

eXpert 5600 Series®

Modular Universal Testing Systems

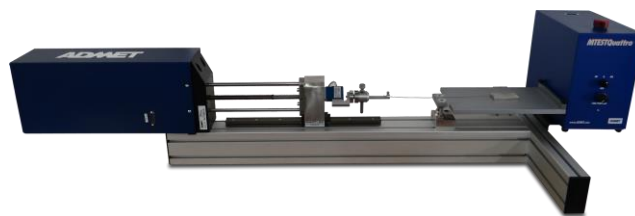


Flexible Testing Up To 8.9 Kilonewtons

The eXpert 5600 Series is ADMET's modular testing platform, designed for laboratories and production environments that need maximum flexibility without sacrificing precision or reliability. With multiple actuator, frame, and controller options, the eXpert 5600 series adapts easily to changing test requirements—making it ideal for organizations that test a wide range of materials, products, and standards. With static force capacities from 1 kN to 8.9 kN, fast-acting servo motor control, and a detachable actuator design, the eXpert 5600 delivers accurate motion for both routine quality testing and more demanding R&D applications.



Vertically-Oriented Dual-Column
Modular Testing System



Vertically- and Horizontally-Oriented Single-Column Modular Testing Systems

System Highlights

True Modular Architecture: Configure the actuator, frame, and controller to fit your application. The eXpert 5600 supports single- or dual-column frames, vertical or horizontal mounting, and future reconfiguration as future test needs evolve.

Precision Motion with Smooth Force Control: A high-performance servo drive provides consistent motion and accurate force regulation, delivering repeatable results across a wide range of materials and products.

Built for Demanding Test Environments: Industrial components, integrated safety features, and proven electromechanical design ensure reliable, long-term performance in lab and production settings.



Actuator and Frame Specifications

ACTUATOR	Unit	5601 <i>Static</i>	5602 <i>Static</i>	5603 <i>Static</i>	5604 <i>Static</i>	5605 <i>Static</i>
Continuous Force	<i>lbf</i> <i>kN</i> <i>kgf</i>	225 1.0 100	500 2.2 225	1,000 5.0 450	1,500 6.7 680	2,000 8.9 907
Maximum Speed	<i>in/min</i> <i>mm/min</i>	25 635	7 178	20 504	40 1,016	5 127
Position Resolution	μ <i>in</i> μ <i>m</i>	2.9 0.073	0.87 0.022	2.2 0.057	6.25 0.16	6.25 0.16
Single Phase Voltage	<i>VAC</i> <i>Hz</i>	110,220 50,60	110,220 50,60	110,220 50,60	110,220 50,60	110,220 50,60

FRAME	Unit	Single-Column Frame	Dual-Column Frame
Total Vertical Test Space ¹	<i>in</i> <i>mm</i>	31 787	44 1,118
Actuator Stroke	<i>in</i> <i>mm</i>	12 305	10 254
Total Lateral Test Space	<i>in</i> <i>mm</i>	3.5 89	--
Space Between Columns	<i>in</i> <i>mm</i>	--	16.5 419
Throat Depth (1 Column Frame)	<i>in</i> <i>mm</i>	3 76	--
Height	<i>in</i> <i>mm</i>	53.3 1,354	66.3 1,684
Width (Frame Only)	<i>in</i> <i>mm</i>	18.9 480	18.9 480
Depth	<i>in</i> <i>mm</i>	15.1 384	15.1 384

1: Max. total vertical test space (listed) is distance from top surface of base platen to bottom surface of moving crosshead, excl. load cell, grips and fixtures. Larger openings can be provided upon request. Vertical Test Space is adjustable by re-positioning the actuator along height of column(s) to provide the stroke required for the test specimen and fixture configuration.

Measurement Performance – ADMET offers best-in-class accuracies for repeatable and reliable testing



Load Measurement Accuracy: +/- 0.5% of reading down to 1/500 of load cell capacity. Meets or exceeds ASTM E4, BS/EN/ISO 7500-1: 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 BS/EN/ISO 9513:2002 standards.



Crosshead Position Accuracy: The greater of +/- 0.01mm or +/- 0.05% of displacement.



Test Control and Software Options

All ADMET Testing Machines can be equipped with one of two closed loop servo controllers. **MTESTQuattro®**, our most advanced testing system, is a PC-based unit that offers a wide range of flexibility in control, data acquisition, analysis, and reporting. The **eP2 Digital Controller**, a standalone touch panel unit, offers a balance between performance and simplicity. Both controllers feature 8 kHz servo update periods and programmable log rates to 1 kHz.



Interface	MTESTQuattro® (Windows Software)	eP2 (Touch Panel Controller)
Analysis	Extensive calculations library with built-in ASTM/ISO/EN specification analysis.	Standard calculation package for basic testing requirements and QC testing.
Test Methods	Use built-in or create an unlimited number of simple to complex test procedures.	Save up to six test procedures in eP2.
Reporting	Store and organize all data. View and print user customizable test reports with chart and tables.	Post test, view results on eP2 screen and send data to PC for reporting using optional GaugeSafe Software.

Accessories - Grips, environmental chambers, extensometers, baths, cutting tools and more

Systems can be equipped with a variety of grips, fixtures, environmental chambers and temperature-controlled baths to accommodate a wide range of testing requirements. For more accurate strain measurements, extensometers or deflectometers can be added to any ADMET Testing System.



Service and Training

ADMET strives to make its materials testing products powerful and easy-to-use. Free technical support is standard with the purchase of any ADMET product. We also offer an array of services to help you use your ADMET system to its fullest potential.

Available Services

- ✓ On-site installation and training.
- ✓ Custom analysis and report generation.
- ✓ Creation of, or connectivity to, your in-house database program.
- ✓ Online training with WebEx.
- ✓ On-Site ISO/IEC 17025:2017 Calibration Services.
- ✓ Preventative Maintenance Planning.
- ✓ Install, Operational Qualification (IQ/OQ) Documentation.

ISO/IEC 17025:2017 On-Site Calibration Services

ADMET provides a full range of calibration and maintenance services designed to fit your needs and budget. Our in-house calibration and service team has deep, hands-on knowledge of ADMET systems and is equipped to support you in any situation. Customers who require accredited calibrations in their laboratories or production facilities can establish calibration contracts with ADMET, ensuring automatic service at customer-defined calibration intervals. Proven maintenance programs help minimize downtime on production testing equipment, and each contract can be customized to match your specific equipment and operational requirements.

As a matter of course, we provide all calibration passwords to you at the time of your instrument or machine purchase. This enables you to choose who performs calibration and maintenance on your systems.

ASTM Calibration Standards offered:

- ASTM E4 – Tension/Compression Force Verification
- ASTM E2309 – Crosshead Displacement Verification
- ASTM E2658 – Crosshead Speed Calibration
- ASTM E83 – Extensometer Verification and Classification
- ASTM E2624 – Torque Calibration



Submit An Inquiry At:
calibration@admet.com



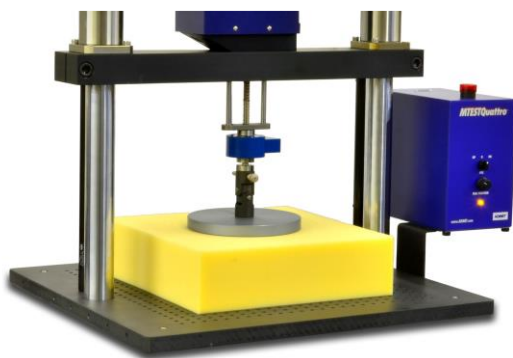
Application Gallery: eXpert 5600 Series



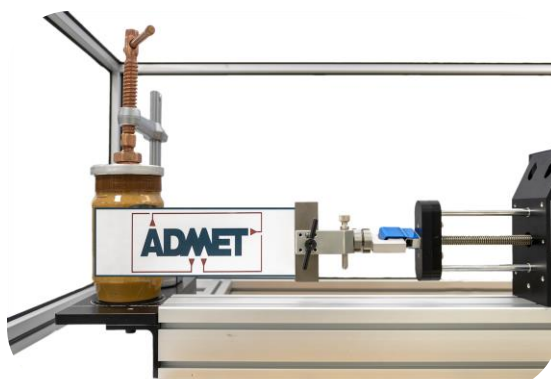
Modular eXpert 5600 Actuator For
Egg Carton Crush Testing



ASTM D903
Three Headed Peel Test
of Adhesives



ASTM D3574
Foam Compression Test



Packaging Label
Peel Testing



All ADMET systems and software are designed, engineered, and manufactured in the United States.

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Test with Certainty.

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