


Cincinnati Sub-Zero

ENVIRONMENTAL WALK-IN / DRIVE-IN CHAMBERS

www.cszproducts.com

Environmental Walk-In Chambers

Walk-In chambers are used for testing or storing products that require a large capacity chamber. Applications include full vehicle testing, automotive components, solar panels, electronic components, packaging, stability testing, biological research, industrial applications and more. We offer a broad selection of various types of walk-in chambers to meet almost any test requirement.

WM-Series Modular Walk-In Temperature/Humidity Chambers

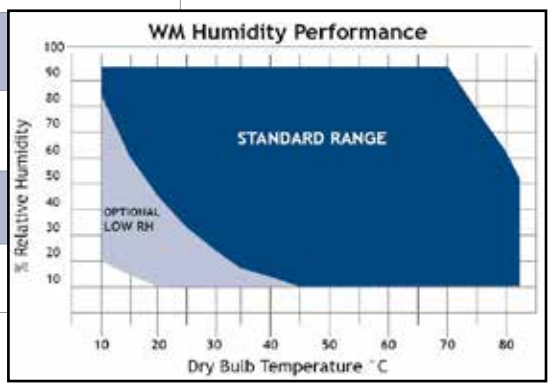
Offers flexibility for testing larger volumes at an economical price

Modular Walk-In chambers offer flexibility to meet virtually any size or configuration by using pre-fabricated panels. Modular chambers are constructed of 4" thick polyurethane-foamed panels that lock together to form a tightly sealed chamber with stainless steel interior and aluminum or white embossed exterior. Available in a variety of temperature ranges to meet your specific testing needs.

WM-Series Specifications

Workspace Volume*	512 cu. ft.	800 cu. ft	1152 cu. ft.
Internal Dimensions W X D X H ft. (cm)	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)
Temperature Range	-68°C to +85°C		
Optional Humidity Range	10% to 95% RH		
Temperature Tolerance	+/- 1.0°C		
Humidity Tolerance	+/- 5.0%		

* Other sizes and configurations available.



Modular Plenum Conditioning Systems

CSZ walk-In chambers feature our standard conditioning systems, which include refrigeration, air circulation, electrical components, instrumentation and optional humidification needed to control your chamber environment. A variety of different conditioning systems are available to meet your temperature and humidity requirements. Our applications specialists will select the most appropriate, cost-effective system for your application.

These conditioning systems are designed to interface with an assembled Walk-In box without taking up valuable workspace in your chamber. Each conditioning system unit includes hinged service panels for easy access and may be located on either side or the back of your walk-in box.

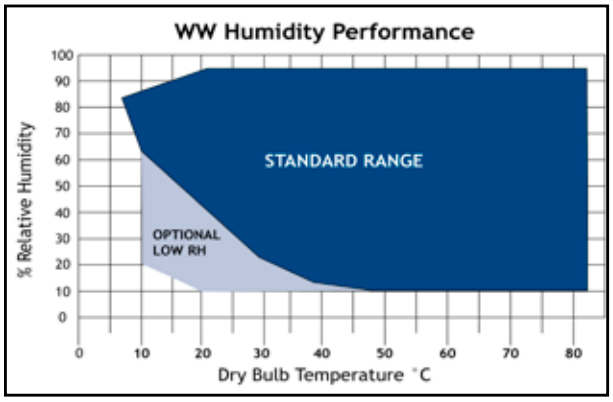
These systems may also be incorporated with existing Walk-In boxes. They can be ordered separately to replace existing conditioning systems or add additional capacity to current walk-in chambers.

Environmental Walk-In/Drive-In Chambers

WW-Series Welded Walk-In (Solid Construction) Chambers

Rugged construction with higher temperatures and faster cycling

Welded Walk-In chambers provide wider temperature and humidity ranges. These welded walk-in chambers consist of one solid piece, simplifying installation. Welded Walk-In chambers are constructed using a zinc-coated exterior, polyurethane enamel finish and a type 304 stainless steel interior. Fiberglass insulated walls are 6" thick with seams that are continuously welded to form a hermetically sealed chamber. Ideal for rapid temperature change rates, higher temperatures or applications that combine multiple environments.



Size	200 to 8,000 cu. ft. (Custom Sizes Available)
Temperature Range	Single Stage: -34°C to +190°C (-30°F to +375°F) Tundra®: -45°C to +190°C (-49°F to +375°F) Tundra® II: -50°C to +190°C (-58°F to +375°F) Cascade: -68°C to +190°C (-90°F to +375°F)
Humidity Range	10% to 95% RH

Which type of walk-in room is most appropriate for your application?

©GM Corporation

	Modular Panel	Welded
Economical	X	
Easy Move-In	X	
Easy Installation	X	X
Choice of Interior and Exterior Finishes	X	
Extended Temperature Range		X
Extended Humidity Range		X
Fast Change Rate	X	X
Combined Environments		X
Altitude Simulation		X
Vibration Integration	X	X

Drive-In Series Chambers

We provide drive-in chambers for combined environmental testing to simulate a variety of road conditions and climates. These chambers are designed to test items from an automotive sub-system assembly to a full vehicle.

Our drive-in chambers can be constructed by either utilizing an insulated modular panelized system or as a fully welded construction, depending on performance requirements. Each chamber can be tailor-designed to meet various requirements and specifications. Applications include quarter buck to full buck assemblies, automotive components, electronic components, instrument panels, diurnal solar simulation, infrared lighting. Full vehicle testing may be integrated with a with four post road simulator and dynamometers.

Four post road simulator with temperature, humidity, vibration and solar simulation.

Designed for full vehicle testing from small cars to full semi-trucks

Size	200 to 8,000 cu. ft. (Custom Sizes Available)
Temperature Range	Single Stage: -34°C to +190°C (-30°F to +375°F) Tundra®: -45°C to +190°C (-49°F to +375°F) Tundra® II: -50°C to +190°C (-58°F to +375°F) Cascade: -68°C to +190°C (-90°F to +375°F)
Humidity Range	10% to 95% RH

Environmental Walk-In/Drive-In Chambers

Drive-In Chamber for Semi-Truck

This drive-in chamber was 33,750 cu. ft. with exterior dimensions of 48'W x 65'D x 27'H. To meet the specific testing requirements, this vast chamber required an extensive refrigeration system. The system included a total of (6) modular plenums, (6) 30-30 cascade refrigeration systems and (6) remote air cooled condensers with a combined air flow of 24,000 cfm.

Combined Environments

- Solar Simulation
- Infrared Lighting
- Vibration Simulation
- Altitude Simulation
- Freezing Rain Simulation

Walk-In Chambers are configured to meet your requirements with conditioning systems that may be mounted in your location of choice, remote instrument consoles, custom fixtures, and more.

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.

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Standard Features

- Modular Panel or Welded Construction
- Stainless Steel Interior
- Safety Release Latches
- Heated Windows
- Vapor Proof Interior Lights
- EZT-570 Programmable Controller
- Temperature Limit & Alarm
- RS-232/485 Computer Interface
- Solid State Humidity Sensor*
- Refrigeration High Temperature Protection
- Refrigeration Pressure Gauges
- Compressor Overload Protection
- Refrigeration Service Taps
- Water-Cooled Condenser
- Zero Ozone Depletion Refrigerants
- High and Low Pressure Switches (3HP & Over)

Optional Accessories & Custom Capabilities

- Access Ports
- Additional/Oversize Doors
- Automatic Door Operation
- Entry Ramp
- Reinforced Treaded Floor
- Remote Refrigeration System
- Explosion-Proof Electrical
- LN2/CO2 Boost Cooling
- Ultra Low Temperature
- Ultra High Temperature
- Custom Control Interface
- Reverse Osmosis Water System
- Dry Air Purge System
- Windows-Based Software
- Redundant Temp. Limit & Alarm
- IEEE-488 Computer Interface
- Running Time Meter
- 50 Hz. Operation
- Temperature Recorders
- Electrical Disconnect Switch
- Remote Instrument Console
- Hydro Carbon/Carbon Monoxide Monitor
- Refrigeration Sound Deadening Package
- Extended Relative Humidity Range
- Compliance to Special Wiring Standards
- Internal or External Emergency Stop Switch

* Humidity Units Only

Certain options not available on stability rooms

EZT-570 Touchscreen Controller

Find out more

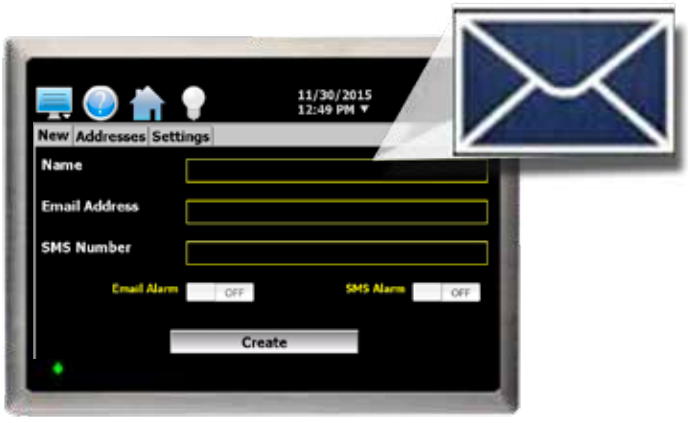
The Next Generation Controller with Smartphone Technology

All features are built into the controller interface so no additional software or internet is required for access to all the features the controller has to offer.

Communications & Connectivity

- Monitor and/or Control the chamber remotely for anytime, anywhere access from any device using LAN VNC.
- Alarm notification sends email and/or text messages.
- Email built-in to send data, alarm, audit trail files directly from controller.
- Ethernet TCP/IP, EIA-232, EIA-485 communications.

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



Profiling

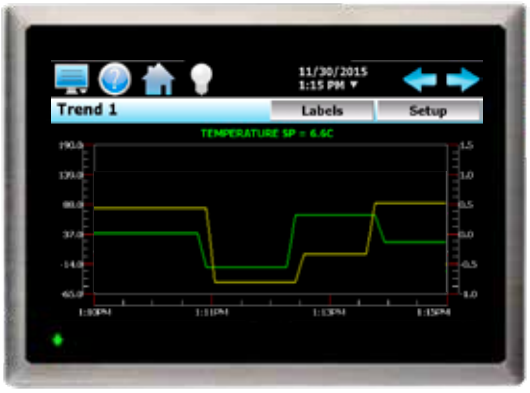
- Profiling includes up to 99 steps and 1000 cycles.
- Program ramp steps entering time or °C/min.
- Programs may be written using product control function.
- Easily review profile using trend chart or review list of steps before running profile.
- Profile status view displays current step, estimated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

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.
- Access data files directly from controller or PC.
- Easily download profiles, alarm files, audit trail files and data files using LAN (FTP, email) and/or USB in a compatible .csv file format for ease of use. Files may also be automatically backed up daily for hassle-free file management.
- Files may also be automatically backed up daily for hassle-free file management using FTP. FTP/FileWeb/DataWeb (LAN/WAN).

User Convenience & Flexibility

- Controller may be configured in 28 languages
- 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.
- Configure alarm setting and maintenance alerts.



Graphing Technology

- Real-time trend display graph with adjustable time and min/max values.
- Up to eight configurable trend graphs with left & right axis
- Graph historical data files
- Zoom in/out of graphs for a closer look.

Enhanced Communications & Control Options

- Digital input option provides 8 inputs that can be configured for various control functions including starting, stopping and pausing a profile. "Wait for" function allows the user to pause a profile during a particular step of the profile until a specific digital input is turned on or off.
- Digital output "customer event" feature provides 15 programmable outputs. Each output can be configured to perform other operations including alarm or profile status indicators for more control over your testing.
- Optional refrigeration monitor package displays and data logs temperatures and refrigeration system compressor suction/discharge pressures.
- Condensation control option helps prevent condensation from collecting on the part by automatically managing the air dewpoint.
- Bar code option allows user to scan barcode to start profile and to add notes to current data file when datalogging.

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 2,900 people in 18 group companies in 15 countries.

Request Information

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The Testing Standard.

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