



# TESTING SERVICES

Environmental/Climatic Testing  
Shock & Vibration Testing

Ohio and Michigan Laboratories

**CSZ**  
Cincinnati Sub-Zero

# CSZ Testing Services is an innovative and experienced test facility with dependability and confidentiality you can rely on.

## Testing Capabilities

### ENVIRONMENTAL

- High and Low Temperature
- Temperature/Humidity
- Combined Temperature/Humidity/Vibration
- Thermal Shock
- Burn-in
- Altitude
- Salt Spray/Cyclic Corrosion
- Accelerated Aging
- Stability

### HALT/HASS

- Rapid Thermal Cycling
- Multi-Axis Vibration

### DYNAMIC VIBRATION

- Random, Sinusoidal, Mixed Mode
- Transportation and Packaging
- Gunfire
- NAVMAT Screening
- Combined Vibration/Temperature/Humidity

### SHOCK

- Half Sine
- Sawtooth
- Squarewave
- Pyrotechnic
- SRS
- Analog Capture

### RADIATOR TESTING

- Temperature Cycling
- Fluid Pressure
- Vibration Testing
- SAE J1542

## Your Laboratory Testing Partner

Companies in a diverse group of industries rely on CSZ Testing Services and our team of experienced test personnel to deliver high-quality environmental, climatic, shock, and vibration testing services—fast. The findings are used to improve design and/or production processes, to reduce after-sales service, and/or to ensure product quality and reliability.

CSZ Testing Services, established in 1988 as ESSC Test Laboratory, is a division of Cincinnati Sub-Zero (CSZ) Products, Inc., a leading manufacturer of environmental chambers. As an expert in the testing process and equipment field, our two test laboratories—located in Cincinnati and Detroit—are equipped with the latest technologies for a variety of testing capabilities.

With a combined 40 years of experience in multiple testing methodologies, CSZ on-site test technicians will coordinate a tailored, cost-effective solution to meet specific product development needs. You can depend on CSZ to deliver confidential, accurate, and valid test results within 72 hours (or less).

## CSZ Testing Applications

CSZ laboratories serve a number of industries with varying needs. Tests are customized to each need, but some common test applications are:

- |                                   |  |
|-----------------------------------|--|
| Aerospace Components              | Mil-Std Testing                          |
| Automotive Components             | Packaging                                |
| Batteries                         | Plastics                                 |
| Chemicals                         | Solar Cells/Panels                       |
| Electronic Components and Devices | Telecommunication Components and Devices |
| Medical Devices                   |  |





## Testing Service Offerings

### Environmental Test Capabilities

With a wide variety of chambers, shakers, and state-of-the-art equipment on hand, CSZ is capable of simulating any environment and meeting any process requirement. Our experienced test personnel will quickly determine the most efficient test procedure set-up to accommodate products of different sizes for fast turnaround of your project.

Additionally, shock and vibration testing is monitored via digital vibration and control analysis equipment tailored to match your specific hardware.

### Data Analysis



Upon completion of testing, CSZ will provide you with a comprehensive data analysis detailing the total product assessment under test conditions. Meticulous, documented reports of your test results are backed by our test certificate and accreditation.

### Customized Tests

To accommodate a wide range of product sizes, shapes and materials, CSZ's test technicians routinely customize testing services to meet unique requirements. Both fixturing and test setups can be custom-tailored, as can data monitoring and reporting methodologies (up to 500 channels). For durability testing, CSZ can devise customized robotics for acceleration/de-acceleration of assemblies in conjunction with environmental factors, such as temperature and humidity.

All testing services and results obtained at both the Ohio and Michigan laboratories are A2LA accredited and are compliant with ISO/IEC 17025.

## Why Test Your Product at CSZ?

Full compliance with ISO/IEC 17025

Detailed test reports within 72 hours or less

Quick turnaround and response

Professional and experienced staff

Latest equipment and technology

Custom-designed fixtures and tests



CSZ Testing Services' laboratories are equipped with state-of-the-art technologies for comprehensive, independent testing of products in the aerospace, automotive, chemical, defense, electronics, medical, plastics, power generation, and telecommunications fields.

As well as offering testing services, CSZ also manufactures a wide range of environmental test chambers from benchtop to full walk-in rooms. As a manufacturer and accredited testing services company, you can rely on a single organization to meet your testing and test equipment needs.

Interested in performing your own testing in-house?  
Visit [www.cszindustrial.com](http://www.cszindustrial.com) for more information.

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