

UNIVERSAL TESTER AT 50 kN

84-04-02-0001



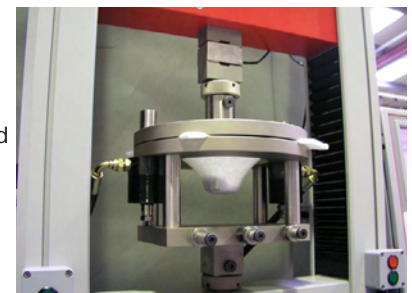
Model AT offers integrated PC with touch screen control

The 50kN is a two-column, Universal tester that can be programmed with up to 100 different test methods. These tests range from the most basic to the most sophisticated machine control, all with full graphics and statistical display. They are ideal solutions to testing problems where there is a need for precise, efficient and consistent performance.

Applications in Plastics, Cord, Textiles, Food, Rubber, Nonwovens, Packaging, Adhesives, Wire, Wood Products, Composites, Adhesives and Metals

Machine Features

- Integral PC system running full universal windows software with industry standard and customer specific test methods pre-installed.
- Touch screen display with active tester control panel and read-out screen showing real time test curves calculated results and statistics. Height adjustable and fully articulated.
- Optional full colour printer system mounted on universal position swivel arm.
- 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 $\pm 0.5\%$ 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.
- Small footprint design, giving economy of bench and floor space.
- 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, callipers, balances etc.
- High stiffness loading frames with solid specialised steel cross-heads 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.



winTest™ Analysis

Powerful Software

winTest™ Analysis universal testing software is a multi-functional and fully customizable software package that supports all industry standards including ISO, ASTM and BS EN specifications. Test specifications supported include tensile, compression, flexural, peel, tear, burst, adhesion, shear, cyclic and hardness. Additional flexibility is provided by user-defined multistage step testing for highly specialised testing requirements.



Easy to Use Touch Screen

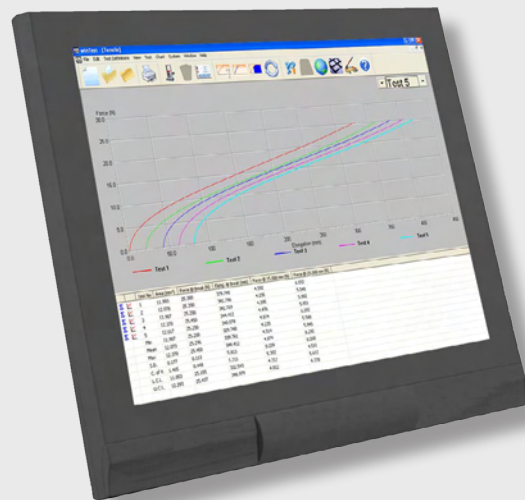
The on screen control panel allows the operator full control of all tester functions and the ability to conduct manual tests. It give easy access directly to stored test methods and many other functions. Interactive touch screen facility is available on AT models.

Enhanced Graphics

Multiple result/graphs test sheets.
Graphs with zoom facility.
Real-time graphs.
Test results using industry standard calculations.
Gradients or critical sections of graphs with movable marker.

Develop Your Own Methods

User defined machine control routines.
Customized test calculations
Auto scaling graphical displays.
Comprehensive print outs
Interface with peripheral equipment.
Graphs with configurative axes, best fit



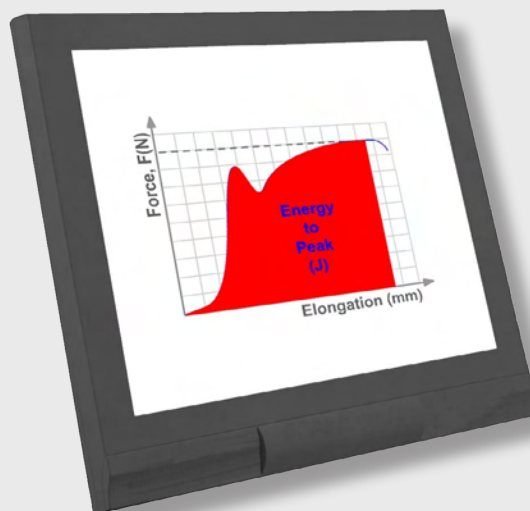


Additional Features

- Pre-defined industry standard test methods available.
- Ability to create and store unlimited number of additional test methods.
- Comprehensive stored library of industry standards calculations.
- Graphical representation of all stored calculations.
- Retrospective analysis of all test calculations.
- Selectable pass fail criteria for all calculations.
- Upper and lower limits cursors displayed on graph screen.
- Multi-lingual support with one key press.
- Support for a wide range of peripherals including balances, extensometers, thickness measurement devices, temperature chambers etc.
- Operates under Windows 98™ se, NT, 2000, XP

Analyze your data your way

Copy your results into Microsoft™ Word to produce your own presentation-quality test reports. Output your data in CSV format for importing into spreadsheets including Microsoft Excel and standard 'off-the-shelf' SPC packages and Laboratory Manager software. Convert your results into Microsoft™ Access database format. Additional modules are also available that will filter test data to produce long term statistical data that can be used for creating SPC charts for detailed trend analysis Operates under Windows™ 98 se, NT, 2000, XP



Hardware requirements

- Minimum System
- Windows 98™ Second Edition
 - 1GHz Processor
 - 128 MB RAM
 - 250 MB hard disk space. This is only to install the software, the program also requires hard disk space to store data, this should also be taken into consideration.
 - Both computer and monitor must be capable of displaying a resolution of 1024 x 768.
 - CD-ROM drive for installation.
 - 1 x Free serial port

SPECIFICATIONS

Model AT	84-04-02-0001		
Range kN	50 kN	Max speed at full load	600 mm/min
Power	1 kW	Weight kg	245 kg (540 lbs)
Vertical space	1180 mm	Number of Columns	2
Crosshead travel/ resolution	980 by 0.001 mm	PC-Controlled	Windows™ XP Software
Throat	420 mm	Operating temp degree C	-10 ° to +40 °C
Frame stiffness	200 kN/mm	Operating humidity	+10 to +90% non-condensing
Speed range	0.001 to 1000 mm/min	Machine Configuration	Table top, base cabinet available
Speed Accuracy	+/- 0.1% under stable conditions.	Data Sampling rate	Maximum 12kHz with up to 200Hz data frames
Crosshead Guidance	Linear slides integral within column	Overall dimensions W x D x H	762 mm x 505 mm x 1585 mm 30 in x 19.8 in x 62.4 in
Max force at full speed	50 kN	Electrical supply	Universal input. (de-rate max speed at 115V)
Accuracy:	+/- 0.5% of reading down to 1/1000th of load cell capacity.		
Available load cells:	5N, 10N, 20N, 100N, 250N, 500N. 1kN, 2.5kN, 3kN, 5kN, 10kN, 20kN, 25kN, 30kN, 50kN Maximum of four load cells up to capacity of machine.		

Force Measurement

Universally Calibrated, better than Grade 0.5 EN 7500-1, DIN 51221 ASTM E-4. AFNOR A03-501. Range 0.4% to 100% minimum. Automatic identification of load cell. Resolution 1 part in 500000 with autoranging. Electronic load cell protection.

Extension Measurement

Full frame length to 0.001mm. Resolution 0.001 min. Accuracy 0.01mm. Absolute, relative and auxiliary modes mm, inch and percent. Programmable extension limits.

Speed Control

Drive system temperature and current protection. Positional jog speed 0.001mm/min to maximum. Speed setting increments 0.001mm/min.

Load Frame

Rigid frame, using dual slide crosshead guidance system and rigid extruded support column. Frame stiffness 200kN/mm plus K factor facility built-in. Re-circulating ball screw with bellows. Electronic limit trips, total travel trips and customer programmable safety stops. Rubber mat front protection.

Software

Comprehensive winTest™ Analysis universal windows software covering tensile, compression, peel, shear, tear, cyclic, creep and multi stage testing. It includes a wide range of industry standard test methods and facility to create and store an unlimited number of further test methods. There is automated storage of all test data and ease of export to other software packages such as word, excel, access and SPC systems for enhanced report generation. winTest™ Reports is an enhancement to winTest Analysis to add flexibility to data analysis and statistical reporting. The package provides a report generation capability that can include long-term statistics and control charts for all specified calculations. winTest Reports™ can also be configured to display headings, titles, company logos, graphs, charts, pop-up menus and specific technical information.

Options

In addition to standard fixtures we can test your specimens in our applications laboratory and design special grips and fixtures for custom applications. Models are available with extended frames and wider throat.

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