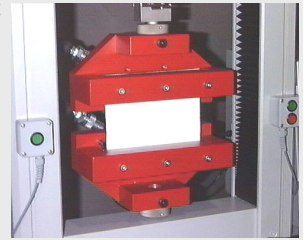




Range kN	150	Data sampling rate	Maximum 12kHz with up to 200Hz data frames.
Accuracy	+/- 0.5% of reading down to 1/1000th of load cell capacity.	Overall dimensions W x D x H	900 x 625 x 2350
Vertical space mm	1200	Weight kg	975
Crosshead travel/resolution mm	900 by 0.001	Electrical supply	380/400V 3ph
Throat mm	480	Operating temp degree C	-10 to +40
Frame stiffness kN/mm	500	Operating humidity	+10 to +90% non-condensing
Speed range mm/min	0.001 to 600	Machine Configuration	Floor standing
Speed accuracy	+/- 0.1% under stable conditions.	Number of Columns	2
Crosshead guidance	50mm Ø precision ground guide pillars.	Available load cells	5N, 10N, 20N, 100N, 250N, 500N 1kN, 2.5kN, 3kN, 5kN, 10kN, 20kN, 25kN, 30kN, 50kN, 100kN, 125kN, 150kN Maximum of four load cells up to capacity of machine.
Max force at full speed kN	150	Spigot Ø mm	50
Max speed at full load mm/min	600	Power kW	2.2

## Machine Features

- 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 1/1000<sup>th</sup> 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 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.



## 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, mm 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.

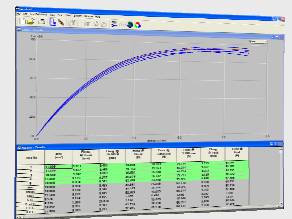
## Load Frame

Rigid frame, using dual slide crosshead guidance system and rigid extruded support column. Frame stiffness 500kN/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

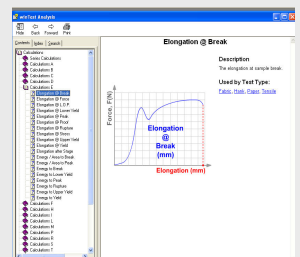
In addition to standard fixtures we can test your specimens in our applications laboratory and design special grips and fixtures for custom applications. Models are available with extended frames and wider throat.

## CE Marking

Conforms to all relevant European standards with UKAS certification.

## Environmental

Energy efficient, lead-free and fully RoHS compliant.

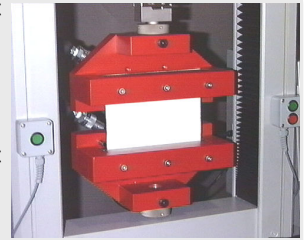




Range kN	150	Data sampling rate	Maximum 12kHz with up to 200Hz data frames.
Accuracy	+/- 0.5% of reading down to 1/1000th of load cell capacity.	Overall dimensions W x D x H Overall width does not include display.	900 x 625 x 2350
Vertical space mm	1200	Weight kg	985
Crosshead travel/resolution mm	900 by 0.001	Electrical supply	380/400V 3ph
Throat mm	480	Operating temp degree C	-10 to +40
Frame stiffness kN/mm	500	Operating humidity	+10 to +90% non-condensing
Speed range mm/min	0.001 to 600	Machine Configuration	Floor standing
Speed accuracy	+/- 0.1% under stable conditions.	Number of Columns	2
Crosshead guidance	50mm Ø precision ground guide pillars.	Available load cells	5N, 10N, 20N, 100N, 250N, 500N 1kN, 2.5kN, 3kN, 5kN, 10kN, 20kN, 25kN, 30kN, 50kN, 100kN, 125kN, 150kN Maximum of four load cells up to capacity of machine.
Max force at full speed kN	150	Spigot Ø mm	50
Max speed at full load mm/min	600	Power kW	2.2

## 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 readout 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 +/-0.5% down to 1/1000<sup>th</sup> 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 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.



## 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 500kN/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.

## CE Marking

Conforms to all relevant European standards with UKAS certification.

## Environmental

Energy efficient, lead-free and fully RoHS compliant.

