

ESS Test Chamber

Applications :

Temperature adaptability test under the condition of rapid change, or gradient for electrical, electronic, instruments and other products or spare parts, particularly applies to environmental stress screening test (ESS)

Environmental stress screening (ESS) refers to the process of exposing a newly manufactured or repaired product or component (typically electronic) to stresses such as thermal cycling and vibration in order to force latent defects to manifest themselves by permanent or catastrophic failure during the screening process. The surviving population, upon completion of screening, can be assumed to have a higher reliability than a similar unscreened population.

ESS can be performed as part of the manufacturing process or it can be used in new product qualification testing.

ESS Testing Purpose

Testing at the physical environmental conditions (shock, vibration, temperature, altitude, humidity, etc.) that simulate those encountered over the operational life of the component. Random vibration and temperature cycling have proven to be the most successful forms of ESS in terms of effective flaw precipitation.

Features :

Standard Water cooled systems

Copper tubing cooling coils with aluminum fins;

Solder-in-place components minimize leakage;

High temperature silphosed or silver soldered joints

Stainless steel drip pans in both compressor and cascade compartments contain condensate;

HFC refrigerants;

Electrical Features

Nichrome wire heating elements;

Fail safe fusible link high heat limit protection;

Door interlocks to prevent test interruption;

Air Flow Systems Features

Externally mounted fan motors;

Jackshaft assemblies on all systems to provide maximum reliability and flexibility;

Aluminum backwards-inclined blower wheels;

Vertical or horizontal air flow systems;

High velocity air provides optimum air flow across your product;

■Specifications													
Model	ESS-SL							ESS-LL					
	225S L5	225S L10	408S L5	408S L10	1000 SL5	1000 SL10	1000 SL15	225L L5	225L L10	408L L5	408L L10	1000 LL5	1000 LL10
Working Chamber Volume (L)	225		408		1000			225		408		1000	
Temp Rate of Change(°C/Min)	5	10	5	10	5	10	15	5	10	5	10	5	10
Performance	-70°C~+100°C							-70°C~+100°C					
	Rapid Temp Change -55°C~+85°C Full Linear Control							Rapid Temp Change -40°C~+85°C Full Linear Control					
Humidity	±0.5°C												
Temp Constancy	±3.0°C												
Exterior Material	Cold-rolled steel sheet (Rust proof & Plastic Spray treated)/ Stainless Steel												
Interior Material	Stainless Steel Plate (SUS 304)												
Insulation Material	Rigid Polyurethane Foam												
Safety Devices	over pressure、 over heat and over current protection for compressor, over temp. protection,												
Compressor	Semi-Hermetic Compressor												
Cooling Mode	Water Cooled												
Control system	Balanced Temperature & Humidity Control System(BTC type)												
Heater	Iron-chrome wire heater												
Blower	Centrifugal Blower												
Observation	Glass incorporating heat generator												
Temp Sensor	Pt-100												
Controller	Touch screen programmable controller												
Ambient Temp.	+5°C~+35°C												
Power	AC 380V/50Hz 3phase 5 wires+ Ground wire												
Note: 1. We reserve the right to change specifications without prior notice 2. Customized sizes and configurations available													



Structure:

Overall structure, new test chamber designed very easy to operation and maintenance:

Water and electricity system separation design;

External humidifying design;

Three levels of overheat protection, easy access for refrigeration servicing, etc.

Material:

TRUMPF machines for sheet metal processing;

Tecumseh, Bock Compressor;

High quality electronic components (e.g. DANFOSS, ALCO, RANCO, SPORLAN, SAGINOMIYA, Schneider solenoid valve)

Standards Implemented and Met

GB10592-89 Technical requirements for high and low temperature test chamber

GB2423.1-1989 Low temperature test

GB2423.2-1989 High temperature test mode

Packing Details:

We use PP Film wrapping the test chamber to protect the test chamber from moisture or being scratched first, then use strong plywood case for easyload and transport, and to keep the chambers from potential crash or impact.

After-sale Service:

If you face any problems in future during testing process we promise we will give you a reply within 48 hours and solution provide within 3 working days. We can offer operation video and English operation manual. We can provide video-conference. If customers require on-site service, the transport and travel expense shall be borne by customer.

Why Choose KOMEG?**Company information:**

Being a first-class supplier and reliable partner, we are certified to ISO 9001 and got CE approval for all our products. All equipment are 7 x 24 hours tested before delivery. That explains why Komeg is the private brand of choice for many well-known brand enterprises, and also one of the very few designated suppliers who were recognized by many top 500 enterprises. Let Komeg's 26 years of professional experience work for you too.

1. Dedicate touch and excellent user experience
2. Unique and compact design, top grade appearance, stable performance and easy operation
3. Can simulate a wide range of temperature and humidity environments

4. Capable of testing large components, assemblies and finished products
5. Customized sizes and configurations available
6. One year warranties

Better Idea, Design and Quality

We strive for continuous innovation, releasing no less than five new designs each year. Our strong R&D team and skilled workers is the key to our success. No matter it is standard or custom-made project, we have rich experience in handling such so that customers worldwide can benefit more when working with us. And to ensure your specific test standards are met, the key components and parts we are using are imported famous brands. That's why SGS, Konica Minolta, Senko, Midea, TCL and Huawei are among our long-term clients.

Establish a cultural KOMEG, Build a century brand.

Quality conscious enterprise for quality conscious people.

We'd rather explain for the price than apologize for the Quality life long

Experienced and skilled staff;

High precision & reliability performance;

Prompt after-sale service;

Persist on the philosophy all the time

Besides this, we have a lot of other chamber for your reference:

3-zone/ 2-zone Thermal Shock Chamber

Walk-in Constant Temp. And Humidity Chamber

Rapid Temp. Change Chamber

Precise Drying Test Chamber

Temperature/ humidity/ vibration three integrated Chamber

Precise Drying Chamber

Vacuum oven/ no oxidation oven

Air Exchange Type Aging Oven

Burn-in Room

Salt spray Chamber

Vibration Testing Machine(mechanical and electromagnetic)

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