# Walk in chambers

# Application:

A KOMEG Walk-In Chamber serves as a test site for large components, assemblies, and finished products. KOMEG manufactures both Panel Walk-In Chambers and Solid Walk-In Chambers and can be configured as a temperature chamber or a temperature humidity chamber.

A Panel Walk-In Chamber is made from lightweight insulated panels for fast and easy installation. Usually for electronics temperature aging, like recharger, PCBA, Battery, LCD, scanners, monitors, LED, biological equipment, etc. Outside banding helps prevent leaking and keeps moisture out of the Walk-In Chamber and workspace temperatures steady.

Solid Walk-In Chambers are custom built to accommodate almost any size. They feature welded walls creating an environmental room for applications requiring controlled temperature and humidity testing exceeding 85°C. Typically, for ease of installation, a Solid Walk-In Chamber works best in new construction buildings, areas with extremely large doors, or rooms where outside walls can be easily removed.



# **Optional accessories**

- Double door
- Pass room: Provided to avoid disturbance of atmospheric temperature and humidity while opening the door.
- Floor reinforcement: Can be fixed if heavy specimen placed in the chamber for test.
- Carry-in inclined platform: Provided below the door to facilitate moving of specimens in and out through the door.
- Entire ceiling blow-out duct

The extremely wide air inlet reduces the airflow rate (down to apprrox.0.5m/s)

Dehumidifier

The rotation regenerating dehumidifier (M-300)ensures precise control of low humidity (21°C,23%RH)for electrostatic reliability tests.

Temperature and humidity recorder

100mm width recording paper with 6 dots

180mm width recording paper with 12 dots

Status indication lamp

Provide to signal chamber status and warnings when normal running, a malfunction running or stand by occurs.

Water purifier

Provided to keep the humidifier heater free from scale and ensure the supply of water to humidifier.

- Power socket
- Air cooled type condense

#### **Standard Met and Implemented:**

GB/Bb T2423.2-89 high temperature test method

GB2423.1-89 test A: low temperature test method 6

GJB150.4-1986 test at low temperature

IEC60068-2-1 low temperature test method

IEC60068-2-38 temperature cycle

IEC60068-2-78 constant humidity temperature

SPECIFICAT	TIONS						
Model		KMHW-					
		4	6	8	13	17	21
Volume(m³)		9	12.9	16.8	16.8	35.2	43.3
Interior Dimensions	W(mm)	2100	3000	3900	3000	3900	4800
	H(mm)	2100	2100	2100	2100	2100	2100
	D(mm)	2050	2050	2050	4300	4300	4300
Exterior Dimensions	W(mm)	3250	4160	5050	5050	5050	5950
	H(mm)	2350	2350	2350	2350	2350	2350
	D(mm)	2250	2250	2250	2250	4500	4500
Control System		Balanced Temperature & Humidity Control System					
Temp. range		Maximum:80°C,120°C;Minimum:-60°C,-50°C,-40°C,-30°C,-20°C,-10°C,0°C					
Humidity Range		10%,20%,30%~95%					
Temp. constancy		±0.5°C					
Humidity constancy		±2.5%R.H					
Temp. uniformity		±2.0°C					
Humidity uniformity		±5.0%R.H					
Heat up time		+20°C~+80°C ,Within 60 min					
Pull down time		+20°C~-55°C\ -40°C\-20°C\-10°C ,Within 120 or 90 or 60 min					
Interior material		Stainless Steel Plate(SUS 304)					
Exterior material		Baked Painting Steel Or Stainless steel(SUS304)					
Insulation material		Rigid polyurethane foam					
Door size (mm)		Single wing:W800*H1800;Double wing:W1600*H1800;					
Safety Devices(standard)		No fuse breaker, over pressure\over heat and over current protection for					
		compressor,					
		over temperature protection, over load protection for blower, dry heat protection					
Standard accessories		Sight window*1,cable port(portΦ50mm)*1,chamber lamp*1, status indicator					
Refrigeration system		Water Cooled					
		Semi-hermetic compressor, single stage or cascade refrigeration system					
		CFC free refrigerant(HFC-507 and HFC-23)					
Controller	Panel	7-inch LCD Touch panel,Chinese or English display selectable					
	Operation model	Program or fix point running					
	Memory						
	capacity	120 programs,1200steps, all repeat 999 cycles,part repeat 99 cycles					
	Accuracy	Temp.:0.1% of F.S±1 digit Humidity:0.1% of F.S±1 digit					
	Input	Temp.:pt-100, Humidity:pt-100 or ~5V DCV					
	Comm.port	RS-232 or RS-485 (Softawre is option)					
Ambient Temp.		+5°C~+35°C					
Wiring method		AC 380±10%50Hz ,3 phase 4 wires +Ground Wires					
Note:1. We r	eserve the right to o	change specifications without prior notice					
2.Customize	d sizes and configu	rations availa	able				

#### Features:

1.Heat preservation material, we use high-intensity PU foam with flame retardant material and high density glass fiber cotton, which can assure high precise and better uniformity and avoid unnecessary energy loss. Meanwhile, our design can better assure personnel safety when operating a Walk-in Chamber.

Cold Room Temperature	Thickness of Cold Room Wall and Proof			
5 - 15 Degree Celsius	75mm			
-15 - 5 Degree Celsius	100mm			
-2015 Degree Celsius	120mm			
-3020 Degree Celsius	150mm			
Lower than -30 Degree Celsius	200mm			

- 2. Large glass window design, viewing angle in all directions, hollow electric plating film and anti-condensation design; built-in LED lights to facilitate the test sample state of real-time observation in the course of testing; double door design, the inner big glass door with hand-in holes for the convenient operating.
- 3. Material quality of inner box is SUS304 # mounted stainless steel imported, and outer box is steel plate and the paint process applies automobile coating technology. Box body is processed shape using Triumph processing machine, its shape is nice and neat.
- 4. Large-size Full Color LCD touchscreen displayer, simple operation, easy to edit programs. PID with automatic calculation function; self-diagnostic function, show failure message and failure shot solutions step by step.
- 5. An RS-232 and RS-485 communication interface, matching recorder, strong expandability. We also support remote control by PC via wifi or wire (recommended).

# Benefits more than you can get from other supplier in China

Features of The KMHW Chambers:

- 1. Controller: LED Touch Screen Programmable Controller
- 2. Refrigeration system: Water cooled:

Semi-hermetic compressor, single stage or cascade refrigeration, CFC free referigerant

3. Safety Devices: No fuse breaker, over pressure, over heat and over current protectors for compressor, over temp. Protector, over load protector of fan, dry heat protector

### Advantages:

#### Structure:

Our housing arehigh-quality carbon steel with <u>static color spray</u> outside and galvanized steel sheet inside. Sheet metal processing machines are TRUMPF from Germany.

Trumph is famous for its precise bending technology, so our products outlook looks quality, precise and neat.

### Refrigerating System:

We use tube bending machine for copper tube bending, this way can decrease the welding points. This is easy to keep the copper tube clean to ensure longer service life of the compressor. Also less welding points can reduce the resistance when the liquid flowing inside, to keep compressor working in higher efficiency, and better energy-saving.

### Water and electricity system separating design:

For improving the comparable fragile part, heating part of constant high damp heat test, we apply water and electricity system separating design, to keep the water and electricity system separated with external humidifying system, and use top brand(e.g.: DANFOSS, Schneider, Danfoss, Emerson, Saginomiya, etc.) for all electronic components to make sure the chambers' quality and service time.

## **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 muanual. 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)

# **KOMEG Technology Industrial Co.,Ltd.**

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Tel: +86-769-83971185 ext.110

Mobile: +86-13428616029
Email: fiona@komegtech.cn
Web: www.komegtech.com

Add: Building 12, Songshan Lake, Small and Medium-Sized Science and Technology Park, Dongguan,

523808, P.R.China