

eXpert 3930 Series Electrodynamic Testing Systems

Speed, Precision and Durability.

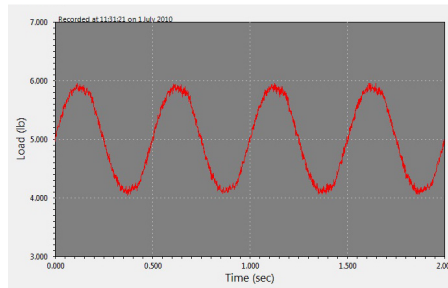
eXpert 3930 Series Electrodynamic Testing Systems are fast acting table top testers ideally suited for performing static and dynamic fatigue tests (up to 20 Hz) on a variety of materials and components. These electrodynamic machines employ a linear electric motor mounted to an adjustable upper crosshead of a stiff dual column frame. The all electric electrodynamic actuator connects to single phase power; resulting in a clean low maintenance solution. With dynamic force capacities ranging from 1.3kN to 4.3kN, the eXpert 3930 Series machines are used to evaluate the mechanical properties of biologic materials, composites, orthopedic fixation devices, prostheses, spinal constructs, stents, dental implants, elastomeric materials and more. eXpert 3930 Series test systems provide the sensitivity and resolution to accurately test soft biologic materials at low forces and are robust and rugged able to perform multi-million cycle durability tests. Example test types include:

- **ASTM F384:** Test Methods for Metallic Angled Orthopedic Fracture Fixation Devices
- **ASTM F1717:** Test Methods for Spinal Implant Constructs
- **ASTM F2077:** Test Methods For Intervertebral Body Fusion Devices
- **ISO 14801:** Dynamic Fatigue Test for Endosseous Dental Implants
- Fatigue Testing of Bone, Biomaterials used in Fracture Repair, and Tissue
- Durability Testing of Polymers, Elastomers, Thin Films and Textiles



Precise Control

Controller	MTESTQuattro®
Interface	Windows Software
Analysis	Extensive calculations library w/ built-in ASTM/ISO specification analysis.
Test Procedures	Use built-in or create an unlimited number of simple to complex procedures.
Reporting	Store and organize all data. View and print user customizable test reports with chart and tables.

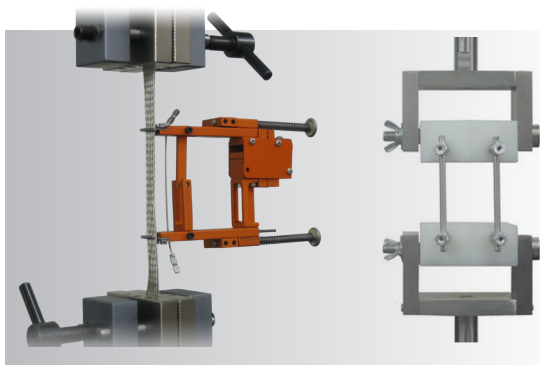


MTESTQuattro® dynamic test waveform.

eXpert 3930 Dynamic Systems are equipped with ADMET's MTEST-Quattro® Test Controller. MTEST-Quattro® includes multiple channels of high resolution input, fast sampling and servo update rates for accurate control and measurement of static and dynamic fatigue tests. 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.

Accessories

Heated fluid baths are offered to facilitate testing in vitro. Environmental chambers are available for testing at sub-zero or elevated temperatures. Custom fixturing specific to an ASTM or ISO specification is also available. Both contact and non-contacting extensometers can be provided for improved strain measurement. In addition, ADMET offers a full line of standard grips and fixtures which can be viewed from our online catalog at www.admet.com.



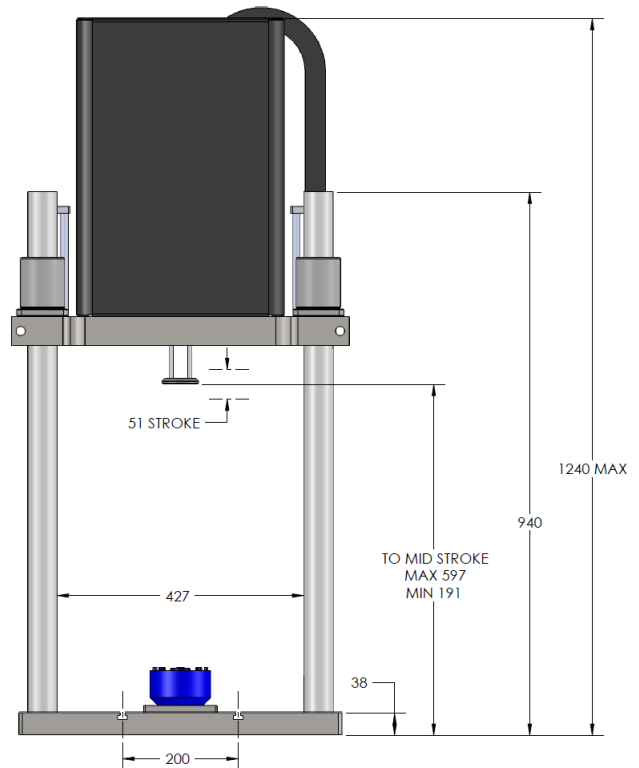
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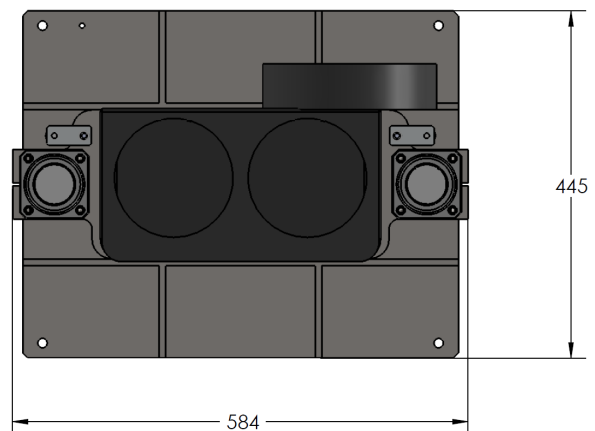
Model		3931	3933	3934
Continuous Force	kN	0.71	1.4	2.0
	lbf	159	314	449
Dynamic Force (3 sec)	kN	1.3	3.0	4.3
	lbf	292	674	966

Common Specifications	
Stroke	50 mm / 2 in (Longer Strokes Available)
Position Resolution	1 μ m / 39 μ in
Force Accuracy	+/- 0.5% of indicated load from 1% to 100% of load cell capacity
Dynamic Capability	20 Hz
Max Vertical Opening	559 mm / 22 in (Between Base & X-head)
Vertical Opening Adjustment	Manual lever clamps. Crosshead counter balanced for easy vertical adjustment.
Power	220 VAC 1 ϕ / 40 A max 50/60Hz
Cooling	Forced Air
Actuator Connections	M6 x 1 RH Center Thread 4X M6 on 36mm BC
Base Connections	M6 x1 RH Center Thread 4X M6 on 36mm BC 4X M6 on 120mm BC 4X M8 T-nut on 100mm Ctr

eXpert 3930 Series Key Dimensions (mm)



Elevation View



Plan View

Service and Calibration

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. ADMET's on-site service and calibration team includes over 100 individuals in over 40 locations in the USA.

Calibration - Customers can setup calibration contracts with ADMET or a private third party. All services meet ISO/IEC Guide 17025 and ANSI/NCSL Z540.