

## A WORLD OF SOLUTIONS



## TESTING YOUR LIMITS

We design and build test equipment to challenge the limits of our customers' products. Our chambers are uniquely engineered to test temperature, humidity, altitude, and vibration. Used by many of the world's top brands, our equipment tests products for the automotive, space, defense, electronic, renewable energy, and many other leading industries.

## SE-Series Chambers

Performs rapid temperature and humidity change rates.

Identifies design problems prior to manufacturing.

Humidity module option allows programmable humidity for product testing.

Wide range of chamber and compressor sizes to meet specific testing needs.

### Other Features & Benefits

*Windows*®-based 8800 programmer controller.

USB connections for fast and convenient data storage and transfer

Ethernet compatibility for network-wide accessibility

Enhanced data acquisition capabilities (*optional*)

Patented baffle design for optimized air flow

Patented universal port (*optional*)



## S-Series Chambers

Performs product testing against temperature and humidity extremes.

### Benchtop Chambers

Small products; ideal for limited space

### Floor Models

Larger products; casters for mobility

### Other Features & Benefits

*Windows*®-based 8800 programmer controller.

USB connections for fast and convenient data storage and transfer

Ethernet compatibility for network-wide accessibility

Hermetically sealed compressors

Self-contained refrigeration system



## Electrodynamic Vibration Systems

Programmed to accurately simulate and control random, sine, and shock profiles.

Can be used for stand-alone vibration testing or integrated with an environmental test chamber.

### Other Features & Benefits

*Windows*®-based vibration controller

Superior acceleration, velocity, and shock performance

Turn-key system

Multiple lightweight, rugged armature sizes

Air-cooled amplifier



## Accelerated Stress Testing (AST)

Extreme temperature change rates, coupled with repetitive shock, multi-axis vibration, determine product design and operating limits.

Multiple test options include HALT, HASS, FAST, and more.

Patented Impactor Monitor System ensures efficiency of the solenoid-controlled impactors.

### Other Features & Benefits

*Windows*®-based 8800 programmer controller.

Exclusive synchronized shock vibration mode

High-volume air flow

Mechanical or liquid nitrogen cooled options

Patented Multi-Zone vibration control to ensure consistency



**EXTREME AST**

## TestTools by Thermotron

Monitor your electronic product while it's being tested and gather real-time data as environmental stresses occur.

View and export all data on one simple chart.

### Other Features & Benefits

A stand-alone chassis houses all tools for operation.

Modular design allows for additional cards and channels.

Set-up wizards make the software easy to program.



**TestTools**  
by THERMOTRON

## AGREE Chambers

Combine thermal and/or humidity stresses with vibration for testing flexibility. Create multi-condition testing environments.

### Other Features & Benefits

*Windows®-based 8800 programmer controller.*  
Fast thermal change rates  
Full humidity (*optional*)  
Removable chamber floor  
Thermotron-designed cascade refrigeration system



## Walk-In Chambers

Provides testing for large components, assemblies, and finished products.

Various standard room configurations and conditioning equipment are available.

### Other Features & Benefits

*Windows®-based 8800 programmer controller.*  
Solid, welded construction for durability  
Low humidity system (*optional*)  
Paneled construction for size and configuration flexibility  
Pre-packaged standard conditioning modules



## Thermal Shock Chambers

Perfect for rapid and extreme temperature-change testing.

Allows for separately controlled hot and cold zones.

### Other Features & Benefits

*Windows®-based 8825 programmer controller.*  
Guaranteed soak cycles  
Independent cold control  
Reliable transfer mechanism



## Altitude Chambers

Combines temperature and altitude with optional humidity for simultaneous environment testing.

Subjects products to various altitudes, up to 100,000 feet.

Complete customized solutions.

### Other Features & Benefits

Commercial aerospace and military  
Automotive tests for mountainous conditions  
Computers, electronics, and packaging materials shipped via air freight



## Speciality & Custom Solutions

Custom chambers designed and built to suit your specific needs.

Our specialty chambers include solar panel and lithium-ion battery testing, automated corrosion, moisture, sand and dust chambers, and many more.

We develop solutions for cytogenetic slide drying tests and accuracy testing of inhalers and nebulizers.

### Other Features & Benefits

Ultra-low temperature refrigeration  
Dedicated software  
Application-specific instrumentation



# Your Custom Solutions

Our goal is for you to effectively test your product so you become the absolute best in your industry. To accomplish that, we are dedicated to personalizing our equipment to meet your unique testing needs.



## » AST-165

The AST-165 is the tallest HALT/HASS chamber ever made by Thermotron. Standing at 14 feet, it accommodates an extremely tall product, tested by a power supply automation company.



## » DSX-8000 with Dual Sliptable

The DSX-8000 was purchased by an automotive subcontractor. The large sliptable interfaces with an environmental test chamber, while the small sliptable is used to meet the 100g/11ms automotive shock specification horizontally with a 100 pound payload. This design provided a versatile and cost-effective piece of equipment for the company.

## Your Service

You'll have the best before- and after-service care in the industry. Thermotron has the largest, best equipped, and most highly-trained direct sales representatives, application engineers, and field service engineers to help throughout the entire purchasing process. After your installation, you'll receive options for preventive maintenance, along with everything from yearly service seminar training to parts, worldwide service centers, and technical support. Expert assistance will be available throughout the life of your equipment.

## Your Promise

We promise to meet and exceed your expectations by continually growing and improving our company. As industries evolve and specifications change, our customers face new challenges. We'll help meet your challenges by providing quality, state-of-the-art equipment. Quality. Trust. Confidence. Build yours with a Thermotron.

## Areas of Expertise

We're proud to be a single-source systems supplier to a variety of industries. Our main areas of expertise include:

- Application-specific software
- Cabinet design and fabrication
- Combined environment testing
- Control system development
- Customization
- Direct sales, product support, and service
- Functional test equipment integration
- High-performance refrigeration
- PCB design, layout, and production
- Vibration system design

## Serving Worldwide Industries

For more than 55 years we've had the privilege of working with, and developing solutions for, many companies.

Industries we serve include:

- Aerospace and Space
- Appliance
- Automotive
- Computer
- Contract Manufacturers
- Defense and Military
- Electronics
- Lithium-Ion Battery
- Medical Device
- Security
- Semiconductor
- Solar and Wind Energy
- Smart Grid
- Telecommunications

## Organizations

We are proud to offer equipment that meets many industry standards including SAE, IEC, JEDEC, ASTM, and MIL-STD.



ISO 9001:2015<sup>1</sup>



<sup>1</sup> The Thermotron U.K. quality system is registered separately to ISO 9001: 2015 by British Standards Institution (BSI) certificate number FS 77545.

<sup>2</sup> The Thermotron accredited laboratory is located in Holland, MI, USA. All factory and field calibrations are controlled at this laboratory.

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