

• The machine is fully automatic, automatic spout input, bag input and output, precision control, stable and smooth running, can work 24 hours continuously.

• The spout system consists of chutes, vibrating disks and guide rails. The photo-electric sensors can induce the spouts and control the charging action.

• The bag system utilizes the pneumatic sucker and sealing system is equipped with dual holding table which increases machine efficiency by enabling dual operations at the same time.

• The heat sealing system includes a big turntable, heat sealing blades and workstations (There are 6 sets of heat sealing blades: 1 set for preheating, 4 sets for heat sealing and 1 set for cooling). Step-by-step heating and cooling, with high performance, stable and dependable operations. Every sealing blade has an independent temperature controller, and runs and debugs independently.

• The workstations are adjustable for bags of different sizes. Customers can order diverse sealing blades for spouts of various types.

• The bag collecting system consists of finished products collecting table and waste product recycling table. Photo-electric sensor and pneumatic control makes the manufacturing process fully automatic.

• The control panel deploys a touch screen, on which all kinds of parameters can be set, and working status in real time such as complete amount, time, success rate and failure rate can be show.

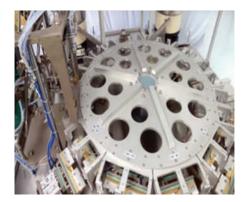
• Other parts: 10 temperature control meter, 8 pressure gages, and 4 emergency stop buttons (1 button on each side of the machine).

• Modular design easy to customize, dismantle, transport and assemble.

• Central control system has control cabinet, control panel and PLC, with touch screen for setting parameters and displaying working status.

• Self-examining the location of malfunction or failure.









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Key QualiBenefits

Qualitest is proud to retain a constantly growing roster of global customers who continue to benefit from our product offerings. Qualitest offers guarantees that make us stand out in the competitive testing equipment industry in offering the best price/quality ratio products, efficient support, and much more. These are a few key benefits that we continue to offer to our customers worldwide:



Low Price Guarantee

Qualitest is confident to offer competitive products at the best possible prices. That's why we offer 110% Low Price Guarantee to meet and beat any price for the same level product. We ensure to offer the best value for your investment.

Efficient Logistics

Short delivery periods for standard products from our many convenient worldwide distribution centers. Our large volume of shipments helps us to offer the most competitive shipping rates worldwide.

Vendor of Choice for many Fortune 500 companies

North American and global Fortune 500 corporations continue to benefit from Qualitest range of products, as we ensure the highest security and assurance for their investment.



High Level of Standards

Qualitest products are built to meet and exceed latest North American and global standard requirements



#1 Source for Testing Technologies

Qualitest is recognized as a one stop source for complete quality control lab solutions, as we provide streamlined support for all of your testing requirements without the need of relying on too many sources.

Centralized Service & Support Coordination

Managed t we offer ef direct or authorized

Managed through our central service dept. we offer efficient customer service support, direct or via our worldwide QualiService authorized network.

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Qualitest also offers an extensive range of testing solutions for plastics, rubber, foam, paper & cardboard, textiles, cement & concrete, and metals.

Other rubber and plastics testing technologies include:

- Universal Tensile/Compression Testing Machines
- Izod/Charpy Impact Testers
- Sample Notchers
- Melt Flow Indexers
- Durometers
- Drop Dart & Gardner Impact Testers
- Specimen Molds
- Sample Preparation Machines
- Capillary Rheometers
- Laboratory Mixing Extruders
- Laboratory Mixing Molders
- Limiting Oxygen Index Chambers
- HDT/VICAT Heat Deflection Testers
- Gloss Meters
- Light booths
- Coefficient of Friction (COF) Testers
- Hot Tack Heat Seal Testers
- Elmendorf Tear Strength Testers
- Opacity Meters
- Film Thickness Gauges
- Gradient Tester for Minimum Film Forming Measurement
- Gas & Water Vapor Permeability Testers
- much more



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