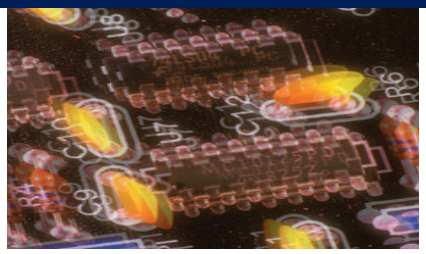


Cincinnati Sub-Zero

AGREE-STYLE TEMPERATURE & TEMPERATURE/HUMIDITY VIBRATION TEST CHAMBERS

AV(H)L
Cantilever Vertical Lift

Custom AV(H)
Gantry Vertical Lift

CV(H) Commercial Vibration

Engineered & Manufactured in the USA

www.cszproducts.com

Vibration Chambers

Our vibration chambers offer rapid temperature change rates to reduce product development time and improve product reliability. These chambers are available for temperature & vibration testing or temperature, humidity and vibration. All models are designed for compatibility with your choice of electrodynamic or mechanical vibration systems. While each model is manufactured to standard designs, they may also be custom engineered to meet a wide range of stringent test requirements.

Features & Benefits

- Simulates up to 3 Combined Environments in one Chamber
- Versatile - Chamber may interface with your existing vibration shaker or new shaker of your choice
- Dual Purpose - May be operated as a separate temperature/ humidity chamber, with optional solid floor plug, maximizing your investment
- High performance with fast change rates for accelerated stress testing
- Customizable design to meet stringent test requirements
- User-friendly controls for easy integration into your test system
- Refrigeration design protects compressors and prolongs life keeping cool during all operating conditions
- Refrigeration design uses less power saving operating costs
- An electronic humidity sensor is used on all humidity models for accuracy and minimal maintenance*
- Humidity water filtration system is optional to filter impurities and protect your chamber interior*

Combined environmental testing environments with flexibility for use with new or existing vibration systems

Temperature Range

Cascade: -70°C to +190°C (-94°F to +375°F)
Single Stage: -34°C to +190°C (-30°F to +375°F)
Tundra®: -45°C to +190°C (-49°F to +375°F)

Humidity Range

10% to 95% RH as limited by +4.5°C (+40°F) dewpoint, and +85°C (185°F) dry bulb

Standard Features

- 4" Access Port
- Non-Settling Fiberglass Insulation
- Fog-Free Wiperless Window
- Diaphragm Interface to Shaker
- Adjustable Chamber Height**
- Brushed Stainless Steel Interior
- High Volume Air Flow
- EZT-570 Touch Screen Controller
- Internal Light with Switch
- Fused Electrical Components
- Solid State RH Sensor*
- Refrigeration Service Taps
- Digital Display Temp. Limit & Alarm
- Zero Ozone Depletion Refrigerants
- Refrigeration High Temperature Protection
- Water Cooled Condenser
- Refrigeration Pressure Gauges
- Emergency Stop Button

* Humidity units only ** AV-Series Only

Optional Accessories & Custom Capabilities

- Casters
- Shelving
- Additional Access Ports
- Vertical Lift Door
- Vibration Sound Deadening
- Cable Notch
- Solid Floor Plug
- Custom-Size Chambers
- Remote Instrument Console
- IEEE-488 Computer Interface
- Running Time Meter
- 50 Hz. Operation
- Electrical Disconnect Switch
- EZ-View Software
- Explosion-Proof Electrical
- Compliance to all Wiring Standards
- Custom Control Interface Capability
- Humidity Demineralizer Water System (Humidity units only)

Consult factory for additional options.

AV(H)L-Series Specifications

AV(H)L-Series

Our AV(H)L-Series AGREE (Advisory Group on Reliability of Electronic Equipment) chambers combine temperature/ humidity and vibration for commercial and military testing. The AV(H)L-Series models have the optional capability to interface with both horizontal and vertical electrodynamic vibration systems with rear or vertical sliding doors.

Model	*Capacity at 5°C/min Loaded Chamber -40°C ... +85°C		Cooling Rate Empty Chamber +85°C...-40°C		Heating Rate Empty Chamber -40°C ... +85°C	
AVL-32-6-6	30	lbs.	7.5	°C/min.	7.5	°C/min.
AVL-32-10-10	130	lbs.	10.5	°C/min.	10.5	°C/min.
AVHL-32-6-6	15	lbs.	6	°C/min.	6	°C/min.
AVHL-32-10-10	100	lbs.	9	°C/min.	9	°C/min.
AVL-50-10-10	50	lbs.	8	°C/min.	8	°C/min.
AVL-50-15-15	280	lbs.	16.5	°C/min.	16.5	°C/min.
AVHL-50-10-10	35	lbs.	6.5	°C/min.	6.5	°C/min.
AVHL-50-15-15	240	lbs.	13	°C/min.	13	°C/min.
AVL-81-15-15	225	lbs.	13	°C/min.	13	°C/min.
AVL-81-30-30	600	lbs.	18.5	°C/min.	15	°C/min.
AVHL-81-15-15	190	lbs.	10	°C/min.	10	°C/min.
AVHL-81-30-30	540	lbs.	16.5	°C/min.	13	°C/min.

*Capacity Calculated in Aluminum

Customized AV

Customized AV

AV(H)L-Series

Model	Work Space Dimensions Inches (mm)	Maximum Shaker Diameter Inches (mm)	Maximum Slip Table Dimension Inches (mm)	Approximate Exterior Dimensions Inches (mm)	Recommended FLA 480/3PH/60HZ
AVL-32-6-6	38" x 38" x 38" (965 x 965 x 965)	32" (812)	30" x 30" (762 x 762)	80" x 125" x 103" (2032 x 3175 x 2616)	36
AVL-32-10-10				80" x 130" x 103" (2032 x 3302 x 2616)	53
AVHL-32-6-6				80" x 125" x 103" (2032 x 3175 x 2616)	36
AVHL-32-10-10				80" x 130" x 103" (2032 x 3302 x 2616)	53
AVL-50-10-10	44" x 44" x 44" (1117 x 1117 x 1117)	38" (965)	36" x 36" (914 x 914)	80" x 136" x 103" (2032 x 3454 x 2616)	54
AVL-50-15-15					90
AVHL-50-10-10					56
AVHL-50-15-15					92
AVL-81-15-15	54" x 54" x 48" (1371 x 1371 x 1219)	48" (1219)	46" x 46" (1168 x 1168)	76" x 192" x 121" (1930 x 4876 x 3073)	92
AVL-81-30-30					139
AVHL-81-15-15					92
AVHL-81-30-30					139

Water-cooled refrigeration
Amount of heat/FLA subject to change based on final engineering design

CV(H)-Series Specifications

CV-Series
Temperature/Humidity/Vibration Chambers

The CV-Series temperature/humidity and vibration chambers are designed to integrate with vibration systems in only the vertical mode of operation.

Model	*Capacity at 5°C/min Loaded Chamber -40°C ... +85°C		Cooling Rate Empty Chamber +85°C...-40°C		Heating rate Empty Chamber -40°C ... +85°C	
CV-32-6-6	100	lbs.	10	°C/min	10	°C/min
CV-32-10-10	225	lbs.	18	°C/min	18	°C/min
CVH-32-6-6	60	lbs.	8	°C/min	8.5	°C/min
CVH-32-10-10	175	lbs.	12	°C/min	12	°C/min
CV-50-10-10	190	lbs.	14	°C/min	14	°C/min
CV-50-15-15	400	lbs.	20	°C/min	20	°C/min
CVH-50-10-10	120	lbs.	9	°C/min	9	°C/min
CVH-50-15-15	325	lbs.	17	°C/min	17	°C/min
CV-81-15-15	400	lbs.	19	°C/min	19	°C/min
CV-81-30-30	850	lbs.	24	°C/min	17	°C/min
CVH-81-15-15	300	lbs.	15	°C/min	15	°C/min
CVH-81-30-30	725	lbs.	20	°C/min	13	°C/min

*Capacity Calculated in Aluminum

Model	Work Space Dimensions Inches (mm)	Maximum Shaker Diameter Inches (mm)	Approximate Exterior Dimensions Inches (mm)	Recommended FLA 480/3PH/60HZ
CV-32-6-6	38" x 38" x 38" (965 x 965 x 965)	32" (812)	80" x 92.5" x 99.5" (2032 x 2349 x 2527)	38
CV-32-10-10				63
CVH-32-6-6			80" X 113" X 88" (2032 x 2870 x 2235)	38
CVH-32-10-10			80" X 118" X 88" (2032 x 2997 x 2235)	63
CV-50-10-10	44" x 44" x 44" (1117x 1117 x 1117)	38" (965)	80" x 98.5" x 105" (2032 x 2501 x 2667)	65
CV-50-15-15			80" x 98.5" x 107" (2032 x 2501 x 2717)	90
CVH-50-10-10			80" x 124" x 93" (2032 x 3149 x 2362)	67
CVH-50-15-15				97
CV-81-15-15	54" x 54" x 48" (1371 x 1371 x 1219)	48" (1219)	80" x 108.5" x 104.5" (2032 x 2755 x 2679)	97
CV-81-30-30				139
CVH-81-15-15			80" x 134" x 97" (2032 x 3403 x 2463)	100
CVH-81-30-30				139

Water-cooled refrigeration
Amount of heat/FLA subject to change based on final engineering design

EZT-570 Touchscreen Controller

Find out more

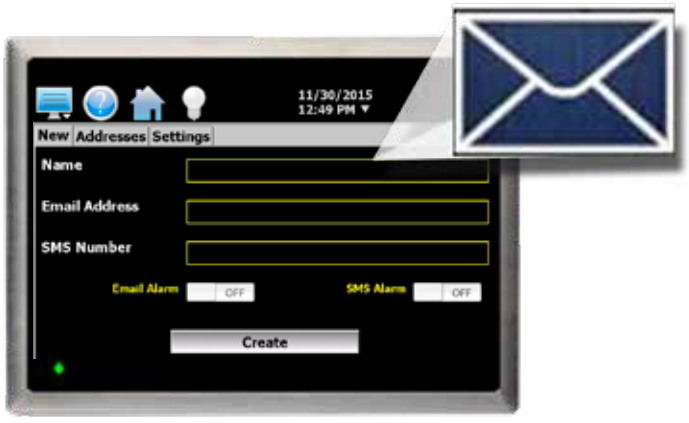
The Next Generation Controller with Smartphone Technology

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

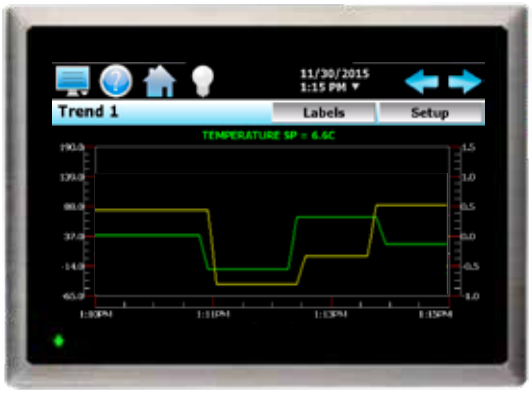
- Profiling includes up to 99 steps and 1000 cycles
- Program ramp steps entering time or °C/min
- Programs may be written using product control function
- Easily review profile using trend chart or review list of steps before running profile
- Profile status view displays current step, estimated start/stop 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

Cincinnati Sub-Zero

The Testing Standard.

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