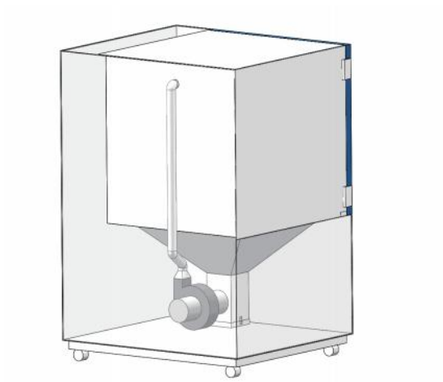
Sand and Dust Test Chamber

LIB Sand and Dust chambers simulate an environmental condition to test the exposure of electronic components to concentrated levels of dust in order to validate product seal integrity.

Considering that the components are small and large, LIB manufactures different size and configuration of dust chambers,ranging in size from 200Ltier to 3000Liter, included standard and custom chambers. All dust chambers are designed to meet test methods of IEC60529, ISO20653, IEC 60068-2-68, ASTM and MIL standards.

Dust circulation System

Test chamber with vertical circulating airflow. The airflow can smoothly blow dust into the working room, forming a dust blowing circulation system.



Easy to power up the specimen

The workroom is equipped with a single-phase 16A internal power interface to power up the test specimen. The poweron time and cycle can be controlled by the controller.

Various models available

LIB designed and produced different size and configuration of dust chamber, has capacity of 800 liters, 1000 liters, 1500 liters, 2000 liters and larger volume based on various specimens.

Large size

Specification

Model	DI-800	DI-1000	DI-1500	DI-2000
Internal Dimension (mm)	800*1000*1000	1000*1000*1000	1000*1500*1000	1000*2000*1000
Overall Dimension (mm)	1040*1450*1960	1330*1450*1960	1330*1950*1990	1330*2450*1990
Useful Volume (L)	800	1000	1500	2000
Temperature Range	Ambient ~ +50℃			
Humidity Range	< 30% RH			
Normal Wire Diameter	50um			
Nominal Width of a Gap Between wires	75um			
Fight Time	0 ~ 99H59M			
Blowing Time	0 ~ 99H59M			
Specimen Power Outlet	Dust-proof socket 16A			
Heating Element	Nichrome heater			
Vacuum System	Equipped with a pressure gauge, air filter, pressure regulator, connecting tube			
Controller	Programmable color LCD touch screen controller, Ethernet connection			
Door Lock	Electromagnetic lock			
Safety Device	Over-temperature Protection; Over-current Protection; Earth Leakage Protection; Phase Sequence Protection			
Exterior Material	A3 Steel Plate with protective coating			
Interior Material	SUS304 stainless steel			
Observation Window	Interior lighting, double-layer thermo stability silicone rubber sealing			
Standard Configuration	Sample shelf, dust wiper, talcum powder(5kgs)			
Power Supply	380V 50Hz			

MIL-STD- 810H Sand and Dust Test Chamber

TEMPERATURE：10℃～ 80℃
BLOWING DUST：10.7±7g/ m³
BLOWING SAND：0.18+0.2g/m³; 1.1+0.3g/m³; 2.2+0.5g/m³
Size can be customized according to the requirements.

Specification

Model	DIM-1000
Internal Dimension	1000*1000*1000mm D*W*H
Overall Dimension	3000*6100*2200mm D*W*H
Interior Volume	1000L
Blowing Dust	
Air velocity	1.5 -8.9m/s
Concentration of dust	10.7±7g/ m³
Dust particles	＜ 150μm
Blowing sand	
Air velocity	18.0 -29.0m/s
Concentration of sand	0.18+0.2g/m³; 1.1+0.3g/m³; 2.2+0.5g/m³
Sand particles	149μm - 600μm, 600μm - 850μm
Controller	Programmable color LCD touch screen controller, Ethernet connection
Testing Platform Diameter	600mm
Door Lock	Electromagnetic lock
Testing Platform Speed	1-7 r.p.m
Dust Detector	Integrated dust detector
Exterior Material	A3 Steel Plate with protective coating
Interior Material	SUS304 stainless steel
Standard	MIL-STD- 810H