

思維帶動科技 科技改變未來
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公司簡介 Company Profile

菴鴻科技有限公司於1999年成立，為研發力量雄厚的可靠性試驗設備與環境仿真設備的製造整合專家。

在菴鴻科技專業團隊的努力下，已成功針對可靠性及環境模擬系列之產品，諸如(歐、美、日規)耐水試驗機、(歐、美、日規)耐塵試驗機、換氣式老化試驗機、濕潤試驗機、耐光試驗機、耐候試驗機、鹽水噴霧試驗機、鹽乾濕複合腐蝕試驗機、可程式恒溫恒濕試驗機、冷熱衝擊試驗機、車燈振動模擬試驗機、精密熱風循環乾燥箱、真空烘箱、高溫爐等...做出了符合國際潮流及人性化的更新並積極與國內外試驗設備大廠接觸，成功代理(拉、壓)力機、(電解、渦電流、熒光X-RAY)膜厚計、硬度計等各種試驗設備；以協助顧客成為國際品牌為出發點，為顧客提供兼容性高，整合性強的一系列試驗設備。

客戶產業涉及於汽車、電子、半導體、光電、通訊、航天、機械、實驗室...等科技產業；從產品研發、整合到售後服務，每一個環節，都以顧客的需求、人性化的控制、日後方便迅速的維護作為設計的出發點，以期帶給顧客更符合國際標準規範，及更經濟的各類標準及非標準試驗設備。

Chung Hung Tech. Co. Ltd was established in 1999. The company is specialized in the research of reliable testing equipments and manufacture & integration of environmental simulation equipments.

Under the endeavor of specialty team in Chung Hung Tech. Co. Ltd, renovation has been successfully developed on the reliability of its environmental simulation products, such as the Rain Proof Tester (Europe, U.S.A and Japan standard), Dust Proof Tester (Europe, U.S.A and Japan standard), Ventilation Aging Tester, Humidity Tester, Light Fastness Tester, Weatherproof Tester, Brine Spray Tester, Salt Dry-wet Compound Erosion Tester, Programmable Constant Temperature and Humidity Tester, Thermal Shock Tester, Car-light Vibration Simulative Tester, Precise Hot Wind Circulation Tester, Vacuum Oven, High-temperature Furnace etc. The company also contacts with the abroad testing equipment producers actively, acting as a big agent of various testers including the Power machines (draught, pressing), Membrane Thickness Tester (electrolysis, whorl current, fluorescence X-RAY), Rigidity Tester etc. The company considers the clients' requirements as the priority, providing clients with high compatible and strong conformable testing equipments.

The service industries cover automobile, electron, semiconductor, photo-electricity, communication, spaceflight, machine, and laboratories, etc. The client requirements, humanistic management and convenient maintenance are considered into the product design, development, integration and after service. More economical standard and non-standard testing equipments meeting the international criterions are expected to service the clients.

可程式耐水(雨淋)試驗機(Standard Programmable Rain Tester)

本機乃用來測試汽機車燈具、雨刷性能、防水條帶、機車儀表、國防工業之導航系統、飛彈之導火管、鼻錐狀體、雷達錐頂、航天工業之耐雨水試驗及電器外殼之防水性能，藉以檢測產品之防水性能。

This tester may be used to test the lights of automobile and autobikes, the function of rain sweeper, weather strip, the panel of autoikes, the guiding device of the missiles in national defense system, and the cone shaped cap of radar. It may also be used to test the rainproof function of the equipment used in aviation industry.



特点Features:

- 1.全彩觸控雙語控制介面，操作簡易。
- 2.可程式設計，無需人員計算等待。
- 3.變頻式流量控制系統，流量控制準確。
- 4.高壓均值技術應用，準確度高。
- 5.可更換管件防呆設計。
- 6.低噪音結構工程。
- 7.磁簧式流量計，精確度高，誤差小。
- 8.大尺寸觀測窗，檢視方便。
- 9.直讀式故障檢診系統。
- 10.依據測試標準:IEC60529; ISO16750; GB4208; JISD0203 D0205; SAE J575e; CNS 7138

1. Colored and bilingual control interface, easy handled;
2. Programmable design, handed calculated is not required;
3. Converter flux control system, with precise flux;
4. High-pressure average value is applicable, with high nicety;
5. Changeable pieces to prevent stiff;
6. Low-noise project;
7. Magnetic-reed flow meter, with high precise;
8. Large-size observation window, convenient for the observation;
9. Direct-reading failure inspection system
10. Conform to testing norms: IEC 60529; ISO 16750; GB 4208; JIS D0203 D0205; SAE J575e; CNS 7138



Model	CH-2010(A - A2)		CH-2010(B-B2)		CH-2010S	
Inside dimensions (W x H x D)cm	100 x 100 x 100		100 x 100 x 100		peculiar	
Outside dimensions (W x H x D)cm	145 x 200 x 130		145 x 200 x 130		peculiar	
Test Temperature	Chamber(RT ~ 120°C)			Water(13°C ~ RT)		
Capacity	R1	1.9 L/min ↑	IPX1	With in 1 ~ 1.05L/min	IPX5	12.5 L/min
	R2	3.2L/ min ↑	IPX2	With in 3 ~ 3.05L/min	IPX6	100 L/min
	S1	24.5L/ min ↑	IPX3	0.07L/min x Nozzle	SAE	0.1in/min
	S2	39.2L/ min ↑	IPX4	0.07L/min x Nozzle		
Pressure	Adjust 1 ~ 7kg/cm ²					
Test Specimen Frame R.P.M	Adjust Table 1 ~ 17 R.P.M					
Controller	CHUNG HUNG programmable touch panel v1.4					

耐塵(防塵)試驗機(Standard Dust Tester)

本機系針對各種零配件做防塵及耐塵試驗，主要測試有 (F) 浮塵、(C) 流塵。其測試零配件包含有車燈、儀表、座椅調整器、電器防塵套、燈具、轉向系統元件杆軸、門鎖等，以測試其耐塵動作的安全性。

Dustproof test machine is used to test the dustproof and dust resistant function of automobile part. The main test includes float dust (F) and current dust (C) test and the parts to be tested include lights, panel board, taking back device of safety belt, dust cover of electrical parts, steering system, gear shaft, door lock, etc. The test is aimed at finding out dustproof and dust resistance functions as well as the safety of those parts.

特点Features:

- 1.外觀經2660粉體烤漆處理，造型美觀。
- 2.採全透式觀測窗，檢視方便。
- 3.使用特殊設計噴咀，浮塵均勻。
- 4.採用網狀置放架，測試物擺放簡便。
- 5.C,CF型 使用變頻式鼓風機，風量準確。
- 6.C,CF型 採熱感式風速計，流量精準。
- 7.使用進口真空系統。
- 8.數顯式負壓控制系統，控制精準。
- 9.系統故障指示燈，USB2.0 數據儲存接口。
- 10.高密度粉塵過濾裝置。

1. The outside is processed by 2660 powder baking finish, with pretty appearance;
2. Entirely visible observation window, convenient for observation;
3. Special designed nozzle, flat surface dust;
4. Reticular placement shelf, easy for the placement of testing materials;
5. C, CF, use converter blower, accurate wind rate;
6. C, CF, adopt thermal wind speed meter, precise flux;
7. Imported vacuum system;
8. Digital suction control system, accurate control;
9. Failure indicator, USB 2.0 data storage interface;
10. High density powder filter



Model	CH-7139-F	CH-7139-C	CH-7139-CF
Inside dimensions (W×H×D)cm	90×90×90 or Above	90×90×90 or Above	90×90×90 or Above
Outside dimensions (W×H×D)cm	155×180×130 or Above	155×180×130 or Above	155×180×130 or Above
Test Temperature & Humidity	20°C ±5°C 45%~85% RH		
Test Applicable & Dust Concentration	F1	F2	F3
	60000mg/m ³	3000mg/m ³	100mg/m ³
Test Cycling Controller	Time Control 0~999sec 0~99HR		IEC-60529 IP5X, IP6X 5000 mg/m ³ 5m/sec 100mg/m ³ 10m/sec Time Control 0~99HR
	Power consumption		
220V 單相或1φ 50/60HZ			

冷熱衝擊試驗機(Programmable Thermal Shock Tester)

冷熱衝擊試驗機為待測品靜置之冷、熱交替衝擊方式，廣泛使用於電子零組件測試、半導體、金屬、化學、材料等測試設備。

Thermal shock tester can be used to test the static materials, including the electron component, semi-conductor, metal, chemicals and material;



特点Features:

- 1.工業級10.2吋全彩觸控可程式雙語系控制系統
- 2.試驗結束待測品回常溫保護機制
- 3.完整即時試驗曲線分析顯示
- 4.溫度設定條件防呆保護
- 5.動態即時變化曲線
- 6.Error 故障病歷表檢示裝置
- 7.HFC環保冷媒,板式冷熱交換器,二元式冷凍系統
- 8.冷媒流量自動負載控制
- 9.可符合MIL, IEC, JIS規範
- 10.衝擊溫度恢復時間為5分鐘內,可符合相關試驗規範
- 11.可擴充: LN2V 液態氮快速降溫控制裝置

1. Full colored programmable bilingual control system with the industrial grade of 10.2;
2. Room temperature protection system is developed for the tested materials;
3. Analysis of the completed in-time testing curve;
4. Setting condition of temperature, stiff prevention;
5. Dynamic in-time variation curve;
6. Error record demonstrator;
7. HFC environmental protection coolant, plate cool-heat exchanger, dyadic cooling system;
8. Automatic loading control of coolant flux;
9. Pursuant to rules of MIL, IEC, JIS;
10. Recovery time for shock temperature is five minutes, pursuant to relevant testing rules;
11. Can be enlarged: LN2V liquid nitrogen rapid cooling control device



Model	CH-TS-401-A-C	CH-TS-501-A-C	CH-TS-601-A-C
Inside dimensions (W×H×D)cm	50×40×40	60×50×50	70×60×60
Outside dimensions (W×H×D)cm	171×200×153	181×210×163	191×220×173
Precool / Preheat range	-70 ~ -10°C / +80 ~ +200°C		
Shocking range	-65 ~ -10°C / +80 ~ +150°C		
Time range	0 hour 1 min ~ 9999 hour 59 min / segment		
Resolution	± 1.5°C		
Controller	CHUNG HUNG programmable touch panel v1.4		

可程式恒温恒濕試驗機(標準型)(Programmable Temperature & Humidity Chamber)



特点Features:

- 1.工業級觸控可程式多語系控制系統，可顯示故障原因，排除容易。
- 2.溫濕度設定條件防呆保護。
- 3.特殊送風循環設計，溫濕度均勻性佳。
- 4.法國原裝進口工業用環保壓縮機，使用壽命長久。
- 5.進口隱藏式門把，造型美觀。
- 6.自動供水設計。(需有入水源)。
- 7.蓄水桶預知缺水警告。
- 8.外箱SUS#304不銹鋼板+2660錐形粉體塗裝。
- 9.USB2.0數據儲存接口。

1. Programmable industrial grade controlled multi-language management system, can present the failure cause, easy to remove;
2. Setting conditions for temperature and humidity, stiff prevention;
3. Special blow circulation design, uniform temperature and humidity;
4. Imported industrial environmental protection compressor made in France, with long service life;
5. Imported hidden door handle, with pretty appearance;
6. Design of automatic water supply; (Water source is required.)
7. Water storage bucket can predict the water shortage;
8. Outer box SUS#304, made of stainless steel plate, coated with 2660 tapered powder.
9. USB 2.0 data storage interface.

Model	CH-TH-1	CH-TH-2	CH-TH-3	CH-TH-4	CH-TH-5
Inside dimensions(W×H×D)cm	50×60×50	60×70×60	60×85×80	100×100×80	100×100×100
Outside dimensions(W×H×D)cm	117×156×82	127×167×92	127×167×112	167×186×112	167×186×132
Cool & Heat range	-70℃, -60℃, -40℃, -20℃, 0℃ ~ 100℃, 120℃, 150℃				
Humidity range	20%RH ~ 95%RH				
Time range	0 hour 1 min ~ 999 hour 59 min				
Temp & Humi resolution	0.01℃ / min, 0.1%RH/ min				
Constancy	± 0.2℃, ±2.0%RH				

步入式可程式恒温恒濕試驗室(Programmable Temp.&Humi. Walk-In Chamber)

步入式恒温恒濕試驗室主要由控制面板、配電盤、保濕庫板送風機、加熱器、加濕器、冷凍機組合而成。提供業界大型零件、半成品、成品、溫濕度環境測試，如：計算機終端機，汽車零件。

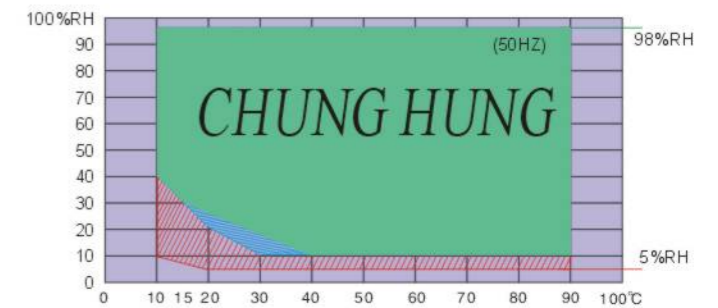
Constant temperature & humidity chamber is made up of control panel, switchboard, insulation storehouse board, forced draught blower, heater, humidifier, refrigerator. Pffer large-scale part, semi-manufactured goods, finished product, temp & humidity environment test for the manufactory, for instance; computer terminal machine, automobile part.



特点Features:

- 1.工業級觸控可程式多語系控制系統。
- 2.溫濕度設定條件防呆保護。
- 3.特殊送風循環設計，溫濕度均勻性佳。
- 4.德國原裝進口半密閉式環保壓縮機。
- 5.內箱SUS#304，外箱鹽化鋼板組合式設計。
- 6.內底板強化型不銹鋼板。
- 7.大型RO逆滲透自動供水裝置。
- 8.室內可開啓式安全門設計。
- 9.USB 2.0數據儲存接口。

1. Programmable industrial grade controlled multi-language management system;
2. Setting conditions for temperature and humidity, stiff prevention;
3. Special blow circulation design, harmonious temperature and humidity;
4. Imported semi-confined environmental protection compressor made in German;
5. Inner box sus#304, outer box is designed with the combination of salinized steel plates;
6. Inner bottom plate is made of intensified stainless steel plate;
7. Large scale RO reverse osmosis automatic water supply equipment;
8. Indoor open safety door;
9. USB 2.0 data storage interface.



- 綠色區域為50Hz能力範圍。
- 藍色區域為60Hz比50Hz多出的能力。
- 紅色區域為加裝化學除濕的能力範圍。

Model	CH-WI-1	CH-WI-2	CH-WI-3
Inside dimensions(W×H×D)cm	210×210×205	300×210×205	≥390×210×205
Outside dimensions(W×H×D)cm	Peculiar	Peculiar	Peculiar
Cool & Heat range	-40℃, -20℃, -10℃, 0℃ ~ 80℃		
Humidity range	20%RH ~ 95%RH		
Time range	0 hour 1 min ~ 999 hour 59 min		
Temp & Humi resolution	0.01℃ / min, 0.1%RH/ min		
Constancy	± 0.2℃, ±2.0%RH		

運輸型低頻振動試驗機(Vibration Simulator)

特點Features:

1. 機構與控制器分離獨立設計，確保控制器精準度及安全性。
2. 提供交談式程序設定方式，操作簡單易學；測試結果可儲存打印。
3. 提供總測試時間999hrs(可自動重複周期)。
4. 自動頻率掃描控制：提供模擬運輸過程(車、船、飛機車、船、飛機)之振動測試功能。
5. 手動頻率掃描控制：待測物共振點搜尋(手動頻率掃描控制：待測物共振點搜尋)振動測試功能(振動測試功能1Hz按鍵與每按一次增加0.1Hz按鍵)。



6. 隨機頻率掃描控制，可提供非連續性振動試驗功能1sec以下。
1. Separate design of the mechanism and controller, to ensure the precise and safety of the controller;
 2. Providing interactive program setting method, easy to handle; the testing result can be stored and printed;
 3. Providing total testing time of 999hrs (the period can be repeated automatically);
 4. Automatic frequency scanning control: providing vibration testing function for simulative transport process of automobile, vessels, planes, ships etc.
 5. Manual frequency scanning control: searching the resonant point of testing materials; vibration testing function: 1Hz of key, growth with 0.1 Hz of every depressed key;
 6. Random frequency scanning control, can provide inconsistent vibration testing function within 1 sec.

型號	9363-PCL-S	9363-PCL-L	9363-SP-S	9363-SP-L
平臺尺寸	450x450	550x700	450x450	550x700
控制方式	PC	PC	Controller	Controller
頻率範圍	5~100			
最高加速度g	12	14	12	14
位移mm	0.35~2.5 ± 1.5%			
最大載重kg	100	200	100	200
外觀尺寸mm	450x450x280	550x700x300	450x450x280	550x700x300
重量kg	100	125	100	125
電氣需求	220V/5A 220V/5A			
其它	手動控制/可程控/綫性掃描/對數掃描/隨機掃描/定頻駐留/Word格式測試報告輸出/19段程序設定		手動控制/可程控/綫性掃描/對數掃描/隨機掃描/定頻駐留/9段程序設定	

電氣加熱高溫爐(Muffle furnaces)

特點Features:

1. 適用範圍：預熱、淬火、燒鈍、退火、灰化實驗、精煉及其它高熱處理實驗等。
2. 溫度範圍：室溫~1100°C
3. 內部材質：內部採用耐高溫陶瓷板
4. 外部材質：外部採用SECC鋼板、精粉體烤漆處理
5. 循環方式：熱輻射及自然對流
6. 超溫保護：安全可靠
7. 升降溫快，經濟快速；可通氣體
8. 備註說明：另備有1200°C~1600度機型

Applicable scope: test of warm-up, quench, braise, anneal, incineration, smelting and other high-temperature treatment;
Temperature range: room temperature~1100°C;

Inside material: High-temperature durable ceramic plate;
Outside material: SECC armor plate, processed by fine powder baking finish;
Circulation method: heat radiation and natural convection;

Overheating protection: safety and reliable;
Temperature can be heated or cooled fast, rapid and economic; Gas is allowable.

Note: Machine with 1200°C~1600°C is available.



Model	Inside dimensions W×H×D(cm)	Outside dimensions W×H×D(cm)	Temperature range (°C)	Controllers	Precision (°C)	power supply 50/60HZ
CH-15MF	15×15×20	42×67×48	室溫~1100°C	PID微電腦控制	±1.0	220V 2.8KW
CH-15SMF	15×15×40	42×67×68				220V 4KW
CH-15WMF	15×10×20	42×67×48				220V 2KW
CH-20MF	20×20×20	47×72×48				220V 4KW
CH-20WMF	20×10×20	47×62×48				220V 4KW
CH-30MF	30×30×30	72×98×60				380V 12KW
CH-40MF	20×20×40	47×72×70				220V 6KW
CH-60MF	30×30×60	72×98×86				380V 15KW

鹽乾濕複合式腐蝕試驗機(Combined Cyclic Corrosion Test Instrument)

本機為鹽水噴霧、乾燥、濕潤、外氣導入、鹽水浸漬複合型試驗機，可程式模擬各種環境試驗並可於規定時間內完成條件轉移，符合ISO、JASO、ASTM、MIL-STD、BS、JIS、DIN等各國標準。



The tester is a compound tester with brine spray, dry, wet, outer gas injection and brine dip, can programmable simulate various environmental testing and can complete the transfer in designated time, pursuant to the international standards of ISO, JASO, ASTM, MIL-STD, BS, JIS and DIN;

特点 Features :

- ★全彩人機控制介面，操作簡單化。
- ★可程式編輯，控制簡單、方便。
- ★故障自檢系統，便於故障排除及維修。
- ★水平式可調整噴霧塔，落霧均勻。
- ★試藥補充瓶採用隱藏式附水位表，清洗容易。
- ★飽和空氣桶採用SUS#304不銹鋼耐高壓桶保溫效果最佳。
- ★試驗室柵架採平面分度架，可任意調整角度。
- ★試驗條件轉移時間正確，誤差率低。
- ★雙層式斷熱上蓋，觀察容易。
- ★特殊設計循環系統，溫度均勻。



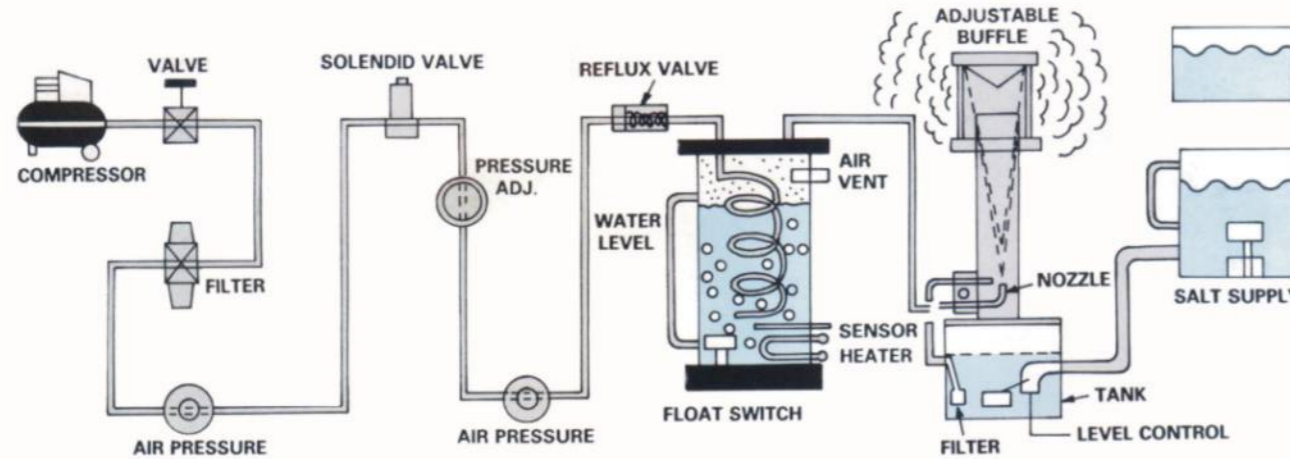
Full colored man-machine control interface, easy to handle;
Programmable edition, easy and convenient for management;
Failure self-checking system, convenient for the elimination and maintenance of the failure;
Horizon spray tower which can be adjusted, with flat fallen spray;
Hidden water level gauge is designed in the supplement bottle of the reagent, easy to clean;
Saturated air bucket adopts SUS#304 stainless steel and high-pressure durable bucket, receiving perfect effects;
Shelf in the laboratory introduces flat graduated shelf, can adjust the angle by the water level gauge randomly;
Transfer time of testing is proper, with low error probability;
Double adiabatic cover, easy for observation;
Special designed circulation system, with harmonious temperature.

Model	SH-CCT-100-(L)	SH-CCT-120-(L)	SH-CCT-SUS
Inside dimensions (W×D×H)cm	100×60×50	120×100×50	95×85×50
Outside dimensions (W×D×H)cm	peculiar	peculiar	peculiar
Test applicable	(ACSS) (DRY) (SOAK) (HUMI) (RT)	35~50°C ± 1°C RT+10°C~70°C ± 1°C OR 15°C~70°C ± 1°C RT+10°C~60°C ± 1°C(Liquid temp.)※L TYPE 50~70°C ± 1°C 60~95% RH ± 5% About room temp.	35~50°C ± 1°C -20~70°C ± 1°C RT+10°C~60°C ± 1°C 60~95% RH ± 5% About room temp.
Material	Exterio	Poly Vinyl Chloride	SUS#304 Stainless Steel
	Interior	Highly polymerized Poly Vinyl Chloride	SUS#316 Stainless Steel
Power source	220V 3 KW		220V 6.5 KW
Controller	CHUNG HUNG programmable touch panel v1.4		

鹽水噴霧試驗機(SALT SPRAY TESTER)

鹽水噴霧試驗乃針對各種材質之表面處理，包含塗料、電鍍、無機及有機皮膜、陽極處理、防銹油等防蝕處理後，測試其製品之腐蝕性。

The salt spray corrosion tester is used to test the corrosion resistance of all kinds of materials whether plated or organic coated or inorganic coated by exposing atomized salt solution. Check if the specimen has the conditions of denting rusting, cracking or blister after test.



Specification instructions	type	Inside dimensions (W × D × H)mm	Outside dimensions (W × D × H)mm
	SH-60	600x450x400	1075 × 630 × 1100
	SH-90	900x600x500	1415 × 885 × 1285
	SH-120	1200x1000x500	1900 × 1200 × 1400
	SH-160	1600x1000x500	2300 × 1200 × 1400
	SH-200	2000x1000x500	2700 × 1200 × 1400
According to the specification of CNS.JIS.ASTM. can set out temperature-fixing control.		<A> Salty-watered spray experiment: NSS. ACSS (1) Lab: 35°C ± 1°C (2) Air-saturated tub: 47°C ± 1°C Erosion-bearing experiment : CASS (1) Lab: 50°C ± 1°C (2) Air-saturated tub : 63°C ± 1°C	
Power		1 φ 220V	20A/30A

★另有腐蝕泥漿試驗機可供應，可依客戶要求之尺寸製作試驗室，滿足客戶的要求。
Erosive mud tester is available. Laboratory is established based on the clients' requirement.

程控型鹽水噴霧試驗機(PROGRAMMABLE SALT SPRAY TESTER)

特点Features:

- 1.採用程控系統，可選擇做連續鹽霧(ASTM標準)或周期式鹽霧(GB標準)
- 2.採用自動/手動(兩用)加水系統，水位不足時能自動補充水位之功能試驗不中斷。
- 3.精密玻璃噴嘴(PYREX)霧氣擴散均勻，自然落于試片，保證無結晶鹽堵塞。
- 4.附雙重超溫保護，水位不足警示確保使用安全。
- 5.溫度控制器使用數字顯示，PID控制誤差 ± 0.1°C

1. Programmable system, continuous brine spray (ASTM standard) and periodic brine spray (GB-national standard) can be selected;
2. Introducing automatic/manual watering system, watering automatically as the water level deficient to prevent the intermit of the testing;
3. Fine glass nozzle (PYREX) can ensure the harmonious diffusion of spray. Fallen on the testing block naturally and ensure there is no crystal salt blocked;
4. Double over-heating protection, alarm of water level deficiency, to ensure the operation safety;
5. Digital display with the temperature controller, the control error of PID is ± 0.1°C;

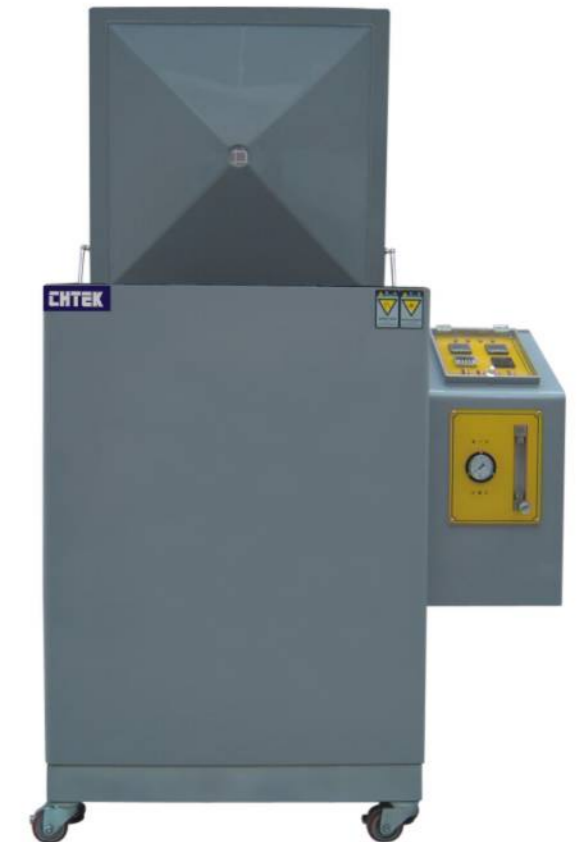


濕潤試驗機(HUMIDITY CABINET TESTER)

本機系用來測試金屬防銹油及塗膜在高溫高濕環境下的防銹特性。適用於汽機車零件防銹油性能及海洋運輸模擬等。

This tester provides a mean for evaluating the rust-preventive properties of metal preservatives or coating films under conditions of high humidity and high temperature. This test applies to most auto parts, anti-rust oils and useful for imitation of the oceanic transportation.

Molde	CH-60RT
Inside dimensions	70 × 70 × 70 (W × D × H)cm
Outside dimensions	100 × 80 × 120 (W × D × H)cm
Test temperature	49°C ± 1°C
Test humidity	98 ± 1%
Air volume	0.8m ³ /hr
Specimen rotating speed	1/3 rpm
Weight	110 kg
power	220V 50HZ



換氣式老化試驗機(Geer's Aging Oven Tester)

本機專門針對橡膠、塑料及各種絕緣材料之熱老化性做測試,換氣式老化試驗機與一般烘箱之區別在於強制性達到箱內空氣的置換,並達到一定的次數。不同規範中對換氣量有不同的界定。

This tester is specialized in the aging test of rubber, plastic and various isolation materials. Differed with the general oven, Ventilation Aging Tester can realize the compulsory interchange of air inside the box with several times. Different rules have different regulations on the ventilation volume;

特點Features:

1. 採多翼離心水平擴散送風循環系統。
2. 採用PID數字設定溫控器, SCR電流調整控制。
3. 連動式安全保護回路, 並故障指示燈。
4. 數字顯示瓦時功率計。
5. 內箱SUS#304 1mm 耐蝕不銹鋼板。
6. 外箱 2660錐型粉體塗裝。
7. 進口隱藏式門把。
8. 進口精密換氣調節裝置。
9. 0 ~ 200 Times/Hr 可調節換氣量。
10. 依據測試標準: JIS-K 7212 K 6723 K6301; ASTM-D2436 D573; UL-746B; IEC-540; BS-6746 903 ISO/DIS 4577

1. Multi-plane centrifugal horizon diffusion blow circulation system;
2. PID digital setting temperature controller, regulated by SCR current;
3. Coupled safety protection circuit, with failure indicating lamp;
4. The digital display is calculated with watt-hour power efficiency;
5. Inner box is made of SUS#304 1mm corrosion-resistant stainless steel plate;
6. Outer box is coated with 2660 tapered powder;
7. Imported hidden door handle;
8. Imported fine ventilation adjustor;
9. The ventilation volume can be adjusted between 0 ~ 200 Times/Hr.
10. Conform to testing norms: JIS-K 7212 K 6723 K6301; ASTM-D2436 D573; UL-746B; IEC-540; BS-6746 903 ISO/DIS 4577



$$\text{換氣量計算公式: } N = \frac{(X-Y) 3590}{V \cdot D \cdot \Delta T}$$

N: 每小時換氣量 Number of change of air per hour.
 X: 換氣耗電量(W) Power consumption during air change
 Y: 無換氣時耗電量(W) Power consumption during no air change
 V: 箱內容積(cm³) total volume of over
 D: 箱內空氣比重 (g/cm³) Density of over ambient air
 T: 箱內外溫度差 (°C) Temperature difference inside/outside over

Model	CH-2436-1	CH-2436-2
Inside dimensions(W x H x D)cm	45 x 50 x 45	50 x 60 x 50
Outside dimensions(W x H x D)cm	115 x 140 x 80	130 x 150 x 95
Temp range	RT+10°C ~ 200°C (300°C)	
Temp constancy	± 0.5°C	
Temp uniformity	(200°C) ± 2°C	
Indication resolution	0.1°C	
Material	Exterior	SUS#304 Stainless Steel Plate
	Interior	SECC Steel Plate + 2660 3B Surface treatment
	Insulation	Fiberglass wool + Ceramic fiber + Rock wool
Controller	PID Electronic Digital Control + S. C. R	
Airchange rate	0 ~ 200, 3 ~ 250 Times/Hr	
Power source (K.W)	7	10
Option	YOKOGAWA SR10006 6 POINT RECORDER	

耐黃變試驗機(Discoloration Tester)

特點Features:

1. 本機系模擬太陽光中紫外線, 主要專門測定白色或淺色幫材、底材、皮革、PU、織物、成品鞋對光綫照射之耐黃變, 一般測試參考時間為三小時, 相當于在貨櫃中3個月時間。
2. 以德制UV燈泡作為光源, 並控制其箱內溫度。
3. 溫度範圍: 室溫+20°C~260°C
4. 內部材質: 內部採用SUS不銹鋼
5. 外部材質: 外部採用SECC鋼板、經粉體烤漆處理
6. 溫控系統: PID微電腦控制, PV/SV同時顯示按鍵設定

1. The tester simulates the ultraviolet ray of the sunshine, for special discoloration testing of white or light supplement materials, ground materials, leather, PU, textile, finished shoes exposure to the rays. The testing time generally lasts 3 hrs, equivalent to 3 months in the storage shelf;
2. Making German UV bulb as the light source, and control the inner temperature of the box;
3. Temperature scope: +20°C ~ 260°C
4. Inner materials: SUS stainless steels;
5. Outer materials: SECC steel plates, processed by fine powder baking finish.
6. Temperature controller: controlled by PID microcomputer, PV/SV presents the key setting,



Molde	CH-60RLT	CH-75RLT
Inside dimensions	50 x 60 x 50(W x D x H)cm	90 x 122 x 55(W x D x H)cm
Outside dimensions	50 x 75 x 50(W x D x H)cm	90 x 137 x 55(W x D x H)cm
Light Source	300W UV 燈泡Lamp	
Heating	PID+SSR	
Specimen pan	φ 45cm (revolving)	
Heat holding layer	玻璃纖維 Glass fiber	
Temperature	+20°C~260°C	
Motor	1/4HP	
power supply	220/380V 3KW	220/380V 4KW

老化試驗機(Aging oven Tester)

特點Features:

1. 本烘箱主要用來研究測試橡、塑料等產品在固定時間內, 以回轉方式受熱下的耐久性試驗及材料在老化後之強度、伸長率等變化。在70°C下測試一天, 理論上相當于曝露在大氣中6個月的時間。
2. 溫控系統: PID微電腦控制, PV/SV同時顯示按鍵設定
3. 溫度範圍: RT+20°C~260°C

1. The oven is used for degradation study of plastics & rubber when subjected to heat in a rotational condition for a specified time. One day test at 70°C is theoretically equivalent to six-month usage in normal environmental condition. The machine is equipped with a motor-driven rotary plate. Hot air circulation will ensure even temperature distribution.
2. Temperature controller: controlled by PID microcomputer, PV/SV presents the key setting,
3. Temperature scope: RT (room temperature) +20°C ~ 260°C;



Molde	CH-50RT	CH-60RT
Inside dimensions	40 x 50 x 40(W x D x H)cm	50 x 60 x 50(W x D x H)cm
Outside dimensions	87 x 119 x 49(W x D x H)cm	90 x 122 x 55(W x D x H)cm
Controllers	PID微電腦控制	
Temperature	+20°C~260°C	
Heating	PID+SSR	
Motor	1/4HP	1/2HP
power supply	220 2KW	220/380V 3KW

精密型熱風循環乾燥箱(Hot Circulator Exact Oven)

特点Features:

- 1.材質：外部採用SECC鋼板、經粉體烤漆處理；內部採用SUS不銹鋼。
- 2.馬達：全新耐高溫長軸馬達。
- 3.風輪：強力型多翼式風輪。
- 4.迫緊：硅膠迫緊。
- 5.超溫保護：超負載自動斷電系統
- 6.循環方式：強制水平送風循環，特殊風路設計，加熱溫度均勻。
- 7.加熱方式：PID+SSR
- 8.溫度範圍：RT (室溫) +20°C ~ 260°C
- 9.溫控器：PID微電腦控制，PV/SV同時顯示按鍵設定，溫到計時，時間到切斷加熱電流。
- 10.另有高溫型熱風循環乾燥箱可供選擇。



- 1.Materials: outer materials are SECC steel plates, processed by fine powder baking finish. Inner materials are SUS stainless steels;
- 2.Motor: new high-temperature resistant and long-axis motor;
- 3.Wind wheel: strong, multi-plane;
- 4.Tightness: tightened by silicone;
- 5.Over-heat protection: automatic cut off system of current if over loaded;
- 6.Circulation method: forcible horizon blow circulation, special design of wind path, with harmonious heating temperature;
- 7.Heating method: PID+SSR;
- 8.Temperature scope: RT (room temperature) +20°C ~ 260°C;
- 9.Temperature controller: controlled by PID microcomputer, PV/SV presents the key setting, heating current will be cut off in a given time;
- 10.High temperature hot-wind circulation drying box is available.

Model	Inside dimensions W×H×D(cm)	Outside dimensions W×H×D(cm)	Temperature Range (°C)	Precision (°C)	power supply 50/60HZ	Remarks
CH-452	45×40×40	66×80×46	RT+20°C~ 260°C	±0.5	220V 2KW	
CH-602	50×60×50	70×113×56		±0.5	220V/380V 32KW	
CH-802	80×100×60	107×162×66		±1.0	220V/380V 6KW	
CH-902	60×90×50	87×152×66		±1.0	220V/380V 5KW	
CH-1002	100×100×100	127×167×110		±1.0	220V/380V 12 KW	雙門
CH-100N	100×100×60	127×167×70		±1.0	220V/380V 11 KW	雙門
CH-1202H	90×120×60	117×181×70		±1.0	220V/380V 12 KW	
CH-1202L	120×90×50	147×157×70		±1.0	220V/380V 12 KW	雙門
CH-1402	140×140×70	167×210×80		±1.0	220V/380V 15 KW	雙門
CH-1602	160×140×80	187×185×90		±1.0	220V/380V 15 KW	雙門
CH-1802	180×140×100	207×185×110		±1.0	220V/380V 19 KW	雙門
CH-2002	200×175×180	225×217×190		±1.0	220V/380V 25 KW	雙門

真空烘箱(Vacuum oven)

特点Features:

- 1.外部採用SECC鋼板、經粉體烤漆處理；內部採用SUS不銹鋼。
- 2.耐真空度，可達 5×10^{-3} Torr。
- 3.抽氣閥及進氣閥採用球閥，使用方便，緊密性高。
- 4.硅膠迫緊。
- 5.循環方式為輻射及自然對流
- 6.強化玻璃窗口，便于觀察箱內情況。
- 7.溫度範圍：50°C ~ 200°C

- 1.SECC steel plate is adopted outside, processed by fine powder baking finish;SUS stainless steel is used inside;
- 2.Vacuum endurable, can reach to 5×10^{-3} Torr;
- 3.Ball valve is adopted as the air evaporation valve and intake valve, convenient for use, with high compactness;
- 4.tightened by silicone;
- 5.Circulation methods are radiation and natural convection;
- 6.Strengthen the glass window, convenient for the observation inside the box.
- 7.Temperature scope: 50°C ~ 200°C



Model	Inside dimensions W×H×D(cm)	Outside dimensions W×H×D(cm)	Temperature range (°C)	Controllers	Heating	Precision (°C)	power supply 50/60HZ
CH-40	φ30×40L	44×73×66	50°C ~ 200°C	PID微電腦 控制	PID+SSR	±1.0	220V 1.2KW
CH-30L	30×30×30	50×76×47				±1.0	220V 2KW
CH-45L	40×40×45	60×86×62				±1.5	220V 2.5KW
CH-50L	50×50×50	79×110×75				±2.0	220V 5KW
CH-60L	60×60×60	89×120×85				±2.0	380V 7KW
CH-30LH	30×30×30	50×121×47				±1.0	380V 7KW
CH-45LH	40×40×45	60×131×62				±1.5	220V 2KW
CH-50LH	50×50×50	96×155×75				±2.0	220V 2.5KW
CH-60LH	60×60×60	89×165×85				±2.0	380V 7KW

電腦單晶控制式拉力試驗機(Computer system Universal testing machine)



Models	CH-2328	TCH-2328	PCH-2328BI
容量選擇 Capacity	100,200,500,1000,2000kg		
單位切換 Unit(Switchable)	N,KN,kg,1b		
力量放大倍率Load amplification	x1,x2,x5,x10,x20,x50,x100等七段自動切換功能	x1,x2,x5,x10等四段自動切換功能	
荷重精度Load Accuracy	± 1%		
最大行程(不含夾具)The Stroke	560mm或指定 or specified by user		
測試速度 Test speed	0.005 ~ 1000mm/min	A: 0.05 ~ 1000mm/min B: 10 ~ 500 mm/min C: 10 ~ 1000 mm/min	0.5 ~ 1000mm/min
馬達 Motor	伺服馬達	A.伺服馬達 B.DC馬達 C.DC馬達	DC馬達
超行程、超負荷設定保護功能 Over-travel & Overload protection function	行程上、下限位置設定保護，超過設定試驗力的10%時，系統自動停機保護		
動力系統	耗電量 Consumption	0.5kva	
	電源 Power source	1 φ, 220V, 50/60HZ	
體積	主機	56 × 50 × 126cm	
	計算機系統	100 × 48 × 42cm	
主機重量Weight	56kg		
標準配備附件 Standard accessories	拉力夾具一組、說明書一份、校正報告一份、保固書一份		

EX-3000螢光X綫膜厚計(X-ray fluorescence thickness dollars)

特點Features:

1. 採用中文窗口操作系統，操作性簡便。
2. 厚度測量極限:分辨率0.001um。
3. 可測試項目:單層膜厚、雙層膜厚、三層膜厚、化學鍍膜厚、鉛合金膜厚及組成、壓鑄鋅上鍍銅、二層同時測定、元素光譜分析。
4. 油浸式微小焦點X綫管，50KV管電壓，由上而下垂直照射方式。
5. 採用多頻分析器，可快速處理能譜分析，可執行測定物之能譜分析表示，操作簡單。
6. 濾波器:採用Co、Ni金屬及數字式濾波器，可單一或同時使用。
7. 準直器: 採用5種孔徑一體式之Collimator(可設定任意切換方式)。
8. 彩色樣品觀察系統，附有+字刻度綫，清楚顯示測定位置。
9. 客戶、各部品番號、批號，可登錄在頻道內，共有300個測量頻道數。
10. 自動測定測量臺，可使利用鼠標或搖杆來輸入及調整測定位置，可登錄儲存100組自動測定頻道，可作坐標補正及頻道連結。
11. 採用中文窗口作業軟件，設計及打印測量報告，插入測量位置的彩色圖片、非常容易。
12. 可作數據統計處理及三次元之分布圖案。
13. 自動診斷機能，故障排除對策迅速。附有X綫管的使用時間及壽命表示機能，加強保養的安全性。
14. 測定資料可保存在頻道內，在統計項目設定後可做統計處理。
15. 適合行業: IC業、電鍍業、電子業、精密工業、PCB業、裝飾業。



EX-3000		手動測量臺	自動測量臺
測量臺尺寸(mm)		170 × 110	240 × 220
測量主體	移動量	X (mm)	70
		Y (mm)	70
		Z (mm)	50 (最大150)
測定物最大高度 (mm)		50 (option1 50)	50
尺寸 (mm)		602 × 463 × 732(W × D × H)	
重量 (kg)		55	61
樣品最大荷重 (kg)		3	1
電源		AC100 ± 10V (option AC 115V, 220V)	

CT-2電解式膜厚計(Coulometric Thickness Tester)

特點Features:

1. 適用範圍: 汽機自行車、電鍍業、實驗室、品檢單位
2. 有內藏微電腦，可自我診斷機能。
3. 觸摸式按鍵，液晶顯示屏，對話式鍵入操作。
4. 高達64組頻道記憶，可記憶數據約37000個。
5. 鍍層最多可設定四層，可各層分別統計；合金層及綫材測試具有自動演算，直讀功能；鍍層之電解液、感度、攪拌均交由機器自動判定。
6. 測定範圍: 0.006 ~ 300 μm
7. 分辨率: 0.001 μm
8. 本體精度: ±1%
9. 符合ISO、JIS、ASTM、MIL、DIN等規範



CT-2 電解式膜厚計

GCT-311 電解式膜厚計(Coulometric Thickness Tester)

特點Features:

- 1.利用計算機操作性更加提升，機能也更多樣。
- 2.在微軟窗口規格下，數據處理非常容易。
- 3.可設定上下限值，當有異常值發生時，測量值由紅色表示,并有警示音告知使用者。
- 4.有使用標準的色帶的列表機，亦可使用熱感紙之列表機(選購)。
- 5.使用白金電極(選購)及電位圖的測定功能時，對於作雙重鍍及三重鍍測定分析是非常容易的。
- 6.測量頻道最多可登錄50組頻道。
- 7.鍍層最多可設定5層測量條件，測定部的表面處理方法可以確認。
- 8.作「錫/銅」測定時，純錫層及合金層可各別測量分析。
- 9.符合ISO、JIS、ASTM、MIL、DIN等規範。



測量範圍	0.01 ~ 300 μm	本體精度	1%
最小分辨率	0.001 μm	機臺尺寸	265 × 215 × 138 (W × D × H)mm
測量單位	μm, nm, mil, MI	測量面積	3.4, 2.4, 1.7 φmm
電源	AC 220V ± 10%	控制	微軟窗口兼計算機

TH-11P 電解式膜厚計(Coulometric Thickness Tester)

特點Features:

- 1.微電腦內鍵式，各鍍層條件內藏，并可隨需要修改，程序操控，操作簡單
- 2.對話式操作，錯誤信息提示，電解液更換及測定狀態，測定迅速，一目了然，防止錯誤
- 3.大屏幕之顯示器，字體大清晰明了。自動日歷記憶功能，年、月、日、時間之顯示及印出
- 4.樣品每層測完時間之顯示功能。印字器與主機分離式，印字紙張寬大，容易判讀。
- 5.主機精度高達 ± 0.5%，最大測定厚度達400 μm
- 6.操作鍵盤採用觸膜式斜面按鍵式，輕按即可，并具按鍵高燈指示
- 7.具陰陽極性反轉設定模式，降低人為操作錯誤
- 8.獨特之精密馬達攪拌，攪拌效果良好，不易故障，靜音調和。測定中具有電壓指針表，數字表雙重指示，以防失誤
- 9.標準板測定後校驗系數自動補正、儲存記憶
- 10.測定範圍:0.01-400 μm
- 11.具50組輪番測定數據可搜尋、儲存;悅耳之蜂鳴器、音量大小可調整
- 12.沉穩L臂耐用測定臺，常數發條式荷復位壓設計樣，固定容易，平衡不搖晃



車燈振動模擬試驗機(Lamp Vibration Tester)

車燈振動模擬試驗機依據SAE J-575e、FMVSS-108標準制作，振動臺材質為25mm鋼板經磷酸鹽皮膜處理，振幅3.2mm、頻率750 r.p.m。

Car-light Shock Tester is manufactured in accordance with the standards of SAE J-575e and FMVSS-108. The bumper is made of 25mm steel plates, which are processed by epithelium of phosphate. With the fluctuation of 3.2mm and frequency of 750r.p.m;



特點Features:

- 1.採用TECO變頻式調速馬達,可達800 r.p.m。
- 2.震動塊及凸輪經硬化處理及耐衝擊回火處理。
- 3.主結構採工業級6061鋁合金硬氧處理。
- 4.高强度賽車級避震支撐座。
- 5.全系統使用德國SKF軸承。
- 6.美國原裝進口支撐及張力彈簧。
- 7.加速度可達100G / 2 ms。
- 8.可配合提供治具及治具平臺設計規畫。
- 9.機臺與控制箱分離式設計。
- 10.全覆蓋式隔音箱體。
- 11.大尺寸觀查窗口及照明燈。

- 1.Introducing TESCO converter speed-regulating motor, it can arrive at 800 r.p.m;
- 2.Vibration plate and the jaw are hardened and processed with temper shockproof;
- 3.The main structure adopts industrial grade 6061 A-alloy, and be hardened burning processed;
- 4.High intensity racing-grade shockproof supporting seat;
- 5.German SKF axles are used in the system;
- 6.American original imported supporting and tension spring;
- 7.The accelerated speed can be 100G / 2 ms;
- 8.Smelting equipments and platform design/planning will be provided in match;
- 9.The machine platform and control box are designed separately;
- 10.Full-covered sound proof box;
- 11.Large-size observation window and lighting

Model	CH-D089-A	CH-D089-B
Inside dimensions (W × D × H)cm	100 × 48 × 110	100 × 48 × 110
Outside dimensions(W × D × H)cm	150 × 100 × 160	NA
Frequency range	750 ± 25 r.p.m	
Amplitude	3.2 ± 0.5 mm	
Spring tension	27 ~ 32 kg/cm ²	
Material	Exterior	SECC Steel Pirate + 2660 3B Surface treatment
	Interior	6061 aluminum alloy + hard anodic coating
Controller	AC Inverter controller	
Timer range	0 ~ 999 Hr	