Advanced Metal Testing Technologies
ABOUT QUALITEST

Qualitest is a global contender and one of the top-ranking 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, gold & Jewellery applications and much more.

METAL TESTING TECHNOLOGIES

- Universal Testing Machines
- DWTT Drop Weight Tear Tester
- Pendulum Impact Testers
- Sample Specimen Preparation Equipment
- Metallography Equipment
- Hardness Testers
- XRF Spectrometers
- Analytical Instruments
- Ultrasonic Testers
- Sheet Metal Testers
- Resonant Fatigue Testing Machines
- Other Metal Testing Instruments
QUALITEST NETWORK

We believe in participating responsibly in the global marketplace. We are committed to understanding and respecting the laws, values and cultures wherever we do business; profitably growing in all markets; promoting a healthy business climate globally; and contributing positively in every community we call home, both personally and organizationally.

Together with our WorldofTest.com network of partners, Qualitest offers a complete selection of testing machines and systems. Today Qualitest has 50 – 70 associates who are contributing to our growth.

Through our team’s unrelenting focus on productivity and innovation, we also offer efficient customer service support directly or via our worldwide QualiService authorized partners.

Qualitest and WorldofTest.com network today is a leader in the global testing technology industry.

QUALITEST CUSTOMERS

Qualitest has had the privilege of serving many Fortune 500 companies and global industries. Our growing network of customers include major corporations.

SUPPORT & SERVICES

Quality and customer satisfaction is our top priority. With direct support/service or via our authorized QualiService network we ensure that your Qualitest product stays fully functional wherever you are.

TECHNICAL SUPPORT

Help you to better understand our products and provide support when you need it.

CALIBRATION

We provide fast, quality, accredited calibration services to our products.

REPAIR

Repairing services will also be provided by us to ensure your machine works properly.

PARTS & CONSUMABLES

Qualitest also provides parts and consumables for the long run.
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.

**Metals**

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.

**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.
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.

### Electromechanical Universal Testing Machine - QM Series

https://www.worldoftest.com/universal-testing-machine-qm-series

<table>
<thead>
<tr>
<th>Model/Specs</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>650 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>
</tbody>
</table>

### Hydraulic Universal Testing Machines - HW Series

https://www.worldoftest.com/hydraulic-universal-testing-machines-hw-series

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

<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>1,000</td>
<td>2,000</td>
<td>3,000</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>1,200</td>
</tr>
<tr>
<td>Clearance between platens (mm)</td>
<td>580</td>
<td>600</td>
<td>600</td>
<td>1,200</td>
</tr>
</tbody>
</table>

### Extensometers, Grip & Fixtures

https://www.worldoftest.com/extensometers
https://www.worldoftest.com/grip-fixtures

Extension measurement is one of the areas that complements our range of UTM program. The result is a comprehensive range of high class variations.
Qualitest offers an extensive range of advanced test fixtures and grips, accessories, and adapters for Universal Testing Machines, and Tensile / Compression Testers.
**Charpy Specimen Milling Machine – CNM**
Charpy Specimen Milling Machine – CNM is designed to enable laboratory personnel to produce their own Charpy test samples instead of waiting for machine shop time. It will produce 10mm square Charpy test specimens from rough cut samples of up to 15mm square.

**Motorised Charpy Notch Machine**
Motorized Charpy Notch Machine is a self-contained floor mounted unit, specially designed for cutting Charpy and Izod ‘V’ and ‘U’ notches in the pre-machined standard 10mm square, sub-size and 0.45” diameter specimens.

**Hand Operated Charpy Notch Machine**
Hand Operated Charpy Notch Broaching Machine is designed for test houses and laboratories, which are producing small batches of test pieces in carbon steels, easily machined low alloy steels, non-ferrous and plastic materials.
## Sample Specimen Preparation CNC Machine

<table>
<thead>
<tr>
<th>Machine Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QualiLathe – 210</td>
<td>CNC Sample Preparation Lathe Machine is designed for sample preparation for various metals and non-metals.</td>
</tr>
<tr>
<td>QualiMill – CNC Sample Preparation Milling Machine</td>
<td>is a high-performance center, which can be set up quickly, easy to operate, high stability, high flexibility and low-maintenance.</td>
</tr>
<tr>
<td>Micro CNC Sample Preparation Milling Machine</td>
<td>M4 is a High performance small CNC milling Machine suitable for metal processing factories, research and development laboratory, and universities</td>
</tr>
</tbody>
</table>

## Optical Instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portable Metallurgical Microscope</td>
<td>SM 500 Metalloscope is a self-contained portable metallurgical microscope ideally used for metallographic inspection of metals in laboratory or in-site. 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.</td>
</tr>
<tr>
<td>Profile Projector – Optical Comparator</td>
<td>Profile projector is widely used for complex shape stampings, gears, cams, threads and comparing the measured contour model. It’s easy to use and highly efficient. It is a commonly used measurement of optical instruments.</td>
</tr>
<tr>
<td>Vision Measuring Machine</td>
<td>Qualitest provides a wide range of 2D and 3D Vision Measuring Machine which is widely used in electronic industry, medical devices, LCD, aerospace and other industries measurement.</td>
</tr>
</tbody>
</table>
Inverted Metallurgical Microscope

Modern design inverted metallographic bench microscope for measuring and viewing surfaces and studying materials, equipped with a polarised light set for crystallographic analysis.

Grinding & Polishing Sample Preparation

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. Available as Single wheel and Dual wheel Units (200/250/300 mm wheel size).

Precision Cutting Sample Preparation

Petrography 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.

Mounting Press Machine

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.

Abrasive Cutting Sample Preparation

A abrasive cutting is generally used for metal specimens. Selecting the right cut-off wheel ensures freedom from burn and distortion and is the best way to save time and consumables.

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.”

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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.

The Qualitest range of Rockwell Hardness Tester Range start from low cost analog models up to sophisticated and advanced load-cell type models.

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.

Mirco 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.

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. These Universal hardness testers can cover Rockwell Regular, Superficial as well as Brinell and Vickers scales in one single machine.
**Analytical Instruments**

**XRF Spectrometers and Metal Analyzers**


XRF (X-ray fluorescence spectrometry) is a non-destructive analytical technique used to identify and determine the concentrations of elements present in solid, powdered and liquid samples. XRF is capable of measuring elements from Beryllium (Be) to Uranium (U) and beyond at trace levels and up to 100%. The QualiX series of XRF X-ray fluorescence spectrometers measures the individual component wavelengths of the fluorescent emission produced by a sample when irradiated with X-rays. QualiX- XRF X-ray fluorescence spectrometer includes special electronics and software modules to take care that all radiation is properly analyzed in the detector.

**Carbon and Sulphur Analyzer (infrared)**


QT-CS-3000G is a highly advanced infrared carbon and Sulphur analyzer which is equipped with two sets of sample pre-treatment units: resistance furnace and the high frequency induction furnace, which share the same infrared detection system for analyzing the percentage of Sulphur and Carbon in combustion gases.

**Atomic Absorption Spectrometer**

[https://www.worldoftest.com/atomic-absorption-spectrometer](https://www.worldoftest.com/atomic-absorption-spectrometer)

Atomic absorption spectroscopy (AAS) determines the presence of metals in liquid samples. It also measures the concentrations of metals in the samples. In their elemental form, metals will absorb ultraviolet light when they are excited by heat.
Optical Emission Spectrometer - OES

https://www.worldoftest.com/optical-emission-spectrometer-oes

This line of OES spectrometers serves a wide range of uses. From the more traditional use of optical emission spectroscopy of analysis of unknown compounds and elements to elemental analysis of lubricating oils, transmission fluids, fuels, hydraulic fluids and much more this line of optical emission spectrometers can do it all.

UV/VIS Spectrophotometer

https://www.worldoftest.com/uvvis-spectrophotometer

Qualitest provides a wide range of UV/VIS, FT-IR as well as Atomic Absorption Spectrophotometers, software, sampling accessories and services to help you improve product quality, productivity and analytical processes.

FTIR Spectrophotometer

https://www.worldoftest.com/ftir-spectrophotometer

Qualitest offers a wide variety of laboratory FTIR spectrometers for verify the identity and specifications of raw materials and products. The QualiFT-IR 5000 Spectrophotometer is built on an upgraded integration electronic system that is designed with highest flexibility and stability.

Atomic Emission Spectrometer

https://www.worldoftest.com/atomic-emission-spectrometer

The Atomic Emission Spectrometer - QualiAES is mainly used in the quantitative analysis of metallic element and partial non-metallic element in liquid sample (including the solid sample which can convert into a solution by chemical processing).

Oxygen/Nitrogen/Hydrogen Analyzer

https://www.worldoftest.com/oxygennitrogenhydrogen-analyzer

QT-ONH-3000 Oxygen/Nitrogen/Hydrogen Analyzer is a new and advanced product. It is used for oxygen, nitrogen and hydrogen determination in ferrous and non-ferrous metals, rare earth materials, alloy, and some other inorganic.
The Qualitest Roughness Testing range provides the best possible mix of different models ranging from economical portable models for basic roughness testing needs, up to the tabletop advanced version.

Portable Surface Roughness Tester - TR-200 Plus

Portable surface Roughness Tester TR-200 Plus includes graphical display on large LCD with very complete instrument along with pickup stylus position indicator.

QualiSurf II surface roughness tester is suitable for the scientific labs, factory metrology rooms and working site. It can test the surface roughness of various machining components.

Skidless and Skidded Surface Roughness Tester - Qualisurf III

Skidless and Skidded Surface Roughness Tester - Qualisurf III is high precision and high-performance universal roughness tester with excellent price/quality rating.

The Qualitest Roughness Testing range provides the best possible mix of different models ranging from economical portable models for basic roughness testing needs, up to the tabletop advanced version.

Portable Surface Roughness Tester - QTG Series

The QTG IV Ultrasonic Thickness Gauge is the new and improved unit with A and B scan gauge, 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.

Qualitest offers extensive range of high-quality industrial ultrasonic testing equipment for the petrochemical, aerospace, power generation, automotive, and other related industries.

Ultrasonic Thickness Gauge - Dakota Series

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.
ISO 8490, EN 14-58, EN 14-67, DIN 50 101, DIN 50 102, BS 3855:1965, NF A 03-602, 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.

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**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.

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**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.

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**Ear Measuring Instrument - Model 126 Plus**

The Ear Measuring Instrument, Model 126 Plus, is designed for the axial measurement of deep-drawn cups and raw cans. Typical standards are DIN EN 1669 and ISO 11531.

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**Universal Sheet Metal Testing Machine Model 134/142/145/156**

Classic tests like the cupping test and deep drawing cup test are still indispensable for the preparation of metal forming processes. Increasingly, these tests are supplemented by alternative methods. New materials and their combination as used in the car industry, always require the most appropriate test methods.

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**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.
Meets & exceeds applicable ISO, ASTM, BS, SAE & other international standards

Qualitest Creep and Stress Rupture Tester - QualiCreep Series is mainly designed to perform Creep and Stress Rupture testing of a wide variety of materials to both standard and customized specifications such as ASTM E139, ISO 204, ISO/R 206 and similar international standards.

Cold Bend Testing Machine

The Cold Bend Testing Machine - QualiBend series are used for bending of metallic materials such as metal rods, planks and steel screw threads. The machines operate with a hydraulic loading system to adjust the distance of the cold-bending press roll to drive the rod in both directions making the cold bending press roll forward and back.

Height Gauge

Height gauges serve a variety of use. Primarily it is used to measure distances, 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.

Torsion Tester - Quali TT

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 30 mm (1.18 in) in diameter.
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:

**Competitive Price Guarantee**
Qualitest is confident to offer competitive products at the best possible prices. We ensure to offer the best value for your investment without compromising quality.

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

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

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

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

**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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