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:

1. **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.

2. **High Level of Standards**
   - Qualitest products are built to meet and exceed latest North American and global standard requirements.

3. **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.

4. **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.

5. **#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.

6. **Centralized Service & Support Coordination**
   - Managed through our central service dept., we offer efficient customer service support, direct or via our worldwide QualiService authorized network.

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**Metal Testing Technologies**

- Universal Testing Machines
- Impact Testers
- Sample Preparation Equipment
- Metallurgical Equipment
- Metallurgical Microscope and Profile Projectors
- Hardness Testers
- XRF Spectrometers and Spectroscopy Instruments
- Surface Roughness Testers – Profilometers
- Ultrasonic Thickness Gauges
- Sheet Metal Testers
- Other Metal Testing Instruments
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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Height Gauge

www.WorldofTest.com/height-gauge

Height gauges serve a variety of use. Primarily it is used to measure distance, lengths and various other dimensions. Height Gauges are essential tools to ensure that materials to be worked on or machined are working with starting materials of uniform dimensions. These gauges can also be used to check whether finished products have the right specifications.

Torsion Tester - Quali TT

www.WorldofTest.com/torsion-tester-quali-tt

ASTM E4, ASTM E83, EN 10002-4, EN 10002-2, BS 3846, BS 1610, DIN 51221, ISO 9513, ISO 7500-1

The Quali-TT Series Torsion Tester offers a standard torque capacity of up to 2,000 Nm (17,700 in lb). This robust industrial frame provides maximum stiffness and has the capability to test specimens up to 550 mm (21.65 in) in length and 38 mm (1.18 in) in diameter.
Metals have always provided humans with the tools to survive and thrive. From early man’s use of iron and bronze to make tools to modern man’s use of gold and platinum for jewelry, metals have been used in an extensive range of applications.

Steel is frequently used in automobiles, buildings, utility poles, rail cars, appliances, pipes, infrastructure, bridges, road construction, architectural applications, turbines, and much more.

Aluminum with high electrical conductivity, ductility and low mass is frequently used in electrical transmission lines. It is also used in aircrafts, pipes, sheets, ductwork, juice cans, furniture, appliances, components and alloys.

Titanium, due to its immunity to environmental attack, is used in aerospace and industrial applications, automotive and computer industries, human implants, jewelry and sporting goods such as bicycles and golf clubs.

Tin is used for food packaging, storage tanks, electronic, culinary equipment, household utility items and automotive applications.

Qualitest Advanced Testing Technologies are the most reliable and cost-effective solutions for Metal Testing.

Together with our WorldofTest.com network of partners, Qualitest offers you a complete selection of testing machines and systems for metallic materials and components testing. We are able to supply an extensive range of competitive solutions such as universal testing machines with accessories and advanced software developed especially for specific metals tests, the widest range of portable and bench top hardness testers on the market, sample preparation equipment, and full systems for metallurgical departments in every labs or production environments.

Our extensive product selection for metals testing encompasses many additional technologies such as automated testers, impact testers, metallographs, fatigue testers, sheet metal formability testers, surface roughness testers, XRF spectrometers, drop weight testers and much more.
Q-SOFT Control Software

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-analyzing of the tests
- Statistical analysis of the tests

QM-Series Universal Testing Machine Range

<table>
<thead>
<tr>
<th>Model / Space for QM-Series</th>
<th>QM-2</th>
<th>QM-5</th>
<th>QM-10</th>
<th>QM-20</th>
<th>QM-50</th>
<th>QM-100</th>
<th>QM-200</th>
<th>QM-300</th>
<th>QM-500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (kN)</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>20</td>
<td>50</td>
<td>100</td>
<td>200</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>Total Cross-head Movement (mm)</td>
<td>400 or 800</td>
<td>600 or 1,100</td>
<td>800 or 1,200</td>
<td>1,000 or 1,100</td>
<td>1,000</td>
<td>1,100</td>
<td>1,100</td>
<td>1,200</td>
<td></td>
</tr>
<tr>
<td>Model / Space for QM-Series</td>
<td>QM-500</td>
<td>QM-1000</td>
<td>QM-1500</td>
<td>QM-2000</td>
<td>QM-3000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity (kN)</td>
<td>600</td>
<td>1,000</td>
<td>1,500</td>
<td>2,000</td>
<td>3,000</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Automatic Erichsen Cupping Test Machine Model 111

A full range of Sheet Metal Formability/Ductility Testers from manual versions up to highly advanced and sophisticated automatic models to measure formability, ductility characteristics of sheet metals as well as perform erichsen, olisen, deep drawing, ear measurement, FLC analysis, and sample marking.

Sheet Metal Testers

- www.WorldofTest.com/shear-metal-cupping-tester-model-100
- www.WorldofTest.com/bulgeflc-tester-model-161
- www.WorldofTest.com/shear-metal-testing-machine-model-134
- www.WorldofTest.com/bulgeflc-tester-model-161

Sheet Metal Testing Machine Model 134

Model 134, with electro-hydraulic drive, max drawing force 120 kN and adjustment for pre-setting the blank holder pressure max. 45 kN, blanking head max. blanking force of 200 kN, automatic test sequence and facility for automatic stop at specimen failure. Drawing force and blank holder force as well as the drawing punch stroke are displayed digitally.

Bulge/FLC Tester Model 161

The Bulge/FLC Tester, Model 161, is an electro hydraulic testing machine to carry out the hydraulic cupping test on all ferrous and nonferrous metals. Specimens up to a size of 400 x 650 mm can be tested. In addition to the actual hydraulic forming process the design of the machine also allows the use of ball punches (FLC) up to a diameter of 100 to 195 mm.
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.

“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.

<table>
<thead>
<tr>
<th>Q-Series Universal Testing Machine Range</th>
<th>Bench Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Capacity</td>
</tr>
<tr>
<td></td>
<td>in Kn</td>
</tr>
<tr>
<td></td>
<td>in lbf</td>
</tr>
<tr>
<td>Q25</td>
<td>1.5</td>
</tr>
<tr>
<td>Q5</td>
<td>2.5 (1 column)</td>
</tr>
<tr>
<td>Q10</td>
<td>5</td>
</tr>
<tr>
<td>Q25</td>
<td>10</td>
</tr>
<tr>
<td>Q50</td>
<td>25</td>
</tr>
<tr>
<td>Q100</td>
<td>50</td>
</tr>
<tr>
<td>Q200</td>
<td>100</td>
</tr>
</tbody>
</table>

Universal Testing Machines - HW Series

Universal Testing Machine HYW series from Qualitest are the most popular Hydraulic Frames for testing metal samples, concrete, rebar, tube & pipe, stranded wire, sheet bar & plate, fasteners, wood and high-strength composites.

Features
• Frame design features double test space for tensile and compression bending, cutting, stripping, and tearing tests.
• Digital control electronics provide high accuracy and fast response.
• Easy to navigate software provides the ultimate in ease-of-operation and flexibility.
• Meets and exceeds the requirements of majority of the North American and International standards such as ASTM, BIL, EN, ISO, and more.
• Variety of grips and fixtures available.

Ultrasonic Thickness Gauges
www.WorldofTest.com/ultrasonic-thickness-gauge-ultrasonic-tester

Our Ultrasonic Thickness Gauge range is the widest selection on the market with the best cost/performance ratio. On some of the models the warranties are extended up to 5 years while all of these gauges are efficiently and fully backed up and supported. These models are normally carried in stock for fast delivery.

Ultrasonic Thickness Gauge - QTG Series
www(WorldofTest.com/ultrasonic-thickness-gauge-qtg-series

The QTG IV Ultrasonic Thickness Gauge is the new and improved unit with A and B scan gauges, besides E-E (Thru-Paint) function. The instrument can measure with very high resolution (0.01 mm or 0.001 inches) the thickness of metallic and non-metallic materials such as steel, aluminum, titanium, plastics, ceramics, glass and any other good ultrasonic wave conductor. The QTG IV accurately displays readings in either inches or millimeters.

Ultrasonic Flaw Detector
www(WorldofTest.com/ultrasonic-flaw-detector

The Ultrasonic Flaw Detector - QFD 200 is a redesigned version of Qualitest’s well known SUD 10 Ultrasonic Flaw Detector. The Ultrasonic Flaw Detector - QFD 200 has all the familiar features of the SUD 10 flaw detector and is offered with an improved LCD screen, modern (USB) computer connection, compact design and more economical price package.

Ultrasonic Crawler System - UT Crawler
Ultrasonic Crawler System - Scorpion DCP which is a rugged remote access ultrasonic crawler designed to allow cost effective ultrasound thickness measurements on above ground ferro-magnetic structures without the need for costly scaffolding or rope access.

Ultrasonic Thickness Gauge – MX Series
Qualitest offers extensive range of advanced Ultrasonic Thickness Gauge such as MX, CMX, UMX, MMX, PVX Series Ultrasonic Thickness Gauge with a widest variety of modes and features for extra versatility.

Ultrasonic Thickness Gauges
Universal Testing Machines
Extension measurement is one of the areas that complements our range of UTM program. The result is a comprehensive range of high class variations. The product selection is arranged as follows:

- Non-contact extensometers with and without measurement marks.
- Contact extensometers: Sensor arm extensometers, incremental and analogue clip-on extensometers as well as extensometers for compression and flexure tests.

Grip & Fixtures

Grip & Fixtures

Qualitest offers a large range of mechanical, pneumatic, and hydraulic specimen grips for a wide variety of materials and shapes. The grips are easy to adapt to ours as well as other materials testing machines on the market. In addition, adaptations can be made using connecting pieces. Qualitest grips have force ranges up to 2 MN (400,000 lbf). A variety of jaw faces are available, permitting all kinds of materials to be held securely for testing.

Technical Specifications

<table>
<thead>
<tr>
<th>Model &amp; specification</th>
<th>QT-HW2 -600</th>
<th>QT-HW2 -1000</th>
<th>QT-HW2 -2000</th>
<th>QT-HW2 -3000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (kN)</td>
<td>600</td>
<td>1000</td>
<td>2000</td>
<td>3000</td>
</tr>
<tr>
<td>Clearance between columns (mm)</td>
<td>540</td>
<td>560</td>
<td>680</td>
<td>898</td>
</tr>
<tr>
<td>Clearance between grips (mm)</td>
<td>700</td>
<td>750</td>
<td>800</td>
<td>1200</td>
</tr>
<tr>
<td>Clearance between platens (mm)</td>
<td>580</td>
<td>600</td>
<td>600</td>
<td>1200</td>
</tr>
</tbody>
</table>

Surface Roughness Testers – Profilometers


Portable Surface Roughness Tester - QualiSurf II / II-S


QualiSurf II surface roughness tester is suitable for the scientific labs, factory metrology rooms and working sites. It can test the surface roughness of various machining components and allows for user selectable 45 roughness units in Ra, Rz etc. The testing results and surface profile can be stored in QualiSurf II unit and be output to PC. Besides QualiSurf II, Qualitest also offers QualiSurf II S which has an external transducer with extended connection cable. QualiSurf II S is suitable for measuring the surface roughness inside the pipes and tubes.

Portable Surface Roughness Tester - QualiSurf I


QualiSurf I portable surface roughness tester is a pocket-sized economically priced instrument for measuring surface texture conforming to traceable standards. It can be used on the shop floor in any position, horizontal, vertical or anywhere in between.

Portable Surface Roughness Tester - TR100

www.WorldofTest.com/portable-surface-roughness-tester-tr100

Portable Surface Roughness Tester - TR100 is a pocket-sized economically priced instrument for measuring surface texture conforming to traceable standards. It can be used on the shop floor in any position, horizontal, vertical or anywhere in between.

The large LCD display shows either roughness parameter Ra or Rz at the touch of a button, combined with the selected cut-off length. External calibration of roughness values is possible by means of a special CAL button, which makes adjustment of this instrument very easy. A beep signal informs the user of each individual measurement status when ready.

Portable Surface Roughness Tester TR200


Portable Surface Roughness Tester - TR200 is the newest model among our portable surface roughness testers with Pickup stylus position indicator.

Features:
- Graphical display on large LCD
- Very complete instrument
- Pickup stylus position indicator
- 13 different roughness parameters
- Auto-off after 5 minutes with auto-store
- Display 6 languages, English, French, German, Italian, Spanish and Dutch
- Data output RS232 to optional printer TA220 or PC
- Excellent battery power with Li-Ion technology
Hardness Test Blocks, Indenters & Accessories


Qualitest offers the largest Hardness Test Block selection in the industry. If you don’t see what you’re looking for, please call our sales department. All of our Hardness Test Blocks come with Certification. All the blocks are calibrated and accredited to ISO guide 25 and will meet automotive and aerospace standards. The HRC test blocks are calibrated on the new NEBT level.

- Rockwell Regular Hardness Test Block
- Rockwell Superficial Hardness Test Block
- Rockwell Testing Accessories
- Brinell Test Blocks and Accessories
- Micro Hardness Test Blocks
- Master Calibration Kits

Universal Hardness Tester

www.WorldofTest.com/universal-hardness-tester-range

A great advantage for testing labs is combining different test methods in one Universal hardness tester, which allows significant cost and space savings, flexibility and user-friendliness. Qualitest offers a competitive range of dead-weight models up to best-selling load-cell type systems. These Universal hardness testers can cover Rockwell Regular, Superficial as well as Brinell and Vickers scales in one single machine.

Micro / Knoop / Vickers Hardness Tester


Micro Hardness Tester / Vickers Hardness Tester is a key piece of equipment that is indispensable to metallographic research, product quality control, and the development of product certification materials. Vickers / Microhardness test procedure as per ASTM E-384, EN ISO 6507, and ASTM E-92 standard specifies making indentation with a range of loads using a diamond indenter which is then measured and converted to a hardness value. For this purpose as long as test samples are carefully and properly prepared, the Vickers / Microhardness method is considered to be very useful for testing on a wide type of materials, including metals, composites, ceramics, or applications such as testing films, measuring surface of a part, testing individual microstructures, or measuring the depth of case hardening by sectioning a part and making a series of indentations.

Charpy Dimension Verification System

www.WorldofTest.com/charpy-dimension-verification-system

The Percent Shear / Lateral Expansion / Charpy Dimension Verification System - QPM 7000 Series dimension verification system allows the user to comply with the current ASTM E 23 method for measuring percent shear fracture area. Although this can be tedious and inaccurate. While the use of a lateral expansion gage is adequate for standard specimens, miniature and subsize specimens often require an alternative procedure. With the QPM system a new technology has been developed for accurate shear and lateral expansion measurement. In addition, the system can be used for Charpy notch and other important dimensional verification. The hardware and software are used for acquiring fracture surface and notch images. After the image is acquired, the software is used to make measurements in accordance with the ASTM E 23 standard. The system consists of a camera, lens, lighting, and video acquisition software.

Fracture Image Analyzer

www.WorldofTest.com/fracture-image-analyzer

Qualitest covers a complete and competitive range of Fracture Image Analyzers for dynamic fracture tests. The dynamic fracture image analyzer can not only conduct the fracture surface analysis and measurement in the dynamic tear tests and drop hammer dynamic tear tests, but can also perform measurement of fracture fiber ratio of the impact specimen, crack length of the fracture toughness specimen, etc.

Pendulum Impact Testers


Available in 200J, 450J, 600J and 750J capacities

Qualitest offers Charpy / Izod Impact Testers with capacities up to 800J meeting and exceeding ASTM E23, ISO, DIN, JIS, ISO standard requirements. The key benefits of this line of top technology models are price competitiveness, extremely high precision and durability, automatic motorized lifting of the pendulum hammer to optimize cycle times, flexibility, efficiency for low/high temperature testing, and much more. Optionally we offer temperature chambers, automated sample handling, centering device, Charpy sample preparation and broaching machines for preparation of notched bar specimens.

Instrumented Pendulum Impact Testing Machine - Quali-Impact


Instrumented pendulum impact tester is a high-tech product. This tester, which directly and vividly reflects the force and deformation of materials under shock loading and the relationship between force and deformation, provides reliable data for describing the whole fracture process of materials due to impact. The equipment is widely used for the development of products and safety assessment in such fields as metallurgical steel industry, machinery manufacturing, petroleum, shipbuilding, military industry and nuclear power. It is also the indispensable test instrument for institutions of higher learning and scientific research units when they are conducting new material researches. The tester, which is automatically controlled, is easy to operate, safe and reliable and is highly efficient. Technical parameters can be modified online; the recording system uses high-speed data acquisition card which can record the whole process of high-speed loading; mechanical curves of various materials can be drawn; and the test reports can be shown and printed.

ADVANCED TESTING TECHNOLOGIES
A range of drop weight impact testers for measuring the fracture characteristics and fracture ductility of steel specimens according to the following standards: AS/NZS 1253, EN 10274, ASTM-E 436 and ‘Pellini’.

Since the introduction of the Drop Weight Tear Tester - DWTT, materials have moved on. In particular, demands for high operating pressures of line-pipes and larger diameters have driven the development of higher strength steels. Forty years ago the work that led to the drop weight tear test was done on X52 steel (380MPa yield strength). Improvements in thermo-mechanical processing has yielded improvements of approximately 10,000psi per decade, to the point where the state of the art is now X100 steels, and the use of X120 steels is being considered.

The Charpy Notch Broaching Machine is a simple hand-operated machine designed to enable laboratory personnel to produce their own Charpy test samples instead of waiting for machine shop time.

Up to 4 specimens can be machined at the same time and these are mounted in a rotating fixture. After the first rotation, which cuts the first side, the fixture is removed and turned through 180 degrees to cut the second side, after which the specimens are remounted in the fixture at 90 degrees to cut the third and fourth sides in a similar fashion. On completion of the fourth side, a 10mm square specimen is achieved, meeting surface finish and dimensional tolerances of all international standards including ASTM and BSI.

The Charpy Specimen Machine uses a 5 bladed cutter with easily replaceable inserts, used without any cutting lubricants. Up to 4 specimens can be machined at the same time and these are mounted in a rotating fixture.

This Motorized Charpy and Izod Notch cutting machine will cut Charpy V and U notches and Izod V notches in 10mm square alloy steel specimens up to a hardness of 42 Rockwell C. It is a free standing unit of simple, robust construction requiring only a single phase electrical supply for its operation.

The most popular and widely used method of Hardness Testing, The Qualitest range of Rockwell Hardness Tester models range from low cost analog models up to sophisticated and advanced load-cell type models. The popular, HardRocker, QualiRock, Rocky series hardness tester models have configurations suitable for regular and/or Superficial Rockwell Hardness Testing, while our advanced Universal Hardness Tester Range can test the full Rockwell scale in addition to Brinell & Vickers. Qualitest also offers Automatic In-line hardness testers for high volume testing.

Using a carbide ball penetrator, and applying loads of up to 3,000 kgf, Brinell hardness tester following ASTM E-10 are widely used on castings and forgings. This method requires optical reading of the diameter of ball indentation, and using a chart to convert the average measurement to Brinell hardness value. We offer low cost handheld Brinell models right up to our Pocket Hardness testers, which are widely used on castings and forgings. This method requires optical reading of the diameter of ball indentation, and using a chart to convert the measurement to Brinell hardness value.

Handheld Hardness Testers are ideal hardness testing tools where large samples, which cannot be brought to a traditional tabletop hardness tester, or specimens with hard to access areas are to be tested. A wide variety of the portable hardness testers, offered by Qualitest ensure that we recommend the most suitable model for your application. The extensive selection of our handheld hardness testers is available from low cost economy models up to advanced models coming with more features. These models can measure the hardness of your materials in Rockwell, Superficial Rockwell, Brinell, Vickers, Webster, Barcol scales and often conversions can be done.

Handheld Hardness Testers are ideal hardness testing tools where large samples, which cannot be brought to a traditional tabletop hardness tester, or specimens with hard to access areas are to be tested. A wide variety of the portable hardness testers, offered by Qualitest ensure that we recommend the most suitable model for your application. The extensive selection of our handheld hardness testers is available from low cost economy models up to advanced models coming with more features. These models can measure the hardness of your materials in Rockwell, Superficial Rockwell, Brinell, Vickers, Webster, Barcol scales and often conversions can be done.
Metallurgical Microscope and Profile Projectors

Inverted Metallurgical Microscope
www.WorldofTest.com/metallurgical-microscope
Qualitest offers an attractive range of top quality portable as well as table-top inverted Metallurgical Microscopes to complement metallography labs. Our portable range offered in both optical as well as digital configurations provide ultimate flexibility for in-situ analysis of your large samples in the field. The options of advanced image analysis software and camera systems, all offered at reasonable prices, provides optimum value, quality and choice for our customers.

Portable Metallurgical Microscope
www.WorldofTest.com/portable-metallurgical-microscope
SM 500 Metalloscope is a self-contained portable metallurgical microscope ideally used for metallographical inspection of metals in laboratory or in-situ. With fully handheld design and unique magnetic stand, SM 500 can be mounted directly against the surface of ferrous metals at any angles for non-destructive examination on flat, curved as well as other complicated surfaces. SM 500 also can be used with digital camera or CCD image processing system to download metallurgical image on to PC for data transfer, analysis, storage and printout.

Profile Projector - Optical Comparator
www.WorldofTest.com/profile-projectors-optical-comparators
Qualitest offers best-selling and top quality profile projectors that are highly versatile and easy to operate. This popular series has large travel range, excellent quality and performance and is very reasonable priced. 300mm screen projector with multi-function readout unit, printer and data output.

Features
• Projection capacity (unit mm) Magnification 10x 20x 50x 100x
• View field diameter 30 15 6 3
• Working distance W 77.7 44.3 24.5 25.3
• Max. Workpiece height H 80 80 80 80
• Max. Workpiece diameter, 160 130 55 60 edge line can be focused on the screen center

Sample Specimen Preparation Equipment

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 milling, 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
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 conectivity 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
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 conectivity 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
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
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.
Precision cutting is used for precise and deformation-free cutting of “Metals, Ceramics, Electronic Components, Crystals, Composites, Biomaterials, Sintered Carbides, Minerals, etc.”

MICRACUT Precision Cutter has its place in virtually any metallurgical, geological, electronics, research, biomedical or industrial laboratory. The applications are endless.

GEO Line is the complete range of instruments for petrographic sample preparation, starting with a piece of rock and finishing at 20 microns. The existing product range offers the latest technology and functional design to provide high performance in preparation of mineralogical samples and thin section specimens. The existing product range offers the latest technology and functional design to provide high performance in preparation of mineralogical samples and thin section specimens. For mineralogical specimens, the surface is prepared for examination with a reflected light microscope and the preparation procedure is basically similar to the preparation of metallographic specimens. Preparing thin sections, on the other hand, requires highly specialized equipment and skills because the specimen is extremely thin, generally around 20 microns for observations with transmitted light microscope.

After cutting the specimen, the next step is mounting. The aim of mounting is to handle small or odd shaped specimens and to protect fragile materials, thin layers or coating during preparation as well as to provide good edge retention. Mounting produces specimens with uniform size so that it is easier to handle in automatic holders for further preparation steps. Basically, two methods are available: Hot Mounting & Cold Mounting. In hot mounting, the specimen is mounted under heat and pressure with a hot mounting press. Cold mounting is preferred for samples which are sensitive to damage from heat and pressure (like coatings, PCB, etc.). Cold mounting resins are easy to use and require mixing which is then poured into a mould and allowed to set.

In order to obtain a highly reflective surface that is free from scratches and deformation, the specimens must be carefully grinded and polished before they can be examined under the microscope. Qualitest offers high quality instruments and consumables for achieving this goal. Metallography Grinder & Polisher - FORCIPOL - Series of instruments are available as Single wheel and Dual wheel Units (200/250/300 mm wheel size). Both single and double wheel versions are available with constant, dual or infinitely variable rotating speeds with digital display. This allows the setting of the optimum speed for each individual preparation process.
Precision Cutting Sample Preparation


Precision cutting is used for precise and deformation-free cutting of “Metals, Ceramics, Electronic Components, Crystals, Composites, Biomaterials, Sintered Carbides, Minerals, etc.”

MICRACUT Precision Cutter has its place in virtually any metallurgical, geological, electronics, research, biomedical or industrial laboratory. The applications are endless.

Sample Preparation for Spectroscopy

www.WorldTest.com/sample-preparation-spectroscopy

Qualitest covers a complete range of instruments for Optical emission spectrometry (OES) and X-Ray fluorescence which are most commonly used techniques for the analysis of metals and solid samples. Sample preparation of metals and materials have become more and more important because of the rapid development and improvement of both software as well as OES and XRF-devices during the past few years that shifts the detection limit for trace analyses. It is crucial to have the sample properly prepared.

Mounting Sample Preparation


After cutting the specimen, the next step is mounting. The aim of mounting is to handle small or odd shaped specimens and to protect fragile materials, thin layers or coating during preparation as well as to provide good edge retention. Mounting produces specimens with uniform size so that it is easier to handle in automatic holders for further preparation steps.

Practically, two methods are available: Hot Mounting & Cold Mounting.

In hot mounting, the specimen is mounted under heat and pressure with a hot mounting press. Cold mounting is preferred for samples which are sensitive to damage from heat and pressure (like coatings, PCB, etc.) Cold mounting resins are easy to use and require mixing which is then poured into a mould and allowed to set.

Grinding & Polishing Sample Preparation


In order to obtain a highly reflective surface that is free from scratches and deformation, the specimens must be carefully ground and polished before they can be examined under the microscope. Qualitest offers high quality instruments and consumables for achieving this goal.

Metallography Grinder & Polisher - FORCIPOL - Series of instruments are available as Single wheel and Dual wheel Units (200/250/300 mm wheel size). Both single and double wheel versions are available with constant, dual or infinitely variable rotating speeds with digital display. This allows the setting of the optimum speed for each individual preparation process.
Metallurgical Microscope and Profile Projectors

Inverted Metallurgical Microscope
www.WorldofTest.com/inverted-metallurgical-microscope
Qualitest offers an attractive range of top quality portable as well as table-top inverted Metallurgical Microscopes to complement metallurgy labs. Our portable range offered in both optical as well as digital configurations provide ultimate flexibility for in-situ analysis of your large samples in the field. The options of advanced image analysis software and camera systems, all offered at reasonable prices, provides optimum value, quality and choice for our customers.

Portable Metallurgical Microscope
www.WorldofTest.com/portable-metallurgical-microscope
SM 500 Metalscope is a self-contained portable metallurgical microscope ideally used for metallographical inspection of metals in laboratory or in-situ. With fully hand-held design and unique magnetic stand, SM 500 can be mounted directly against the surface of ferrous metals at any angles for non-destructive examination on flat, curved as well as other complicated surfaces. SM 500 also can be used with digital camera or CCD image processing system to download metallurgical image on to PC for data transfer, analysis, storage and printout.

Profile Projector - Optical Comparator
www.WorldofTest.com/profile-projectors-optical-comparators
Qualitest offers best-selling and top quality profile projectors that are highly versatile and easy to operate. This popular series has large travel range, excellent quality and performance and is very reasonable priced. 300mm screen projector with multi-function readout unit, printer and data output.

Features
• Projection capacity (unit mm) Magnification 10x 20x 50x 100x
• View field diameter 30 15 6 3
• Working distance W 77.7 44.3 24.5 25.3
• Max. Workpiece height H 80 80 55 60
• Max. Workpiece diameter, 160 130 55 60 edge line can be focused on the screen center

Sample Specimen Preparation Equipment

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 milling, 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
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
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
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
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.
A range of drop weight impact testers for measuring the fracture characteristics and fracture ductility of steel specimens according to the following standards: API recommended practice 5L3, EN 10274, ASTM E-436 and ‘Pellini’.

Since the introduction of the Drop Weight Tear Tester - DWTT, materials have moved on. In particular, demands for high operating pressures of line-pipes and larger diameters have driven the development of higher strength steels. Forty years ago the work that led to the drop weight tear test was done on X52 steel (380MPa yield strength). Improvements in thermo-mechanical processing has yielded improvements of approximately 10,000psi per decade, to the point where the state of the art is now X100 steels, and the use of X120 steels is being considered.

**Charpy Notch Broaching Machine (Hand Operated)**

The Charpy Specimen Machine will produce 10mm square Charpy test specimens from rough cut samples of up to 15mm square. It is designed to enable laboratory personnel to produce their own Charpy test samples instead of waiting for machine shop time.

The Charpy Specimen Machine uses a 5 bladed cutter with easily replaceable inserts, used without any cutting lubricants.

Up to 4 specimens can be machined at the same time and these are mounted in a rotating fixture. After the first rotation, which cuts the first side, the fixture is removed and turned through 180 degrees to cut the second side, after which the specimens are remounted in the fixture at 90 degrees to cut the third and fourth sides in a similar fashion. On completion of the fourth side, a 10mm square specimen is achieved, meeting surface finish and dimensional tolerances of all international standards including ASTM and BS1.

**Charpy Notch Broaching Machine (Hand Operated)**

This Motorized Charpy and Izod notch cutting machine will cut Charpy V and U notches and Izod V notches in 10mm square alloy steel specimens up to a hardness of 42 Rockwell C. It is a free standing unit of simple, robust construction requiring only a single phase electrical supply for its operation.

**Charpy Specimen Machine – CNM**

The Charpy Specimen Machine will produce 10mm square Charpy test specimens from rough cut samples of up to 15mm square. It is designed to enable laboratory personnel to produce their own Charpy test samples instead of waiting for machine shop time.

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**Charpy Notch Broaching Machine (Hand Operated)**

The Charpy Notch Broaching Machine will cut Charpy V and U notches and Izod V notches in 10mm square alloy steel specimens up to a hardness of 42 Rockwell C.

Intended for bench mounting, the charpy notch robustly constructed broaching machine cuts the notches by means of a specially designed Multi-Toothed Broach which is driven across the specimen by rotating the spoked hand-wheel. A simple Hand Vice for holding the specimen is built onto the machine body and the tooling includes the adjusters and end stops necessary to ensure notch depth and position are correctly set.

**Charpy Notch Broaching Machine (Hand Operated)**

This Motorized Charpy and Izod notch cutting machine will cut Charpy V and U notches and Izod V notches in 10mm square alloy steel specimens up to a hardness of 42 Rockwell C. It is a free standing unit of simple, robust construction requiring only a single phase electrical supply for its operation.

**Brinell Hardness Tester**

Using a carbide ball penetrator, and applying loads of up to 3,000 kgf, Brinell hardness tester following ASTM E-10 are widely used on castings and forgings. This method requires optical reading of the diameter of ball indentation, and using a chart to convert the average measurement to Brinell hardness value. We offer low cost handheld Brinell scopes as well as a popular line of Automatic Brinell Microscopes for high frequency of testing. Qualitest also offers Automatic In-line hardness testers for high volume testing.

**Rockwell Hardness Tester**

The most popular and widely used method of Hardness Testing, The Qualitest range of Rockwell Hardness Tester Range start from low cost analog models up to sophisticated and advanced load-cell type models. The popular, HardRock, QualRock, Rockey series hardness tester models have configurations suitable for regular and/or Superficial Rockwell Hardness Testing, while our advanced Universal Hardness Tester Range can test the full Rockwell scale in addition to Brinell & Vickers. Qualitest also offers Automatic In-line hardness testers for high volume testing.
Hardness Testers

Micro / Knoop / Vickers Hardness Tester

Micro Hardness Tester / Vickers Hardness Tester is a key piece of equipment that is indispensable to metallurgical research, product quality control, and the development of product certification materials.

Vickers / Microhardness test procedure as per ASTM E-384, EN ISO 6507, and ASTM E-92 standard specifies making indentation with a range of loads using a diamond indenter which is then measured and converted to a hardness value. For this purpose as long as test samples are carefully and properly prepared, the Vickers / Microhardness method is considered to be very useful for testing on a wide type of materials, including metals, composites, ceramics, or applications such as testing foils, measuring surface of a part, testing individual microstructures, or measuring the depth of case hardening by sectioning a part and making a series of indentations.

- Master Calibration Kits
- Rockwell Testing Accessories
- Rockwell Superficial Hardness Test Block
- Rockwell Regular Hardness Test Block

Qualitest offer the largest Hardness Test Block selection in the industry. If you don’t see what you’re looking for, please call our sales department. All of our Hardness Test Blocks come with Certification. All the blocks are calibrated and accredited to ISO guide 25 and will meet automotive and aerospace standards. The HRC test blocks are calibrated on the new NIST level.

- Rockwell Regular Hardness Test Block
- Rockwell Superficial Hardness Test Block
- Rockwell Testing Accessories
- Brinell Test Blocks and Accessories
- Micro Hardness Test Blocks
- Master Calibration Kits

Universal Hardness Tester
www.WorldofTest.com/universal-hardness-tester-range

A great advantage for testing labs is combining different test methods in one Universal hardness tester, which allows significant cost and space savings, flexibility and user-friendliness. Qualitest offers a competitive range of dead-weight models up to best-selling load-cell type systems. These Universal hardness testers can cover Rockwell Regular, Superficial as well as Brinell and Vickers scales in one single machine.

Hardness Test Blocks, Indenters & Accessories

Qualitest offer the largest Hardness Test Block selection in the industry. If you don’t see what you’re looking for, please call our sales department. All of our Hardness Test Blocks come with Certification. All the blocks are calibrated and accredited to ISO guide 25 and will meet automotive and aerospace standards. The HRC test blocks are calibrated on the new NIST level.

- Rockwell Regular Hardness Test Block
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- Rockwell Testing Accessories
- Brinell Test Blocks and Accessories
- Micro Hardness Test Blocks
- Master Calibration Kits

Impact Testers

Pendulum Impact Testers

Available in 200J, 450J, 600J and 750J capacities

Qualitest offers Charpy / Izod Impact Testers with capacities up to 800J meeting and exceeding ASTM E23, ISO, DIN, JIS, ISO standard requirements. The key benefits of this line of top technology models are price competitiveness, extremely high precision and durability, automatic motorized lifting of the pendulum hammer to optimize cycle times, flexibility, efficiency for low/high temperature testing, and much more. Optionally we offer temperature chambers, automated sample handling, centering device, Charpy sample preparation and broaching machines for preparation of notched bar specimens.

Instrumented Pendulum Impact Testing Machine - Quali-Impact


Instrumented pendulum impact tester is a high-tech product. This tester, which directly and vividly reflects the force and deformation of materials under shock loading and the relationship between force and deformation, provides reliable data for describing the whole fracture process of materials due to impact. The equipment is widely used for the development of products and safety assessment in such fields as metallurgical steel industry, machinery manufacturing, petroleum, shipbuilding, military industry and nuclear power. It also serves as indispensable test instrument for testing labs in other fields of high learning and scientific research units when they are conducting new material researches. The tester, which is automatically controlled, is easy to operate, safe and reliable and is highly efficient. Technical parameters can be modified online; the recording system uses high-speed data acquisition card which can record the whole process of high-speed loading; mechanical curves of various materials can be drawn; and the test reports can be shown and printed.

Charpy Dimension Verification System
www.WorldofTest.com/charpy-dimension-verification-system

DIN, JIS, ISO standard requirements. The key benefits of this line of top technology models are price competitiveness, extremely high precision and durability, automatic motorized lifting of the pendulum hammer to optimize cycle times, flexibility, efficiency for low/high temperature testing, and much more. Optionally we offer temperature chambers, automated sample handling, centering device, Charpy sample preparation and broaching machines for preparation of notched bar specimens.

Fracture Image Analyzer
www.WorldofTest.com/fracture-image-analyzer

Qualitest offers a complete and competitive range of Fracture Image Analyzers for dynamic fracture tests. The dynamic fracture image analyzer can not only conduct the fracture surface analysis and measurement in the dynamic tear tests and drop hammer dynamic tear tests, but can also perform measurement of fracture fiber ratio of the impact specimens, crack length of the fracture toughness specimen, etc.
Universal Testing Machines

Extension measurement is one of the areas that complements our range of UTM program. The result is a comprehensive range of high-class variations. The product selection is arranged as follows:

- Non-contact extensometers with and without measurement marks.
- Contact extensometers: Senso arm extensometers, incremental and analogue clip-on extensometers as well as extensometers for compression and flexure tests.

Grip & Fixtures

Qualitest offers a large range of mechanical, pneumatic, and hydraulic specimen grips for a wide variety of materials and shapes. The grips are easy to adapt to ours as well as other materials testing machines on the market. In addition, adaptations can be made using connecting pieces. Qualitest grips have force ranges up to 2 MN (400,000 lbf). A variety of jaw faces are available, permitting all kinds of materials to be held securely for testing.

Technical Specifications

<table>
<thead>
<tr>
<th>Model &amp; specification</th>
<th>QT-HW2 - 600</th>
<th>QT-HW2 - 1000</th>
<th>QT-HW2 - 2000</th>
<th>QT-HW2 - 3000</th>
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<tbody>
<tr>
<td>Capacity (kN)</td>
<td>600</td>
<td>1000</td>
<td>2000</td>
<td>3000</td>
</tr>
<tr>
<td>Clearance between columns (mm)</td>
<td>540</td>
<td>560</td>
<td>680</td>
<td>898</td>
</tr>
<tr>
<td>Clearance between grips (mm)</td>
<td>700</td>
<td>750</td>
<td>850</td>
<td>1200</td>
</tr>
<tr>
<td>Clearance between platens (mm)</td>
<td>590</td>
<td>650</td>
<td>650</td>
<td>1200</td>
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</tbody>
</table>

Surface Roughness Testers – Profilometers

Portable Surface Roughness Tester - Qualisurf II / II-S

Qualisurf II surface roughness tester is suitable for the scientific labs, factory metrology rooms and working sites. It can test the surface roughness of various machining components and allows for user selectable 45 roughness units in Rz, Rz etc. The testing results and surface profile can be stored in Qualisurf II unit and be output to PC. Besides Qualisurf II, Qualitest also offers Qualisurf I which has an external transducer with extended connection cable. Qualisurf II S is suitable for measuring the surface roughness inside the pipes and tubes.

Portable Surface Roughness Tester - Qualisurf I

Portable Surface Roughness Tester - TR100

Portable Surface Roughness Tester - TR200

Portable Surface Roughness Tester - TR200 is the newest model among our portable surface roughness testers with Pickup stylus point indicator.

Features:
- Graphical display on large LCD
- Very complete instrument
- Pickup stylus point indicator
- 13 different roughness parameters
- Auto-off after 5 minutes with auto-store
- Display in 6 languages, English, French, German, Italian, Spanish and Dutch
- Data output RS232 to optional printer TA220 or PC
- Excellent battery power with Li-Ion technology

Portable Surface Roughness Tester - Qualisurf II

Portable Surface Roughness Tester - Qualisurf I

Portable Surface Roughness Tester - TR100

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- Excellent battery power with Li-Ion technology
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 - all at a very reasonable price, very efficient and comprehensive support with Qualitest's professional after sales service team.

<table>
<thead>
<tr>
<th>Q-Series Universal Testing Machine Range</th>
<th>Bench Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Q2.5</td>
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<tr>
<td>Capacity kN</td>
<td>1.5</td>
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<tr>
<td>Capacity lbf</td>
<td>300</td>
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<tr>
<td>Floor Standing Models</td>
<td></td>
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<tr>
<td>Model</td>
<td>Q250</td>
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<tr>
<td>Capacity kN</td>
<td>250</td>
</tr>
<tr>
<td>Capacity lbf</td>
<td>55,000</td>
</tr>
</tbody>
</table>

Ultrasonic Thickness Gauges

Our Ultrasonic Thickness Gauge range is the widest selection on the market with the best cost/performance ratio. On some of the models the warranties are extended up to 5 years while all of these gauges are efficiently and fully backed up and supported. These models are normally carried in stock for fast delivery.

Ultrasonic Thickness Gauge - QTG Series
www.WorldofTest.com/ultrasonic-thickness-gauge-qtg-series

The QTG IV Ultrasonic Thickness Gauge is the new and improved unit with A and B scan gauges, besides E-E (Thru-Paint) function. The instrument can measure with very high resolution (0.01 mm or 0.001 inch) the thickness of metallic and non-metallic materials such as steel, aluminum, titanium, plastics, ceramics, glass and any other good ultrasonic wave conductor. The QTG IV accurately displays readings in either inches or millimeters.

Ultrasonic Flaw Detector
www.WorldofTest.com/ultrasonic-flaw-detector

The Ultrasonic Flaw Detector - QFD 200 is a redesigned version of Qualitest’s well known SUD 10 Ultrasonic Flaw Detector. The Ultrasonic Flaw Detector - QFD 200 has all the familiar features of the SUD 10 flaw detector and is offered with an improved LCD screen, modern (USB) computer connection, compact design and more economical price package.

Ultrasonic Crawler System - UT Crawler

Ultrasonic Crawler System - Scorpion DCP which is a rugged remote access ultrasonic crawler designed to allow cost effective ultrasound thickness measurements on elevated ground ferrous-magnetic structures without the need for costly scaffolding or rope access.

Ultrasonic Thickness Gauge – MX Series

Qualitest offers extensive range of advanced Ultrasonic Thickness Gauge such as MX, CMX, UMK, MMK, PVX Series Ultrasonic Thickness Gauge with a widest variety of modes and features for extra versatility.
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 UUTM 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.

Q-SOFT Control Software
Q-SOFT 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**

### QM-Series Universal Testing Machine Range

<table>
<thead>
<tr>
<th>Model / Space for QM-Series</th>
<th>QM-2</th>
<th>QM-5</th>
<th>QM-10</th>
<th>QM-20</th>
<th>QM-50</th>
<th>QM-100</th>
<th>QM-200</th>
<th>QM-300</th>
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<tbody>
<tr>
<td>Capacity (kN)</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>20</td>
<td>50</td>
<td>100</td>
<td>200</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>Total Cross - head Movement (mm)</td>
<td>400 or 800</td>
<td>650 or 1,100</td>
<td>800 or 1,200</td>
<td>1,000 or 1,150</td>
<td>1,000</td>
<td>1,100</td>
<td>1,100</td>
<td>1,200</td>
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<thead>
<tr>
<th>Model / Spaces for QM-Series</th>
<th>QM-500</th>
<th>QM-1000</th>
<th>QM-1500</th>
<th>QM-2000</th>
<th>QM-3000</th>
<th>QM-5000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity (kN)</td>
<td>600</td>
<td>1,000</td>
<td>1,500</td>
<td>2,000</td>
<td>3,000</td>
<td></td>
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</table>

Sheet Metal Testers

www.WorldofTest.com/elmendorf-tear-strength-tester
ISO 8430, EN 14-58, EN 14-67, DIN 50 101, DIN 50 102, BS 3855:1985, NF A 03-652, NF A 03-652, ASTM E 643-84

A full range of Sheet Metal Formability/Ductility Testers from manual versions up to highly advanced and sophisticated automatic models to measure formability, ductility characteristics of sheet metals as well as perform erichsen, olsen, deep drawing, ear measurement, FLC analysis, and sample marking.

**Sheet Metal Cupping Tester Model 100**


Model 100 Sheet Metal Testing Machine for manual operation provides a maximum drawing force of 30 kN and a blank holder force according to the standard, of 10 kN.

**Automatic Erichsen Cupping Test Machine Model 111**


Electronically controlled cupping test machine with electro-hydraulic drive and automatic test sequence, including crack detection, standardised cupping speed and a maximum drawing force of 45 kN.

**Ear Measuring Instrument - Model 126C**

www.WorldofTest.com/ear-measuring-instrument-model-126c

The second generation ear measuring instrument, Model 126 C is used in quality assurance when sheets are produced and processed. The equipment makes it possible to evaluate the quality of the material as well as supervise the adjustment of the processing machines.

**Sheet Metal Testing Machine - Model 134**


Model 134, with electro-hydraulic drive, max drawing force 130 kN and adjustment for pre-setting the blank holder pressure max. 45 kN, blanking head (max. blanking force of 200 kN), automatic test sequence and facility for automatic stop at specimen failure. Drawing force and blank holder force as well as the drawing punch stroke are displayed digitally.

**Bulge/FLC Tester Model-161**

www.WorldofTest.com/bulgeflc-tester-model-161

The Bulge/FLC Tester, Model 161, is an electro hydraulic testing machine to carry out the hydraulic cupping test on all ferrous and nonferrous metals. Specimen up to a size of 400 x 650 mm can be tested. In addition to the actual hydraulic forming process the design of the machine also allows the use of ball punches (FLC) up to a diameter of 100 to 195 mm.
Metals
Steel, aluminum, iron, titanium, tin, copper and zinc and their alloys are metals that are mostly used for the production of appliances, devices, machines and buildings. The wide spectrum of metal properties also determines the essential need for a wide range testing technologies.

General Applications
Metals have always provided humans with the tools to survive and thrive. From early man’s use of iron and bronze to make tools to modern man’s use of gold and platinum for jewelry, metals have been used in an extensive range of applications.

Steel is frequently used in automobiles, buildings, utility poles, rail cars, appliances, pipes, infrastructure, bridges, road construction, architectural applications, turbines, and much more.

Aluminum with high electrical conductivity, ductility and low mass is frequently used in electrical transmission lines. It is also used in aircrafts, pipes, sheets, ductwork, juice cans, furniture, appliances, components and alloys.

Titanium, due to its immunity to environmental attack, is used in aerospace and industrial applications, automotive and computer industries, human implants, jewelry and sporting goods such as bicycles and golf clubs.

Tin is used for food packaging, storage tanks, electronic, culinary equipment, household utility items and automotive applications.

Qualitest Advanced Testing Technologies are the most reliable and cost-effective solutions for Metal Testing.

Together with our WorldofTest.com network of partners, Qualitest offers you a complete selection of testing machines and systems for metallic materials and components testing. We are able to supply an extensive range of competitive solutions such as universal testing machines with accessories and advanced software developed especially for specific metals tests, the widest range of portable and bench top hardness testers on the market, sample preparation equipment, and full systems for metallurgical departments in every labs or production environments.

Our extensive product selection for metals testing encompasses many additional technologies such as automated testers, impact testers, metallographs, fatigue testers, sheet metal formability testers, surface roughness testers, XRF spectrometers, drop weight testers and 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/pipeline industries, and much more.

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Height Gauge

www.WorldofTest.com/height-gauge

Height gauges serve a variety of use. Primarily it is used to measure distance, lengths and various other dimensions. Height Gauges are essential tools to ensure that materials to be worked on or machined are working with starting materials of uniform dimensions. These gauges can also be used to check whether finished products have the right specifications.

Torsion Tester - Quali TT

www.WorldofTest.com/torsion-tester-quali-tt

ASTM E4, ASTM E83, EN 10002-4, EN 10002-2, BS 3846, BS 1610, DIN 51221, ISO 9513, ISO 7500-1

The Quali-TT Series Torsion Tester offers a standard torque capacity of up to 2,000 Nm (17,700 in lb). The robust industrial frame provides maximum stiffness and has the capability to test specimens up to 550 mm (21.65 in) in length and 38 mm (1.18 in) in diameter.
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 by 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 a 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 support direct or via our worldwide QualiService authorized network.

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**Metal Testing Technologies**

- Universal Testing Machines
- Impact Testers
- Sample Specimen Preparation Equipment
- Metallography Equipment
- Metallurgical Microscope and Profile Projectors
- Hardness Testers
- XRF Spectrometers and Spectroscopy Instruments
- Surface Roughness Testers – Profilometers
- Ultrasonic Thickness Gauge
- Sheet Metal Testers
- Other Metal Testing Instruments