



Your Climate, Our Expertise

www.cosmosenvirosystems.com

BUSINESS PORTFOLIO



Design, manufacture and supply of standard and custom Environmental Test Chambers



Repair, Service, Maintenance and AMC of Environmental Test Chambers



Refurbishments of Old/Unused Environmental Chambers



Rentals of Environmental Test Chambers of standard sizes/models

ABOUT US

Cosmos Enviro Systems is an ISO 9001:2015 certified company and a leading manufacturer of Environmental Simulation Chambers and related products. These products play a crucial role in various industries, especially for testing and simulating environmental conditions to ensure the quality and reliability of products. We at Cosmos Enviro Systems provide you with sublime and exceptional works in the respective field. Here is some of the products we specialize at:

1. Environmental Test Chamber
2. Walk-in Environmental Chamber
3. Subzero Chamber
4. Dust Chamber
5. Salt Spray /Corrosion Test Chamber
6. Altitude Chambers
7. Hot Air Ovens/ Burn-in Chamber
8. Thermal Shock Chamber
9. Rain Test Chamber
10. Recirculating Chiller
11. Ultra Low Refrigerated Circulator
12. Industrial Air & Water Chiller
13. Aging Room
14. Cascade Refrigeration Unit
15. Stability Chamber
16. Battery Test Chamber
17. Condensing Unit
18. Evaporator Unit

It's clear that Cosmos Enviro Systems offers a comprehensive range of equipment for environmental testing and simulation. These products help ensure product quality, reliability, and compliance with industry standards.

WHY CHOOSE COSMOS ENVIRO SYSTEMS ?

Competent and Dedicated Team



Our team consists of highly skilled professionals who are committed to delivering exceptional results. With a strong sense of dedication, we go above and beyond to exceed customer expectations.

Small & Proud



We take pride in being a small company. Our small size enables us to provide personalized attention, flexibility, and agility in meeting our customers' needs. We value the relationships we build with our customers and go the extra mile to ensure their satisfaction.

Higher Revenue



By focusing on high-quality products and excellent customer service, we help our customers achieve higher revenue and business success. Partnering with Cosmos Enviro Systems means having a reliable ally in reaching your goals.

Great Emphasis on Safety



We prioritize safety in our product designs and manufacturing processes. Our Environmental Test Chambers undergo rigorous testing and meet stringent safety standards to ensure the protection of personnel, equipment, and the environment.

High-Quality Products



Quality is the cornerstone of our company. We are dedicated to delivering products of the highest standard, designed to withstand challenging environmental conditions and provide accurate and reliable test results. Our stringent quality control measures ensure customer satisfaction.

Qualitative Products



Our products are designed to meet or exceed industry standards, ensuring optimal performance and durability. We use top-grade materials and employ advanced manufacturing techniques to deliver qualitative products that meet the evolving needs of our customers.

Latest Technologies



We stay up-to-date with the latest advancements in technology and incorporate them into our product development process. By utilizing cutting-edge technologies, we offer innovative solutions that enhance the functionality, efficiency, and performance of our environmental test chambers.

Time-Bound Approach



We understand the importance of timely delivery. Our efficient production processes enable us to adhere to agreed-upon timelines, ensuring prompt delivery of orders to our customers.

When you choose Cosmos Enviro Systems, you partner with a company that prioritizes customer satisfaction, delivers high-quality products, and embraces the latest technologies. We are dedicated to your success and aim to provide you with a positive experience throughout our collaboration.

INDUSTRIES WE SERVE



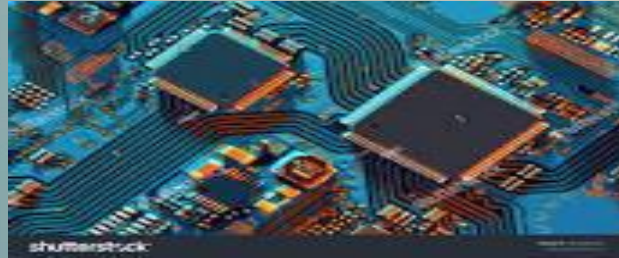
AEROSPACE



AUTOMOTIVE



DEFENCE



ELECTRICAL & ELECTRONICS



PRIVATE & GOVT. SECTORS



FOOD INDUSTRIES



AGRICULTURE/SCIENCE



PHARMA



CONSUMER PRODUCTS

OUR PRODUCTS

CESEC



CESWC



CESSZ



CESDC



CESSC



CESAC



CESO/CESB



CESTS



CESR



CESRC



CESULC



CESIC



CESAR



CESCR



CESST



CESBT



CESCU



CEEU



CESEC- SERIES ENVIRONMENTAL TEST CHAMBER

Environmental test chambers are specialized pieces of equipment used in various industries and research settings to simulate and control specific environmental conditions for the purpose of testing and evaluating the performance, durability, and reliability of products, materials, and components. These chambers provide a controlled environment in which various parameters such as temperature, humidity, pressure, light, and more can be manipulated to replicate real-world conditions or extreme scenarios.

Parameters	Specifications
CESEC-22	300X250X300 MM – work space
CESEC-30	300X350X300 MM – work space
CESEC-64	400X400X400 MM – work space
CESEC-80	400X500X400 MM – work space
CESEC-150	550X400X700 MM – work space
CESEC-300	650X600X800 MM – work space
CESEC-600	800X850X900 MM – work space
CESEC-950	1000X100X950 MM – work space
CESEC-1400	1100X1350X950MM - work space
Volume	22, 30, 64, 80, 150, 300, 600, 950 & 1400 Liters
Temperature	-40°C/-70°C to 180°C
Relative Humidity	10 to 95%
Customize	Yes

CESWC- SERIES WALK-IN ENVIRONMENTAL TEST CHAMBER

Walk-in chambers are larger in size compared to benchtop or smaller environmental chambers. Their design allows for easy access to the testing area, making it convenient to load and unload test specimens, including large or bulky items. Chambers can often be customized to meet specific testing requirements. This may include adjusting the size, shape, and configuration of the testing area, as well as adding specific sensors or fixtures as needed for your testing protocols.

Parameters	Specifications
CESWC-10K	2200X2200X2000 MM – work space
CESWC-12K	2200X2200X2400 MM – work space
CESWC-14K	2200X3100X2000 MM – work space
CESWC-16K	2200X3100X2400 MM – work space
CESWC-18K	2200X3200X2600 MM – work space
CESWC-22K	2200X4100X2400 MM – work space
CESWC-24K	2000X4000X3000 MM – work space
Volume	10000, 12000, 14000, 16000, 18000, 22000 & 24000 Liters
Temperature	-35°C/-70°C to 150°C
Relative Humidity	10 to 95%
Customize	Yes

CESSZ- SERIES SUBZERO CHAMBER

A "Subzero chamber," also known as a "sub-zero chamber," typically refers to a specialized enclosure or facility designed to create and maintain extremely low temperatures, often well below freezing. These chambers are used for various purposes in research, testing, and industrial applications where low-temperature conditions are required.

Parameters	Specifications
Volume	50, 100, 200, 500, 1000 Kgs. etc....
Temperature	Ambient to -96°C
Inner Material	SS 304
Outer Material	CRCA Powder Coated/ SS304
Voltage	Single Phase/ 3Phase
Customize	Yes

CESDC- SERIES DUST CHAMBER

Dust chambers are equipped with mechanisms to generate controlled and standardized amounts of dust particles. This dust can be composed of materials like talc, silica, or other types of fine particulates, depending on the testing requirements. These chambers are commonly used in industries such as electronics, automotive, aerospace, and manufacturing to assess the durability, reliability, and performance of equipment and devices in dusty or abrasive environments

Parameters	Specifications
Body Material	SS 304
Volume	1000, 1500, 3300 L
Standards of Chamber	IEC-60529, IEC-68-2-68, DIN 40050, DIN /VDE 470, DIN EN 60068-2-68, SAE J575, MIL, JIS, etc..
Voltage	415 VAC
Customize	Yes

CESSC- SERIES SALT SPRAY / CORROSION TEST CHAMBER

Salt spray chamber or simply a Corrosion test chamber, is a specialized piece of laboratory equipment used to evaluate the corrosion resistance and durability of materials, coatings, and products when exposed to salt-laden environments. The primary feature of these chambers is their ability to create a controlled salt-laden environment. They utilize a salt solution, typically a sodium chloride (NaCl) solution, which is atomized and sprayed into the chamber as a fine mist.

Parameters	Specifications
CESSC-300	850X550X650MM
CESSC-600	900X800X850 MM
CESSC-900	1350 X800X850MM
CESSC-1500	1500X1000X1000MM
Volume	50, 100, 300, 600,900 & 1500 Liters
Temp	Ambient to 50°C
Humidity	Optional
Customize	Yes

CESAC- SERIES ALTITUDE CHAMBER

Combined altitude and humidity test chambers are specialized environmental testing chambers designed to simulate and evaluate the effects of both high altitude conditions and humidity on products, materials, and components. These chambers are commonly used in industries such as aerospace, automotive, electronics, and defense to assess how items perform in harsh environmental conditions. These chambers are capable of simulating high-altitude conditions, where air pressure and oxygen levels are reduced compared to sea-level conditions. The ability to lower air pressure within the chamber is a crucial feature.

Parameters	Specifications
CESAC-600 CESAC-950 CESAC-1400 CESAC-9800	800X850X900 MM – work space 1000X1000X950 MM – work space 1100X1350X950 MM – work space 2000X2000X2450MM – work space
Volume	600, 950, 1400, 9800 Liters
Temperature	-45°C/-70°C to 180°C
Relative Humidity	10 to 95% (Optional)
Altitude Range	Up to 10 m Bar
Customize	Yes

CESO/CESB- SERIES HOT AIR OVENS/ BURN -IN CHAMBER

A hot air oven is a laboratory device that uses dry heat to sterilize equipment and materials or to perform various thermal tests and experiments. Hot air ovens are designed to achieve and maintain precise temperature levels. They typically operate at temperatures ranging from ambient to several hundred degrees Celsius, depending on the application. A burn-in chamber, also known as a burn-in oven or stress-testing chamber, is a specialized piece of equipment used to subject electronic components, devices, or assemblies to prolonged elevated temperatures and voltage levels, it provide precise control over both temperature and voltage levels. The temperature can often be adjusted to mimic real-world operating conditions, and voltage can be applied to stress the components.

Parameters	Specifications
CESO/CESB-150	550X400X700MM
CESO/CESB-300	650X600X800MM
CESO/CESB-600	800X850X900MM
CEO/CESB-950	1000X100X950MM
CESO/CESB-1400	1100X1350X950 MM
Temp	Ambient to 200°C
Volume	150,300,600,950 & 1400 Liters
Customize	Yes

CESTS- SERIES THERMAL SHOCK CHAMBER

Thermal shock chamber, is a specialized piece of equipment used to subject products, materials, or components to rapid and extreme temperature changes in order to evaluate their ability to withstand thermal stresses and determine their durability under such conditions. These chambers typically consist of two separate chambers, known as the hot chamber and the cold chamber. Each chamber can maintain a stable and extreme temperature range. Which can occur in real-world scenarios like rapid startup or shutdown of electronic devices, automotive parts exposed to extreme weather, and aerospace components transitioning between atmospheric and space conditions.

Parameters	Specifications
CESTS- 50	500X350X300 MM – work space
CESTS- 100	500X500X400 MM – work space
CESTS- 150	600X500X500 MM – work space
CESTS- 300	800X750X500 MM – work space
CESTS- 600	900X900X750 MM – work space
CESTS- 900	1000X1000X900 MM– work space
Volume	50, 100, 150, 300, 600, 900 Liters
Temperature	-70°C to 200°C
Basket Transition Time	<10 secs
Customize	Yes

CESR- SERIES RAIN CHAMBER

Rain chambers are specialized testing facilities or chambers designed to simulate and assess the effects of rainfall and water exposure on various products, materials, and equipment. Rain test chambers are equipped with precise and adjustable water spray systems that can simulate different rainfall intensities, patterns, and durations. The spray nozzles are strategically positioned to direct water onto the test specimen. Some chambers offer the ability to control the temperature of the water being sprayed. This can be important for simulating various weather conditions, including cold rain or warm rain. Testing in rain chambers can be used to determine if a product meets specific Ingress Protection(IP) ratings, which indicate its resistance to water and dust ingress.

Parameters	Specifications
IP Test	XI to X8, X4K, X6K &X9K
Standard	BIS, JIS, IEC-60529, EN, DIN, JSS-55555, MIL, etc...
Voltage	415 VAC
Customize	Yes

CESRC - SERIES RECIRULATING CHILLER

Recirculating chillers are cooling systems used in various industrial and laboratory applications to maintain the temperature of equipment or processes. They work by circulating a cooling fluid (usually a mixture of water and a coolant) through a closed-loop system to remove heat and maintain a consistent temperature. Recirculating chillers come in various sizes and configurations, including compact and portable models, making them suitable for both benchtop and industrial applications. Many modern recirculating chillers are designed with energy-efficient components and features to minimize energy consumption while maintaining temperature stability. The choice of a chiller depends on factors such as cooling capacity, temperature range, and specific application requirements.

Parameters	Specifications
Volume	5, 10, 20, 50 liters etc.....
Inner Material	SS 304
Temperature	-120°C to 40°C
Voltage	230 VAC/415 VAC
Refrigeration	Cascade Type
Customize	Yes

CESULC- SERIES ULTRA LOW REFRIGERATED CIRCULATOR

Ultra-low refrigerated circulators are specialized laboratory equipment designed to provide precise temperature control and cooling for various scientific and industrial applications. These circulators are capable of maintaining extremely low temperatures, typically in the range of -80°C to -100°C, and are essential for tasks such as cooling samples, conducting experiments at low temperatures, and supporting equipment like chromatographs and spectrometers. These circulators have advanced refrigeration systems that can reach and maintain ultra-low temperatures.

Common cooling methods include cascade refrigeration systems, two-stage compressors, and cryogenic refrigerants. Low refrigerated circulators offer precise temperature control and stability. Applications of ultra-low refrigerated circulators include: Chemical Synthesis, Biological Research, Material Testing, Environmental Testing, Medical and Healthcare.

Parameters	Specifications
Bath Tank Volume	5.....10 Liters
Inner Material	SS 304
Temperature	-96°C to 100°C
Voltage	230 VAC
Customize	Yes

CESIC- SERIES INDUSTRIAL AIR & WATER CHILLER

Industrial air and water chillers are specialized cooling systems used in a wide range of industrial processes and applications to regulate temperatures. These chillers work by removing excess heat from processes and equipment, maintaining the desired temperature, and ensuring efficient and reliable operation. Water chillers use water as the cooling medium. They circulate chilled water through a closed-loop system to absorb heat from the process or equipment they are cooling. Air chillers use air as the cooling medium. They blow cold air directly onto the equipment or process to dissipate heat and lower temperatures. Air-cooled chillers use fans to dissipate heat from the refrigerant, which is then used to cool the circulating water or process fluid. They are suitable for applications where water availability is limited or where water usage needs to be minimized. Water-cooled chillers use a separate cooling tower or a water source to dissipate heat from the refrigerant. They are more energy-efficient than air-cooled chillers but require a water source for cooling. Industrial chillers come in various sizes and configurations, allowing for scalability to meet the specific cooling needs of different applications. Industrial Applications include: Manufacturing, Food and Beverage, Pharmaceuticals, Chemical Processing, HVAC, Data Centers, Plastics and Rubber Manufacturing, Medical Imaging

Parameters	Specifications
Standard	2....to 300 TR
Condenser	Air-cooled
Temperature	35°C to 4°C
Voltage	230 VAC/ 415 VAC
Customize	Yes

CESAR- SERIES AGING ROOM

An aging test chamber, also known as an environmental test chamber or simply a test chamber, is a controlled environment used for conducting various tests to evaluate the long-term performance, durability, and reliability of products and materials. These chambers are designed to simulate a wide range of environmental conditions to assess how a product or material responds to these conditions over time. Uses: Product Testing, Material Testing, Accelerated Aging Tests, Quality Assurance, Research and Development, Regulatory Compliance. Aging test chambers are versatile tools used in various industries to ensure product reliability, safety, and quality by subjecting them to controlled environmental conditions that mimic the challenges they might face during their operational life.

Parameters	Specifications
CESAR-C18K	2200X3200X2600 MM – work space
CESAR-22K	2200X4100X2400 MM – work space
CESAR-24K	2000X4000X3000 MM – work space
CESAR-357K	10200X7000X5000 MM- work space
Volume	18000, 22000, 24000 & 357000 Liters
Temperature	Ambient to 80°C
Relative Humidity	Optional
Customize	Yes

CESCR- SERIES CASCADE REFRIGERATION UNIT

A cascade refrigeration unit is a type of refrigeration system that consists of two or more individual refrigeration cycles operating in tandem to achieve lower temperatures than a single-cycle system could achieve. It is commonly used in applications where extremely low temperatures are required, such as in industrial processes, scientific research, or specialized cooling systems. The key components of a cascade refrigeration unit typically include two or more separate refrigeration cycles, each with its own set of components, including compressors, evaporators, condensers, and expansion valves. The cycles are arranged in a cascading manner, with the refrigerant from the first cycle (the high-temperature cycle) being used to cool the evaporator of the second cycle (the low-temperature cycle). This allows for more efficient cooling at very low temperatures. Cascade refrigeration units can also have more than two cycles, depending on the desired temperature range and specific requirements of the application. Each additional cycle allows for even lower temperatures to be achieved in a stepwise manner.

Parameters	Specifications
Number of stages	2
Condenser	Depends on factors
Temperature	Ambient to -86°C
Voltage	230 VAC/ 415 VAC
Customize	Yes

CESST- SERIES STABILITY CHAMBER

A stability chamber, also known as a stability test chamber or stability testing chamber, is a controlled environmental chamber used in various industries, particularly pharmaceuticals, food, and cosmetics, to conduct stability testing on products. The primary purpose of stability chambers is to simulate and monitor the effects of various environmental conditions on products over an extended period. This helps manufacturers assess product shelf life, quality, and efficacy under different storage conditions. Functions of this chamber: **Stability Testing, Forced Degradation Studies, Quality Assurance, Regulatory Compliance, Research and Development.**

Parameters	Specifications
Volume	100 to 25000 liters
Temperature	-20°C to +70°C
Relative Humidity	20 to 90%
Inner Material	SS 304
Outer Material	CRCA Powder Coated
Voltage	230 VAC/ 415 VAC
Customize	Yes

CESBT- SERIES BATTERY TEST CHAMBER

A battery test chamber is a specialized piece of equipment used for conducting a wide range of tests on batteries. These chambers provide controlled environmental conditions, including temperature, humidity, and sometimes pressure, to evaluate the performance, safety, and durability of batteries. Battery test chambers are essential in industries like electronics, automotive, energy storage, and aerospace. Battery test chambers can precisely control temperature conditions, both high and low, to simulate various operating and storage temperatures. This is crucial for assessing battery performance under extreme conditions. In some cases, chambers can control the composition of gases in the environment to assess battery behavior in different atmospheres. Battery test chambers have racks or fixtures to securely hold batteries during testing. Advanced control systems allow for precise control of temperature and environmental conditions throughout the test. Applications are: Battery Performance Testing, Cycle Testing, Safety Testing, Quality Control, Research and Development, Regulatory Compliance

Parameters	Specifications
Volume	600, 950, 1400 liters
Temperature	-40 / -70°C to +200°C
Humidity	10 % to 95% (Optional)
Inner Material	SS 304
Outer Material	CRCA Powder Coated
Voltage	415 VAC
Customize	Yes

CESCU- SERIES CONDENSING UNIT

A condensing unit is a key component of a refrigeration system or air conditioning system. It plays a crucial role in the cooling cycle by facilitating the transfer of heat from the refrigerant to the external environment. Condensing units are commonly found in various applications, including residential air conditioning, commercial refrigeration, and industrial cooling systems. Functions are: Heat Rejection, Pressure Increase, Condensing the Refrigerant, Sending Liquid Refrigerant. Proper maintenance and sizing of condensing units are essential to ensure the efficient and reliable operation of these systems.

Parameters	Specifications
Volume	02 KW to 70 KW
Temperature	25°C to -80°C
Material	CRCA Powder Coated
Voltage	230 VAC/ 415 VAC
Customize	Yes

CESEU- SERIES EVAPORATOR UNIT

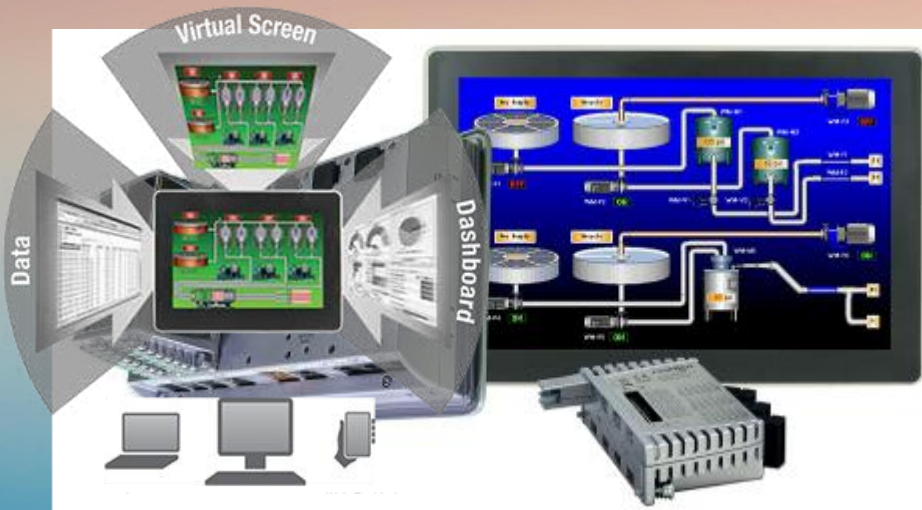
An evaporator unit is a critical component of a refrigeration or air conditioning system responsible for absorbing heat from the surrounding environment or the space being cooled. It functions in conjunction with a condensing unit to create a continuous cycle of heat exchange and cooling. Evaporator units are found in various applications, including residential air conditioning, commercial refrigeration, and industrial cooling systems. Functions are: Heat Absorption, Cooling Effect:, Dehumidification, Continuous Refrigeration Cycle. The evaporator unit is responsible for the cooling and dehumidification of air or the absorption of heat in refrigeration systems. It is a vital component in maintaining comfortable indoor temperatures and preserving perishable goods in commercial refrigeration applications.

Parameters	Specifications
Volume	02 KW to 70 KW
Temperature	-80°C to +50°C
Material	SS304/CRCA Powder Coated
Voltage	230 VAC/ 415 VAC
Customize	Yes

COMSOFT

Comsoft software developed by Cosmos Enviro Systems to manage controlling needs, functionality, and safety interlocks in various testing applications. It's designed to facilitate the testing of components and enable users to analyze and generate reports efficiently.

1. Comsoft leverages the latest in software technology to meet the controlling needs of various applications.
2. Comsoft effectively manages control functions while ensuring safety interlocks, crucial for secure testing operations.
3. Comsoft offers a wide range of testing capabilities, making it adaptable to different testing requirements and scenarios.
4. Users can easily analyze test data, facilitating informed decision-making and streamlined reporting processes.
5. The software simplifies report generation, making it convenient for users to document and communicate test results effectively.
6. Comsoft likely boasts a user-friendly interface, enhancing user experience and ease of operation.
7. Advanced software technology contributes to the accuracy and reliability of test results.
8. Comsoft may provide customization options to tailor the software to specific testing needs or industry requirements.
9. The software likely includes features for documenting test procedures, results, and any deviations or issues encountered during testing, facilitating comprehensive reporting.



OUR CLIENTS





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