

# SUZHOU SUSHI TESTING GROUP CO., LTD



# STI ENVIRONMENTAL RELIABILITY LABORATORY CO.,LTD

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To extend Southeast Asia Market, Promote the process of internationalization of Suzhou Sushi Testing Group establish the first overseas Subsidiary Corporation in Thailand: STI Environmental Reliability Laboratory Co., Ltd. STI Thailand business is to provide the Environmental reliability tests and test instruments to customer. We will provide the best test services and test instruments to Thailand and Southeast Asia Customers.

## **Main test:**

- Vibration test
- Temperature humidity test
- Salt spray test
- ✓ IPX test
- Drop test
- Shock test
- Battery cell and pack tests
- Other complex tests Etc.

## **Main test instrument:**

- Vibration test system
- Temperature / Humidity chamber
- Combined test system: vibration, temperature, humidity, light etc.
- Thermal shock chamber
- Salt spray chamber
- **✓** IP chamber
- Shock tester
- Drop tester
- Battery pack/module/cell charge discharge system

  Etc.



## 1. Vibration, temperature, humidity combined test system 3sets

Vibration test system

Information: Vibration test system is a kind of test instrument to simulate different complex vibration environment, to check the sample in different frequency range, acceleration, displacement vibration environment.

We have three small and big vibration test system, can do the electronic, automobile parts, whole system vibration tests.

Test Standards: MIL-STD, IEC, ASTM, ISO, ISTA

System type	Specification	Table size(H&V)
Vibration system	Rated force: 49kN	1200mm/800mm
	Rated force: 52.9kN	1500mm/800mm
	Rated force: 392kN	3000mm/2000mm



### Combined temperature humidity chamber 3sets

Information: The THV series combined environmental chamber is a special kind of chamber which can be fixed with vibration shaker, this kind of system can do different kind of combined tests such as: vibration, temperature, humidity, light etc. tests, can simulate the real complex combined environment for the test sample, customer may find the sample problems which can not happen in just one kind of environment.

Standards: ISO, IEC, ISTA, ASTM, MIL-STD

System type	Specification	
Combined chamber	Size: 1.5×1.5×1.5 m. Temp. range: -70~150°C Temp. change rate: 10°C/min Humidity: 25%RH~98%RH	1 set
	Size: 1.8×1.8×1.5 m.  Temp. range: -70~150°C  Temp. change rate: 5°C/min  Humidity: 25%RH~98%RH	1 set
	Size: 3.0×3.0×2.6 m. Temp. range: -70~150°C Temp. change rate: 5°C/min	1 set

Humidity: 25%RH~98%RH



## 2. Temperature humidity chamber 30 sets

Information: High and low temperature humidity chambers can provide high temperature, low temperature, and humidity simulation conditions, and are used for temperature related environmental tests or reliability tests of materials, components, assemblies, parts, instruments and small equipment in the fields of aviation, aerospace, automobile, shipbuilding, information, electronics, etc.

Standards: ASTM, IEC, MIL-STD, ISO, ISTA

#### Size: 700mm.×800mm.×900mm.

Temp. range: -70~150°C

Humidity: 25%RH~98%RH

Temp. change rate: 3°C/min



#### Size: 1m.×1m.×1m.

Temp. range: -70~150°C

Humidity: 25%RH~98%RH

Temp. change rate: 5°C/min



#### Size: 1m.×1m.×1m.

Temp. range: -70~150°C

Humidity: 25%RH~98%RH

Temp. change rate: 15°C/min





#### 3.Thermal shock test chamber 2sets

Information: TSM series thermal shock chamber can be used for environmental simulation, reliability test and stress screening test of complete machines, components, parts and materials of electronic products. TSM series thermal shock chamber can provide two test spaces, high temperature and low temperature. The specimens are transferred between the two spaces through a basket to achieve thermal shock with rapid temperature changes between upper and lower temperature limits.

Standard: IEC, ISO, MIL-STD, JEDEC



#### Working Size: 600mm.×700mm.×600mm.

Temp. range: -60~170°C

Change rate: 15s



Low temperature size: 1310D×1550W×1300H mm.

High temperature size: 1310D×1550W×1300H mm.

Temp. range: -60~170°C

Change rate: 15s





## 4.Salt spray test chamber 1set

Information: The Salt Spray Test Chamber (Size:  $3m \times 2.1m \times 2m$ ) is designed for advanced corrosion testing with a temperature range of  $20^{\circ}$ C to  $70^{\circ}$ C and a salt spray output of 1-3 mL/80cm<sup>3</sup>/h. This chamber supports a wide variety of testing modes including alternating salt spray tests, salt spray/dry cycle tests, brine spray tests, AASS (acetate salt spray), CASS (copper-accelerated acetate salt spray), as well as wet heat, dry heat, low temperature, and standard atmospheric condition tests. It provides flexible environmental simulation capabilities for validating the durability of automotive components, electronics, coatings, and materials.

Standard: ASTM, ISO, JIS, MIL-STD, IEC.

Size: 3m.×2m.×1m.

Temp. range: 20°C~70°C Salt: 1~3mL/80cm<sup>3</sup>/h

Can be used for alternating salt spray test; Salt spray, dry alternating test; Other: brine spray test, AASS acetate salt spray test, copper accelerated acetate salt spray test, wet heat test, dry test, low

temperature test, standard atmospheric environment test or other

combination of composite test conditions.





#### 5.IPX1~6-9K chamber 1set

Information: The IPX1 $\sim$ 6-9K Waterproof Test Chamber (Size:  $1.4m \times 1.4m \times 1.4m$ ) is designed to simulate various levels of water ingress protection in compliance with international IP standards. It supports comprehensive waterproof testing including IPX1 (vertical dripping), IPX2 (tilted dripping), IPX3/IPX4 (spraying and splashing), IPX5/IPX6 (water jet), and IPX9K (high-pressure, high-temperature water spray). Ideal for evaluating the water resistance of electronic devices, automotive components, and outdoor equipment under extreme environmental conditions.

Standard: IEC,ISO

Size: 1.4m.×1.4m.×1.4m.

Test: X1, X2, IPX3/X4, IPX5/X6, IPX9K





#### 6.Shock tester 1set

Information: Shock Tester is designed for high-precision mechanical shock testing of electronic components, automotive parts, and aerospace equipment. With a maximum load capacity of 200 kg and a table size of  $800 \times 600$  mm, the system supports half sine wave shock profiles with acceleration ranging from 15 to 500 g, pulse durations between 1-30 ms, and a maximum drop height of 1,600 mm. It is ideal for simulating real-world mechanical impact conditions to evaluate product durability and structural integrity.

Standard: ASTM, ISTA, MIL-STD, ISO



Max Load mass: 200KG

Acceleration: Half sine 15-500g

Pulse time: 1-30ms

Table size: 800x600mm.



#### 7.Drop tester 1set

Information: Drop Tester is engineered to evaluate the impact resistance and packaging reliability of large and heavy products during free-fall conditions. With a drop height adjustable from 0 to 1,500 mm, it supports test items (DUT) up to  $2,200 \times 2,200 \times 12,000$  mm in size and a maximum load capacity of 300 kg. This system is ideal for assessing product robustness, packaging integrity, and shock absorption performance under handling, shipping, or accidental drop scenarios.

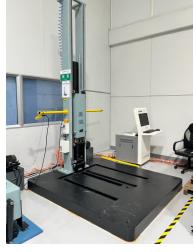
Standard: ASTM, ISTA, MIL-STD, ISO

Height: 0-1500mm.

Max DUT size: 2200mm.×2200mm.×12000mm.

Max Load Mass: 300kg





#### 8.Battery Charge/discharge system 428channels

Information: Battery Charge/Discharge System is a high-performance testing platform designed for evaluating battery cells, modules, and packs under various current and power conditions. The system delivers a total power of 400 kW with current ranges of 10A to 600A across multiple configurations. Providing flexible and scalable multi-channel testing capability. Ideal for R&D, quality control, and reliability assessment in battery production and electric vehicle applications.

Standard: IEC, UL and UN 38.3



Power: 400KW Current: 600A, 0~50A, 50~300A, 300~600A Channel number: 2

Current: 30A, 50A, 100A Channel number: 224

Current: 10A, 50A, 300A Channel number: 120

Current: 100A, 300A, 600A Channel number: 80

15 sets

10 sets

## 9. Adiabatic temperature rise tester 1Set

**Specification** 

Information: The Adiabatic Temperature Rise Tester is a testing device used to evaluate the thermal runaway behavior of battery cells or chemical substances under adiabatic (no heat loss) conditions. The test simulates real-world failure scenarios where internal heat cannot dissipate, allowing observation of self-heating reactions and thermal stability.

Test Standards: GB/T 36276-2023; UL 9540A:2025

Module



**Description** 

Needle Penetration	Stroke: 0-80mm. Speed: 0.1-100mm./s	Needle Penetration Testing
Heating Wire	≤80A, ≤40V, ≤1500W. 1mm., 1500/3000mm.	Programmable heating current
Specific Heat Test	±5% Accuracy	Constant power & comparative method
Gas Monitoring	Vacuum pump: 7.2m³/h.	Monitor gases from reactions
Sealed Tank	Φ272×360mm. Pressure: 0-2MPa	Sealed gas detection
Charging/Discharging	4 Channels, 5V 100A each	CC/CV Mode
Temp. Measurement	10-32 Channels, -100~1300°C	N-type Thermocouples
Camera Module	4MP, 25fps, H.265	Visible-light camera, 128GB
Category	Parameter	Description
	Operating Modes	HWS, Scanning, Isothermal, Specific Heat, Temperature Baseline, Heat
	Measurable Parameters	Generation, GB/T 36276 Adiabatic Rise  Specific heat, heat generation, thermal runaway, adiabatic rise rate
	Adiabatic Chamber	Φ420mm.xDepth520mm.
Combined chamber	Adiabatic Chamber Temp. Control range	Ф420mm.xDepth520mm. RT +5°C~300°C
Combined chamber		1
Combined chamber	Temp. Control range	RT +5°C~300°C
Combined chamber	Temp. Control range Temp. Stability	RT +5°C~300°C ±0.05°C
Combined chamber	Temp. Control range Temp. Stability Temp. Resolution	RT +5°C~300°C ±0.05°C 0.001°C
Combined chamber	Temp. Control range Temp. Stability Temp. Resolution Sensitivity	RT +5°C~300°C ±0.05°C 0.001°C 0.02~0.05°C/min
Combined chamber	Temp. Control range Temp. Stability Temp. Resolution Sensitivity Tracking Rate	RT +5°C~300°C ±0.05°C 0.001°C 0.02~0.05°C/min 0.02~13°C/min
Combined chamber  Electrical System	Temp. Control range Temp. Stability Temp. Resolution Sensitivity Tracking Rate Power Supply	RT +5°C~300°C ±0.05°C 0.001°C 0.02~0.05°C/min 0.02~13°C/min 3-Phase, 8400W
	Temp. Control range Temp. Stability Temp. Resolution Sensitivity Tracking Rate Power Supply Data Logging	RT +5°C~300°C ±0.05°C 0.001°C 0.02~0.05°C/min 0.02~13°C/min 3-Phase, 8400W Multidimensional Sync
	Temp. Control range Temp. Stability Temp. Resolution Sensitivity Tracking Rate Power Supply Data Logging Thermal Analysis	RT +5°C~300°C  ±0.05°C  0.001°C  0.02~0.05°C/min  0.02~13°C/min  3-Phase, 8400W  Multidimensional Sync  Thermodynamics & Kinetics



## 10. The High-Low Temperature Battery Short Circuit Tester 1Set

Information:

The High-Low Temperature Battery Short Circuit Tester is a new generation device specially developed for high-capacity power and energy storage batteries used in vehicles or other applications. It can simulate a short-circuit condition by providing different high-current resistances. During the test, the equipment is capable of monitoring current variation and temperature changes on different surfaces or different points of a single battery. All data can be stored and exported in numerical or graphical formats. It is an ideal instrument for research, 3 testing, and evaluation of power and energy storage batteries.

 $\hbox{Test Standards: GB/T 36276-2023, GB/T 36276-2018, GB 38031-2020, GB/T 36972-2018, IEC 62619-2017, GB 31241-2014, GB/T 18332.2-2001, UN38.3 \\$ 



Item	Specification
Short Circuit Temperature Range	25°C ~ +120°C
Heating Wire	Approx. 1000×1000×1200mm. (W×H×D)
Resistance Range	0.5~10m $\Omega$ , Adjustable 1m $\Omega$ , 10~100m $\Omega$ , Adjustable 10m $\Omega$
Short Circuit current	0~4000A Accuracy: 0.3%FS
Voltage Range	0~5V and 0~30V Accuracy: 0.1%FS
Data Acquisition Frequency	≥10KHz

Short Circuit Tester Detailed parameters

 $0.5\sim100 m\Omega$  (including but not limited to  $1m\Omega$ ;  $5m\Omega$ ;  $20m\Omega$ ;  $40m\Omega$ ;  $50m\Omega$ ;  $80m\Omega$ ;  $100m\Omega$ ) $10m\Omega$  or less, Adjustable in  $1m\Omega$  increments,  $10-100m\Omega$  Adjustable in  $10m\Omega$  intervals.

0.5~5m $\Omega$ , all devices in the short circuit loop are allowed to withstand current ≥4000A, Duration ≥600s, Continuous current resistance 1000A

 $6m\Omega$ ~25m $\Omega$  all devices in the short circuit loop are allowed to withstand current  $\geq$ 1000A, Duration  $\geq$ 600s, Continuous current resistance 500A

 $>25 m\Omega$  All devices in the short circuit loop are allowed to withstand current  $\geq$ 500A, Duration  $\geq$ 600s, Continuous current resistance 100A

Loop resistance tolerance range:  $\leq \pm 0.1 \text{m}\Omega$  at  $1 \text{m}\Omega$ , -5% or more at other positions Certainly

Inductance value:  $< 5m\Omega$ ,  $\le 10uH$  (100Hz $\sim$ 100kHz)



#### 11. Servo-controlled forced internal short-circuit tester 1Set

Information:

The Servo-controlled Forced Internal Short-circuit Tester simulates internal short circuits in lithium-ion batteries caused by tiny metal particles, allowing evaluation of battery safety under controlled laboratory conditions. It measures voltage and thermal behavior during testing, provides data for product optimization, and ensures compliance with forced internal short-circuit requirements in various international standards. The tester uses precise servo-controlled force and displacement to reproduce realistic internal short-circuit conditions for both cylindrical and prismatic battery cells.

Test Standards: IEC 62133-2012, JIS C 8714:2007, IEC 62619-2022, IEC 6260-4, GB 44240-2024



System Types	Specification
Max. Test Force	1 kN (optional configurations available)
Force Range	0 ~ 1000 N
Force Resolution	0.01 N
Force Accuracy	≥200 N: ±0.5%; <200 N: ±1 N
Test Travel	300 mm. (excluding fixtures)
Displacement Resolution	0.001 mm.
Displacement Accuracy	≤±0.5%
Test Speed	0.01 ~ 20 mm/s (adjustable)
Speed Resolution	0.001 mm/s
Sped Accuracy	≤±0.5% or ≤±0.01 mm/s
Maximum Test Size	W400 × D400 mm.
System Sampling Rate	1 ~ 200 Hz (adjustable)
Voltage Measurement	$0 \sim 10$ V DC, accuracy $\pm 0.05\%$ FS, 2 channels, resolution $\pm 0.01\%$ FS
Voltage Sampling Rate	1 ~ 1000 Hz (adjustable)
Temperature Measurement	0 ~ 1300°C (sensor dependent), accuracy ±1°C, ≥8 channels, resolution 0.1°C
Temperature Sampling Rate	1 ~ 1000 Hz (adjustable)



### 12. High and low temperature, humidity and low-pressure test chamber

Information

SDPThe series of low pressure test chambers can provide high temperature, low temperature, altitude, humidity and other environmental simulation conditions, and are used for temperature and altitude related environmental tests or reliability tests of materials, components, assemblies, parts, instruments and small equipment in the fields of aviation, aerospace, automobile, shipbuilding, military, information, electronics, etc.

Test Standards: GB/T 5170.1-2016, GB/T 5170.2-2017, GB/T 5170.5-201, GB/T 5170.10-2017, UN38.3-2023



System type

**Specification** 

Size: 1000mm.×1000mm.×1000mm.

Temp. range: -70~200°C

Temperature fluctuation ( $^{\circ}$ C):  $\leq 1$  (normal pressure, no load)

Temperature uniformity (°C): ≤2 (normal pressure, no load)

Temperature deviation (°C):  $\leq \pm 2$  (normal pressure, no load)

Temperature change rate: average≥2°C/min

(- 55°C∼+85°C, normal pressure, no load, no heating load)

Humidity range: Temperature+20°C~+85°C range, humidity20%~98%RH (normal pressure, no heat load)

Temperature+20°C~+75°C range, humidity20%~95%RH (Air pressure≥54kPa, no heat load)

Humidity deviation: ≤75%RHhour:≤±5%RH

(Tested under normal pressure and no-load conditions) >75%RHhour:≤+2- 3%RH

Pressure Range: Normal pressure 0.5 kPa

Rapid pressure reduction: ≤15s (75.2KPa~11.5KPa)

Pressure recovery rate: ≤10.0kPa/min

Pressure error: >40 kPa: <±2 kPa

4 kPa ~ 40 kPa: ≤±5% kPa

< 4 kPa: ≤±0.1 kPa

High and low temperature, humidity and low-pressure test chamber



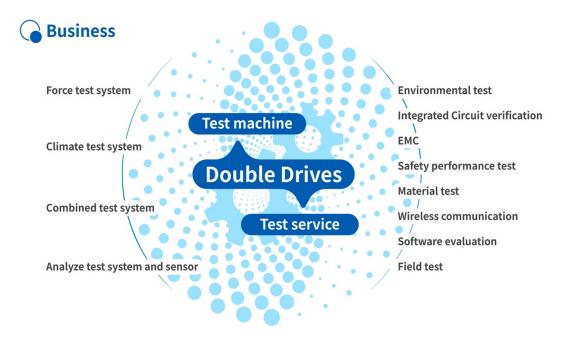
1Set

**SUZHOU SUSHI TESTING GROUP CO.,LTD (SST)** is a provider of environmental reliability test and comprehensive analysis service solutions for industrial products, committed to the development and production of environmental test equipment, providing customers with environmental reliability test services for the whole industrial chain from chips, components to end products.

Capital stock:73 million USD









## **Growth**

