### **Comprehensive Service Network**

When you work with Thermotron, you will be supported by the largest, best equipped, and most highly trained service force in the test equipment business. A network of highly qualified, direct sales representatives, field service and application engineers provide support before and after the sale. From preventive maintenance and customer service seminars to our responsive parts department, our worldwide service centers and technical support staff provide expert assistance throughout the life of your equipment.

#### **Our Promise**

Here at Thermotron we use the precepts of quality to grow and continuously improve our company and employees in order to meet or exceed the expectations of our customers. This simple truth is at the heart of everything we do. As industries evolve and specifications change, our customers face new challenges. By helping customers meet those challenges, we grow. Thermotron's record of achievement comes from an unwavering focus on a few simple goals: identify customer needs, produce superior testing equipment and offer comprehensive service.

### **Our Core Competencies**

Thermotron prides itself on being a single-source systems supplier to a variety of industries. Our core competencies include:

- High Performance Refrigeration
- Combined Environment Testing
- Vibration
- PCB Design, Layout & Production
- Control System Development
- Application Specific Software
- Direct Sales, Product Support and Service
- Cabinet Design & Fabrication
- Customization
- Functional Test Equipment Integration

### Markets We Serve

Over our 40+ year history, we have had the privilege of working with companies from a range of industries developing testing equipment for a variety of testing requirements. Here are some of the industries we continue to serve:

- Aerospace
- Appliance
- Automotive
- Computer
- Contract Manufacturers
- Defense/Military
- Electronics
- Energy
- Medical Device
- Security
- Semiconductor
- **■** Telecommunications

### **Organizations We're Part Of**

Thermotron is pleased to offer equipment meeting many industry standards including SAE, IEC, JEDEC, ASTM and MIL-STD. We are proud to be certified by the following organizations:







## THERMOTRON<sub>®</sub>

#### THERMOTRON INDUSTRIES

291 Kollen Park Drive Holland, Michigan, USA 49423 Mktg: (616) 393-4580 Main: (616) 392-1491 Fax: (616) 392-5643 E-mail: info@thermotron.com

#### Visit us on the Internet

www.thermotron.com

THERMOTRON INDUSTRIES, U.K.

Newton House
Winch Road
Kent Science Park
Sittingbourne, Kent
ME9 8EF England
Phone: 01795 436333
Fax: 01795 436777
Email: sales@thermotron.co.uk

FORM NO. TO-000 10/07 ©THERMOTRON INDUSTRIES PRINTED IN USA

# **THERMOTRON**



### A WORLD OF TEST SOLUTIONS

### **Experience That Counts**

Since shipping our first chamber in 1962, Thermotron has evolved into one of the world's premier suppliers of environmental testing, screening and simulation equipment, vibration and functional test equipment and integration. Headquartered in Holland, Michigan, Thermotron provides a wide range of environmental test solutions capable of temperature and humidity cycling, thermal shock, product stress screening, accelerated stress testing systems for HALT and HASS, combined environmental testing, controlled humidity exposure, altitude simulation and vibration testing.

#### **SE-SERIES CHAMBERS**

- Performs rapid product temperature change rates.
- Locates design problems prior to manufacturing.
- Humidity Module option allows programmable humidity for product or packaging testing.

#### **Other Features & Benefits:**

- Optional Universal port
- ■8800 Touch Screen Programmer Controller
- Data Acquisition capabilities
- Ethernet compatibility to network-wide accessibility
- USB Connections for fast and convenient data storage and transfer
- Optimized Air Flow
- Range of compressor sizes

### STANDARD SERIES CHAMBERS

- Performs testing of products against temperature and humidity extremes.
- Variety of Sizes:
  - Benchtop small products, limited space.
  - Floor Models larger products, casters for mobility.

#### **Other Features & Benefits:**

- 3800 Programmer Controller
- Side access ports
- Hermetically sealed compressors
- Self-contained refrigerator system

### **ACCELERATED STRESS TESTING (AST)**

- Uses extreme temperature change rates and repetitive shock multi-axis vibration to determine product design and operating limits.
- Multiple test options including HALT, HASS, FAST and more.

#### **Other Features & Benefits:**

- Mechanical or Liquid Nitrogen Cooled options
- High Volume Air Flow
- Multi-axis repetitive shock vibration system

### **ELECTRODYNAMIC VIBRATION TESTING**

- Programmed to accurately simulate and control random, sine and shock profiles.
- Can be used for standalone vibration testing or integrated with an environmental test chamber.

#### **Other Features & Benefits:**

- Superior Acceleration, Velocity and Shock Performance
- Turn Key System
- Multiple Lightweight, Rugged Armature Sizes
- Air-Cooled Amplifier
- PC-Based Vibration Control

### **AGREE CHAMBERS**

- Combine thermal and humidity stresses with vibration for flexibility in testing.
- Able to create multi-condition testing environments.

#### **Other Features & Benefits:**

- Thermotron-Designed Cascade Refrigeration System
- Removable Chamber floor
- ■8800 Programmer Controller
- Fast Thermal Change Rates and Full Humidity











### **WALK-IN CHAMBERS**

- Provides testing for large components, assemblies and finished products.
- Variety of standard room configurations and types of conditioning equipment.

#### **Other Features & Benefits:**

- Paneled construction allows for flexibility in size and configuration
- Solid, welded construction for durability
- Optional low humidity system
- Pre-packaged Standard Conditioning Modules



#### THERMAL SHOCK CHAMBERS

- Perfect for testing requiring rapid and extreme temperature changes.
- Allows for separately controlled hot and cold zones.

#### **Other Features & Benefits:**

- Independent cold control
- ■8825 microprocessor-based Programmer Controller
- Guaranteed soak cycles
- Reliable transfer mechanism



### **ENVIRONMENTAL STRESS SCREENING (ESS)**

- Generates fast product temperature change rates, high velocity and uniform airflow.
- Can be used as part of manufacturing process or new product qualification testing.

#### **Other Features & Benefits:**

- Maximized airflow over product surface
- Heavy Duty Construction
- Rear Access Area

## **SPECIALITY & CUSTOM CHAMBERS**

- If our standard equipment doesn't suit your testing needs, we will gladly custom design a chamber for you.
- Our specialty chambers include altitude, automated corrosion, moisture, sand and dust chambers and many more.

#### **Other Features & Benefits:**

- Ultra-low temperature refrigeration
- Dedicated software
- Application specific instrumentation

### **PRODUCT TEST SOLUTIONS**

■ Provides turnkey test systems including system integration, automatic test systems, functional test systems, or a unique custom design.

### **Solutions for a variety of applications:**

- Burn-In Test System
- Continuity Monitor System
- DC-to-DC Converter Testing
- **■** Electromigration Testing
- Functional and Parametric Testing
- Mechanical Fixturing
- Programmable Load Modules
- Surface Insulation Resistance
- Solder Joint Reliability Testing

