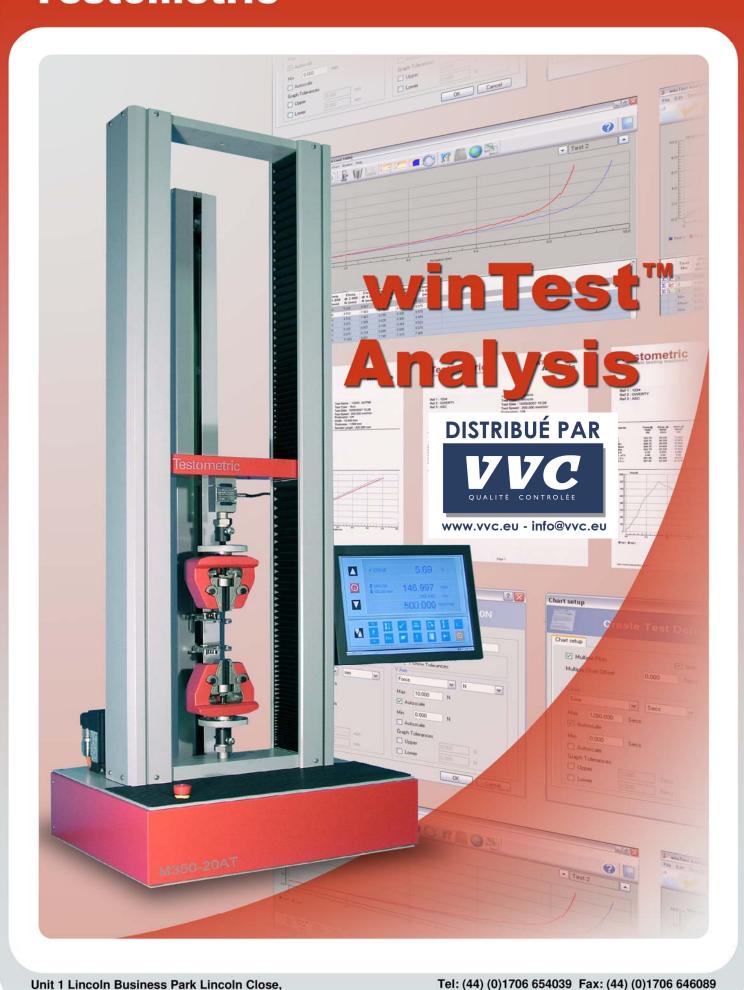
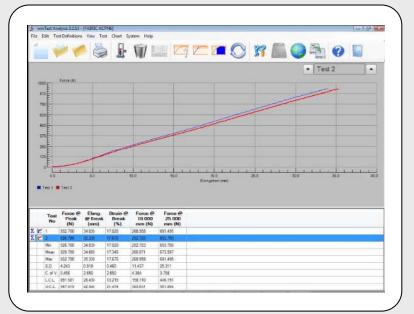
Testometric™



Email: info@testometric.co.uk website: www.testometric.co.uk



Overview

winTest Analysis universal testing software is a fully-integrated and fullycustomisable package that supports all industry standards including ISO, ASTM and BS EN specifications. Test types supported include tensile, compression, flexure, peel, tear, burst, adhesion, shear, spring, cycle, food, GRC and hardness. winTest Analysis is very flexible providing simple peak force testing or complex user-defined multistage step testing for specialised testing requirements.

Control

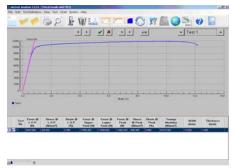
The virtual control panel allows the operator full control of all tester functions and the ability to conduct simple tests manually. The control panel provides easy access to stored test methods, system configuration and diagnostics. The stand-alone AT models also feature touch screen technology to provide a very efficient and easy-to-use interface.





Key Features

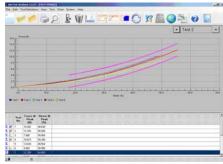
- Intuitive and simple-to-use operation and set-up.
- User-defined machine control routines.
- Configurable trigger points for sample break detection, with multiple methods.
- Configurable statistics summary for each test report.
- Customised test calculations.
- Pass/Fail tolerance bands
- Fully-configurable test reports.
- Pre-defined industry standard test methods available.
- Comprehensive library of industry standard calculations.
- Display of best fit straight line in the elastic region, for calculation of E modulus, proof stress etc.
- Transfer of test data to Excel, Word and Access (additional module)
- Import and export of test definitions in XML format.
- Golden sample, a test curve can be selected as a reference and tolerance bands can be set to provide an instant visual check that all subsequent tests are within tolerance.
- Video extensometer image processing software, including transverse and multi point measurement.
- Direct connection to customer network systems.
- Crosshead speed control selectable in either linear, load, stress or strain rate.
- Sequential calculations to take measurement at set intervals for long term tests etc.
- Custom statistics can be generated for selected calculation.
- Multi level password security.
- Audit trail to log activities performed during any use of the machine and software.
- Direct connection to Testometric control centre for on line service, software upgrades, test method download etc.
- Event marking during real time plotting of test curve.
- Retrospective analysis of all test calculations.



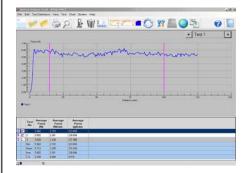
Best fit straight line in elastic region



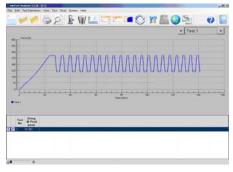
Offset proof values



Golden sample



Selected calculation regions

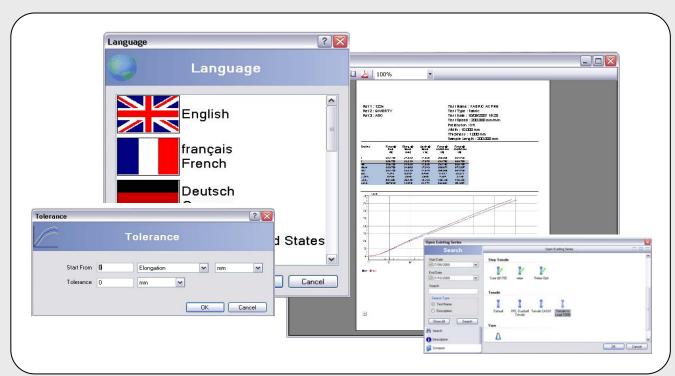


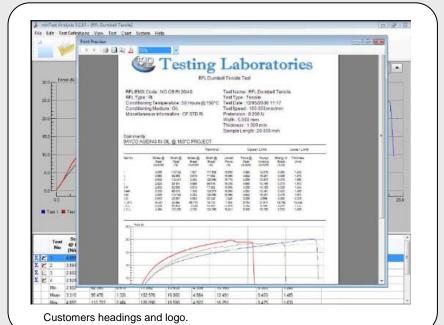
Multi stage test method

Key Features (cont.)

- User-defined header and footer on test reports.
- Export test results and raw curve data in ASCII format.
- Generate test reports in PDF format for email etc.
- Calculate results on pre-defined test regions.
- Multi-lingual support with one key press.
- Support for an extensive range of peripherals including balances, extensometers, thickness gauges, contractometers, environmental chambers etc.
- Load cell calibration check log for reference and diagnostics.
- Comments field and custom columns available for each test series and for individual tests.
- Auto-print and preview option.
- Tester system diagnostics integrated into software.
- Intergrated Help file with graphical representations of stored calculations.
- User-friendly test data backup can be configured for periodic reminders.
- Industry specific test standards installer available.





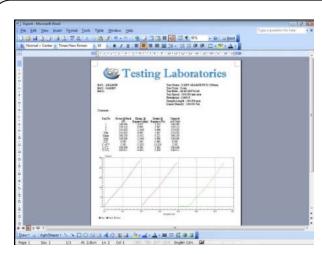


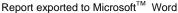
Test Reports

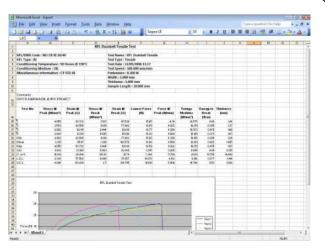
Include a company logo and company details as Header and Footer onto your test results to produce professional looking test reports.

Test reports can also be exported* to Microsoft Word and/or $\operatorname{Excel}^{\operatorname{TM}}$ to provide you with full editing features and copy and paste capability to produce presentation-quality test reports, charts or test data in spreadsheet format.

*Optional Feature



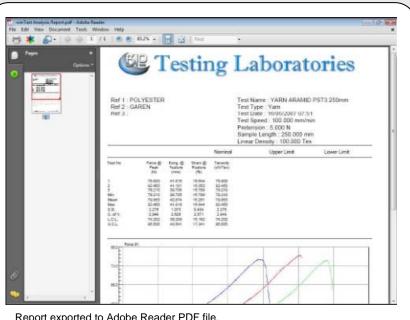




Report exported to Microsoft[™] Excel

PDF Creation and Email

Convert your test report into an $Adobe^{TM}$ PDF file so you can simply email your test report as a PDF attachment using Microsoft Outlook or other programs. You can also email your test reports as a Microsoft WordTM document or an ExcelTM file.



Report exported to Adobe Reader PDF file.

Calculations

The software includes an extensive range of calculations applicable to many industries, including all variations of force, elongation, stress and strain values and many others. Some examples are listed below.

Average Force / Width Bending Modulus Crush Force (Edge) Deflection @ 1st Collapse Deflection @ Force (Stage) Dynamic Co-eff of Friction Elongation @ Break Energy to Break Energy to Yield Initial Modulus

Force @ Peak

Force @ 1st Collapse

Force @ Elongation

Force @ Proof

Force after Stage

Lowest Force

Seam Opening Force

Seamed Strength

Static Co-eff of Friction

Strain @ Break

Strain @ Force (Load Cycle)

Strain @ Force (Return Cycle)

Strain @ Force (Stage)

Stress @ Peak

Stress @ Proof

Stress @ Strain

Stress @ Yield

T.E.A.

Tenacity

Transverse Rupture Strength

Unseamed Strength

Youngs Modulus

Chord Modulus

Tangential Modulus @ Strain

Tangential Modulus @ Stress

Secant Modulus @ Strain

Secant Modulus @ Stress

Strain @ Limit of Proportionality

Force @ Rupture

Strain @ Rupture

Average of 5 Highest Peaks

Bend. Strength @ Peak

Bursting Strength

Stress @ % Height

Force @ Time

Deflection @ Time

Secant Stiffness

Stress @ Relative Deformation

Time to Peak

Time to Failure

LOP

MOR

Strain to LOP

Strain to MOR

Ym

Average Peaks (Selected Region)

Percentage Reduction of Area

Spring Rate Between Forces

Spring Rate Between Deflections

Density

Chewiness

Fracturability

Hardness

Poisson's Ratio Plastic Strain Ratio r

Strain Hardening Exponent n

Integrated Help System

winTest Analysis has an integrated HTML Help file with added search function that includes simple explanations of machine operation, test result descriptions and graphical FlashTM representation of tests and test calculations. View graphically how specific test results are calculated to help you verify the correct selection of test calculations.

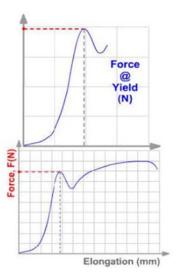
Force@Yield

Description

The force at which extension/deflection increases without a corresponding change in force (normally just beyond the elastic limit of the sample). Followed by a decrease in force.

Used by Test Type:

3 point flexural, 4 point flexural, compression, tensile



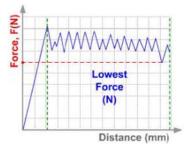
Lowest Force

Description

The lowest force after the initial peak force during a test stage.

Used by Test Type:

Fabric, peel, tear, tensile.



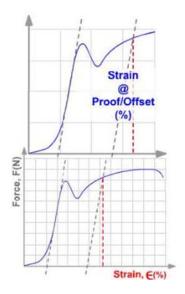
Strain@Proof

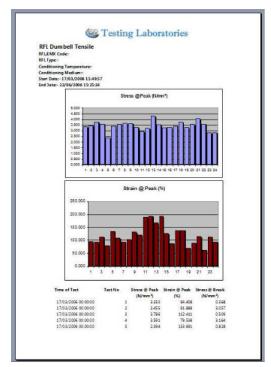
Description

The percentage elongation/deflection at which the straight-line gradient of stress against strain, when the sample is below its elastic limit (limit of proportionality) is offset by a specified fractional strain. Divided by the original cross sectional area of the sample

Used by Test Type:

3 point flexural, 4 point flexural, compression, tensile.





Trend Analysis

Export selectable test data in ASCII delimited format to Microsoft ExcelTM or other spreadsheet software to analyse test result trends over a user-specified time period or production batch. Represent test result trends graphically using the charting features ExcelTM to review trends 'at a glance' and also produce presentation-quality trend analysis reports













Standards Installer

Eliminate the need to interpret standards and manually configure the software by using pre-defined test methods based on an extensive range of industry standards. These can be installed as separate modules or installed as an industry-specific package to give you access to an impressive set of test methods and test calculations ranging from basic tensile tests to complex multistage tests. You can preview the test methods to verify and ensure the correct one has been selected before you start testing.



Industries

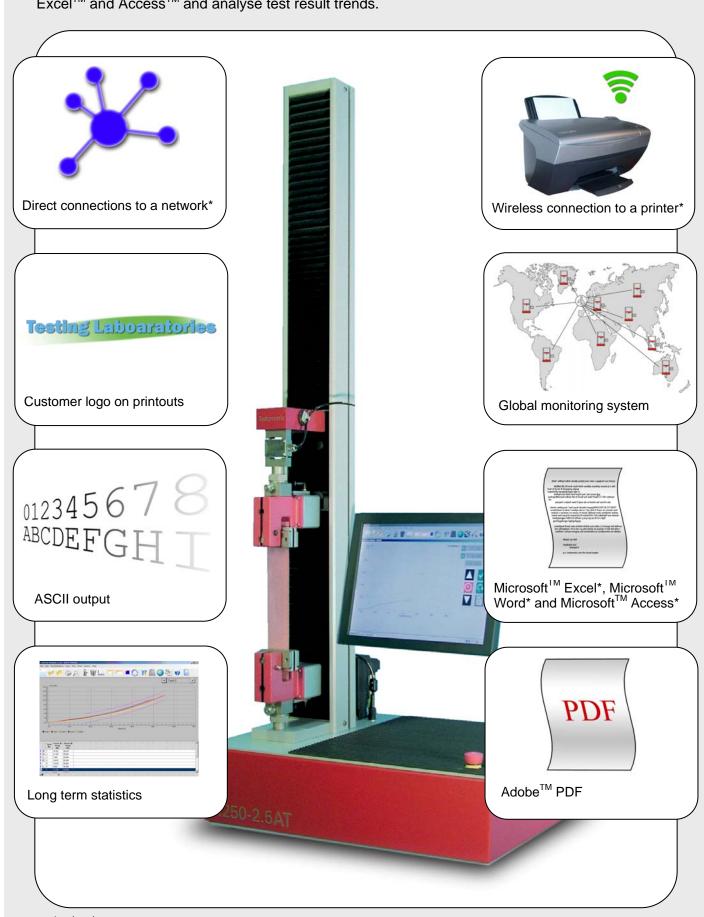
Testometric systems are in worldwide use in almost every industry for both routine quality control testing and specialised research and development.

- Aerospace
- Automotive
- Cable and Wire
- Clothing
- Adhesives
- Food
- Pipe
- Adhesive tape
- Containers
- Credit Cards
- Armaments
- Constructions
- Bedding
- Cargo Restraints
- Toys
- Concrete
- Fibre
- Metals

- Packaging
- Cord and Rope
- Elastic
- Geotextiles
- Medical
- Rubber
- GRC
- Rope
- Insulation
- Furniture
- Footwear
- Springs
- Timber
- Foam
- Wood based Panel
- Plastic film and sheet
- Corrugated board
- Yarn

Fully-integrated test environment

Manage your test data, enhance your test reports, utilise the capabilities of Microsoft WordTM, $Excel^{TM}$ and AccessTM and analyse test result trends.



*optional



Machine Features

- Touch screen display with active tester control panel and readout screen showing real time test curves calculated results and statistics. Height adjustable and fully articulated (AT Models only).
- Optional full colour printer system mounted on universal position swivel
- Fully digital testing system with high precision control and accuracy, includes automated computer control of test methods giving simplicity of operation.
- High resolution auto ranging load cells with accuracies better than +/-0.5% down to 1/1000th of the load cell capacity.
- Automatic recognition and calibration of load cells and extensometers, with instant calibration check facility.
- 800% overload capability of load cells without damage.
- High efficiency pre-loaded self cleaning ballscrews for fast, quiet testing. Fitted with sealed for life lubricated end bearings.
- Crosshead guidance system providing precise alignment and smooth running.
- Precision crosshead control via digital AC servo drive and brushless servo motor giving maintenance free operation and 4,000,000 steps per revolution positional control.
- High speed data collection systems for up to 4 synchronous channels.
- 6 I/O channels for additional devices such as extensometers, micrometers, calipers, balances etc.
- High stiffness loading frames with solid specialised steel crossheads and rigid extruded support columns with T-slots for accessory mounting.
- Overload, overtravel and impact protection.
- Telescopic covers giving additional protection for ballscrews against dust and testing debris.
- Extensive range of grips and fixtures for tension, compression, flexural, shear, peel and product testing etc.
- A wide range of contacting and non-contacting extensometers is available including laser and video models.



Processor	1 Ghz or above Pentium processor, or an AMD Opteron, AMD Athlon 64 or AMD
	Athlon XP processor.
Memory	256MB or above.
Serial Port	1 x Free serial port. At least one serial port will be required for connection to a tester.
	If other devices are to be connected, extra serial ports may be required.
Hard Disk	250MB hard disk space. This is only to install the software, the program also
	requires hard disk space to store data, this should be taken into consideration.
Display	Both computer and monitor must be capable of displaying a resolution of 1024 x 768.
CD Drive	CD/DVD drive required for installation.
	50 C 10 L 10 C
	Microsoft Windows 98 Second Edition.
	Microsoft Windows 98 Second Edition. Microsoft Windows 2000 Professional with SP4
OS System	
OS System	Microsoft Windows 2000 Professional with SP4
OS System	Microsoft Windows 2000 Professional with SP4 Microsoft Windows XP Home/Professional with SP2 (recommended)
OS System	Microsoft Windows 2000 Professional with SP4 Microsoft Windows XP Home/Professional with SP2 (recommended) Microsoft Windows Vista
,	Microsoft Windows 2000 Professional with SP4 Microsoft Windows XP Home/Professional with SP2 (recommended) Microsoft Windows Vista Microsoft Windows 7
OS System Software	Microsoft Windows 2000 Professional with SP4 Microsoft Windows XP Home/Professional with SP2 (recommended) Microsoft Windows Vista Microsoft Windows 7 Microsoft .Net Framework 2.0 Redistributable (On Disk)

















