

Helping Make Safe & Reliable Products
Because people count on your products everyday



CSZ
Cincinnati Sub-Zero

STABILITY CHAMBERS AND ROOMS



www.cszproducts.com

Stability Chambers and Rooms

Stability chambers are ideal for ICH Q1A stability testing, shelf life, package testing and accelerated aging.



Keeping your products on schedule allows you to deliver life-saving products to patients sooner. We understand the importance of having reliable and stable chambers to ensure tests are completed in a timely manner while complying with regulatory standards.

Whether your testing is for R&D, clinical trials or ongoing stability, our chambers and rooms provide uniform temperature/ humidity conditioned environments for worry-free operations with a control system that is easy to use and saves time.

Stability Chambers are used for testing by a variety of industries, including:

- Pharmaceutical Products / Packaging
- Medical Products / Packaging
- Personal Care Products
- Consumer Products
- Research





Stability Testing Applications

Our chambers are designed to meet a variety of test specifications including ASTM standards for testing medical devices, shipping containers and packaging tests. Applications include, but are not limited to: stability testing, pharmaceutical, life science, biomedical storage and research.

The reach-in stability chambers and environmental rooms meet the stability testing ICH Q1A guidelines for drug substances and products. These chambers adhere to the sections of the test standard listed below.

Section	Description	Condition	Duration	
2.1.7.1 & 2.2.7.1	Storage Conditions for Drug Substances or Products	General Case Long Term	25°C, ±2°C/60% RH ±5% RH or 30°C, ±2°C/65% RH ±5% RH	12 months
		Intermediate	30°C, ±2°C/65% RH ±5% RH	6 months
		Accelerated	40°C, ±2°C/75% RH ±5% RH	6 months
2.1.7.2 & 2.2.7.4	Drug Substances or Products for Storage in a Refrigerator	Long Term	5°C, ±3°C	12 months
		Accelerated	25°C, ±2°C/60% RH ±5% RH	6 months
2.2.7.3	Drug products packaged in Semi-Permeable Containers	Long Term	25°C, ±2°C/40% RH ±5% RH or 30°C, ±2°C/35% RH ±5% RH	12 months
		Intermediate	30°C, ±2°C/65% RH ±5% RH	6 months
		Accelerated Not More than	40°C, ±2°C/75% RH ±25% RH	6 months

Stability Reach-in Chambers

StableClimate® II

Temperature/Humidity Stability Chambers

Our stability chambers provide a stable, temperature and/or humidity-conditioned environment for worry-free operation with a control system that is easy to use and saves you time. These chambers are available in temperature or temperature and humidity models with three different chamber sizes in a single, double or triple door configuration. Validation protocol is included upon request. Factory trained service group also provides onsite validation. Below are some of the key features & benefits included.



Features

- Broad temperature & humidity range from +2°C to +70°C to meet a variety of test and storage conditions for more versatility.
- Superb CSZ EZT-570S 21 CFR Part 11 Compliant touch-screen controller with automated humidity control dehumidification and manual or automatic user settings for defrost.
- Ethernet connectivity to remotely monitor and control your chamber using VNC.
- EIA-485 & EIA-232 computer interface for communications with software and the ability to control multiple chambers.
- Full heated glass doors with lock keep your product secure and provide product viewing.
- Cabinet is insulated with CFC-free polyurethane foam for thermal protection. Finish consists of durable white power-coated exterior and corrosion resistant stainless steel interior.
- Solid stainless steel shelves slide out for convenience. Shelves are easy to clean, install and relocate. Three shelves per door are included and additional shelves are available.
- 2" cable port for temperature monitoring or mapping.
- Compact size and casters allow you to move the chamber throughout your lab with leveling legs to secure and level your chamber.
- Single door model 115V and plug into standard 20 amps electrical outlet for easy installation.
- IQ, OQ, PQ protocol included. On-site validation is optional.
- UL/CUL 61010 Listed

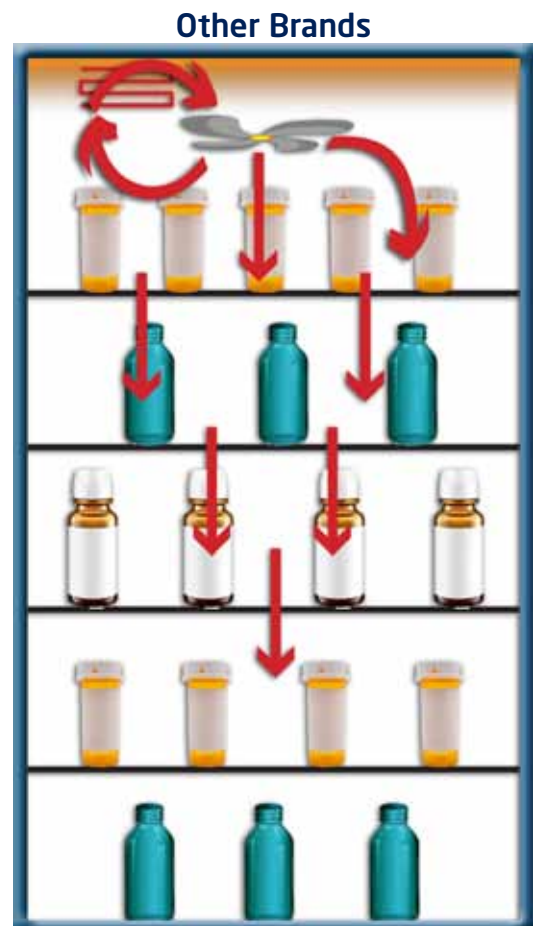
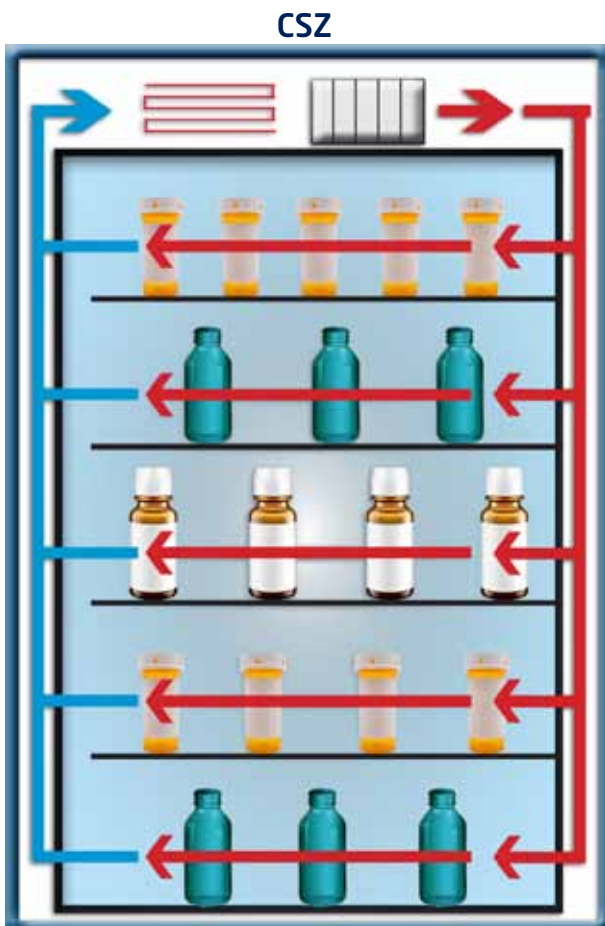




Precise Uniformity

Horizontal air flow design directs air across the chamber and solid shelves assuring consistent air flow for better uniformity with faster temperature recovery from door openings. Top to bottom air flow designs can restrict air movement and cause "dead spots" of air in the chamber and other designs which circulate front to back can cause temperature recovery after door openings to be longer.

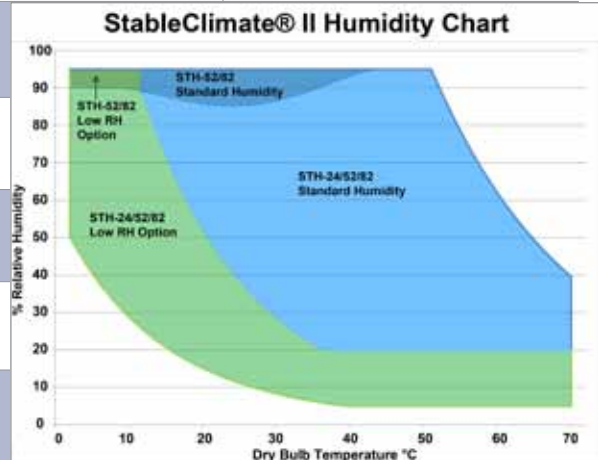
These chambers are used to test and store a wide range of products in specific temperature and/or humidity conditions.



Stability Reach-in Chambers

StableClimate® II Specifications

	ST(H)-24	ST(H)-52	ST(H)-82
Workspace	24 cu. ft. (680L)	52 cu. ft. (1473L)	82 cu. ft. (2322L)
Temperature Range	+2°C to +70°C		
Humidity Range	20% to 95% RH		
Internal Dimensions	24.5"W x 28"D x 60.5"H (62cm x 71cm x 154cm)	54"W x 28"D x 60.5"H (137 cm x 71cm x 154cm)	84"W x 28"D x 60.5"H (213cm x 71cm x 154cm)
External Dimensions	33"W x 35"D x 90"H (84cm x 89cm x 229cm)	65"W x 35"D x 90"H (165 cm x 89cm x 229cm)	97"W x 35"D x 90"H (246cm x 89cm x 229cm)
Temperature Tolerance¹	±0.3°C		
Temperature Uniformity¹	±1°C (±0.6°C from 25°C to 50°C)		
Humidity Tolerance¹	±3%		
Humidity Uniformity¹	±4%		
Maximum Shelf Weight	75 lbs. (34 kg) per shelf		
Maximum Shelves	10 Shelves	20 Shelves	30 Shelves
Maximum Weight Capacity	300 lbs. total (136 kg)	600 lbs. total (272 kg)	900 lbs. total (408 kg)
Voltage	115V/1Ph/60Hz 230V/1Ph/50Hz	230V/1Ph/60Hz 230V/1Ph/50Hz	



¹ Control derived from the deviation of the temperature control sensor from the set point. Uniformity derived from the maximum deviation of 9 temperature sensors placed on 3 horizontal planes across entire temperature range at 24°C ambient.

Optional Accessories

- Low Humidity
- Recirculating Water
- UV Recirculating Water
- Opaque Door
- Chart Recorder
- LED Light
- Additional Shelves
- Duplex Outlet
- Additional Ports
- Water Demineralizer System
- Reverse Osmosis Water System
- UPS Backup for Controller





Stability Walk-In Rooms

WMST Series

Stability Temperature/Humidity Walk-In Rooms

Walk-In stability rooms are available in temperature only or temperature & humidity. These chambers are designed for stability studies and testing large batches of product.

All stability rooms meet ICH Q1A guidelines. Each conditioning system is tested before shipment. Our factory-trained service team can also assist with the assembly, start-up and training and validation.

- Wide temperature & humidity range from -20°C to +60°C to meet a variety of test and storage conditions for more versatility.
- Superb CSZ EZT-570S 21 CFR Part 11 Compliant touch screen controller with data logging, data file access with USB stick, Ethernet control and monitoring, alarm notification via email and/or phone text message, data file backup system, full system security, audit trail, digital signatures, power recovery options and more.
- EIA-485 & EIA-232 computer interface for communications with software and the ability to control multiple chambers.
- Cabinet is insulated with CFC-free polyurethane foam for thermal protection. Finish consists of durable white or embossed aluminum scratch/rust resistant exterior and corrosion resistant stainless steel interior.
- 8' wide x 78" high door with heated viewing window and vapor proof lights (double doors available).
- Integral air-cooled condenser.
- 2" cable port for temperature monitoring or mapping.
- Electronic humidity sensor on humidity models.
- IQ, OQ, PQ protocol available. On-site validation is optional.

Stability Walk-in Rooms

Walk-In Chambers Customized to Meet Your Needs

A variety of options are available for enhanced performance and combined environments with custom configurations designed to meet your specific requirements.



This room is designed to store bottles of pharmaceutical product at -70°C. With over 4800 cu.ft. of conditioned interior space, the chamber is divided into four zones that can each hold up to 288 bottles.



Optional Accessories

- Access ports
- Wire shelves
- Entry ramp
- Reverse osmosis water filtration system*
- Dry air purge system
- Windows-based software package
- IEEE-488 computer interface
- Temperature recorders
- Redundant refrigeration system

*Humidity units only



WMST Series Specifications

Workspace Volume*	288 cu. ft.	512 cu. ft.	800 cu. ft.	1152 cu. ft.	2025 cu. ft.
Internal Dimensions W X D X H ft. (cm)	6' x 6' x 8' (183 x 183 x 244)	8' x 8' x 8' (244 x 244 x 244)	10' x 10' x 8' (305 x 305 x 244)	12' x 12' x 8' (366 x 366 x 244)	15' x 15' x 9' (457 x 457 x 274)
Temperature Range	-20°C to 60°C				
Optional Humidity Range	20% to 95% RH				
Temperature Tolerance	+/- 0.3°C				
Humidity Tolerance	+/- 2.5%**				
Temperature Uniformity	+/- 1.0°C or designed for your application				

*Other sizes and configurations available.

**Better tolerances may be achieved over narrow ranges. Please contact factory to discuss your requirements.



EZT-570S Controller 21 CFR Part 11 Compliant

The Next Generation Controller with Smartphone Technology

Communications & Connectivity

- Remotely monitor and/or Control the chamber for anytime, anywhere access from any device (PC, smartphone or tablet) using LAN/VNC.
- Alarm notification system sends email and/or text phone messages in the event of a test chamber alarm, saving valuable tests while reducing downtime.
- Multiple chambers may also be managed using VNC or CSZ's optional EZ-View PC software to monitor control CSZ chambers and download profiles.



Save valuable time with the ease of use of the EZT-570S featuring fewer steps to accomplish your daily testing needs while incorporating simplified operation and programming to test faster.



Profiling

- Profiling includes up to 99 steps and 1000 cycles.
- Program ramp steps entering time or °C/min.
- Easily review profile using trend chart or list of steps
- Profile status view displays current step, estimated start/stop date and time.
- Profiles may be transferred to different chambers via USB or optional EZ-View software.



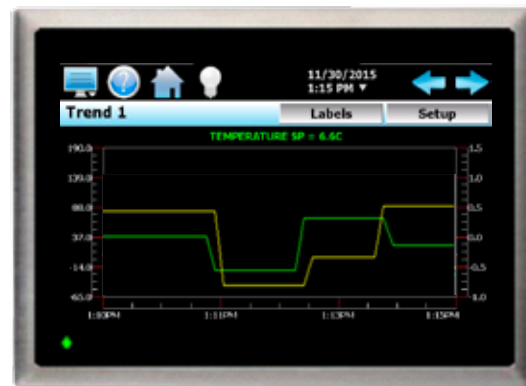
Data Logging

- Configurable log interval, data file length, filename, operator entered batch & lot information as well as an unlimited number of operator notes saved to the data file.
- Easily download profiles, alarm files, audit trail files and data files using USB or email from controller in a compatible .csv file format. Files may automatically be backed up using FTP.
- Email built-in to send data, alarm, audit trail files directly from controller. Also create and send new emails.
- Open and plot historical data files.



User Convenience & Flexibility

- Controller may be configured in any of one of 28 languages- one setting updates icons, menus and help screen.
- Selectable power failure/recovery options.
- Full system security allows up to 30 different users with four different levels of security.
- Audit trail files track changes in settings by each user.
- Import/export configuration settings to other controllers saving time. (Personalized to your use)
- Configurable alarms and maintenance alerts.





Cincinnati Sub-Zero is a product brand of Weiss Technik North America, Inc. Weiss Technik North America is a member of the Weiss Technik group of companies, a division of the Schunk Group with its headquarters in Heuchelheim, Germany. Weiss Technik is the world's largest manufacturer of environmental simulation systems and employs more than 2,400 people in 22 group companies in 15 countries.



Testing Services

Our AZLA Accredited Test Laboratory provides environmental simulation testing utilizing the latest test technology to meet your testing needs from product qualification testing, overflow testing and /or third party product validation. Capabilities include Temperature, Humidity, and/or Vibration, Thermal Shock, Burn-in, Radiator Testing, Altitude, Vibration, HALT/HASS, Shock, Salt Spray, Cyclic Corrosion test and Drop Testing. Serving you from two locations in **Cincinnati, OH** and **Sterling Heights, MI**.

FOR MORE INFORMATION please call our Testing headquarters at **513-793-7774** or visit **www.wnatesting.com**.



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