



Plastics Testing Technologies

Universal Testing Machines

Universal Force Test Systems

Durometer - Shore Hardness Testers

Charpy / Izod Pendulum Impact Testers

Plastics Pipe / PVC Testing Instruments

Drop Impact Testers

Specific Gravity Tester – Densimeter

Brittleness & Freezing Testers

Sample Specimen Preparation Equipment

Specimen Dies & Clicker Presses

MFI, Capillary Rheometer, HDT/VICAT & LME

Friction, Adhesive, Tearing Testers

Film Permeability Tester

Film Thickness Gauges

Color Testing Instruments

Block Oven / Aging Oven

Low Temperature Tester – Combo

Creep & Relaxation Tester

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 & Jewellery applications and much more.

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Plastics

Plastics are made by using microscopic building blocks called hydrocarbons, typically derived from petroleum or natural gas. These monomers (small molecules) are bonded into chains called polymers or plastic resins. Different combinations of monomers yield resins with special properties and characteristics.



General Applications

Plastics are often used to replace other common materials such as metals and wood because of their low cost and durable characteristics. Plastics offer innumerable advantages in production as they are easily softened or melted, and can be molded into any shape.

Plastics in general can be divided into two categories: thermoplastic and thermoset processing groups.

Thermoplastic materials are made of polymers or long-chain macromolecules. Heat can transform this material, giving it the flexibility to be formed into tools or key components of other products. This characteristic also allows plastics to be reused or recycled. The other components that make up this material are additives that change properties such as color, stiffness, weatherability, and wear resistance. Thermoplastic materials are necessary for essential manufacturing materials such as sheets, round bars, round bars with a steel core, pipes, and various other sections.

Thermoset plastics are made of polymers that are permanently set through exposure to heat and catalysts during the manufacturing process. As heat can no longer change their shape, these materials are thereby used at higher temperatures and pressures than thermoplastics can withstand.

The ideal combination of processing flexibility and performance enables plastics to be used in an extensive range of applications ranging from low-cost disposable items to expensive specialty parts. Plastics are key materials in the production of automotive parts, electrical appliances, aircraft and aerospace components, sporting goods, packaging, toys, food packaging, and much more. There is no other material that can match the durability of plastic due to its flexibility, fast molding qualities, color absorption, resistance to corrosion, low weight, electrical and thermal insulation, and general toughness and longevity.

The extensive use of plastics requires testing at all stages of development and manufacturing to ensure that products are able to perform well in their intended use. The tests are conducted by companies to guarantee quality control, using internationally standardized methods in the production of all plastic products.

As the characteristics of plastics are influenced by external temperature changes, testing should also be conducted at high and low temperatures. Extreme temperatures can be achieved in environmental chambers, which provide the conditions of real-world applications. For tensile testing, laser and video extensometers are also used for high temperature strain measurements as well as for plastics materials that are sensitive to contact stresses or contamination

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.



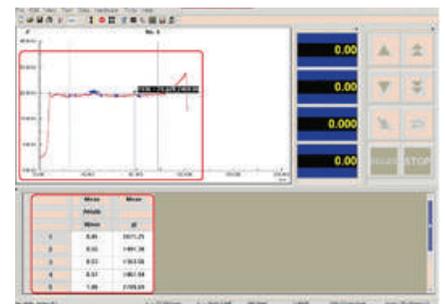
QM - Series Universal Testing Machine Range									
Model / Specs for QM-Series	QM-2	QM-5	QM-10	QM-20	QM-50	QM-100	QM-200	QM-300	QM-500
Capacity (kN)	2	5	10	20	50	100	200	300	500
Total Cross-head Movement (mm)	400 or 800		650 or 1,100	800 or 1,200	1,000 or 1,100	1,000	1100	1100	1200

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



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 lbf	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



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 FollowMe™ 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 single- and 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



Analog Durometer HP-Series

www.WorldofTest.com/analog-durometer

Our range of Shore Durometer - HP Series Durometers are suitable for accurate hardness measurement of all natural and synthetic rubber products, plastics, acrylic glass, acetates, casting resin, polyester, thermoplastics, PVC, neoprenes, hardboards, wood, leather, and fruits within the Shore A, A0, B, 0, C, D, D0, 00, 000, 000S, E, Qualitest Variant C (Asker C), L/c. These durometers are the highest precision models on the market with very easy handling.



Digital Durometer HPE-II

www.WorldofTest.com/digital-durometer-hpe-ii

High-end Durometers with the highest quality and accuracy on the market.

DIN ISO 7619, DIN EN ISO 868, NF EN ISO 868, ASTM D 2240 (DIN 53505)

Digital Shore Durometer - HPE-II Series Digital Durometers are high-end hardness testers for accurate and repeatable hardness measurement of rubber, plastics and other elastomers within the Shore A, A0, B, 0, C, D, D0, 00, 000, 000S, E, scales and much more. This portable handy instrument is available in the widest range of scales and L/c as well as Variant C (Asker C), CS, F and BARCOL.



Digital Shore Hardness Tester HPE III

www.WorldofTest.com/digital-shore-hardness-tester-hpe-iii

Shore Hardness - Specimen/Environment Temperature - Humidity

DIN ISO 7619, DIN EN ISO 868, ASTM D2240, NF EN ISO 868, JISK 6253

Qualitest offers Digital Hardness Tester HPE III which provides significant test data for the use in laboratory or field. Companies that develop or use the products made of soft elastic materials produce, have usually a laboratory in which the products and raw material are regularly tested according to the standard.



Pusey & Jones Hardness Tester – Plastometer

www.WorldofTest.com/pusey-jones-hardness-tester-plastometer

ASTM D 531

Our top quality Pusey & Jones (P&J) hardness tester (Plastometer) serves for the determination of the penetration depth on rubber and elastomer materials like rubber rollers and standard blocks made of rubber with a minimum thickness of 13 mm as well as paper rollers.

The electronic dial gauge is integrated in the instrument and shows the indentation depth to an accuracy of 3 decimal places (0.000 mm). With the help of a vertical spindle which is integrated on the back of instrument, the dial gauge can be moved up and down conveniently and precisely.



HPE II - Digital Barcol Hardness Tester

www.WorldofTest.com/barcol-hardness-tester-impessor

According to ASTM D 2583 and DIN EN 59

Qualitest's Analog and Digital models are designed for accurate hardness measurement on fiber-glass glass-reinforced plastics, duro plastics, hard thermo plastics, aluminum, semi-finished and finished products, according to the Barcol method. Available models include GYZJ series Analog Barcol Impressor Hardness Tester as well as HPE-II series Digital Barcol Hardness Testers.



Automatic Motorized Durometer - Digi-Test II

www.WorldofTest.com/automatic-motorized-durometer

The most accurate and versatile hardness tester on the market, DigiTest positions itself as the top level Shore/IRHD hardness tester with a modular design to suit virtually every Shore or IRHD hardness measurement scale for Polymers. The automatic test procedure of DigiTest eliminates the operator's test influence on test procedure and thus always provides the most accurate results.

Depending on the hardness scales of your choice, from any of Shore scales A, A0, B, 0, C, D, D0, 00, 000, 000 S, E, micro Shore A, micro Shore D, C, D0, IRHD/DIDC M, N, H, L, VLRH, you can select the most cost effective combination of required test heads, and expand and upgrade it at any time in the future.



IRHD Micro Hardness Tester III

www.WorldofTest.com/irhd-micro-hardness-tester-iii

The IRHD Micro Hardness Tester III - New Generation - 3rd series of this popular IRHD Hardness Tester line has a more convenient and user-friendly operation. Accurate IRHD Micro hardness measurement of soft elastomers such as O-rings, seals and gaskets, with thickness down to 0.6mm, is guaranteed.

IRHD Micro Hardness Tester III - New Generation offers new advantages, with an excellent price/quality ratio. Testing of O-rings, molder samples with irregular shapes, seals, etc. are ideal applications for this model. A quick center lever allows quick and precise positioning of the samples and the measuring head comes with integrated display and keypad for ease of use. IRHD Micro Compact III comes with standard RS-232 data interface as well as exchangeable indenters.



High Performance Charpy / Izod Impact Tester Q-Impact 50

www.WorldofTest.com/high-performance-charpy-izod-impact-tester-q-impact-50

ISO 179, ISO 180, ASTM D256

The Q-Impact 50 High Performance Charpy/ Izod Impact Tester is a high performance impact tester designed to precisely determine the absorbed impact energy and resistance to breakage of plastic specimens. The tester conforms to both ASTM and ISO standards. The innovative design allows this tester to be used for both Izod and Charpy test. The max capacity of this tester is 22J (Izod) and 50J (Charpy)



Digital Charpy/Izod Impact Tester - Q-Impact 25

www.WorldofTest.com/q-impact-25-digital-charpyizod-impact-tester

ASTM D-256, ASTM D-6110, ISO 179, ISO 180

Q-Impact 25 is a high performance impact tester designed to precisely determine the absorbed impact energy and resistance to breakage of plastic specimens. The tester conforms to both ASTM and ISO standards. The instrument is capable of recognizing the height loss of swinging pendulum accurately and quickly determine the impact strength via a high precision digital encoder and calculating system. In combination with automation features, the Q-Impact 25 applies pendulum auto-braking, pendulum auto-lifting and pendulum auto-identification to ensure the operator's safety and increase the working efficiency of impact test.



Analog Izod / Charpy Impact Tester - QPI-IC

www.WorldofTest.com/analog-izod-charpy-impact-tester-qp-i-c

ASTM D256 - ISO 180

The QPI-IC Basic Izod Impact Tester determines the energy required to break standard plastics impact specimens. Meeting the corresponding ASTM, & ISO test methods, this equipment is equipped with both Izod and Charpy Vise and made according their respective standards. Users can read the endurance of impact strength directly from the scale.



Impact Specimen V-Notcher QuickNotch-II

www.WorldofTest.com/impact-specimen-v-notcher-quicknotch-ii

ASTM D256

The Notcher for Impact Test Specimen machine can cut various depths for V shapes according to standards. To produce IZOD and CHARPY specimens, the user will cut a V angle along the middle of the specimen to decrease the diversity. The cutting speed of the Notcher for Impact Test Specimens machine can be adjusted according to the material of the specimen, as well as, to different angle depths, where the user can adjust or change the shape of the cutting tool to produce different angle cuts.



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.



Hydrostatic Pressure Tester

www.WorldofTest.com/hydrostatic-pressure-tester

ASTM D-1598, ASTM D-1599, ISO 1167

Conforming to ISO 1167 and ASTM D 1598 & 1599, the Hydrostatic Pressure testing system is mainly used to determine the resistance of thermoplastics pipes to constant internal water pressure at constant temperature.

This system is mainly used in testing the short-time hydraulic failure and resistance to constant internal pressure of the plastic pipes for the transport of fluids. The test stations work fully independently of one another, according to your testing application.



Thermal Recycling Testers

www.WorldofTest.com/thermal-recycling-testers

ASTM F1335, ISO 15874, ISO15875, ISO 15876, ISO 15877

The Thermal Recycling Testers for Plastic Pipes is used to evaluate the function of hot and cold water-pipes PP, PE-X, PVC-C, PB), under a certain pressure for 5000 cycles. A test assembly of pipes and fittings is subjected to temperature cycling by the passage of water under pressure using hot and cold water alternately for a specified number of cycles. While being subjected to temperature cycling parts of the assembly of pipes and fittings are maintained under tensile stress and/or flexural strain by the use of static clamps.



Pipe Cutting and Chamfering Machine

www.WorldofTest.com/pipe-cutting-and-chamfering-machine

The Pipe Cutting and Chamfering Machine is used for cutting and chamfering big pipes. It is an ideal machine for pipe manufacturers as well as quality inspections and research institutions.



Pipe Opacity Tester

www.WorldofTest.com/pipe-opacity-tester

ISO 7686:2005

The Pipe Opacity Tester is used to determine the opacity of pipes and fittings. It is an ideal device for pipe manufacturers, research and inspection institutions. It consists of optical source, Luminous flux collection system, and automatic specimen going in/out controlling system, specimen automatic moving device and specimen support.



Ring Stiffness Tester

www.WorldofTest.com/ring-stiffness-tester

ISO 9969-2007, ISO9967

The Ring Stiffness Tester RST30 is designed to measure the ring stiffness, ring softness and creep rate for plastic pipe. The unique design makes this tester especially suitable for large diameter pipe. The RST30 features built in measurement of the inner diameter of the pipe and the compression plate load-cell interface is designed to reduce the risk of damaging the load cell during testing. The rigid compression plates ensure the results will be free of machine deflection and increases the accuracy of the test results.



Buckling Resistance Tester for Thermoplastic Drainage Cover

www.WorldofTest.com/buckling-resistance-tester-thermoplastic-drainage-cover

BS EN 14830:2006, BS EN 13598-2:2009

Buckling Resistance Tester is used to simulate the conditions when manhole is buried underground and for checking its resistance to the force from underground water.



Drop Impact Testers

Drop Weight Impact Tester for Plastic Pipes

www.WorldofTest.com/drop-weight-impact-tester

300C (ISO 3127, EN744, EN1411) & 300D (ASTM D2444)

The Falling Weight Impact Tester is used to perform impact tests on plastic pipes, conforming to ISO 3127, EN744 and EN1411. Test pieces are subjected to blows from a falling striker, of specified mass and shape, dropped from a known height onto specified positions around the circumference of the test piece. The true impact rate of the batch, or production run from an extruder, is estimated.



Gardner Impact Tester

www.WorldofTest.com/gardner-impact-tester

ASTM D 2794, D 5420, D 3029, D 4226 and G14

Qualitest offers extensive range of advanced plastics and color testing equipment such as Gardner Impact Tester which is a widely used device for the coating and plastic industries.



Drop Dart Impact Tester for Plastics Film

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

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.



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.



Ball Rebound Tester for Foam Materials

www.WorldofTest.com/ball-rebound-tester

The microcomputer controlled ball-rebound-tester is designed for the determination of the rebound elasticity of foam materials acc. to ASTM D 3574 and DIN EN ISO 8307.

A quick, easy and reliable measurement can be done with the ball-rebound-tester because of its innovative technique. This top quality unit is ideal for the quality control of foam materials during the production and in the acceptance department.

A two lined display reads the measured value and median value in %. The testing device is equipped with a serial interface.



Specific Gravity Tester – Densimeter

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

Densimeter - EW-300SG

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

- 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

- 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-200l

- 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

- 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

- Measuring capacity up to 3kg
- Wide measuring capacity enables to measure the samples without cutting, and calculates an average density for the whole sample.
- Sensor & water tank size can be customized depending on the sample size.
- Easy and convenient "auto-weighing function" as a standard feature.



Brittleness Temperature Tester QT-BPT

www.WorldofTest.com/brittleness-temperature-tester-qt-bpt

ASTM D746, JIS-K 7216, ISO 812, and GB/T 15256

The Brittleness Point Temperature Tester - QT-BPT Series Brittleness Tester covers the determination of the temperature at which rubber, plastics and elastomers exhibit brittle failure under specified impact conditions. Samples to be housed in a thermostatic bath based on the reference standards ASTM D746, ISO 812, as well as and other international standards.



Brittleness Tester - ET 05 II

www.WorldofTest.com/brittleness-tester-et-05-ii

ASTM D746, ASTM D2137, ISO 812, ISO 974

It is used for the automatic determination of Brittleness point according to ISO 812, ISO 974, ASTM D746 and ASTM D2137. The price includes the instrument and software, but not the computer.

The test rig is raised by pneumatic cylinders, which require an air supply of 6 Bar. The brittleness tester is designed as a falling weight tester, where the speed is set by the height and the energy by the attached weights. The computer controls the temperature rise and measures the temperature at impact. The result from each stroke is entered by typing the result in the software. The speed is measured after the impact, to verify the speed loss during impact.



Freezing Tester

www.WorldofTest.com/freezing-tester

Our Freezing Tester units are available in vertical or horizontal configurations are used to test the bending/flexing durability of rubber, plastics, synthetic leather, shoes, etc., under cold temperatures as low as -30°C or -70°C depending on the selected model. The test chambers can be equipped with a variety of flexing/bending fixtures made of stainless steel. These models conform to ASTM D 1790, and ASTM D1593 standards.



Apparent / Bulk Density Tester

www.WorldofTest.com/apparent-bulk-density-tester

The Apparent Density Tester - Bulk Density Tester series testers are used to measure apparent density, bulk factor, and where applicable, the pourability of plastic materials such as molding powders. There are three methods according to ASTM D 1895 that are applicable to various forms of these materials that are commonly encountered - from powders and granules to large flakes and cut fibers. The apparatus consists of a measuring cup which is polished inside and a funnel.



SpeciCut II-P

www.WorldofTest.com/sample-preparation-machine-specicut-ii-p

Hard Plastic Tensile Specimen Cutting Machine

The Sample Preparation Machine - Specicut II-P is a manually operated, economical way to prepare tensile bars and other samples. The Sample Preparation Machine - Specicut II-P is an enclosed machine which includes integral misting, chip removal and motor speed regulation units. The chip shield around the control head protects the area around the unit from debris, while the sound deadening package absorbs much of the noise of the unit. A series of power switches located on the front of the panel enables the operator to easily access those accessories desired, while the emergency stop switch located on the machine cuts power to all systems simultaneously.



SpeciCut III

www.WorldofTest.com/cnc-sample-preparation-machine-specicut-iii

The Specicut III CNC sample preparation machine is cost effective in motion control application of up to 3 axes. The motion control is based on numerical control Technology. The machine adopts a simple connectivity and a single commercially available USB cable is used for communication between the PC and control board which can be placed as per user preference.



SpeciCut IV

www.WorldofTest.com/cnc-sample-preparation-machine-specicut-iv

The CNC Sample Preparation Machine - Specicut IV - Flat Samples is a PC controlled system capable of controlling all 4 axes. The motion control is based on numerical control Technology. The machine adopts a simple connectivity and a single commercially available USB cable is used for communication between the PC and control board which can be placed as per user preference.



SpeciLathe I

www.WorldofTest.com/cnc-sample-preparation-machine-specilathe-i

The Mini NC Lathe - Specilathe I is a Compact NC Lathe for various metals and non-metals. The motion control is based on numerical control Technology, which is programmable for a range of specimens. The Turret head and the tail stock features in the lathe enable to operate the machine for various purposes and the Spindle speed can be reached at 4000 rpm. The in-built cover prevents the operator from Dust and noise.



SpeciLathe II

www.WorldofTest.com/mini-nc-lathe-specilathe-ii

The Mini NC Lathe - Specilathe II is used for Sample preparation from various metals and non-metals. The motion control is based on numerical control Technology, which is programmable for a range of specimens. It employs an integral microcomputer to prepare those specimens which we have programmed in accordance with the customer's requirements. The Turret head and the tail stock features in the lathe enable to operate the machine for various purposes. The in-built cover prevents the operator from dust and noise.



Molding Press for Plastics Sample Preparation

www.WorldofTest.com/molding-press-plastics-sample-preparation

Proper sample preparation will achieve accurate and consistent results. Most variation in testing occurs before the test is performed as sample preparation plays a major role in final results. These machines are convenient for preparing samples as they ensure uniform process and save time.



Specimen Dies & Clicker Presses

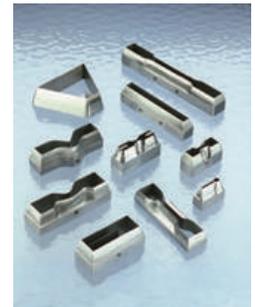
www.WorldofTest.com/specimen-dies-molds

Specimen Cutting Dies

Fully Certified ASTM, DIN and ISO dies.

High quality range of specimen cutting dies and sample cutter are made exactly according to the specific ASTM, DIN, ISO, or JIS standards and are highly accurate for perfect preparation of your test specimens. All of these specimen cutting dies come in a padded carrying case and are supplied with full certification. Qualitest also offers re-sharpening service for these specimen dies and maintain highest quality of production and standards.

Each of our cutters comes with a fully detailed "Inspection Report" and a "Certificate of Compliance" to NIST/SCC and the ISO Guide #25.



ASTM Standard Cutting Dies	
ASTM D-412 A Tensile Sample Cutting Die	ASTM D-1708 Micro tensile Die
ASTM D-412 B Tensile Sample Cutting Die	ASTM D-624 B Tear Sample Cutting Die
ASTM D-412 C Tensile Sample Cutting Die	ASTM D-624 B Tear Sample Cutting Die with Slit
ASTM D-412 D Tensile Sample Cutting Die	ASTM D-624 C Tear Sample Cutting Die
ASTM D-412 F Tensile Sample Cutting Die	ASTM D-624 T Tear Sample Cutting Die
ASTM D-638 Type I Tensile Die	ASTM D-1004
ASTM D-638 Type II Tensile Die	ASTM D-1922
ASTM D-638 Type III Tensile Die	ASTM D-746
ASTM D-638 Type IV Tensile Die	ASTM D-746 T50
ASTM D-638 Type V Tensile Die	ASTM D-1938
ASTM D-1822-S	Other ASTM Dies Available Upon Request

JIS Standard	DIN Standard	Miscellaneous	Accessories
JIS K -6301 1	DIN 53504 S1	ISO 34 A	Mallet Handles & Backplate
JIS K -6301 2	DIN 53504 S2	ISO 34 B	Shanks
JIS K -6301 3	DIN 53504 S3	ISO 37, Type 1 through 4	Adaptors
JIS K -6301 4	DIN 53504 S3A	ISO/DIS 3167	Backplate
JIS K -6301 A		.250 x 5.0	Rubber Filled
JIS K -6301 B		.500 x 5.0	Naef adaptor

Specimen Molds

Our molds are made of P20 tool steel that is hardened, ground and polished, then chrome-plated with the option of Teflon coating. Typical molds have one to four cavities. Various sizes are available. Dies are EDM wire cut from solid tool steel.

The mold's inside surface is perpendicular to the cutting edge and polished. This insures that test specimens are cut to uniform thickness. Dies are designed to be re-sharpened. Both molds and dies meet most national and international standards such as ASTM, DIN and ISO.



Manual Test Sample Clicker Press

www.WorldofTest.com/clicker-presses

Clicker Press units operate well in stand-alone cutting situations, and also compliment a Hydraulic press for smaller operations.

With the single lever rotation and compressing action, its speed of operation is quite surprising and you can be up and cutting for a fraction of the cost of a hydraulic press.



Auto-Pneumatic Clicker Press

www.WorldofTest.com/clicker-presses

This low-cost and high quality Pneumatic clicker press only requires air with min. 73 psi (5 bar) pressure to operate and is widely used in the rubber and plastics industry for accurately cutting rubber, plastics, and leather specimens. The Auto-Pneumatic clicker press is available in 3 or 5 ton capacities suitable to cut rubber samples with thickness up to 10 or 15mm respectively. This compact, cost effective and high quality sample cutting press can be used for any testing laboratory.



Laboratory Sized Swing Arm Clicker Press

www.WorldofTest.com/clicker-presses

The reasonably-priced Clicker Press - Model SE-8 Hydraulic Mini-Clicker die cuts exact (dumbbells, etc.) samples from split layered materials. The Clicker Press - SE-8 automatically adjusts the stroke to the proper cutting height. Eight ton cutting pressure (Optionally up to 25 Ton) allows easy operation. This useful laboratory tool requires a minimum of floor space and is highly recommended for medium to high specimen cutting needs.



Melt Flow Indexer - Quali-Fi 6000/3000 Series

www.WorldofTest.com/melt-flow-tester-mfi

ASTM D1238, ISO1133

Quali-Fi 6000 Melt Flow Indexer Series can be used for testing MFR and MVR of polycarbonate, fluoroplastics, as well as polyethylene, polypropylene, ABS, POM, etc and is related to the melted material viscosity. It enables the operator to estimate the mean molecular weight and at the same time gives an indication of melt flow ability through the die.

MFI-3000 Series Melt Flow Indexers, with integrated touch panel display measure the melt mass-flow rate (MFR), melt volume-flow rate (MVR), as well as Melt density test according to the standards ASTM D1238 (A & B Methods), ISO 1133.



Melt Flow Indexer - 5000 Series

www.WorldofTest.com/melt-flow-tester-mfi

ASTM D1238

The LMFI-5000 series melt flow indexers are designed to meet or exceed the ASTM D1238 specifications as well as international standards. They provide an accurate, cost-effective means of monitoring material flow characteristics consistency.



Capillary Rheometer

www.WorldofTest.com/capillary-rheometer

Qualitest offers a full range of capillary rheometers that offers state-of-the-art features and will meet the demands of a 24-hour a day shop floor operation while maintaining the highest possible level of accuracy, repeatability and sensitivity for R&D applications. Qualitest line of capillary rheometers is versatile and easy to use yet they offer the most sophisticated materials characterization, data analysis, and reporting capabilities. Our Capillary Rheometers are available with 10 or 25kN load cells, single or double barrel configuration and optional features to meet all the needs of QA and R&D in the industry.



HV-3000-D3 / D6 HDT / VICAT Tester

www.WorldofTest.com/hdtvicat-heat-deflection-testers

HV-3000-D, the latest compact model of DT/VICAT tester, is designed to measure both heat deflection temperature (HDT) and VICAT softening temperature (VST) for evaluating the thermal property of plastic materials.

The lightweight design makes HV-3000-D an ideal choice of compact HDT-VICAT tester. The information of temperature in real time from each test station can be read in a single display screen allowing user to monitor test more conveniently. The design of the tester complies with international standards including ASTM, ISO and DIN.



HDT Series- Heat Deflection Tester

www.WorldofTest.com/hdtvicat-heat-deflection-testers

Heat Deflection Temperature Tester (HDT1) is a single station and low-cost system designed in accordance to ASTM D648 as well as ISO 75 to measure material's ability to perform for a short time at elevated temperatures while supporting a load. The test measures the effect of temperature on stiffness: a standard test specimen is given a defined surface stress and the temperature is raised at a uniform rate.



LME Laboratory Mixing Extruder

www.WorldofTest.com/lme-laboratory-mixing-extruder

The LME Laboratory Mixing Extruder is a unique laboratory tool developed to evaluate the process ability of a variety of plastics and rubbers prior to production. From very fine powders to coarse materials, the LME will meet many extruding needs. The LME possesses a moveable header and dial gauge that allows for constant mixer adjustability. While in operation, the rotational shearing (mixing) is controlled by adjusting the distance between the end of the rotor and the inside header. This unique feature, not found in other extruders, allows for various extrudate mix levels in a single sample run. The rotational shearing of the LME system provides extensive and intensive mixing and can be used in the production of polymer blends or alloys. These blends have been found homogeneous enough to be spun into fibers over the entire range of composition. Since mixing may be independently adjusted, agglomerates of additives, such as fillers or pigments, may be accurately controlled.



Friction, Adhesive, Tearing Testers

Coefficient of Friction Tester - COF Tester - Peel Tester

www.WorldofTest.com/coefficient-friction-tester-cof-tester

Qualitest covers a complete and competitive range of Coefficient of Friction Testers for plastic films, sheets, rubber, paper and paper board, PP woven bags, fabrics, metal-plastic composite belts for communication cables, convey belts, wood, coatings, brake pads, windshield wipers, shoe materials, tyres, and other materials.



Adhesive Tape - Roller Pressing Machine

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

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

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

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.



Gel Timer

www.WorldofTest.com/gel-timer

These gel timers are perfect for determining the gel time of resinous plastics, adhesives, crying oils, two component elastomers, and paints. A low torque, synchronous motor rotates a specially shaped stirrer in the catalyzed resin or elastomer. As gelation occurs, drag exceeds torque and the motor stalls. This signals an electronic circuit which stops the clock and activates a flashing lamp. The gel time will show on the LCD display.

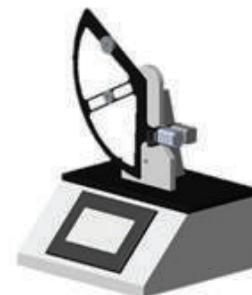


Digital Elmendorf Tearing Tester – QT-DET

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.



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

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 adaptability 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 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

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.



Film 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 Micro Gauges 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 $\pm 0.1\mu\text{m}$.



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.



Thickness Tester - Model 543

www.WorldofTest.com/thickness-tester-model-543

Digital indicator and stand provides a convenient, cost-effective way to perform plant floor or laboratory spot checks of film and sheet thickness. Also ideal for tensile test sample thickness measurement. Resolution to 50 millionths of an inch with accuracy to 120 micro inches. Glass scale technology is rugged and reliable. Can be connected to SPC software for statistical and graphical data analysis (option).



Thickness Gauge EV 01

www.WorldofTest.com/thickness-gauge-ev-01

EV 01 Thickness gauge series are special thickness gauges, with the possibility of many different applications, measuring foot and table.

It can be used for computerized compression set testing according to ISO 815 and thickness measurement according to ISO 23529 for rubber or ISO 5084 for textiles and consists of the following parts:

- Digital Gauge modified for correct measuring pressure for rubber, plastic or textile testing, including 10 mm gauge block, lifting cable, measuring foot and weight for thickness measurements.
- Stand, of stable construction, with the possibility of fine adjustments of the height.
- Interface Kit, EV 01.04 for PC-Computer, including cables and foot pedal. (Optional)
- Software EC 02 for thickness measurements and Compression Set for PC-Computers.



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.



Film Heat Shrink Tester

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.



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.



Hot Tack Tester - QT-HTT

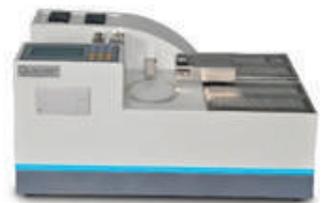
www.WorldofTest.com/hot-tack-tester-qt-htt

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.



Light Booths

www.WorldofTest.com/light-booths-visual-color-control

Colors appear differently under different lighting conditions. Use of a light booth to simulate different lighting conditions helps to obtain objective color assessment, improves communication and reduces product rejections. We offer a complete line of light booths which allow you to see what your product will look like – independent of location and environmental influences.

Light Booth - Spectra

For critical color evaluation the byko-spectra light booth offers every option and feature that is needed to evaluate and communicate color with absolute confidence.

- Comparison of standard and sample in a color-neutral environment
- Five different controlled light sources
- Viewing under ultraviolet light to detect and evaluate optical brighteners or fluorescent pigments
- No warm-up time or flickering which ensures quick and reliable color judgment.
- Automatic light source sequencing to standardize testing procedures
- Color Guard II timing center tracks light source usage and indicates when to replace the lamps



Light Booth - Spectra Basic

For general color evaluation under defined lighting conditions

- Comparison of standard and sample in a color-neutral environment
- Three different controlled light sources: Daylight D65, Incandescent light A, Department store light CWF or TL84
- Easy to operate by using individual switches for each light source
- Can be set up in minutes without any tools
- Economical testing of large samples in a compact design – for laboratory and production



Light Booth - Spectra Effect

For objective evaluation of color under different viewing angles, and flake characterization under different illumination conditions

Color evaluation for daylight under 6 defined viewing angles: A tiltable sample table allows the samples to be presented at the following angles: $-15^{\circ}/15^{\circ}/25^{\circ}/45^{\circ}/75^{\circ}/110^{\circ}$. The illumination system also pivots, insuring excellent agreement with the measurement results of multi-angle color instruments.



Light Booth - Spectra Mini

For general color evaluation of small samples

- Comparison of standard and sample in a color-neutral environment
- Three different controlled light sources: Daylight D65, Incandescent light A, Department store light CWF or TL84
- Easy to operate by using individual switches for each light source
- Can be set up in minutes without any tools



Portable Spectrophotometers - Color Meters

www.WorldofTest.com/portable-spectrophotometers-color-meters

Qualitest offers extensive range of advanced plastics and Color testing equipment such as Portable Spectrophotometer – Spectro-Guide & Color-Guide which is used for total Appearance Control - color and gloss in one unit.

Mobile Color Measurement. Store up to 200 standards with tolerances and 999 samples in the color-guide's memory and control color whenever and wherever it is needed.



Micro-Gloss 20, 60, 85, 45, 75 & TRI

www.WorldofTest.com/gloss-meters

The micro-gloss has been the unsurpassed industry standard in gloss measurement for many years. It is the only gloss meter combining highest accuracy, ease-of-use and multiple functionality – essential for today's testing requirements



QualiGloss Series Gloss Meter

www.WorldofTest.com/qualigloss-series-gloss-meter

A gloss meter is an instrument which is used to measure gloss of materials such as the wood floor, paint, plastics and paper. Gloss is a measure of the proportion of light that has a specular reflection from the surface. A surface such as a mirror has a high gloss, where a surface such as chalk has less because the light reflected is diffused. Numerous international technical standards define the method of use and specifications of different types of gloss meter used on different types of materials. Some of these materials include ceramics, paper, metals, and plastics. A major user of gloss meters is in the auto industry. The uses for automobiles extend from the factory floor to the repair shop.



Orange Peel / DOI Meter - Wave Scan

www.WorldofTest.com/orange-peel-doi-meter-wave-scan

Appearance control is no longer limited to final topcoat inspection. The orange peel meter scans the optical profile of high gloss surfaces using a laser light source. An additional, infrared –high energy LED allows measuring the same structure spectrum (0.1 – 30 mm) on medium gloss surfaces. The dullness measurement is recorded with state-of-the-art CCD camera technology. It gives information on the image forming qualities of the surface caused by structures < 0.1mm.



Universal Paint Inspection Gauge

www.WorldofTest.com/universal-paint-inspection-gauge

The byko-cut universal is a multi-purpose paint testing instrument that measures paint coating thickness, paint adhesion, and coating hardness.

- Can measure coating thickness on metal, wood, plastic, and other rigid substrates
- Multi-layer coating thickness can be measured
- Built-in microscope can also be used for assessing paint imperfections



Automatic Film Applicators

www.WorldofTest.com/automatic-film-applicators

The Byko-drive Automatic Applicator is an economical film applicator that improves the consistency of draw-downs. When more than one operator is drawing down the same coating or ink, the dry film appearance will vary because of different drawdown techniques. Drawdown speed and pressure on the applicator tool will impact the result. Film thickness, gloss, opacity, and color can vary with differing drawdown techniques. The byko-drive is available with a vacuum plate or glass plate with clamp. Applicator bars, U-shaped bars, applicator frames, film casting knives, and wire-wound rods are acceptable applicators. The byko-drive has a compact design consisting of a light-weight aluminum chassis and impact resistant thermo-plastic cover.



Viscometer

www.WorldofTest.com/viscometer

The versatility of the CAP 1000+ and CAP 2000+ Viscometer makes these instruments a practical tool for any QC or R&D lab requiring quick and easy testing of materials, regardless of application, at high shear rates.

- Provides for viscosity measurements at high shear rates
- LCD display of viscosity in Poise or Pascal-seconds
- Uses less than 2 ml of sample to avoid excess cleaning and material costs
- Automatic viscosity range calibration and cone gap positioning make the viscometer easy to use



Rotational Viscometers

www.WorldofTest.com/viscometer

To measure the absolute viscosity a rotational viscometer is used. For non-Newtonian liquids a digital viscometer that applies a precise shear rate is needed. For laboratory viscosity measurement, we offers a comprehensive line of rotational viscometers. The viscometer product line can measure viscosity from a near water-like viscosity to a very high viscosity range for epoxy, sealants, and paste. To measure viscosity under a high shear rate Cone and Plate viscometers are available. The easy to use digital Stormer viscometer is also part of the rotational viscometer family.



Transparency Meter - Haze Gard-i

www.WorldofTest.com/transparency-meter-haze-gard-i

Transparent products can have a milky or fuzzy appearance dependent on their light scattering behavior. The haze-gard i quantifies the visual perception with objective measurement criteria:

- Total transmittance
- Transmission haze
- Clarity



Gradient Oven

www.WorldofTest.com/gradient-oven

The Gradient Oven is a test apparatus for evaluating the baking and drying behavior of liquid coatings, powder coatings, resins, plastics, etc. A production baking process can be simulated by programming heat-up speed, baking temperature and time.

- Saves time and energy
- Generates various curing temperatures on one panel
- Simulates the temperature profile of a production oven in the laboratory



www.WorldofTest.com/block-oven-aging-oven

Cabinet Ageing Oven - EB Series

www.WorldofTest.com/cabinet-ageing-oven-eb-series

Cabinet Aging ovens for precision ageing of rubbers and plastics under controlled conditions. EB 04-II and EB 10-II are shelf ovens and conform to ISO 188, ISO 3383, IEC 811 and technical equivalent standards. They designed to give very low temperature variations in time and space, low air speed and controlled air exchange rate. This is achieved by using an inner chamber with a controlled air flow.

Cabinet Ovens are ideal for ageing finished products and large test pieces which are unsuitable for cell ovens. Both shelves and rods are supplied with the oven for accommodating most types of samples. The settings are done on the colour touch PLC screen.



Cell Ageing Oven - EB Series

www.WorldofTest.com/cell-ageing-oven-eb-series

ISO 188 method A, IEC 811 (EB01), ISO 3384 method B (EB01 LTP)

The Cell Ageing Oven - EB Series are designed for Aging tests according ASTM D 865 Rubber-Deterioration by Heating in Air (Test Tube Enclosure). The ovens can also be used for testing in liquids according to ASTM D 471 Effect of liquids. Cell ovens and cabinet Ageing ovens perform well inside the apparatus requirements in ISO 188, IEC 811 and other equivalent standards.



Test Tube Ageing Oven - EB Series

www.WorldofTest.com/test-tube-ageing-oven-eb-series

ASTM D865, ASTM D471, ISO 1817 (EB 11-II, EB 28)

The Test Tube Ageing Oven - EB Series are designed for Aging tests according to ASTM D 865 Rubber-Deterioration by Heating in Air (Test Tube Enclosure). The ovens can also be used for testing in liquids according to ASTM D 471 and ISO 1817 Effect of liquids. Glass tubes for both standards are included. Glass tubes for air cooling are included and water cooling can be supplied as an option.



Low Temperature Tester – Combo

www.WorldofTest.com/low-temperature-tester-combo

The TR-Tester, Gehman Tester and Brittleness Tester can be combined using the same base unit and a rig changing system. The combined instrument consists of a base unit with a cooling bath and the electronics. The three different test rigs are then mounted on a carousel. No lifting is necessary when switching from one method to another. An automatic computerized Low Temperature Tester increases the precision up to 5 times. The capacity will also increase with about 50 % and not least the labour time will decrease about 75 %.

Gehman Tester

www.WorldofTest.com/gehman-tester

ASTM D1053, ISO 1432

Gehman Tester - ET-02 - Relative Stiffness Characteristics Determination for determination of the relative stiffness characteristics of vulcanized or thermoplastic rubbers, also called the Gehman procedure. The test is done according to ISO 1432, ASTM D1053, or technical equivalent standards.

The Gehman Tester - ET-02 - Relative Stiffness Characteristics Determination, has 6 test stations, is computerized and performs the test automatically.



TR Tester - Low Temperature Retraction Tester

www.WorldofTest.com/tr-tester-low-temperature-retraction-tester

The TR Tester - ET-01 - Low Temperature Retraction Tester is primarily used to determine low temperature characteristics by the temperature retraction procedure according to ISO 2921 and ASTM D-1329.

The TR Tester - ET-01 - Low Temperature Retraction Tester has 6 test stations, is computerized and performs the test automatically after the cooling media has been cooled down and the samples have been mounted. An automatic release of the samples is initiated after the pre cooling period has been completed.

The computer controls both the temperature rise and measures the length change of the samples. The results are displayed in graph and TR10, TR30, TR50 and TR70 values are calculated. The result can also be presented as a table with length change versus temperature. The TR-values and the table values can be exported to other software such as spreadsheets.



Low Temperature Compression Set Rig

www.WorldofTest.com/low-temperature-compression-set-rig

Low Temperature Compression Set Rig - EV-09 performs compression set at low temperatures without having to open the deep-freezer and influence the compression set result has always been a problem.

By using our Low Temperature Compression Set Rig - EV-09 compression rig in combination with a deep-freezer with a special lid the test can be performed without touching the test piece. All adjustments of height and releasing the compression are made outside the freezer thus improving the accuracy of the test results.

The Low Temperature Compression Set Rig - EV-09 rig has a digital gauge (0,001 mm), the piston is made of titanium and the test weight is simply mounted on to the titanium piston. The sample can remain in the test rig for the whole test period and during the recovery time.



Full Notch Creep Tester - EB-15

www.WorldofTest.com/full-notch-creep-tester

The Full Notch Creep Tester - EB-15-II-10 for Testing of Plastics Materials is available in different configurations the creep tester utilizes load cells and servo motors to apply and hold the load rather than the conventional method of applying dead weights. Apart from eliminating the handling problems associated with weights this design offers the possibility of running features such as temperature and load ramps controlled by the computer.



Full Notch Creep Tester - QT-FNCT-6 Series

www.WorldofTest.com/full-notch-creep-tester

ISO 16770 and ISO3501

Full Notch Creep Tester (FNCT) - QT-FNCT-6 Series - For Testing of Plastics Materials is used to determine the stress cracking resistance of polyethylene materials in any environment. A test specimen in the form of a square-section bar with coplanar notches in each face at the center is subjected to a static tensile load in a temperature-controlled environment (ie. air, water, surfactant solution). The geometry of the specimen is such that plane strain conditions are obtained and brittle failure occurs under appropriate tensile load and temperature conditions. The time for this brittle failure to occur after loading is recorded.



Film Creep Tester EB-24

www.WorldofTest.com/film-creep-tester

Film Creep Tester is based on our Ageing Oven EB 10-II with a digital ruler system including a line laser pointer for manually measuring the creep.

The ruler is connected to a computer and the values are fed into an Excel template which calculates the result and presents the graphs.



Automatic Creep & Relaxation Tester

www.WorldofTest.com/automatic-creep-relaxation-tester

ISO 3384 and ISO 899-1

With the Automatic Creep and Stress Relaxation Tester - EB-18-II-3 for Testing of Rubber - tests can be done. The instrument is based on our triple temperature oven EB 07, which means that each test station can run with an individual temperature.

The test rigs are based on our relaxation rig EB 02, but lowering and raising of the rigs is motor driven. The compression or tension of the samples is also motor driven with a servo motor.

The test rigs are built into a plastic cabinet made of polycarbonate and aluminum profiles. The cabinet is cooled by Peltier elements which keep a constant room temperature around the test stations.



Stress Relaxation Tester

www.WorldofTest.com/stress-relaxation-tester

ISO 3384, ISO 6914, ASTM D 6147

Stress Relaxation Tester - EB 02 Relaxation system for continuous measurement in either compression or tension. The Stress Relaxation Tester - EB 02 meets the requirements in ISO 3384, ISO 6914 and ASTM D6147.

The relaxation rigs are used in combination with the cell ageing ovens our new range of ovens when testing at elevated temperature.



Hot Set Tester

www.WorldofTest.com/hot-set-tester

IEC 811-2-1, IEC 811

Hot Set Tester - EB 16II is made for hot set testing of cable material according to IEC 811-2-1. To avoid too high temperature loss when inserting and cutting the samples, the samples are introduced through a small opening in the top of the oven. To get a suitable working height and not shake the samples during insertion, the oven is fixed and the sample holder moves up and down by a servo motor driven screw system. The oven has a controlled air exchange rate and low air speed which can be controlled by a flow meter, meeting the requirements for ageing ovens in IEC 811.

Measurements are made through the window with a laser pointer mounted on a measuring scale placed on the door. The window can be taken apart for cleaning. With a push on a button on the scale the measured values are entered in an Excel template, when measuring the elongation. The set is measured outside the oven with a digital caliper also connected to the computer.



Elastometer - EF-02

www.WorldofTest.com/elastometer

ISO 3384, ISO 7743

Discontinuous Stress Relaxation Tester- EF-02 - Elastometer is used for Compression Tests on profiles & for Discontinuous stress relaxation tests.

The test jigs for stress relaxation are simple in design but made with very high accuracy regarding surface finish and parallelism of the platens. The discontinuous stress relaxation system has an economical advantage when many materials are to be tested during very long times.



Carbon Black Content Analyzer

www.WorldofTest.com/carbon-black-content-analyzer

The Carbon Black Content Analyzer - ES-14 - Tube Oven can be used for the following and similar test methods:

- ISO 247 Rubber - Determination of Ash
- ISO 1408 Rubber - Determination of carbon black content
- ASTM D297 Rubber - Determination of carbon black and ash content
- ASTM D1603 Plastics - Test method for carbon black in olefin plastics

Temperature controller, over temperature thermostat, drying tube, flow meters, wash bottles and 5 quartz glass boats are included.



Environmental Stress-Cracking Tester

www.WorldofTest.com/environmental-stress-cracking-tester

ASTM D1693-01

The environmental stress cracking chamber is used to determine of the susceptibility of ethylene plastics, as defined in terminology D883, to environmental stress-cracking when subjected to the conditions specified in ASTM D1693-01, under certain conditions of stress and in the presence of environments such as soaps, wetting agents, oils, or detergents, ethylene plastics may exhibit mechanical failure by cracking.



Salt Spray Tester

www.WorldofTest.com/salt-spray-tester

ASTM-B117, JIS-D0201, JIS-H8502, JIS-H8610, JIS-Z2371, GB/T 10125

The Salt Spray Tester – Salt Spray Cabinet – Chamber – Fog Apparatus is used to create and maintain the salt spray (fog) test environment, and test the anti-corrosion quality of all the materials surfaces after the rust-proof of painting, coating, electroplating, anodizing and rust-proof of greasing. Our salt spray testers available in two capacities meet ASTM-B117, JIS-D0201, JIS-H8502, JIS-H8610, JIS-Z2371 and other International Standards test methods. Power supplied can be configured upon request.



Rotary Abrasion Tester

www.WorldofTest.com/rotary-abrasion-tester

The Rotary Platform Abrasion Testing method was introduced in the 1930's and has been a popular method for evaluating abrasion and wear resistance. Our Rotary Abrasion Tester is a cost-effective, easy to use and high quality instrument, compared to Taber® Abraser used to cover a wide spectrum of materials (including plastics, coatings, laminates, leather, paper, ceramics, carpeting, safety glazing, etc.) and is built in conformance to ASTM C501 / C1353 / D4157 / D1044 / D3389 / D3451 / D3730 / D3884 / D4060 / D4685 / D4712 / D5144 / D5146 / D5324/ D6037 / D7255/ F362/ F510/ F1478/ G195/ F1978, TAPPI T476, as well as many other International DIN, MIL, EN, BN, ISO, JIS, SAE, BS, and ANSI standards.



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.



Ink Rub Tester

www.WorldofTest.com/ink-rub-tester

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.



Synchronous Thermal Analyzer - QT-STA100

www.WorldofTest.com/synchronous-thermal-analyzer-qt-sta100

Synchronous Thermal Analyzer QT-STA100 combines TGA (Thermo gravimetric Analysis) with DSC (Differential Scanning Calorimeter), in which we can get the information of TG and DSC in synchrony using the same sample during the same operation.



Differential Scanning Calorimeter

www.WorldofTest.com/differential-scanning-calorimeter

The Differential Scanning Calorimeter - QT-DSC6 Series is a compact and low-cost thermal analysis instrument. Differential Scanning Calorimeter - QT-DSC6 Series have a vast number of industrial applications, particularly in the quality control of engineering thermoplastics.



Limiting Oxygen Index Chamber

www.WorldofTest.com/limiting-oxygen-index-chamber

ASTM D2863, ISO 4589, BS 2782 part 141

The Limiting Oxygen Index (LOI) fire test is perhaps the most economical and precise quality control test for combustible materials. Its ease of use together with high levels of precision has made this technique a primary characterization and quality control tool for the plastic materials and electric cable industries. It is often used in materials specifications and material/product data sheets and included in some US Mil Specs. The test assesses the minimum percentage of oxygen in the test atmosphere that is required to marginally support combustion.



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.



Leakage and Seal Strength Tester - QT-LT-P

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.



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.

High Level of Standards



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

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.

#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.

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.

Centralized Service & Support Coordination



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