



## Rubber Testing Equipment

- Universal Testing Machines
- Durometer - Shore Hardness Testers
- Abrasion Testers & Rebound Testers
- Specific Gravity Tester – Densimeter
- Environmental Chambers
- Rheometers
- Flex Testers
- Specimen Dies, Molds & Clicker Presses
- Shoe Testers
- Low Temperature Tester – Combo
- Block Oven / Aging Oven
- Much more ...

### 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.

### Rubber

Rubber compounds are one of the most complex and universally used materials and the flexibility of the compounds and their ability to absorb particle filler like carbon black, silica, and clay in amounts more than their own weight results in a wide range of properties, possible to achieve. Quite often, rubber and elastomer compounds are used where resistance to impact, or toughness is desired. Where elasticity during stretching and recoil are needed, rubber and elastomers are ideal materials. An elastomer can be stretched to many times its original length yet bounce back without permanent deformation.

Some rubber and elastomer products are quite economical. One of the popular elastomers for many consumer products, such as toys has been plasticized PVC. To minimize the cost of a low performance rubber product, the compound can be heavily filled with clay. On the higher end of the price range, specialty elastomers made of exotic compounds are used for aerospace applications and possess critical properties for high temperature environments. As a rule of thumb, higher performance and higher temperature usage specifications mean higher cost products and more careful and complex testing is required.

### General Applications

Tires are a typical example of a product made from optimized compounds consisting of several natural and synthetic rubber compounds along with numerous reactive agents and carbon and other particles. The complex rubber compounds used in tires have taken many years to optimize and still intense formulating and testing continues on improving their consistency and performance.

Rubber compounds used for shoe soles, tires, gaskets, belts, and pulleys are optimized formulations, utilizing precise amounts of many different components. This complexity makes testing functions, a huge responsibility within any organization whose products include performance specifications.

The high capacity of rubber to absorb filler material and mix with other polymers enables these compounds to achieve an expansive range of properties. Tires, hockey pucks, drive belts, running shoe soles, exercise mats are all examples of rubber compounds optimized with different compounds and levels of fillers. Latex gloves are a form of natural rubber with limited vulcanizing and little or no fillers.

Polyamide based elastomers provide some of the highest strength and toughness properties known and are used in top of the line clothing and sports gear. One of the higher performance elastomers used in applications requiring durability is considered to be Polyurethane. Where molding of many small parts require to be inexpensive, Thermoplastic rubber (TPR) is a common choice.

Silicone based elastomers and fluoropolymer elastomers are also used in high temperature applications.

## Universal Testing Machine - QM-Series

[www.WorldofTest.com/universal-testing-machine-qm-series](http://www.WorldofTest.com/universal-testing-machine-qm-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.



QM -Series Universal Testing Machine Range									
Model / Specs	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

## Universal Testing Machines - Q-Series

[www.WorldofTest.com/universal-testing-machines-q-series](http://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.



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

## High & Low Temperature Universal Testing Machine

[www.WorldofTest.com/high-low-temperature-universal-testing-machine](http://www.WorldofTest.com/high-low-temperature-universal-testing-machine)

ISO 527, ASTM D 638 and the equivalent.

Environmental system enables the testing of material and components under a variety of real world conditions. Cooperating with environmental chamber, UTM machines can realize variety of tests at low or high temperature.

- It consists of three parts: main frame, grips and moveable high & low temperature cabinet.
- Import full-digital AC servo system and high rigid structure enable high precision of the measuring result. The cabinet, with a double-heat insulation glass door, is convenient to observe the test; stainless steel test cabinet is resistant to corrosive.
- It is nice in appearance, high in precision and easy to operate, also different kinds of grips shall be provided according to your requirement.
- This kind of tester has been authorized CE certificate.



### Analog Durometer HP-Series

[www.WorldofTest.com/analog-durometer](http://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](http://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](http://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](http://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.



## Automatic Motorized Durometer - Digi-Test II

[www.WorldofTest.com/automatic-motorized-durometer](http://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](http://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.



## Automatic Hardness and Density Testing

[www.WorldofTest.com/automatic-hardness-and-density-testing](http://www.WorldofTest.com/automatic-hardness-and-density-testing)

The revolutionary HDA consists of a hardness tester and a density measuring system which allows tests to be carried out automatically. This is an automatic system specialized for high capacity test.

- New product for automatic heavy duty application
- Test up 4000 samples
- Integrated systems to optimize performance



## Temperature Controlled Automatic Motorized Durometer

[www.WorldofTest.com/temperature-controlled-automatic-motorized-durometer](http://www.WorldofTest.com/temperature-controlled-automatic-motorized-durometer)

The revolutionary Temperature Controlled Automatic Motorized Durometer - Digi-Chamber - SHORE & IRHD Scales consists of a Digi-Test II Hardness Tester and a temperature chamber which allows tests to be carried out at above or below ambient temperature. With the function of temperature control, the specimen can be examined of its hardness change in extreme temperature conditions. This kind of test is ideal for the automobile and tire industries as most of the rubber parts are required to sustain critical temperature changes. The entire system can be controlled by a touch panel with colored display providing easy-to-use controls.



### DIN Abrasion Tester

[www.WorldofTest.com/din-abrasion-tester](http://www.WorldofTest.com/din-abrasion-tester)

DIN 53516, DIN ISO 4649, ASTM D 5963

Our DIN Abrasion tester, which is the original product & is designed to conform to the DIN 53516, DIN ISO 4649. This top quality and highly popular abrasion tester determines the resistance of elastomers in regard with the frictional loss on rubber products, such as tires, conveyor belts, hoses, footwear, floor covering etc. Since wear is always a result of abrasion, different test methods have been developed for the simulation of long term wear.



### Rotary Abrasion Tester

[www.WorldofTest.com/rotary-abrasion-tester](http://www.WorldofTest.com/rotary-abrasion-tester)

ASTM-D1044, ASTM-D3884, DIN52347, DIN53109, ISO-5470-1

Qualitest Rotary Abrasion tester is designed for determining the resistance of cloths, paper, paints, plywood, leather and natural rubber to abrasion. Resistance to abrasion is defined as the ability of a material to withstand mechanical action such as rubbing, scraping, or erosion. The test is made by abrading the specimen against the sand wheel.



### Rebound Resilience Tester - DIGITEST II

[www.WorldofTest.com/rebound-resilience-tester](http://www.WorldofTest.com/rebound-resilience-tester)

DIN 53512, DIN 53573, ASTM D 1054, NF ISO 4662

The Rebound Resilience Elasticity Tester - DIGITEST II is a digital apparatus. Determination of the resilience elasticity of elastomers, soft elastic foams and similar during shock loading calculation of median value. The median value is calculated and indicated on the display and sent to the PC afterwards. A test function allows the control of the prescribed double swinging according to standards.



### Ball Rebound Tester

[www.WorldofTest.com/ball-rebound-tester](http://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.

- Short training period.
- Short measuring cycle.
- No adjustment necessary.



[www.WorldofTest.com/specific-gravity-tester-densimeter](http://www.WorldofTest.com/specific-gravity-tester-densimeter)

## Densimeter - EW-300SG

[www.WorldofTest.com/densimeter-ew-300sg](http://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](http://www.WorldofTest.com/densimeter-md-300s)

- Popular model with resolution of 0.001g/cm<sup>3</sup>. (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](http://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](http://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/cm<sup>3</sup> and reference value of 0.0001g/cm<sup>3</sup>.
- Newly designed sensor and auto-weighing function for improved accuracy and working efficiency.



## Densimeter - MDS-3000

[www.WorldofTest.com/densimeter-mds-3000](http://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.



[www.WorldofTest.com/environmental-chambers](http://www.WorldofTest.com/environmental-chambers)

### Environmental Chamber

Environmental chamber is designed for testing the capability of heat-endurance, cold-endurance, dryness-endurance, and humidity-endurance, suitable for quality control of the industries of electron, electrical equipment, vehicle, metal, foodstuffs, chemistry, building materials, luggage, adhesion tape, printing, packaging, etc.



### Environmental Test Chamber

Environmental Test Chamber simulates a full range of temperature and humidity conditions to test reliability, durability, climatic, freezing resistance, quality assurance, thermal endurance, plastic products, electrical appliances, instruments, food, vehicles, metals etc.



### Temperature Humidity Chamber

Temperature humidity chamber is used to test material structure or composite, in the high temperature and ultralow temperature continuous environment. Suitable for electronic, LED lighting industry, auto parts, chemical industry, building materials, mobile computers, batteries, plastic, metal, rubber etc.



### Climatic Chamber

Qualitest's Climatic chamber is designed to do high temperature & high humidity, high and low temperature, or temperature cycling test, Climatic chamber mainly used for quality checking and assessing their quality reliability and life test.



## Ozone Tester / Ozone Chamber

Ozone test chamber is a major factor in rubber cracking although it is rare in the atmosphere, ozone aging tank simulates and enhance the condition of ozone in the atmosphere to study the effects of ozone on rubber, and then identify and evaluate the method to resist ozone and aging for rubber, adopt effective anti-aging measures to enhance the life of rubber products.



## Xenon Test Chamber

Xenon test chamber is affordable, full-featured, and has a large specimen capacity. It provides precise control of critical test parameters including spectrum, irradiance, relative humidity, chamber temperature and black standard temperature.



## Thermal Shock Chamber

Thermal Shock Chamber can be used for testing most commercial products to see how they withstand drastic temperature changes. A thermal shock chamber will subject a product to the most extreme temperature conditions, instantly.



## Rain Test Chamber

Rain Test Chamber is designed according with the standards of IEC 60529-2001 and mainly used for electronic products to do the waterproof test.



## UV Test Chamber

UV test chambers have been developed to provide a UV weathering. The UV simulates the effect of sunlight with fluorescent ultraviolet (UV) lamps, while rain and dew are simulated by the condensation of humidity.



### Walk in Chamber

[www.WorldofTest.com/walk-chamber](http://www.WorldofTest.com/walk-chamber)

Walk in test chamber simulates the effects that a range of temperature and humidity conditions have on a product or material.



### Salt Spray Tester

[www.WorldofTest.com/salt-spray-tester](http://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.



### Freezing Tester

[www.WorldofTest.com/freezing-tester](http://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.



### Brittleness Temperature Tester QT-BPT

[www.WorldofTest.com/brittleness-temperature-tester-qt-bpt](http://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.



## Moving Die Rheometer (MDR)

[www.WorldofTest.com/moving-die-rheometer-mdr](http://www.WorldofTest.com/moving-die-rheometer-mdr)

ASTM D5289, ISO-6502

The Moving Die Rheometer MDR- 3000 measures the change in stiffness of a rubber sample. The sample is compressed between two heated platens and by an applied oscillating force. The degree of vulcanization determines the cure characteristic of the sample as it is heated and compressed. Our Moving Die Rheometer offers affordable testing and stunning results. We offer sealed die and un-sealed die type configurations to suite your application.



## Mooney Viscometer

[www.WorldofTest.com/mooney-viscometer](http://www.WorldofTest.com/mooney-viscometer)

ASTM-D1646, ISO-289, JIS K 6300

The Mooney Viscometer measures the change in a rubber and plastic elastomer properties over time, from uncured to scorched state. The specimen is physically deformed by a rotating platen which will determine changing viscosity at preset temperatures. When the test is completed, the dies will automatically reset and allow for removal of the specimen. With the PID temperature controller you can assure that smooth and accurate data will be taken throughout the test.



## Foam Pressure Rheometer

[www.WorldofTest.com/foam-pressure-rheometer](http://www.WorldofTest.com/foam-pressure-rheometer)

The Foam Pressure Rheometer is for the determination of various vulcanization characteristics of different rubber compounds. This series is divided into two machines, the QT-M3000F and the QT-M3000FA. The Foam Pressure Rheometer - QT-M3000F is able to precisely adjust the gap between upper and lower die freely. The Foam Pressure Rheometer - QT-M3000FA able to isolate the die's opening and frame by the sealed ring. The upper and lower die can be completely sealed.



## Rubber Process Analyzer

[www.WorldofTest.com/rubber-process-analyzer](http://www.WorldofTest.com/rubber-process-analyzer)

ASTM D 5289, ASTM D 6204, ASTM D 6601, ISO 6502, DIN 53529

RPA9000 Rubber Process Analyzer is designed for measuring the viscoelastic properties of polymers and elastomeric compounds before, during and after cure. The acquired data gives exact information about the processability, cure characteristics, cure speed, and behavior of the compound at the after-cure.



### DeMattia Flex Tester

[www.WorldofTest.com/demattia-flexing-fatigue-tester](http://www.WorldofTest.com/demattia-flexing-fatigue-tester)

ASTM-D813, ISO 132, BS 903-A10, JIS K6260, JIS K6301

DeMattia Flex Tester is designed to determine the resistance of vulcanized rubber to dynamic fatigue under repeated tensile deformation at room temperature. Each station is equipped with specimen break detector. Up to 16 specimens can be tested simultaneously.



### Goodrich Flexometer

[www.WorldofTest.com/fully-automated-standard-flexometer](http://www.WorldofTest.com/fully-automated-standard-flexometer)

ASTM D 623, ISO 4666/3, DIN 53 333, BS 903

The Compression Flexometer is used as testing instrument in the rubber industry. Especially producers of fillers (carbon black etc.) and the tire industry use this system, also called "Goodrich Flexometer".



### Manual Standard Flexometer

[www.WorldofTest.com/manual-standard-flexometer](http://www.WorldofTest.com/manual-standard-flexometer)

ASTM D 623, ISO 4666/3, DIN 53 333, BS 903

The Compression Flexometer is used as testing instrument in the rubber industry. Especially producers of fillers (carbon black etc.) and the tire industry use this type of Compression Flexometer. The test is based on the standards ISO 4666, DIN 53 533, part 3 or ASTM D 623.



### Flexometer

The machine is used to determine the rubber subjected to the constant compression load under certain amplitude and frequency to assess its rising speed of temperature, dynamic and permanent deformation but it's available for testing the rubber with the hardness from 30 to 85 IRHD.



## Ross Flexing Tester

[www.WorldofTest.com/ross-flexing-tester](http://www.WorldofTest.com/ross-flexing-tester)

The Ross Flex Tester - Ross Flexing Tester is designed to determine "resistance of vulcanized or synthetic elastomers to cut growth. It conforms to ASTM Method D1052. The rubber will form cracks when subjected to repeated flex or bending under specified conditions and known periods. The tester model QT-RF100 can test six pairs of samples simultaneously (twelve total). The frequency of the flexures is 100 cycles per minute. A six-digit counter tallies actual flexures. Power supplied can be configured upon request.



## Upper Material Flexing Tester

[www.WorldofTest.com/upper-material-flexing-tester](http://www.WorldofTest.com/upper-material-flexing-tester)

BS-5131, SATRA TM3-1999

This machine is designed for the flexing resistance of fiberboards of leather shoes and hiking shoes. The specimen is flexed repeatedly until it breaks under specified conditions, and then the flexing index is calculated according the number of flexes. 6 sets of specimens can be flexed at the same time, and the results will be displayed respectively without mutual influence.



## Scott Type Crease-Flex Abrasion Tester

[www.WorldofTest.com/upper-material-flexing-tester](http://www.WorldofTest.com/upper-material-flexing-tester)

This machine is used to determine the flexible tolerance of leather and fabrics. Place the sample between both sides of the fixtures, then run the test for number of times with proper pressure. After repeated buckling and knead, we can evaluate the damages on the samples.



## High Temperature Rubber Tensile Fatigue Tester

High Temperature Rubber Tensile Fatigue Tester is designed to determine the resistance of vulcanized rubber to fatigue under repeated tensile deformation. The required number of test cycle to break the test pieces can be determined.



### Whole Shoe Sole Flexing Tester

[www.WorldofTest.com/whole-shoe-sole-flexing-tester-bennewart-flex-tester](http://www.WorldofTest.com/whole-shoe-sole-flexing-tester-bennewart-flex-tester)

The Whole Shoe Sole Flexing Tester - Bennewart Flex Tester allows for the determination of a sole's resistance to the growth of a cut during repeated flexing. The Whole Shoe Sole Flexing Tester - Bennewart Flex Tester, commonly referred to as a 'Bennewart flexing machine', is designed for the assessment of complete bottom constructions (including midsoles and insoles), and is used to comply with testing requirements specified in EU safety footwear legislation.



### Shoe Flexing Tester

[www.WorldofTest.com/shoe-flexing-tester](http://www.WorldofTest.com/shoe-flexing-tester)

SATRA TM92

This machine is designed for measuring the resistance of shoes of all kinds to flex. It determines the fatigue durability and service life of shoes by simulating the walking state of a person. This machine features simple operation, reasonable design, rigidity and durability, low noise and easy maintenance.



### Shoe Bending Waterproofness Tester

[www.WorldofTest.com/shoe-bending-waterproof-tester](http://www.WorldofTest.com/shoe-bending-waterproof-tester)

SATRA TM77

The Shoe Bending Waterproof Tester determines the water resistance and durability of flexing for shoes immersed in water. The Shoe Bending Waterproof Tester stops automatically after either a preset number of bends has been performed or a preset testing-time has been reached. The Shoe Bending Waterproof Tester is equipped with an advanced sensor that detects water permeation inside the footwear, which limits operator interference of the test.



### Outsole Belt Flexing Tester

[www.WorldofTest.com/outsole-belt-flexing-tester](http://www.WorldofTest.com/outsole-belt-flexing-tester)

SATRA PM133

This machine is designed for flexing outsoles. It tests the specimen by simulating a personal walking in a normal way so as to determine the resistance of the specimen to flex. Users can set the number of tests themselves, and it will stop automatically when the number of tests has been reached. More than one specimen can be tested once in order to enhance work efficiency.



## Specimen Dies & Clicker Presses

[www.WorldofTest.com/specimen-dies-molds](http://www.WorldofTest.com/specimen-dies-molds)

### Specimen Cutting Dies

Fully Certified ASTM, DIN and ISO dies.

ASTM Standard Cutting Dies	
<b>ASTM D -412 A to F Tensile Sample Cutting Die</b>	ASTM D -1708 Micro tensile Die
<b>ASTM D -638 Type I -VTensile Die</b>	ASTM D -1004
<b>ASTM D -1822 -S</b>	ASTM D -1922
<b>ASTM D -624 B Tear Sample Cutting Die</b>	ASTM D -746
<b>ASTM D -624 B Tear Sample Cutting Die with Slit</b>	ASTM D -746 T50
<b>ASTM D -624 C Tear Sample Cutting Die</b>	ASTM D -1938
<b>ASTM D -624 T Tear Sample Cutting Die</b>	Other ASTM Dies Available Upon Request



### 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.

Both molds and dies meet most national and international standards such as ASTM, DIN and ISO.



### Manual Test Sample Clicker Press

[www.WorldofTest.com/manual-test-sample-clicker-press](http://www.WorldofTest.com/manual-test-sample-clicker-press)

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/auto-pneumatic-clicker-press](http://www.WorldofTest.com/auto-pneumatic-clicker-press)

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/hydraulic-swing-arm-clicker-press](http://www.WorldofTest.com/hydraulic-swing-arm-clicker-press)

QTSE Series Hydraulic Swing Arm Clicker Presses are the most widely used die cutting machines in the world. Qualitest has 20 years' experience in manufacturing clicker presses which is considered the world's leading producer. The constant attention to customer's feedback has allowed us to produce a product able to satisfy the needs of reliability, productivity and energy savings.



[www.WorldofTest.com/low-temperature-tester-combo](http://www.WorldofTest.com/low-temperature-tester-combo)

### Gehman Tester

[www.WorldofTest.com/gehman-tester](http://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](http://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.



### Brittleness Tester - ET 05 II

[www.WorldofTest.com/brittleness-tester-et-05-ii](http://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.



### Low Temperature Compression Set Rig

[www.WorldofTest.com/low-temperature-compression-set-rig](http://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.



[www.WorldofTest.com/block-oven-aging-oven](http://www.WorldofTest.com/block-oven-aging-oven)

## Cabinet Ageing Oven - EB Series

[www.WorldofTest.com/cabinet-aging-oven-eb-series](http://www.WorldofTest.com/cabinet-aging-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.



## Cell Ageing Oven - EB Series

[www.WorldofTest.com/cell-aging-oven-eb-series](http://www.WorldofTest.com/cell-aging-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.



## Test Tube Ageing Oven - EB Series

[www.WorldofTest.com/test-tube-aging-oven-eb-series](http://www.WorldofTest.com/test-tube-aging-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.



## Film Creep Tester EB-24

[www.WorldofTest.com/film-creep-tester](http://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.



## Stress Relaxation Tester

[www.WorldofTest.com/stress-relaxation-tester](http://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.



## Automatic Creep & Relaxation Tester

[www.WorldofTest.com/automatic-creep-relaxation-tester](http://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.



### Full Notch Creep Tester - QT-FNCT-6 Series

[www.WorldofTest.com/full-notch-creep-tester](http://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.



### Carbon Black Dispersion Tester

[www.WorldofTest.com/carbon-black-dispersion-tester](http://www.WorldofTest.com/carbon-black-dispersion-tester)

ISO 11345-1997

Carbon Black Dispersion Tester is designed to ensure uniform dispersion of carbon black in the polymer substrate, which influences the product's characteristics and is therefore vital to check.



### Optical Sorting Machines

[www.WorldofTest.com/optical-sorting-machines](http://www.WorldofTest.com/optical-sorting-machines)

Qualitest offers a line of optical sorting machine that can also be used to do automatic sorting. The optical sorting machine product line offers users flexibility over a wide range of parameters that can be measured as well as sorting machines that are designed specifically for certain objects such as screws, rivets or bolts. One sorting system from the optical sorting machine product line is designed to discriminate metallic objects based on hardness. Each optical sorting machine offers powerful technology to any production line.



### Parallel Plate Plastometer

[www.WorldofTest.com/parallel-plate-plastometer](http://www.WorldofTest.com/parallel-plate-plastometer)

ASTM D926

The Parallel Plate Plastometer is used to determine the plasticity and recovery of uncompounded, compounded, and reclaimed stocks of un-vulcanized rubber and rubber-like materials. It conforms to the requirements of ASTM-D-926.



### Thickness Gauge EV 01

[www.WorldofTest.com/thickness-gauge-ev-01](http://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



### Tire Plunger Tester

[www.WorldofTest.com/tire-plunger-tester](http://www.WorldofTest.com/tire-plunger-tester)

Our advanced range of Tire Plunger Tester machines are available in different configurations for various tests such as, plunger test, bead unseating, vertical elasticity coefficient, lateral elasticity coefficient, footprint analysis, dimension measurement, envelope stiffness, bevel stiffness, torsion, and inflation pressure tests. It equips with a servo driving system, high precision load & displacement detection device and the real-time computer analysis system to help the test facile and comprehensive. This extensive range of Tire Plunger Tester machines are widely used in the tire industry and meet the corresponding ASTM and other international standard test methods.



### Plug Bending Tester

[www.WorldofTest.com/plug-bending-tester](http://www.WorldofTest.com/plug-bending-tester)

The Plug Bending Tester tests the flexing endurance between the power cord and blades and is also capable of testing the flexibility resistance of the cord itself.



### Carbon Black Content Analyzer

[www.WorldofTest.com/arbon-black-content-analyzer](http://www.WorldofTest.com/arbon-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.



## 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.