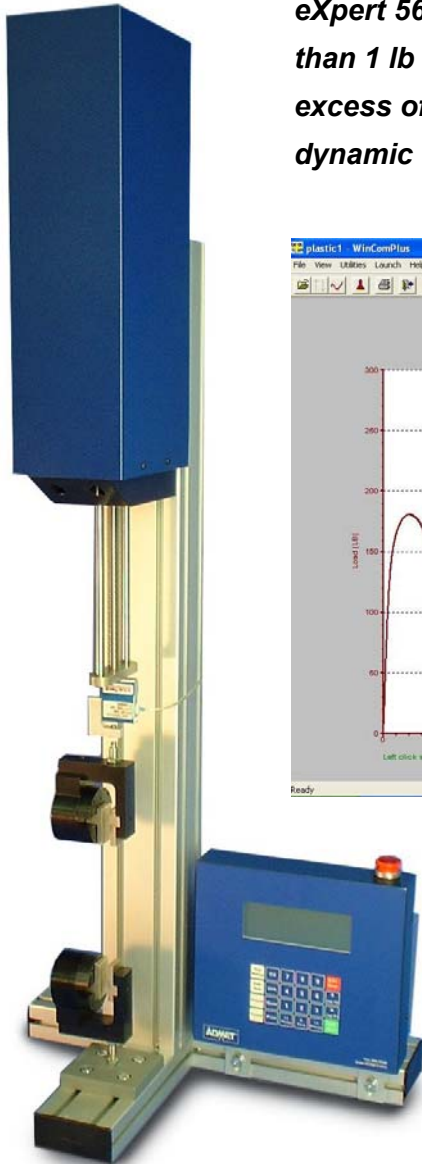
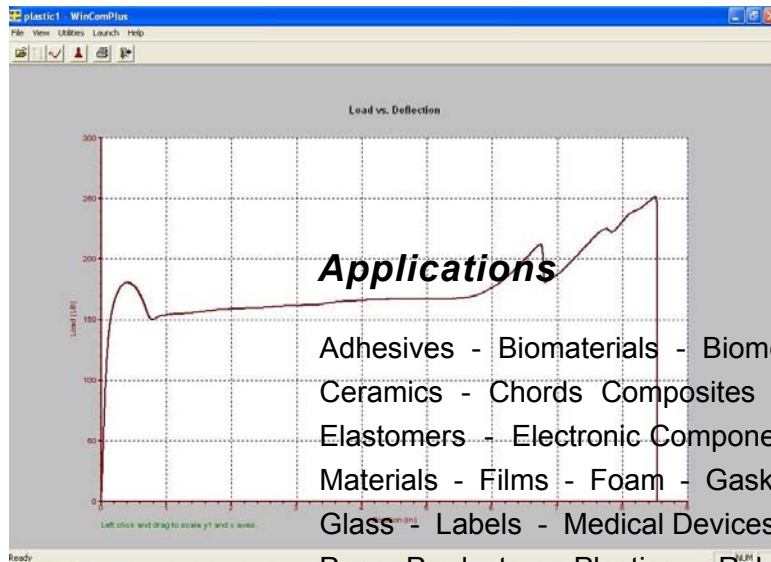


# eXpert 560x Universal Testing Machines

*The eXpert 560x series is a bold new approach to low force testing at an affordable price. The rigid frame, top acting detachable actuator, detachable electronics and several motor/drive combinations allow for a variety of machine configurations. The actuator and electronics can also be sealed from moisture and airborne particles so that it can operate maintenance free in the harshest of environments. The eXpert 560x performs tension, compression and bend tests from less than 1 lb to 1,400 lb (6.2 kN). Some models are capable of speeds in excess of 200 in/min (5,000 mm/min) and can be used in high speed dynamic testing.*



eXpert 5601 with standalone eP Digital Controller and pneumatic grips.



- Adhesives - Biomaterials - Biomechanics -
- Ceramics - Chords Composites - Education
- Elastomers - Electronic Components and
- Materials - Films - Foam - Gasket Material -
- Glass - Labels - Medical Devices - Metals -
- Paper Products - Plastics - Rubber - Seals
- Textiles - Wire - Research - Production -
- Quality Control - Harsh Environments



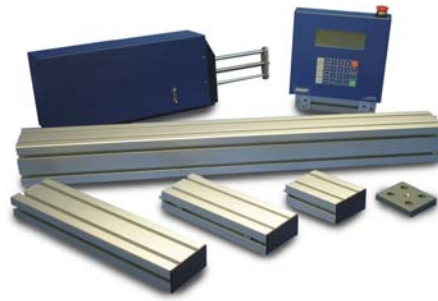
51 Morgan Drive Norwood, MA 02062  
Tel: (781) 769-0850 Fax: (781) 769-0884  
sales@ADMET.com www.ADMET.com

**For a Total Solution to all of your Materials Testing Needs**

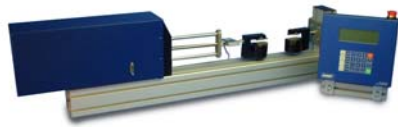
## ***A Flexible Design for a Variety of Tests***

The table top load frame with precision actuator and fast acting servo motor provides controllability at very light loads and rigidity for loads to machine capacity. The standard frame assembly can be user configured for vertical or horizontal operation. With the top-acting actuator, wet specimens can be tested without damaging the controls. Seal the actuator using the optional neoprene bellows and the machine will operate trouble free in dusty abrasive environments. For sub-zero or elevated temperature tests, mount an environmental chamber and the eXpert 560x actuator on the optional two column frame or mount the actuator on a frame of your own design.

eXpert 5601 shown with eP Digital Controller, actuator and load frame disassembled.



## ***Some of the ways the eXpert 560x can be configured.....***



eXpert 5601 in horizontal configuration with detached controller.



Optional actuator seal kit prevents dirt, dust and fibres from contaminating the actuator housing.



eXpert 5601 in vertical configuration with attached controller.



eXpert 5601 actuator mounted on a two column frame for use with a temperature chamber or larger specimens (Two column frame optional).

## ***.....plus grips and fixtures for a variety of tests.***



## Affordable Interfaces for Productive Testing

The eXpert 560x is available with either of two easy-to-learn and easy-to-use user interfaces.

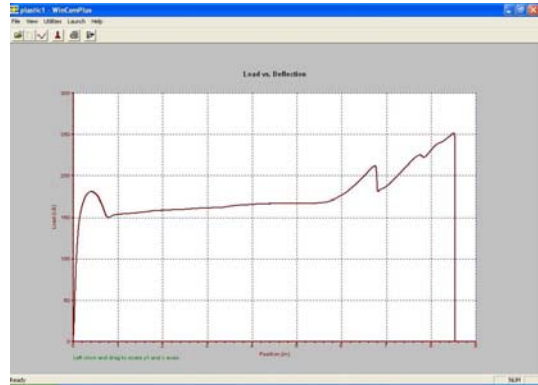
**eP Digital Controller** - Features load, position and optional strain inputs; PWM motor drive, 24-key keypad, 4 line x 20 character LCD display and emergency stop button. Keypad includes functions for test start, return to home, jog up and jog down. Ideal for product testing and quality control applications. Includes calculations for peak load, peak stress, average load, minimum load, load at deflection, deflection at load, load at break, deflection at break, stiffness and energy. Up to four password protected test methods can be stored to memory. At the push of a button, the user can quickly switch between methods for fast efficient testing. Up to 200 test results per method can be stored. Use the WinCom Live Data Communications program to view an XY test curve real-time on a computer. WinCOM Live will also display Maximum Y, Y at X1, X at Y1, Average Y between X1 and X2 and Slope of XY between Y1 and Y2; where X1, X2, Y1 and Y2 are user inputs. Load-deflection curves and test results can also be exported after each test to a Windows based computer running the WinCOM Plus Data Communications program. Users can specify a position control rate or a load control rate to a load, deflection, time or sample break. Cycling between load or deflection values can also be programmed.

**MTESTQuattro™** - ADMET's popular PC/Windows based materials testing system, the most powerful and versatile solution. Standard with MTESTQuattro™ are load, crosshead position, axial strain, transverse strain and auxiliary input channels. 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.

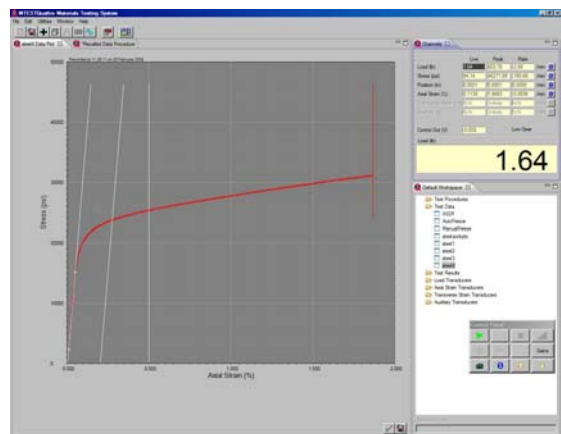
### Advanced Digital Control

Both user interfaces feature high speed 32-bit microprocessors, 20-bit resolution on analog input channels and a fast acting servo-update loop for precise control. The 20-bit resolution allows all inputs to operate on a single range, simplifying operation and calibration.

All systems perform digital closed loop control of the machine's servomotor for accurate and repeatable testing.



eP Digital Controller and load-deflection curve after being downloaded into a Windows based computer running ADMET's WinCOM Plus program.



MTESTQuattro™ Live Screen

All results or raw data can be exported to a

## eXpert 560x Specifications

Model		5601	5601QP	5602	5603	5606	5607	Two Column Frame Option
Load Capacity	lbf	225	100	500	1,000	1,400	1	Any actuator can be mounted
	kN	1	0.5	2.2	4.5	6.2	0.004	
	kgf	100	50	225	450	630	0.45	
Maximum Speed	in/min	25	180	7	20	0.9	300	--
	mm/min	635	4570	178	504	23	7,620	--
Minimum Speed	in/min	0.001	0.005	0.0005	0.001	0.00001	0.01	--
	mm/min	0.025	0.05	0.012	0.025	0.00025	0.25	--
Maximum Force at Full Speed	lbf	225	20	500	800	1,400	1	--
	kN	1	0.1	2.2	3.6	6.2	0.004	--
Position Control Resolution	μin	2.9	14.6	0.87	2.2	0.1	35	--
	μm	0.073	0.38	0.022	0.057	0.0025	0.88	--
Total Crosshead Travel	in	12	12	12	12	12	12 <sup>5</sup>	--
	mm	305	305	305	305	305	305	--
Total Vertical Test Space <sup>1</sup>	in	31	31	31	31	31	31	32
	mm	787	787	787	787	787	787	813
Lateral Test <sup>2</sup> Space	in	3.5	3.5	3.5	3.5	3.5	3.5	--
	mm	89	89	89	89	89	89	--
Space Between Columns	in	--	--	--	--	--	--	16.5
	mm	--	--	--	--	--	--	419
Height <sup>3</sup> (Vertical Frame)	in	53.3	53.3	53.3	53.3	53.3	53.3	54.3
	mm	1354	1354	1354	1354	1354	1354	1379
Width (Vertical Frame)	in	18.9	18.9	18.9	18.9	18.9	18.9	19.5
	mm	480	480	480	480	480	480	495
Depth (Vertical Frame)	in	15.1	15.1	15.1	15.1	15.1	15.1	16
	mm	384	384	384	384	384	384	406
Weight	lbf	45	45	48	70	70	45	80
	kgf	20.5	20.5	22	32	32	20.5	36
Maximum Power	VA	100	350	100	250	100	100	--
Single Phase Voltage	VAC	100-240	100-240	100-240	110,220	100-240	100-240	--
	Hz	47-63	47-63	47-63	50,60	47-63	47-63	--

**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 offered with all systems.

**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 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 when the actuator is adjusted to its highest point on the vertical column. Larger openings can be accommodated by ordering an extended column.
- 2) Larger Lateral Test Spaces can be special ordered.
- 3) Height is measured when the actuator is adjusted to its highest point on the vertical column.
- 4) Noise level measured at full speed and 1m from machine is 60db.
- 5) Tension only applications. Maximum stroke in compression is 3 in.