



VTS

Vertical Thermal Shock Chambers

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CSZ Compact Thermal Shock Chambers consist of a hot/cold zone. Product is transferred between these zones for rapid product temperature changes.

These chambers offer 1-9 ft³ of interior workspace volume, superior performance, and small footprint coupled with many standard features to provide exceptional value. The lower chamber also contains both heating/cooling and may be operated as a separate temperature cycling chamber for greater return on investment.

Our unique chamber design passes equal volumes of high velocity conditioned air over the product, resulting in rapid product temperature changes. The induced thermal stresses can reveal hidden manufacturing defects in electronic sub-assemblies and other components by the expansion and contraction of critical parts. Design meets MIL-STD 883G, 1010.8 along with a variety of other thermal shock test specifications.

Product Features

The EZT-570i controller provides flexibility and a full range of user-friendly features that combine to simplify programming along with built-in safeties to protect your chamber and product under test.

RS-232/485 serial communications.

The product transfer carriage provides smooth, steady transfer of your product between the hot/cold chambers. Special design does not require compressed air to operate ¹.

Door safety interlocks prevent the door from being opened during operation.

Emergency stop button shuts down power to chamber.

Traveling cable port for routing cables and wires from the product under test to an external device.

Removable panels provides easy access to all systems for maintenance purposes.

Compact size and casters provide mobility with leveling legs to secure and level your chamber ¹.

Rapid airflow through the workspace to facilitate fast part temperature change rates.

Environmentally safe, zero ozone depletion potential refrigerants are used to protect the environment.

Model	VTS-1	VTS-3	VTS-9
Workspace Volume	1 cu. ft. (28L)	3 cu. ft. (85L)	9 cu. ft. (255L)
Product Carrier Dimensions	15"W x 10.5"D x 11"H (38cm x 27cm x 28cm)	20"W x 16"D x 16"H (51cm x 41cm x 41cm)	25"W x 25"D x 25"H (64cm x 64cm x 64cm)
Exterior Dimensions	34"W x 62"D x 70"H (86cm x 158cm x 178cm)	40"W x 76"D x 79"H (102cm x 193cm x 201cm)	119"W x 98"D x 96"H (302cm x 249cm x 244cm)
Temperature Range	Hot Chamber: +70°C to +210°C Cold Chamber: -75°C to +190°C		Hot Chamber: +115°C to +210°C Cold Chamber: -75°C to +190°C
Product Load (Based on Mill-Std 883G, Method 1010.8 Test Condition C)	8 lbs (4 kg)	17 lbs (8 kg)	50 lbs (23 kg)
Maximum Product Load	20 lbs (9 kg)	25 lbs (11 kg)	190 lbs (86 kg)
Recommended Minimum Service Amps	200/208-230V, 50/60 Hz 1 Ph 3 Ph 100 Amps 80 Amps	200/20/-230V, 50/60 Hz 3 Ph 125 Amps	380/460V, 50/60 Hz 3 PH 125 Amps

¹Custom size chambers are also available.

Time-Saving Features to Test Faster
 EZ→Programming EZ→Datalogging
 EZ→To be Connected to Your Test World

CSZ's EZT-570i controller offers a 7" or 10" touch screen and the latest in test chamber programming. Flexible configurations along with a full range of user-friendly features combine to simplify programming and save valuable time for greater return on your investment. Intuitive controller includes built-in data security & safeties to protect your chamber and product under test.

User Convenience & Enhanced Functionality

- Allows for programming of the lower (cold) chamber for temperature cycling, offering additional value
- Automatically transfers product between the hot/cold chambers and also displays current position of the transfer basket
- Profile status view provides detailed information on profile running including start & stop date/time
- Profile autostart allows profiles to begin at a date, day and time
- Full system security with audit trail tracking
- Adapt-a-Tune technology provides the ultimate in chamber performance and control stability
- Product high/low limit protects your device under test
- Selectable power failure/recovery options in the event of a power failure
- Help menu provides text and voice assistance in multiple languages (English, Spanish, French or Chinese).



Communications & Connectivity

- Ethernet capabilities to remotely monitor and control multiple test chambers.
- Automated "Ethernet" back-up of data files provides "hassle free" file management.
- Alarm notification system sends e-mail and/or text phone messages in the event of a test chamber alarm.
- Integrated e-mail sends data files directly from the controller with a touch of a button.
- Easily download profiles, alarm files, audit trail files and data log files to removable flashdrive via USB port.
- Data logging with custom file names, batch & lot numbers, operator events & digital signatures.

Optional Accessories

- | | |
|----------------------------------|--------------------------------|
| • Additional Basket/Shelf | • Digital Output Option |
| • Chart Recorders | • Digital Input Option |
| • Digital High/Low Limit & Alarm | • Main Power Disconnect Switch |
| • Run Time Meter | • Dry Air Purge |
| • IEEE-488 Interface | • LN2 Boost |
| • EZ-View Software | • Window ¹ |

¹ VTS-1 & VTS-3 only

The Experience you Rely on...

Cincinnati Sub-Zero (CSZ) Products, Inc. is an ISO-9001 certified company with over 70 years of industry experience designing and manufacturing temperature-controlled products of the highest quality, with a commitment to total customer satisfaction.

At CSZ, we offer a complete line of both standard and custom-designed environmental simulation chambers including:

- Temperature Cycling
- Humidity
- Stability Cabinets & Rooms
- Thermal Shock
- Stress-Screening
- Altitude
- AGREE Vibration
- HALT/HASS
- Freezers
- Liquid Chillers
- Wind & Rain
- Sand & Dust
- Other Temperature Management Solutions

Sizes range from benchtop to full walk-in/drive-in chambers.

TESTING SERVICES

CSZ Testing Services is an A2LA Accredited Test Laboratory utilizing the latest test technology. CSZ is your one stop source for all of your environmental simulation testing needs. Our testing laboratory is here to help with your product qualification testing, overflow testing and /or third party product validation. Testing capabilities include Temperature, Humidity, and/or Vibration, Thermal Shock, Burn-in, Altitude, Vibration, Shock, Salt Spray, and Cyclic Corrosion test. Serving you from two locations in Cincinnati, OH and Sterling Heights, MI. For more information please call CSZ Testing headquarters at 513-793-7774 or visit www.csztesting.com.



CSZ is your one stop solution for ...

Environmental Chambers
Freezers
System Upgrades
Preventative Maintenance
Calibration Services
Contract Testing Services

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