



Gas Corrosion Test Chambers

Manufacturer and Supplier of Environmental Test Chamber

Company

Xi An LIB Environmental Simulation Industry manufactures and sells environmental test chambers since 2009, including design, manufacturing, as well as sales and service around the world. All LIB products have passed CE and ROHS certification, as well as other national certifications.

We deeply realized that quality is the first and most. We control quality from every aspect of raw material, production and inspection. After test chamber completed, we test its performance, inspect its functionality, go commissioning, work on calibration, and issue report for every steps, to guarantee the quality. We also pay more attention to delivery and shipment. We guarantee delivery on time, and have the obligation to advance delivery.

LIB Industry concentrates on providing the Turn-key solution for environmental testing, that research, design, producing, commissioning, delivery, install and training, provide the whole products and service according to customer's requirements..

Regarding sales, LIB direct sales and setting up local agents around the world allow customers to purchase LIB test chambers more conveniently. By 2020, our market has spread to 56 countries around the world, and the market continues to expand.

Regarding service, LIB Industry provides 3 years warranty service. In order to ensure that the customer has a timely and effective solution to the after-sales, LIB's after-sales service center and local service center work together to serve customers around the world.

We have elite team to service our customers. We provide professional solutions, right equipment, and timely reply to our worldwide customers. When we get questions and requests, we reply within 1-3 hours to our clients.

GAS CORROSION TEST CHAMBERS

Xi'an LIB Environmental Simulation Industry

www.lib-industry.com



SO₂ Noxious Gas Test Chamber (single gas)



- Gas Corrosion Test**

This noxious gas chamber can be used for single gas tests, the single gases can be SO₂/HCL/H₂S/CO₂/NO₂/CL₂.
- Anti-Corrosion Treatment Of Workroom Material**

The internal material is 316 stainless steel, rust-proof to temperature, moisture and gas corrosion resistance.
- Safety Performance**

The SO₂ exhaust device is equipped with an NAOH solution tank to dilutes SO₂ to make workplace clean and safe.

SO₂ Noxious Gas Test Chambers reproduce damages by temperature, relative humidity and noxious gas Corrosion to material, components and constructions.

This noxious gas chamber can be used for SO₂ test in accordance with IEC 60068-2-42 and other single gas tests according to customer requirements, such as HCL, H₂S, CO₂, NO₂ and CL₂.

Parameters

Model	GC-100	GC-225	GC-500	GC-800	GC-1000
Internal Dimensions (mm)	400*500*500	500*600*750	700*800*900	800*1000*1000	1000*1000*1000
Overall Dimensions (mm)	860*1050*1620	960*1150*1860	1180*1350*2010	1280*1550*2110	1500*1550*2110
Interior Volume (L)	100	225	500	800	1000
Temperature Range	15 °C ~ 80 °C				
Temperature Fluctuation	± 0.5 °C				
Temperature Deviation	± 2.0 °C				
Humidity Range	30% ~ 98% RH				
Humidity Deviation	+2.5%RH				
SO ₂ Concentration	1 ~ 30 ppm				
Air Change Rate	3 ~ 5 times/hour				
Cooling System	Mechanical compression refrigeration system				
Humidifier	External isolation, stainless steel surface evaporation humidifier				
Water Supply System	Water purification system, Automatic water supply				
Controller	Programmable color LCD touch screen controller. Ethernet connection, PC Link				
Gas Sensor	SO ₂ gas sensor				
Air Circulation	Centrifugal wind fan				
Door Lock	Electromagnetic lock				
Gas Exhaust Device	SO ₂ Exhaust Unit				
Safety Device	Humidifier Dry-combustion Protection; Over-temperature Protection; Over-current Protection; Water Shortage Protection; Earth leakage Protection				
Interior Material	SUS316 stainless steel				
Exterior Material	Steel Plate with protective coating				

Sample Holder

The internal material is 316 stainless steel, rust-proof to temperature, moisture and gas corrosion resistance.

Stainless steel punching sample shelf 2pcs; The height of the shelf is adjustable and can be removed directly to facilitate the various sizes of test samples.



SO₂ Exhaust Device

The SO₂ exhaust device is equipped with an NAOH solution tank to dilutes SO₂ to make workplace clean and safe.

Exhaust the gas after the test, automatic controlled on controller.

Electromagnetic Lock

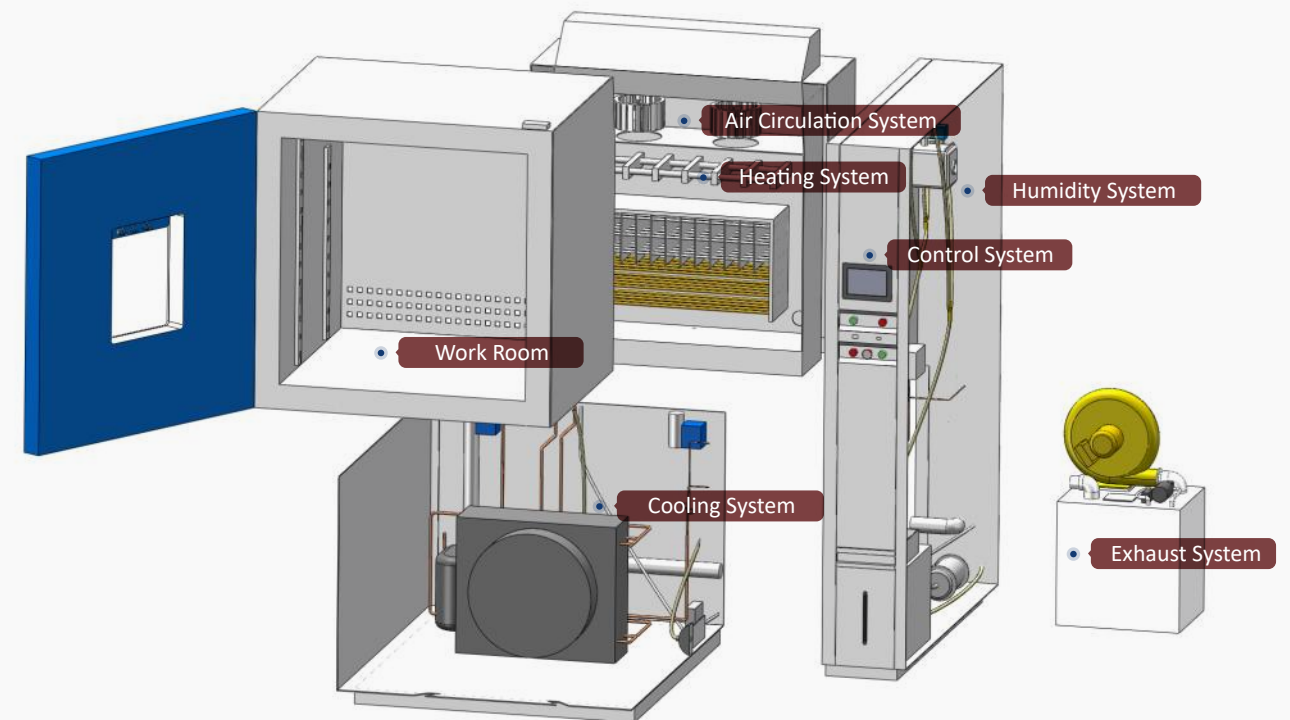
Door lock is an electromagnetic lock, which will generate a strong suction force and tightly attract the iron plate to lock the door

Unlocking is operated on the controller for safety and prevent malfunction.



SO₂ Sensor

SO₂ gas concentration detection transmitter
High accuracy, easy to exchange



Work Room

Place the test specimens into the workroom for testing, and the 2 sample holders can be adjusted. Available in different volumes.

Heating System

Test chambers are outfitted with nichrome heaters to increase air temperature in the workroom.

Control System

LIB test chamber controller is embedded on the equipment, it permits the control and management of the chamber's functions through any kind of connection.

Exhaust System

The SO₂ exhaust device is equipped with an NAOH solution tank to dilutes SO₂ to make workplace clean and safe.

Air Circulation

The centrifugal fan is installed at the rear of the chamber, and the air is uniformly distributed through the air outlet.

Humidity System

A vapor steam generator is custom-fit to test chambers. The humidity system distributes humidity that ranges from 20-98% relatively humidity. Specialized devices allow humidity to be controlled from 10-98% humidity.

Cooling System

The cooling system adopts mechanical compression refrigeration system and uses environmentally friendly refrigerants.

Mixed Flowing Gas Corrosion Test Chamber (Mixed Gas)



Mixed flowing gas corrosion test chamber can be used for MFG corrosion test, the conditions including temperature, relative humidity and mixed gases (H₂S, NO₂, Cl₂ and SO₂) to material, components and constructions.

Mixed gas test in accordance with IEC60068-2-60 and other test requirements.



MFG Corrosion Test

Can perform test conditions for MFG, include a temperature of 30°C and a relative humidity of 70% or a temperature of 25°C and a relative humidity of 75%. The most common gases excreted into the chamber consist of a combination of nitrogen dioxide (NO₂), sulfur dioxide (SO₂), hydrogen sulfide (H₂S), and chorine (Cl₂).

Parameters

Model	GCM-100	GCM-225	GCM-500	GCM-800	GCM-1000
Internal Dimensions (mm)	400*500*500	500*600*750	700*800*900	800*1000*1000	1000*1000*1000
Overall Dimensions (mm)	1010*1050*1620	1110*1150*1860	1330*1350*2010	1430*1550*2110	1650*1550*2110
Interior Volume (L)	100	225	500	800	1000
Temperature Range	15 °C ~ 100 °C				
Temperature Fluctuation	± 0.5 °C				
Temperature Deviation	± 2.0 °C				
Humidity Range	30% ~ 98% RH				
Humidity Deviation	+2.5%RH				
H ₂ S Concentration	10 ~100 ppb ± 20 ppb (Adjustable)				
NO ₂ Concentration	200 ppb ± 20 ppb (Adjustable)				
Cl ₂ concentration	10 ~20 ppb ±5 ppb (Adjustable)				
SO ₂ Concentration	100 ~500 ppb± 20 ppb (Adjustable)				
Air Change Rate	3~10 times /h				
Cooling System	Mechanical compression refrigeration system				
Humidifier	External isolation, stainless steel surface evaporation humidifier				
Water Supply System	Water purification system, Automatic water supply				
Controller	Programmable color LCD touch screen controller. Ethernet connection, PC Link				
Gas Sensor	H ₂ S/NO ₂ /Cl ₂ /SO ₂ gas sensor				
Air Circulation	Centrifugal wind fan				
Door Lock	Electromagnetic lock				
Gas Exhaust Device	Exhaust Unit				
Safety Device	Humidifier Dry-combustion Protection; Over-temperature Protection; Over-current Protection; Water Shortage Protection; Earth leakage Protection				
Interior Material	SUS316 stainless steel				
Exterior Material	Steel Plate with protective coating				

Note: 1. More gases available for mixing 2.Gas concentration can be customized

Ozone Test Chamber

Ozone resistance test chambers test elastomers (rubber) in the condition of ozone exposure,to simulate and measure rubber aging by means of ozone within a few days.

Structure: Built with dynamic and static sample holders, cooling system, humidity system, air circulation, ozone generating unit, ozone exhaust device and control system.



Automatic Control And Supply Ozone Gas

Use silent discharge type ozone generator, gas automatic generated

It has low noise and high purity features.

Safe Ozone Treatment System

The ozone exhaust device is equipped with an activated carbon to absorb ozone to make workplace clean and safe.

Exhaust the gas after the test, automatic controlled on controller.

Multi-language Controller Display

Multiple languages can be selected, English, Chinese, Russian, Korean, German, French, Polish, Spanish, Turkish, Romanian.

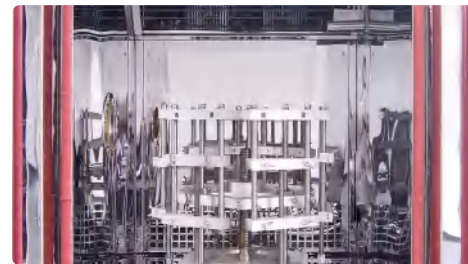
Parameters

Model	OC-250	OC-500	OC-800	OC-010
Internal Dimension (mm)	600*600*700	700*800*900	800*1000*1000	1000*1000*1000
Overall Dimension (mm)	1120*1150*1860	1200*1340*2020	1300*1540*2120	1500*1540*2140
Interior Volume (L)	250	500	800	1000
Temperature Range	0℃ ~ +100 ℃			
Temperature Fluctuation	± 0.5 ℃			
Temperature Deviation	± 2.0 ℃			
Humidity Range	30% ~ 98% RH			
Humidity Deviation	± 2.5% RH			
Cooling Rate	Ambient ~ 0℃ within 20 min			
Ozone Concentration	1 ~ 1000PPHM			
Sample Holder Rotate Speed	20 ~ 25 mm/s			
Airflow Rate	0 ~ 60L/min			
Clamps Tensile Stretch	5% ~ 80%			
Stretch Frequency	0.5Hz			
Cooling System	Mechanical compression refrigeration system			
Refrigerating Unit	French TECUMSEH compressor			
Heating Element	Nichrome heater			
Controller	Programmable color LCD touch screen controller. Ethernet connection, PC Link			
Water Supply System	Automatic water supply, Water purification system			
Humidifier	External isolation, stainless steel surface evaporation humidifier			
Temperature Sensor	PTR Platinum Resistance PT100Ω/MV A-class			
Gas Sensor	Ozone gas sensor			
Ozone Generator	Silent discharge type ozone generator			
Air Circulation	Centrifugal wind fan			
Sample Holder	Static + dynamic combined sample holder			
Exterior Material	Steel Plate with protective coating			
Interior Material	SUS304 stainless steel			
Thermal Insulation	Polyurethane foam and insulation cotton			
Observation Window	Interior lighting, double-layer thermo stability silicone rubber sealing			

Rotating Sample Holder

The internal material is 304 stainless steel, mirror surface, rust-proof to high and low temperature and moisture corrosion resistance.

Static + dynamic combined sample holder can stretch samples. Rotating sample holder allows the sample to be evenly exposed to the ozone condition.



Ozone Generating Unit

Use silent discharge type ozone generator, gas automatic generated.

It has low noise and high purity features.

Ozone Exhaust Device

The ozone exhaust device is equipped with an activated carbon to absorb ozone to make workplace clean and safe.

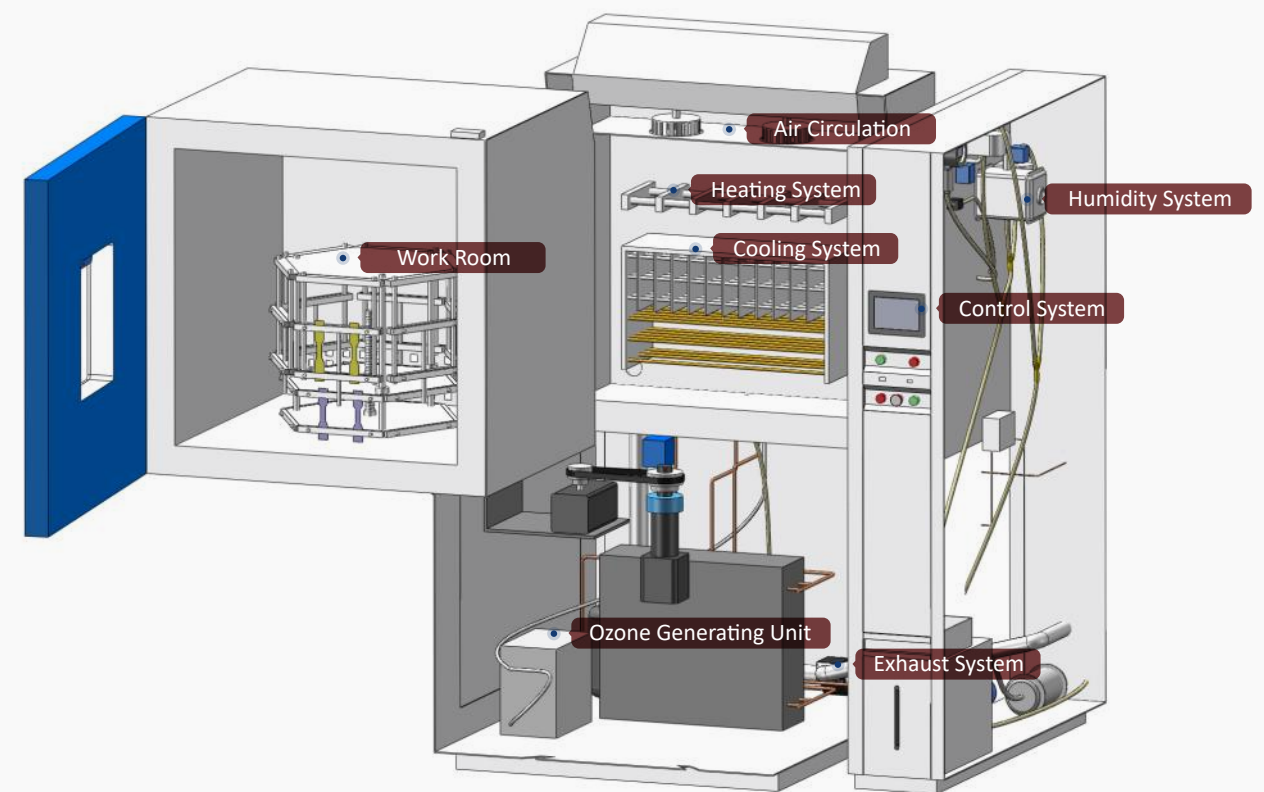
Exhaust the gas after the test, automatic controlled on controller.



Ozone Sensor

Ozone gas concentration detection transmitter.

High accuracy, easy to exchange.



Work Room

The workroom is equipped with a static & dynamic combined sample holder. Available in different volumes and configurations.

Heating System

Test chambers are outfitted with nichrome heaters to increase air temperature in the workroom.

Humidity System

A vapor steam generator is custom-fit to test chambers. The humidity system distributes humidity that ranges from 30-98% relatively humidity.

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Air Circulation

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