

eXpert 760x

Universal Testing Machines

Low force single screw electromechanical frames designed for materials and product testing.

The eXpert 760x line of compact table-top universal mini-testers is designed for users who want the flexibility of a full-size system without the high cost or space requirements. From 1KN up to 10KN (225 lbf to 2,250 lbf) capacity, the ADMET single column bench top models provide the flexibility to test biomaterials, wire, textiles, packaging, elastomers, plastics, films, foils and other materials with confidence. Compact in design, some units fit within a 16 x 12-inch space while others use just 17 x 20-inches of bench top space.

Equipped with a powerful digital closed-loop controller and display for QC/production applications, the eXpert 760x machines are affordable, and are easy to learn and apply. For more demanding applications, ADMET's popular MTESTWindows Materials Testing System can be provided for greater productivity and testing power.



eXpert 7601 and eXpert 7601 extended frame universal testing machines with 1KN (225 Lb) capacity.

- 1KN (225 lbf), 2.5KN (500 lbf), 5KN (1,125 lbf) and 10KN (2,250 lbf) Capacities.
- The eXpert 760x series machines provide the flexibility for testing high elongation materials at speeds to 1,000 mm/min (40 in/min).
- With a wide selection of grips and fixtures, the eXpert 760x testing machines are capable of performing all of your materials and product tests in tension, compression and flexure.



eXpert 7605 universal testing machine with 10KN (2,250 lbf) capacity.



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For a Total Solution to all of your Materials Testing Needs

eXpert 760x Features:

- Precision ball screw and fast acting servo motor provides controllability at very light loads and rigidity for loads to machine capacity.
- Integral operator station with emergency stop button, manual jog controls, load cell and extensometer connections, digital closed loop control and data acquisition electronics.
- Three fast acting digital controllers are available for accurate and repeatable testing.

The most economical and easy-to-use solution employs the **eP Digital Controller**. The eP is a stand-alone controller that features load and crosshead position inputs, enough memory to store 6 test methods, data analysis for measuring peak load, peak stress, load at extension, extension at load, average load, load at break, extension at break, stiffness and free height. The eP is ideal for product or QC testing and is capable of displaying pass/fail messages after each test based on user specified limits. Results can be uploaded to a PC via the on-board RS-232 serial port for import into test reports, spread sheets or database programs. Raw XY data can also be uploaded for further analysis or for generating load vs. deflection curves. The eP can be programmed to run at a constant rate until the specimen breaks, run to a load and hold for a user specified period of time, or cycle between load or position limits.



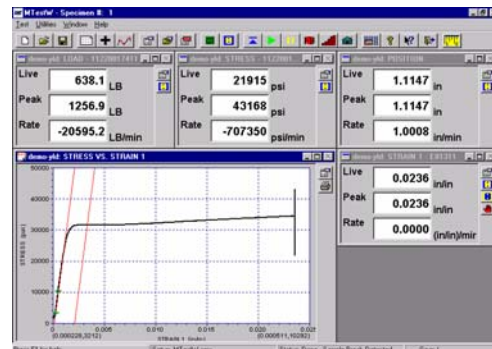
eP Digital Controller



Precise Digital Controller

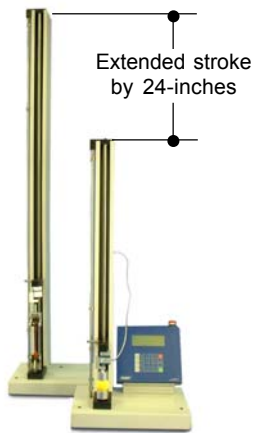
The **Precise Controller** is a stand-alone unit with live graphing capability. The Precise Controller features a keypad, an upper LCD character display for user input and indication, a lower graphical display for viewing stress vs. strain curves plus push-buttons for test start and return to home. The Precise has the ability to perform closed loop load, position or strain controlled tests to sample break or to a user defined setpoint. Test results, including date, time, specimen number, peak load, ultimate tensile strength, offset yield strength, modulus of elasticity, elongation at break, are displayed and can be printed locally or exported to a Windows based computer.

The most powerful and versatile solution features **MTESTWindows**, ADMET's popular PC/Windows based materials testing system. Standard with MTESTWindows are inputs for load, crosshead position and axial strain. A comprehensive set of monotonic, segmented or cyclic servo control profiles under load, position or strain control is available which provides the capability to perform virtually any type of test. Test reports featuring test and specimen information, results and a stress vs. strain curve can be printed or readied for email. A statistical summary for a group of like tests can also be generated. All results or raw data can be exported to a database or spreadsheet program for further review.

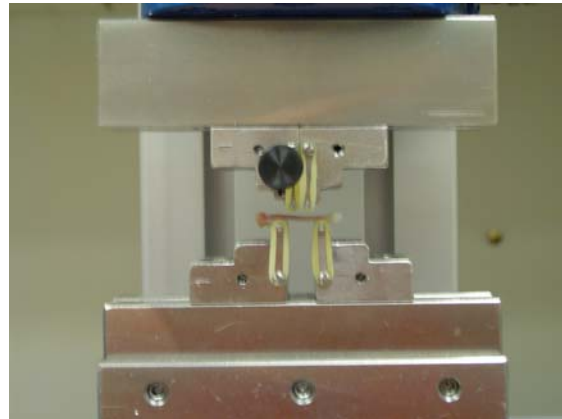


MTESTWindows Live Screen

ADMET Testing Systems - Backed by superior engineering and a willingness to work with you the customer to ensure that you get what you want.



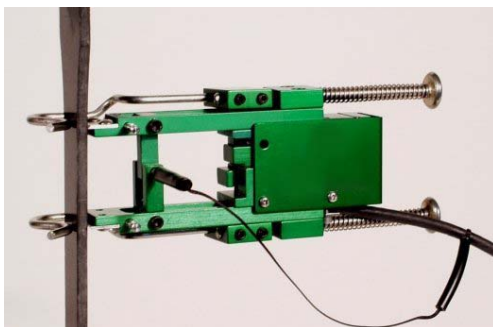
The testing machine stroke was extended by 24-inches for a customer that was performing high elongation tests on rubber.



This leading university was performing 3 point bend tests on animal bones at very low forces with complex, cyclical machine control profiles. Our solution was a testing machine equipped with the MTESTWindows Materials Testing System and a 1 lbf capacity load cell.

Extensometers and strain measuring for metals, plastics and other high elongation test specifications.

Connect to the Precise Controller or MTESTWindows Materials Testing System and perform tests to standards such as ASTM E-8, E-517 and E-646, D-638, D-790, ISO 6892 and 10275, and EN 10002 Part 1 and 10130.



Grips and fixtures for all your materials and product testing needs.



eXpert 760x Specifications

Model		7601	7602	7603	7605
		Table Top	Table Top	Table Top	Table Top
Load Capacity	lbf	225	500	1,000	2,250
	kN	1	2.5	5	10
	kgf	100	250	500	1,125
Maximum Speed	in/min	40	20	40	20
	mm/min	1,016	508	1,016	508
Minimum Speed	in/min	0.0005	0.0005	0.0001	0.0001
	mm/min	0.012	0.012	0.0025	0.0025
Maximum Force at Full Speed	lbf	175	450	1,000	2,250
	kN	0.75	2	5	10
Position Control Resolution	μ in	4.2	2.1	1.1	0.68
	μ m	0.107	0.053	0.028	0.017
Total Crosshead Travel ¹	in	30	30	34	34
	mm	762	762	864	864
Total Vertical Test Space ²	in	34	34	37.5	37.5
	mm	864	864	952	952
Lateral Test Space	in	3.4	3.4	3.4	3.4
	mm	87	87	87	87
Space Between Columns	in	--	--	--	--
	mm	--	--	--	--
Height	in	40	40	49	49
	mm	1,016	1,016	1,245	1,245
Width	in	16	16	17	17
	mm	406	406	432	432
Depth	in	12	12	19.8	19.8
	mm	305	305	503	503
Weight	lbf	45	55	200	225
	kgf	20.5	25	90	102
Maximum Power	VA	100	100	300	300
Single Phase Voltage	VAC	100-240	100-240	110,220	110,220
	Hz	50,60	50,60	50,60	50,60

Load Measurement Accuracy: +/- 0.5% of reading down to 1/100 of load cell capacity. Meets or exceeds ASTM E4, BSENISO7500-1 : 2004, DIN 51221 and JIS B7721 standards. ADMET self-identifying load cells are available.

Strain Measurement Accuracy: +/- 0.5% of reading down to 1/50 of full scale with ASTM E83 class B extensometers. Meets or exceeds ASTM E83 and BSENISO9513 : 2002 standards.

Notes:

- 1) Total Crosshead Travel is calculated without load cells, grips and fixtures. Longer strokes can be accommodated by ordering an extended column frame.
- 2) Total Vertical Test Space is the distance from the top surface of the base platen to the bottom surface of the moving crosshead, excluding load cell, grips and fixtures. Larger openings can be accommodated by ordering an extended column frame.