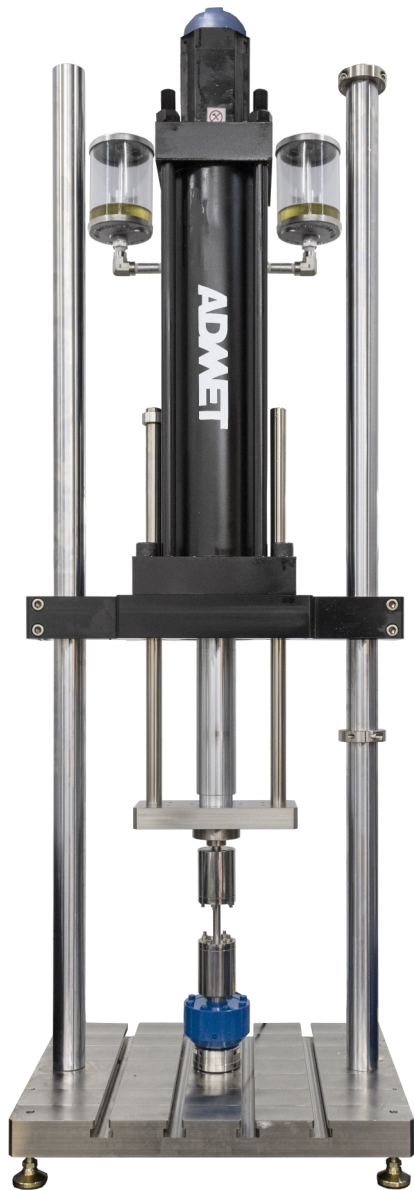


eXpert 5900 Series

Electro-Dynamic Testing Systems



Designed, Engineered, and Built in the United States



eXpert 5955 - Equipped with Electrically Isolated Fatigue grips

eXpert 5900 Series Dynamic Testing Systems are fast acting table top testers ideally suited for performing static and dynamic fatigue tests on a variety of materials and components. These machines are an **all electric design** using fast acting servo motors to achieve loading frequencies up to **20 Hz**. The robust actuator mounts to the adjustable upper crosshead of a stiff dual column frame and connects to single or three phase power.

With dynamic force capacities ranging from **4kN to 14kN**, the eXpert 5900 Series machines are used to evaluate the mechanical properties of biologic materials, composites, orthopedic fixation devices, prostheses, spinal constructs, foams, flexible circuits, elastomers, metals and more. eXpert 5900 Series test systems provide the sensitivity and resolution to test flexible materials at low forces and are **ruggedly designed** to perform **multi-million cycle durability tests**.

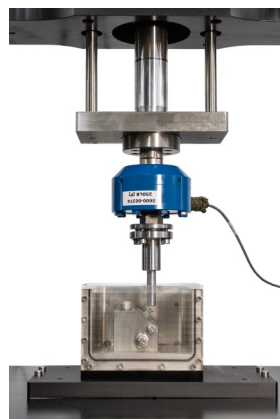
eXpert 5900 Dynamic Systems are equipped with ADMET's MTESTQuattro® Test Controller. MTESTQuattro® includes multiple channels of high resolution input, fast sampling and servo update rates for **accurate control and measurement** of static and dynamic fatigue tests. The MTESTQuattro® controller and drive system include a Hi/Low speed selector switch to best scale the control output to your application. MTESTQuattro® also includes an amplitude control algorithm which automatically adjusts the control output to meet the desired amplitude and frequency. An all inclusive analysis suite plus the ability to develop your own test procedures provides the flexibility to perform virtually any test according to **ASTM, ISO or customer test specifications**.

Example test types (but are not limited to) include:

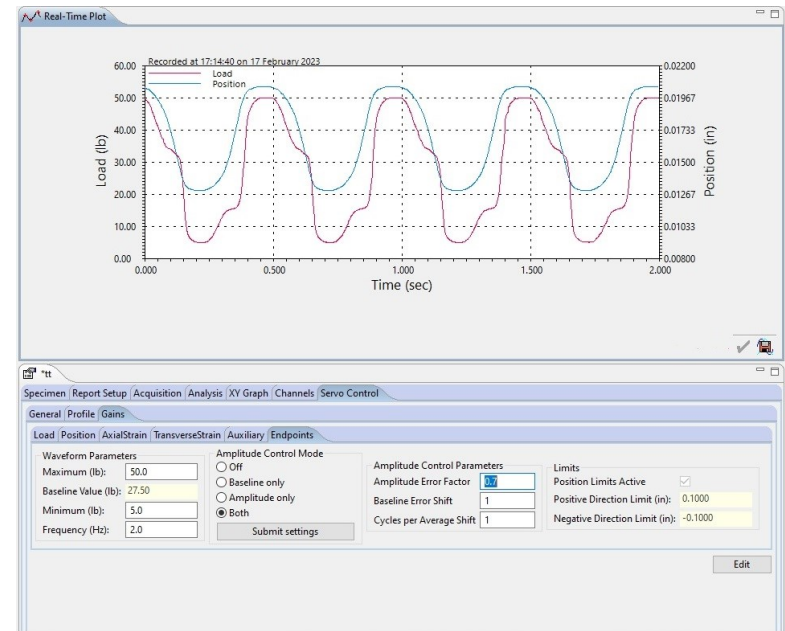
- **ASTM D3574:** Flexible Cellular Foam
- **ASTM E466:** Constant Amplitude Fatigue Tests
- **ASTM E606:** Strain-Controlled Fatigue Testing
- **ASTM F384:** Orthopedic Fracture Fixation Devices
- **ASTM F1717:** Spinal Implant Constructs
- **ASTM F2077:** Intervertebral Body Fusion Devices
- **ISO 14801:** Endosseous Dental Implants

- **Fatigue Testing** of Bone, Biomaterials used in Fracture Repair, and Tissue

- **Durability Testing** of Polymers, Elastomers, Thin Films and Textiles



ISO 14801 Test Fixture with Heated Fluid Bath



MTESTQuattro® Load & Displacement vs. Time Curves during ISO14801 Fatigue Test of a Dental Implant. Image includes Amplitude Control menu.

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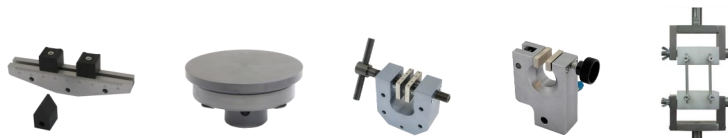


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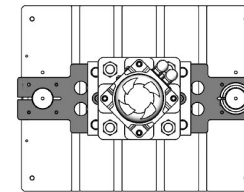
Model		5950	5951	5952	5955
Continuous Force	lbf	225	500	1,125	2,250
	kN	1	2.2	5	10
	kgf	100	225	500	1,000
Dynamic Force (3 sec)	lbf	500	900	1,800	3,150
	kN	2.2	4	8	14
	kgf	225	400	800	1,400
Maximum Power	VA	800	1,760	2,800	3,600
Common Specifications					
Actuator Stroke		6 in (152 mm) Standard, 10 in (254 mm) Optional			
Maximum Speed		Speed and frequency matched to meet testing requirements			
Position Resolution		0.00005 in / 0.0012 mm			
Force Accuracy		+/- 0.5% of indicated load from 1% to 100% of load cell capacity			
Power		220 VAC , Single or Three Phase, 50,60 Hz			
Base Connections		M6 x 1 RH Center Thread, 4 X M6 on 36mm BC, 4 X M6 on 120mm BC, 4 X M8 T-nut on 100mm Ctr			

Accessories

Heated fluid baths are offered to facilitate testing in vitro. Also available are **Environmental chambers** for testing at sub-zero or elevated temperatures; custom fixturing specific to an **ASTM** or **ISO specification**; contact and non-contacting **extensometers**; and alignment couplings for **ASTM E1012** compliance. A **full line of standard ADMET grips and fixtures** can be viewed from our online catalog at www.ADMET.com.



eXpert 5900 Series Key Dimensions (in)



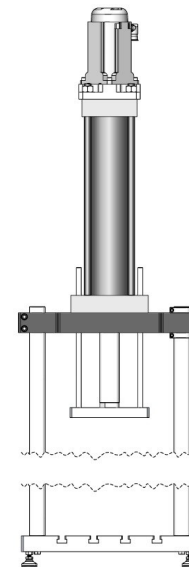
Baseplate: 23in/584mm W x 17.5in/444mm Dp
ADMET offers several baseplate designs to accommodate a wide range of testing applications.

Training and Service

ADMET testing systems are easy to learn and use. We provide introductory on-line training in addition to on-site training. We provide free phone and email product support through the life of the system.

Calibration

Customers can setup calibration contracts with ADMET or a private third party. All services meet ISO/IEC Guide 17025:2017.



Column Separation: 16.25in / 412mm Standard

Wider separations are available to accommodate a full range of product tests.

Vertical Test Space: 38in / 965mm Standard

Optional extended vertical test space to accommodate environmental chambers or custom fixturing is also available.

Overall Height: 75in / 1905mm Actuator adjusted to highest point on test frame.

1-800-667-3220



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Rev A