

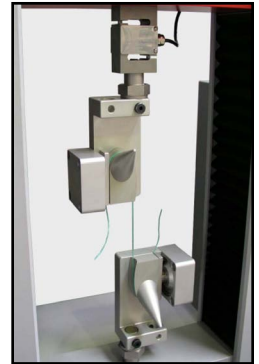
# TENSILE TESTING MACHINE

## MODEL 84-01



### Machine Features

- Aluminium alloy load frame giving high strength and stiffness.
- 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.
- 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.

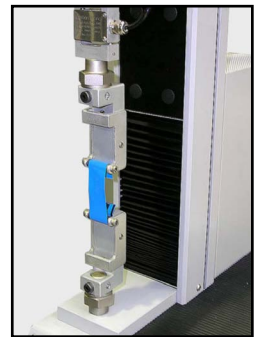


### Force Measurement

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, or 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 2.5kN/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

winTest™ Lite software, cut down version of winTest™ Analysis software with tabulated values of force and elongation, test curves and statistical analysis of test series. For more advanced testing and report generation, upgrade to the winTest™ Analysis software is available.

### Options

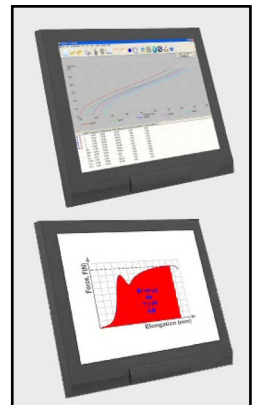
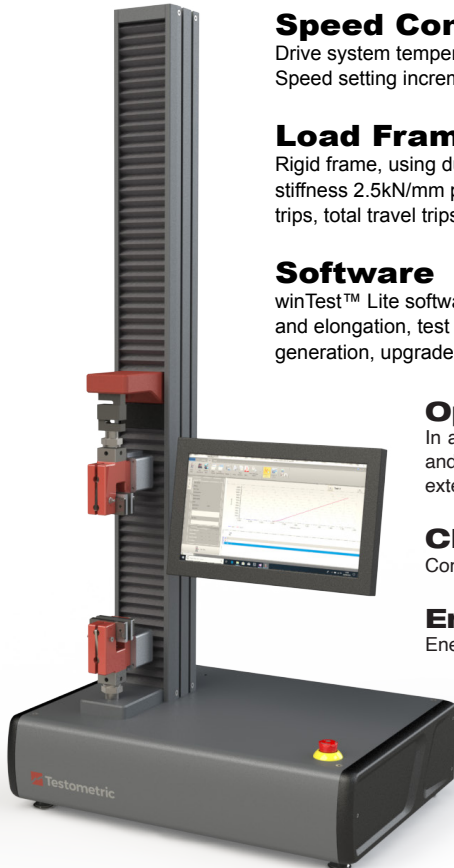
In addition to standard fixtures we can test your specimens in our applications laboratory and design special grips and fixtures for custom applications. Models are available with extended frames and wider throat.

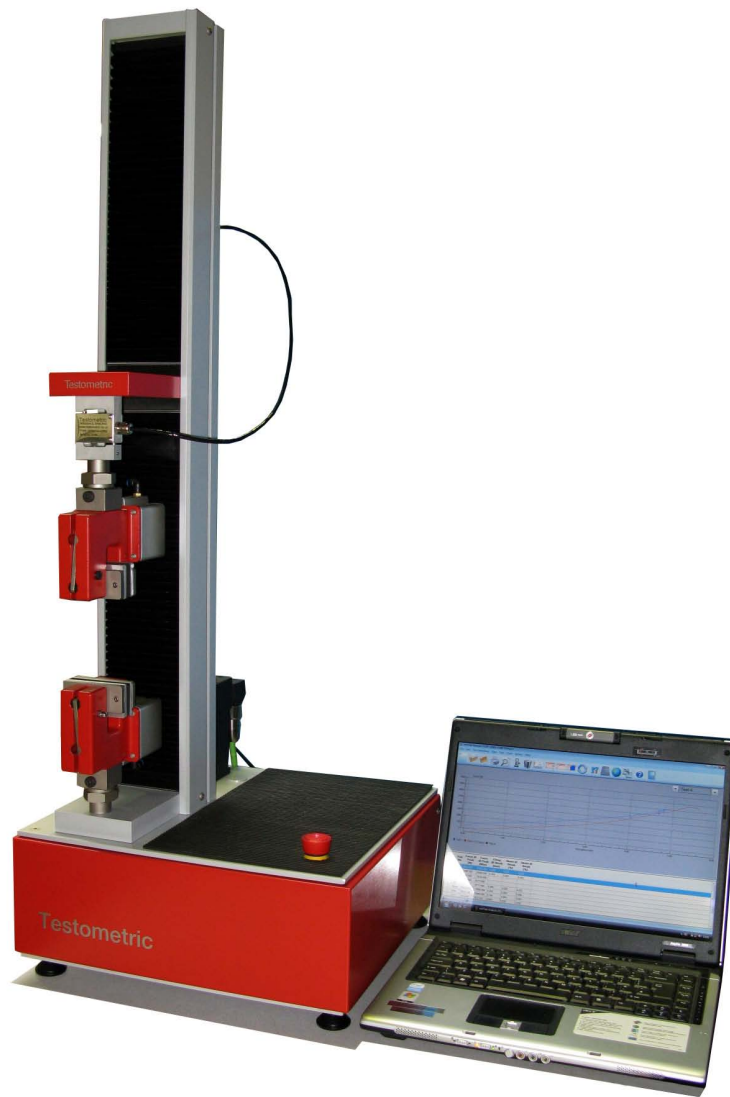
### CE Marking

Conforms to all relevant European standards with UKAS certification.

### Environmental

Energy efficient, lead-free and fully RoHS compliant.





### Model 84-01

Range kN	1	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 O x H	415 x 380 x 1130
Vertical space mm	800	Weight kg	28
Crosshead travel/resolution mm	620 by 0.001	Electrical supply	Dual input selectable 115 or 230V, 1 ph 50/60Hz.
Throat mm	200	Operating temp degree C	-10 to +40
Frame stiffness kN/mm	25	Operating humidity	+10 to +90% non-condensing
Speed range mm/min	0.001 to 2000	Machine Configuration	Table top, base cabinet available
Speed accuracy	+/- 0.1 % under stable conditions.	Number of Columns	1
Crosshead guidance	Linear slides integral within column	Available load cells	5N, 10N, 20N, 100N, 250N, 500N. 1 kN, 2.5kN, 3kN, 5kN Maximum of four load cells up to capacity of machine.
Max force at full speed kN	1	Spigot diameter mm	20
Max speed at full load mm/min	1000	Power kW	0.3

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