

Greeting

Welcome to YM RTC Co., Ltd. a leading and specialty manufacturer of reliability testing Equipments (Reliability & Environmental Testing Equipments).

Based on its abundant technology and experience, Y.M.RTC Co., Ltd. has found to manufacture products which will satisfy customer and quality. One of the unique characteristic of Y.M.RTC Co., Ltd. is ensuring the best quality product by professionals with in-depth product knowledge and experience are directly involved from designing stage to production stage. Our ultimate goal is fostering individuals to become professional who will advance the testing equipment industry and satisfy all of our Customers located at the world wide of reliability test area . By achieving this goal, Y.M.RTC Co., Ltd. will well prepare to become a self-reliant in the environmental testing related products industry as well training all staffs to become a multi player to perform as sales and service duty. Furthermore, everyone at Y.M.RTC Co., Ltd. is striving to fulfill its duty and responsibility as a specialty company of testing equipments. We would like to invite you our company and to cooperate with you for mutual benefit..

Kim Yongmok – President

Company Profile

Company	YM R.T.C. Co., Ltd.
President	Mr. Yong-Mok Kim
Established	08. 28. 2000
Address	#110, Sicox Tower, 484, Dunchon-Daero, Jungwon Ku, Seongnam-si, Gyeonggi-Do, Korea. (462-737) Tel. +82 31 777 3520~3 / Fax. +82 31 777 3524
Paid capital	USD 500,000
Products	<ol style="list-style-type: none"> 1) Temperature & Humidity Chamber 2) Thermal Shock Tester (Temperature Cycling Chamber) 3) Walks in Changer (Aging Room Chamber) 4) PCT (HAST) & Auto Clave 5) Clean Oven for Dry and Bake 6) Reliability test system for Mobile Phone 7) Altitude chamber 8) IPX tester 9) Rain & Spray Test Chambers 10) Salt spray test Chamber
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Our Strength

- Technical support from our in-house expert .
- Specialist of Customized design for reliability test System
- Experienced Personnel in Reliability industry.
- Design Capability of in-house artist.
- Environmental and User Friendly System.
- Confidentiality.
- Total Reliability Solutions Help Customers Saves Resources Through Integrated Reliability Test Services.



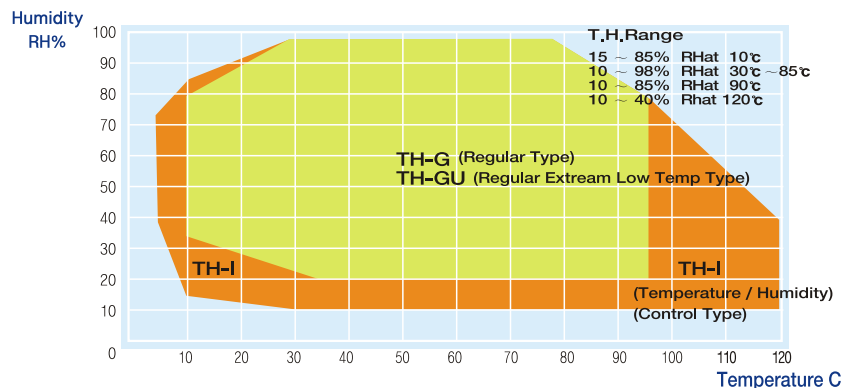
Constant Temperature and Humidity Chamber (항온 항습조)

Application : semiconductor, TFT/LCD, Solar, electronics, automotive, Precision measuring, Medical, Battery, Mobile phone, PCB industry etc..



Temperature/Humidity Control Limit Graph

As per controlling mechanism and controlling limit of temperature and humidity, it is consist by TH - G (Regular Type), TH-GU (Regular Extream Low Temp Type), TH- I (Broad Range Temp/ Humidity Control Type). Control Limits for each type are shown below and for all product, the smooth range of program control is same as the control limit of regular type.



- Temp/Humidity control limit of TH-G and TH-GU, The smooth range of controlling or program control for all model.
- Although progress of program control is little slow but, controlling is smooth for all models. TH-I type includes the temperature and humidity limit of TH-G

Special Features

- ◆ User friendly touch-screen programming and Monitoring system.
- ◆ Stainless steel interior.
- ◆ High performance, reliable compressors.
- ◆ Larger windows with bright lighting and non frosting at window.
- ◆ Shelf with heavy-duty support rails available per customer's requirements.
- ◆ Bias hole of 50mm (2 inch) diameter cable port. (3, 4, 5 inch additional ports optional)
- ◆ Heavy-duty casters with adjustable feet.
- ◆ Hinged service panels.
- ◆ Internal dimension as customer's requirements. (Customized design)
- ◆ Microprocessor PID control for temperature and humidity control.



T2 항온항습기

Temperature & Humidity Chamber - T2 Low Temperature

THC-SERIES SPECIFICATION (-20°C ~ +150°C / 30~98% RH)

MODEL		THC-210	THC-220	THC-230
Power source		AC 220V, 60Hz 3φ		
Total Road current(A)		17	18	25
System		Balanced Temperature & Humidity control System		
Refrigeration system		Hermetically sealed mechanical single-stage refrigeration system (Air-cooled condenser)		
Performance	Temp. & humid.range	-20 ~ +100°C / 30~98%R.H. [-20 ~ +150°C / 30~98%R.H.]		
	Temp. & humid.constancy	±0.3°C / ±2.5%R.H. [±0.3°C (-20 ~ +100°C), ±0.5°C (+101 ~ +150°C) ±2.5%R.H.]		
	Temp. & humid.uniformity	±0.5°C / ±3%R.H. ±0.5°C (-20 ~ +100°C) / ±3%R.H. ±0.75°C (+101 ~ +150°C) / ±3%R.H.		
	Heate-up time	-20 ~ +100°C within 35min. [-20 ~ +150°C within 60min.]		
	Pull-down time	+20 ~ -20°C within 40min.		
	Lowest attainable temperature	-20°C (However, at ambient temperature range of +10 ~ +30°C)		
Constr- uction	Exterior material	304 Stainless steel Plate-Brushed Finish/SS41(Painting)		
	Interior material	304 Stainless Steel Plate-Polished Finish		
	Insulation material	Rigid polyurethane foam (for Chamber Proper) [Fiberglass, Foam glass]		
Air circulator		Line flow fan [Sirocco fan]		
Heater		Nichrome strip wire heater		
Humidifier		SUS316L type sheathed heater (surface evaporating system)		
Cooler(Dehumidifier)		Plate-fin cooler		
Compressor		Hermetically sealed compressor		
Compressor capacity		750W	750W	1500W
Accessories		Viewing window (Heat resisting glass), Cable port(Inside diameter), 50mm(2"), Shelf(shelf, shelf bracket), Chamber lamp, Integrating hour meter, Grounding terminal.		
Safety devices		circuit breaker for power, Heater burn-out protector, Refrigerator overload relay, Thyristor overload/short-circuiting protection breaker, Thermal fuse, Control circuit overload/short, circuiting protection fuse, Temperature control trouble alarm, Burn-out circuit		
Water supply system		Gravity System with tank installed on top outside of chamber		
Internal dimension (W×D×Hmm)		500×500×500	500×500×600	1,000×800×1,000
External dimension (W×D×Hmm)		1,150×1,000×1,450	1,150×1,000×1,550	1,700×1,500×2,150
Volume(ℓ)		125	150	800
Weight(kg)		210	250	700

주) 위의 사양 및 model 외에 고객의 요구에 따라 설계 제작이 가능함. (Internal dimension and temperature, bias hole 등)
note) Customized design for internal dimension, temperature & Humidity, Bias Hole, Shelf, Rack etc..)

■ 정확하고 효율적인 마이크로 프로세서식 시리즈

- 혼합식 마이크로 프로세서는 정확도를 향상 시켜주며, 새로운 냉동시스템은 전력소비를 30~40%까지 줄여줍니다.
- 온도 및 습도 범위가 확장되었으며 소비자들의 요청에 따라 안을 들여다 볼 수 있는 투시창이 보다 커졌습니다.
- 투시창에 습기가 제거될 수 있도록 내.외부 챔버를 완전히 단열시켰으며 결로현상도 완전히 해결하였습니다.

■ 보다 간편한 콘트롤 패널구성

- 온·습도 조절기는 P.I.D프로그램(LCD TYPE)을 채택하여 손쉽게 장비를 운영할 수 있도록 역점을 두었습니다.
- 불필요한 스위치 및 시그널램프를 과감히 줄였으며 실용성과 간편성을 설계에 반영하였습니다.



T4 저온항온항습기

Temperature & Humidity Chamber - T4 Lower Temperature



THC-SERIES SPECIFICATION (-40°C ~ +150°C / 30~98% RH)

MODEL		THC-410	THC-420	THC-430
Power source		AC 220V, 60Hz 3φ		
Total Road current(A)		25	27	35
System		Balanced Temperature & Humidity control System		
Refrigeration system		Hermetically sealed mechanical single-stage refrigeration system (Air-cooled condenser)		
Performance	Temp. & humid.range	-40 ~ +100°C / 30~98%R.H. [-40 ~ +150°C / 30~98%R.H.]		
	Temp. & humid.constancy	±0.3°C / ±2.5%R.H. [±0.3°C (-40 ~ +100°C), ±0.5°C (+101 ~ +150°C) ±2.5%R.H.]		
	Temp. & humid.uniformity	±0.5°C / ±3%R.H. ±0.5°C (-40 ~ +100°C) / ±3%R.H. ±0.75°C (+101 ~ +150°C) / ±3%R.H.		
	Heate-up time	-40 ~ +100°C within 45min.		
	Lowest attainable temperature	+20 ~ -40°C within 60min.		
Constr- uction	Exterior material	304 Stainless steel Plate - Brushed Finish/SS41(Painting)		
	Interior material	304 Stainless Steel Plate - Polished Finish		
	Insulation material	Rigid polyurethane foam (for Chamber Proper) [Fiberglass, Foam glass]		
Air circulator		Line flow fan [Sirocco fan]		
Heater		Nichrome strip wire heater		
Humidifier		SUS316L type sheathed heater		
Cooler(Dehumidifier)		Plate-fin cooler		
Compressor		Hermetically sealed compressor		
Compressor capacity		1.1Kw + 1.1Kw + 400W	1.1Kw + 1.1Kw + 400W	1.5Kw + 1.5Kw + 750W
Circuit breaker for power source		Circuit breaker co-serving as overload/short circuiting protection		
Accessories		Viewing window (Heat resisting glass), Cable port(Inside diameter), 50mm(2"), each(1pc). Shelf(shelf, shelf bracket), Chamber lamp, Integrating hour meter., specimen power connector..		
Safety devices		circuit breaker for power, Refrigerator overload relay, High pressure switch, short-circuiting protection breaker, Thermal fuse, Control circuit overload, Water suspension relay		
Water supply system		Gravity System with tank installed on top outside of chamber		
Internal dimension (W×D×Hmm)		500×500×500	500×500×600	1,000×800×1,000
External dimension (W×D×Hmm)		1,150×1,100×1,450	1,150×1,000×1,550	1,700×1,500×2,150
Volume(ℓ)		125	150	800
Weight(kg)		250	280	800

주) 위의 사양 및 model 외에 고객의 요구에 따라 설계 제작이 가능함. (Internal dimension and temperature, Bias hole 등)
note) Customized design for internal dimension, temperature & Humidity, Bias Hole, Shelf, Rack etc..)

OPTION

TEMP. & HUMID. CONTROLLER	* T. I. C Digital type * P. I. D Digital type * Program digital type
RECORDER	* 2Pen/2Point/6Point
TIMER	* Analog/Digital
COMPUTER SYSTEM	* Pattern 그래프보기, 저장/인쇄 * 특정시간확대, Remote control

Bias hole (hole diameter depend on customer requirements)



Φ20mm



Φ50mm

기기내의 시료에 lead line을 연결후 외부로 관통



T7 초저온항온항습기

Temperature & Humidity Chamber - T7 Lower Temperature

THC-SERIES SPECIFICATION (-70°C ~ +150°C / 30~98% RH)

MODEL		THC-710U	THC-720U	THC-730U
Power source		AC 220V, 60Hz 3φ		
Total Road current(A)		32	35	50
System		Balanced Temperature & Humidity control System		
Refrigeration system		Hermetically sealed mechanical single-stage refrigeration system		
Range for assured performance		+5 ~ +35°C (+41 ~ +95°F)		
Performance	Temp. & humid.range	-70 ~ +100°C / 30~98%R.H. [-70 ~ +150°C / 30~98%R.H.]		
	Temp. & humid.constancy	±0.5°C (±0.9°F) / ±3%R.H. ±0.5°C (-70 ~ +100°C) / ±3%R.H. ±0.7°C (+101 ~ +150°C) / ±3%R.H.		
	Temp. & humid.uniformity	±0.5°C (-70 ~ +100°C) / ±3%R.H. ±0.7°C (+101 ~ +150°C) / ±3%R.H.		
	Heate-up time	-70 ~ +100°C within 70min. [-70 ~ +150°C within 90min.]		
	Pull-down time	+20 ~ -70°C within 90min.		
	Lowest attainable temperature	-70°C (However, at ambient temperature range of +10 ~ +30°C)		
Constr- uction	Exterior material	304 Stainless steel Plate - Brushed Finish / SS41Plate (Painting)		
	Interior material	304 Stainless Steel Plate - Polished Finish		
	Insulation material	Rigid polyurethane foam (for Chamber Proper) Glass wool (for Door)		
Air circulator		Sirocco fan		
Heater		Nichrome strip wire heater		
Humidifier		SUS316L type sheathed heater (surface evaporating system)		
Cooler (Dehumidifier)		Plate - fin cooler		
Compressor		Hermetically sealed compressor		
Compressor capacity(W)		1.1KW + 1.1KW + 400W	1.1Kw + 1.1Kw + 400W	2.1Kw + 2.1Kw + 750W
Circuit breaker for power source		Circuit breaker co-serving as overload/short circuiting protection		
Accessories		Viewing window (Heat resisting glass), Cable port (Inside diameter, 50mm(2"), each 1pc.), Shelf (shelf, shelf bracket), Chamber lamp, Integrating hour meter, Sprcimen power connector, Grounding terminal.		
Safety devices		circuit breaker for power, Refrigerator overload relay, Refrigerator inner thermal (1.5KW), High pressure switch (on refrigerator over 1.1KW), Thyrisor overload/short-circuiting protection breaker, Thermal fuse, Control circuit overload/short circuiting protection fuse, External alarm terminal.		
Water supply system		Gravity System with tank installed on top outside of chamber		
Internal dimension (W×D×Hmm)		500×500×500	500×500×600	1,000×800×1,000
External dimension (W×D×Hmm)		1,150×1,000×1,450	1,150×1,000×1,550	1,700×1,500×2,150
Volume(ℓ)		125	150	800
Weight(kg)		300	250	820

주) 위의 사양 및 model 외에 고객의 요구에 따라 설계 제작이 가능함. (Internal dimension and temperature, Bias hole 등)
note) Customized design for internal dimension, Temperature & Humidity, Bias Hole, Shelf, Rack etc..)

■ 컴퓨터 자동콘트롤 시스템

- 국내 최초로 (주)와이엠알티씨는 컴퓨터 프로그램에 의한 시험작동이 되며 그래픽 및 통계수치 기록을 모니터로 한눈에 비교 분석할 수 있는 기능을 갖고 있습니다.
- COMPUTER SOFTWARE 개발
REMOTE CONTROL SYSTEM(GP-IB, RS-232C적용)



항온·항습기 controller와
접속하여 PC로 운전관리
(Gp-IB, RS-232C)



Room Temperature And Humidity Chamber (Walk-ins Chamber : 항온 항습실)



[YM-TC 1000]

■ AGING CHAMBER (Walk in Chamber)

- Customized Design for internal dimension, Temperature range, Shelves, Fixtures Etc..
- RT to 80°C Normal temperature range (Other as option)
- Reliability test for Semiconductor, Chemical, Electronics, Automotive components, ATM Telecommunication MODEM, Repeater and power supply etc...

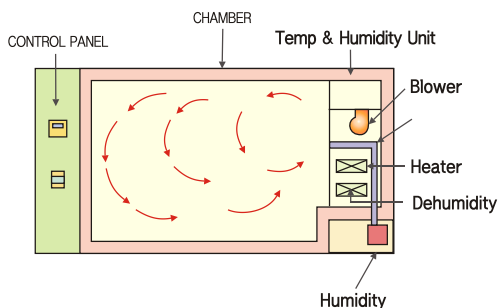


THR-75

Features

- ◆ Large size PID control with fast temperature control. 200 step control.
- ◆ Uniformity temp and humidity control for large area in room.
- ◆ Continuous operation without system stop.
- ◆ Temperature control graph.
- ◆ Electronics sensor for humidity check.
- ◆ Uniformity temperature control within $\pm 1^{\circ}\text{C}$.
- ◆ Customized design is possible for internal dimension, temperature & Humidity.

■ Temp & Humidity Unit



■ 특 징

- 다양한 기종
온도·습도 제어범위가 200STEP으로 구성되어 있으며, 표준사양이외에 주문사양도 가능하다.
- UNIT방식에 의한 SPEED시공
UNIT는 프레하브 실을 구성하는 패널류, CONTROL부품의 제어반, 환경공기의 온도·습도를 조절하는 항온·항습 UNIT 3개 부분으로 구성되어 있다. 각각의 UNIT는 공장에서 제작, 조립을 함으로써 신뢰성이 양호하며 현지공사도 가능하다.
- 독자적인 기술로서 항온·항습 SYSTEM개발
실내에서 순환되는 공기는 먼저 항온·항습 UNIT내에서 일단 냉각·제습이 되며, 다음으로 P.I.D제어에 의해 설정, 온도·습도를 유지하며 가열·가습이 작동된다. 이 방식으로써 가열용량·가습용량을 적절히 보조해주므로 열손실이 적고 전력도 절약된다.

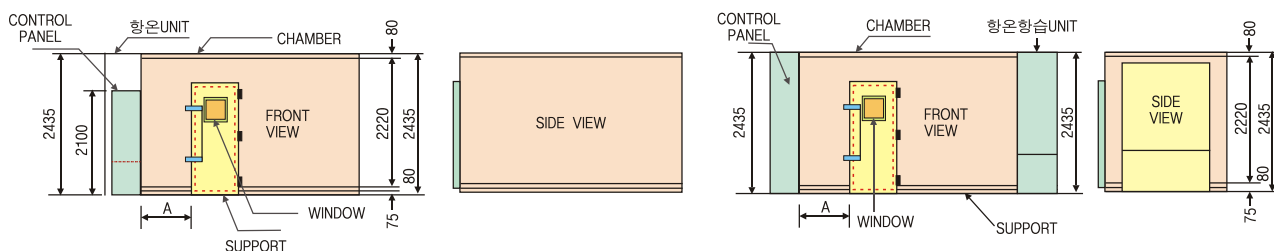


ROOM / COLD ROOM CHAMBER (자동차 신뢰성 시험)

엔지니어링설계에 의한 온·습도 조절 및 규격변동이 가능하며 판넬 재질과 시스템변경 생산이 가능합니다.
 자동차 환경시험/자동차 배기 가스 시험/엔진구성 시험/전장부품 시험/기타 자동차관련 시험설비 생산 등.

Room / Cold Room Chamber for Reliability test of Automotive components
 like electrical components, automotive components, Navigation, Gages, controller, Wire etc...

■ 향온·향습 UNIT



THC-SERIES SPEC.

MODEL		THR-10	THR-20	THR-30	THR-40	THR-50	THR-60	THR-75
RANGE	TEMP./HUMIDITY	-30°C ~ +70°C / 30~98%RH (-50°C ~ 70°C)						
	TEMP.ACCURACY	± 1°C						
	HUMIDITY ACCURACY	± 3%RH						
CHAMBER SIZE	EXTERNAL DIMENSION(m/m)	W	2,950		3,950		4,950	5,950
		D	2,250		2,750	3,250		4,250
		H	2,435					
	INTERNAL DIMENSION(m/m)	W	2,000		3,000		4,000	5,000
		D	2,000		2,500	3,000		4,000
		H	2,350					
TEMP./HUMIDITY EQUIPMENT(W+D+H)m/m		1,350×500×2,400			1,800×800×2,200		2,100×700×2,400	
CONTROL BOX(W+D+H)m/m		600×800×2,100						
VOLTS		AC220V, 60Hz, 3Φ / AC380V, 60Hz, 3Φ						

CTH-SERIES SPEC.

MODEL		CTH-10	CTH-20	CTH-30	CTH-40	CTH-50	CTH-60	CTH-75
SPACE(坪)		1	2	3	4	5	6	7.5
RANGE	TEMP./HUMIDITY	-15°C ~ +35°C / 50~70%RH (0°C ~ 70°C)						
	TEMP.ACCURACY	± 1°C						
	HUMIDITY ACCURACY	± 5%RH						
CHAMBER SIZE	EXTERNAL DIMENSION(m/m)	W	1,800	3,600		4,500	5,400	
		D	1,800	2,700	3,600		4,500	
		H	2,430					
	INTERNAL DIMENSION(m/m)	W	1,720	3,520		4,420	5,320	
		D	1,720	2,620	3,520		4,420	
		H	2,200					
TEMP./HUMIDITY EQUIPMENT(W+D+H)m/m		1,100×500×2,100				1,400×500×2,100		
VOLTS		AC220V, 60Hz, 3Φ / AC380V, 60Hz, 3Φ						



Thermal Shock Test Chamber (Temperature Cycling System) 열충격 시험기

3 ZONE, Model YM-TST300

본 열충격시험기는 고온실과 냉동실에 시료를 짧은 시간 안에 이동시켜 급격한 온도변화에 시료의 이상유무를 확인하기 위한 시험기로 3Zone Type(고온, 상온, 냉동실)이 있으며, 모든 작동은 Program Cycling될 뿐만아니라 그에 따른 온도기록계가 부착되어 있어 온도변화 및 Cycling을 한눈에 확인할 수 있다.



Thermal Shock Test Chamber (3zone) (Temperature Cycling System)

Special Features

- ◆ Temp' Controller with -50~ +200 Deg. C
120 °C within 5 Min. and -50 °C within 5 min.
- ◆ High and LOW Temperature zone change by Damper Switch control.
- ◆ 3 Zone. (High, room, low temp)
- ◆ 300mm / 400mm / 500mm of inner dimension of chamber. Other dimension is available per customer requirements.
- ◆ User frindly control panel with LCD touch screen Monitor and all operation status Display at monitor.
- ◆ HFC refrigerant for green earth environment.

Application

LED, Automotive, Precise Instruments, TFT/LCD, P.C.B, Semiconductor, Frontier Materials

Specification



TST-340



TST-350

Description	High temp zone	Low temp' room
Temp range	Room temp ~ -200 °C	0 ~ -70 °C
Operating temp	+50 °C ~ +200 °C	-25 °C ~ -65 °C
Temp uniformity and accuracy	±1 °C	±1 °C
Temp changing time	5 min.	
Zone changing method	Damper control within 3 sec	
Internal DIMENSION (W×D×H)mm	TST-330	300(W) × 300(L) × 300(H)
	TST-340	400(W) × 400(L) × 400(H)
	TST-350	500(W) × 500(L) × 500(H)

Thermal Shock Test Chamber (Temperature Cycling System) 열충격 시험기

2 ZONE, Model YM-TST300

본 열충격시험기는 고온실과 냉동실에 시료를 짧은 시간 안에 이동시켜 급격한 온도변화에 시료의 이상유무를 확인하기 위한 시험기로 2Zone Type(고온실, 냉동실)이 있으며, 모든 작동은 Program Cycling될 뿐만아니라 그에 따른 온도기록계가 부착되어 있어 온도변화 및 Cycling을 한눈에 확인할 수 있다.



TST-250

Thermal Shock Test Chamber (2 zone) (Temperature Cycling System)

(Liquid to Liquid Temp Cycling System as Option)

Special Features

- ◆ Temp' Controller with -50~ +200 Deg. C
120 °C within 5 Min. and -50 °C within 5 min.
- ◆ High and LOW Temperature control by Up and down elevator with 2 zone.
- ◆ 2 Zone. (High, low temp)
- ◆ 300mm / 400mm / 500mm of inner dimension of chamber. Other dimension is available per customer requirements.
- ◆ User frindly control panel with LCD touch screen Monitor and all operation status Display at monitor.
- ◆ HFC refrigerant for green earth environment.

Application Field

LED, Automotive, Frontier Materials Precise Instruments, PCB, Semiconductor, TFT/LCD

Specification

Description	High temp zone	Low temp' room
Temp range	Room temp ~ -200°C	0 ~ -70°C
Operating temp	+50°C ~ +200°C	-25°C ~ -65°C
Temp uniformity and accuracy	±1°C	±1°C
Temp changing time	5 min.	
Zone changing method	Elevator within 3 sec	
Internal DIMENSION (W×D×H)mm	TST-230	300(W) × 300(L) × 300(H)
	TST-240	400(W) × 400(L) × 400(H)
	TST-250	500(W) × 500(L) × 500(H)



TST-240



Convection Oven (N2 Oven, Vacuum Oven)

1 Zone OVEN



CO-900

4 Zone OVEN



CO-1500

POWER	AC 220V, 60Hz 3
Temp range	Amb+5℃ ~ +250℃
Temp constancy	±3℃
Temp uniformity	±0.3℃(Included Off-Set function)
Temp control	P.I.D DIGITAL
Heater	8.4kw
Material	SUS#304(Stainless steel)
Internal	900(W) × 800(L) × 1,500(H)
External	1,600(W) × 1,000(L) × 2,020(H)

POWER	AC 220V, 60Hz 3
Temp range	Amb+5℃ ~ +250℃
Temp constancy	±3℃
Temp uniformity	±0.3℃(Included Off-Set function)
Temp control	P.I.D DIGITAL
Heater	2.5kw × 4EA
Material	SUS#304(Stainless steel)
Internal	500(W) × 500(L) × 500(H) × 4 zone
External	2,100(W) × 1,150(L) × 1,810(H)

Special Features

- ◆ Large forced convection oven for industrial use.
- ◆ Microprocessor PID temperature controller.
- ◆ Dual over heat Prevention system equipped.
- ◆ User friendly LCD panel touch controller.
- ◆ N2 supply as option.
- ◆ Vacuum as option.
- ◆ Upto 6 zone with individual temperature controller.
- ◆ Heatingup to 170 ℃ and down to 50 ℃ within 30 min.
- ◆ Internal dimension is based on customer requirements.
- ◆ Application for semiconductor, electronics, Solar, TFT/LCD/LED, and others.
- ◆ Water cooling system as option.





Convection Oven (N2 Oven, Vacuum Oven)



CO-1500-6

POWER	AC 220V, 60Hz 3 Phaes
Tempe range	RT ~+250℃ Heating up time to 200 Deg. Within 40 Min.
Temp consancy	±3℃
Temp uniformity	±0.3℃(Included Off-Set function)
Temp control	P.I.D DIGITAL
Heater	2.5kw×6EA
Material	SUS#304(Stainless steel)
Internal Dimension	500(W) × 500(L) × 500(H) × 6 ZONE
External Dimension	2,100(W) × 1,150(L) × 2,300(H)

Special Features



CO-1500

- ◆ Large forced convection oven for industrial use.
- ◆ Microprocessor PID temperature controller.
- ◆ Dual over heat Prevention system equipped.
- ◆ User friendly LCD panel touch controller.
- ◆ N2 supply as option.
- ◆ Vacuum as option.
- ◆ Upto 6 zone with individual temperature controller.
- ◆ Heatingup to 170 ℃ and down to 50 ℃ within 30 min.
- ◆ Internal dimension is based on customer requirements.
- ◆ Application for semiconductor, electronics, Solar, TFT/LCD/LED, and others.
- ◆ Water cooling system as option.

■ Specification

MODEL		YM-CO900	CO-1500
Type		Forced convection system	
Chamber size(W×D×H)	m/m	900×800×1,500	1,500×1,000×1,500
Overall size(W×D×H)	m/m	1,600×1,000×2,020	2,100×1,200×2,020
Temp range		Amb +5℃ ~ 250℃ (+20℃ ~500℃/Max)	
Temperature		260℃ (Max)	
Temperature controller		P.I.D digital setpoint/digital display	
Timer & alarm		0-24hr(be possible change of timer)	
Heater		Sheath Heater (type : fin heater)	
Heater capacity	(W)	12,000	24,000
Fan motor		220V 60Hz 3Φ 1/2Hp	220V 60Hz 3Φ 1Hp
Interior material		Stainless Steel plate (SUS# 304)	
Exterior material		Steel plate with powder coated finish	
ELB(electric leak breaker)	S/w	220V 3Φ 50A	220V 3Φ 60A
Power Source		220V 60Hz 3Φ	



PCT (HAST)

(Highly Accelerated Stress Test Chambers)

PKG Reliability test for Pressure Cook test, under High temp, high humidity and High Pressure change



PCT - 1000

Features

- ◆ Unsaturated or saturated humidity control.
- ◆ Programmable controller with temperature, humidity, and count-down display I.
- ◆ 12 specimen power terminals, allows power-up of specimens.
- ◆ Automatic fill of the humidity water at the start of a test.
- ◆ Overheat & over-pressure protectors.
- ◆ Door lock safety mechanism to prevent opening to the door while the chamber is pressurized.
- ◆ Specimen power control terminal : shuts down the product power in the event of an alarm.
- ◆ User friendly control system with LCD touch screen.
- ◆ Bias hole upto 4 inch depend on customer requirement for testing of specimen.
- ◆ Temp and humidity uniformity by circulation fan within +/-3%.



PCT- 100

Special Features

MODEL	YM-PCT 500	YM-PCT 800	YM-PCT 1000
Temp' range	80~150°C	80~150°C	80~150°C
Humidity	65~100%	65~100%	65~100%
Chamber size	500 Diameter	800 Diameter	1,000 Diameter
Steam Pressure	3 atm	3 atm	3 atm



ALTITUDE CHAMBER (감압 시험기)

Temperature testing at altitudes up to 100,000 feet



ACT - 800



ACT - 1000

Features

- ◆ Provide custom-built chambers for simultaneous testing of temperature and low-pressure altitude conditions with anticipated test load & specification/method.
- ◆ Temperature range from -50 to 150°C.
- ◆ Altitude range from ground to 100,000 feet.
- ◆ Chamber internal size specified by customer.
- ◆ Automatic altitude control, integrated with temperature controller.
- ◆ Vacuum pump sized for climb/dive rate required by application.
- ◆ Viewing window and cable ports available.

Special Features

MODEL	YM-ACT 500	YM-ACT 800	YM-ACT 1000
Temperature range	-40~150°C	-40~150°C	-40~150°C
Humidity range	30~98%	30~98%	30~98%
Vacuum range	1~760mmHg	1~760mmHg	1~760mmHg
Chamber dimension (Internal) W×D×H	500×500×500	800×800×800	1,000×1,000×1,000

Note) Internal dimension depend on customer's requirement.



Rain & Spray Test Chambers (살수 시험기)

Application : Automotive industry, electronics industry

Features

- ◆ Rotating rain and spray nozzles designed.
- ◆ Speed control for the rotating spray nozzles.
- ◆ Stationary product shelf.
- ◆ Water pressure regulators, gauges and flow meters.
- ◆ Special high-volume floor drain system to rapidly drain water out of the chamber.
- ◆ Interior chamber size is depend on customer requirements to meet test methods.

■ R1, R2, S1, S2, Test Methods

- 1) S1 spray : Room temperature water with 40 nozzles at 14.2 psi (1 kgf/cm²) for 30 minutes.
- 2) S2 Spray : Room temperature water with 40 nozzles at 42.7 psi (3 kgf/cm²) for 60 minutes.
The flow rate is 39.2 L/min.
- 3) R1 Spray : Room temperature water with two nozzles at 4.3 psi (0.3 kgf/cm²) for 10 minutes.
The flow rate : 3.2 L/min.
- 4) R2 Spray : Room temperature water with two nozzles at 1.4 psi (0.1 kgf/cm²) for 10 minutes.
The flow rate : 1.9 L/min.

Test Methods

- ◆ JSA JIS (Japanese Industrial Standard) D 0203 “Method of Moisture, Rain and Spray Test for Automobile Parts”
- ◆ SAE (Society of Automotive Engineers) J2245 “Recommended Practice for Splash and Spray Evaluation”
- ◆ SAE J575 “Test Methods and Equipment for Lighting Devices and Components”



RST - 1000

Specification

MODEL		YM RST 1100	REMARKS
DIMENSION	Internal (WxDxH)	1,100×1,100×1,100	Dimension depend on customer requirement
	External (WxDxH)	1,800×1,300×1,900	
MATERIAL	Internal	SUS 304 1.0mm thickness	
	External	SUS 304 1.2mm thickness	
TURN TABLE	RPM	0~10 RPM	
	Motor	AC 90W Gear motor with inverter	
SPRAY SYSTEM	Pressure	0~3 kg / cm ²	R1, R2, S1, S2
	Flow rate	1.9~39.2ℓ / min.	



IPX Test Chamber (내수 시험기)



IPX Waterproof Specifications

Test Level Definitions:

IPX-0	No special protection
IPX-1	Protected against falling water Equivalent to 3-5mm rainfall per minute for a duration of 10 minutes. Unit is placed in its normal operating position.
IPX-2	Protected against falling water when tilted up to 15 degrees - Same as IPX-1 but unit is tested in 4 fixed positions - tilted 15 degrees in each direction from normal operating position
IPX-3	Protected against spraying water - Water spraying up to 60 degrees from vertical at 10 liters/min at a pressure of 80-100kN/m ² for 5 mi.
IPX-4	Protected against splashing water - Same as IPX-3 but water is sprayed at all angles.
IPX-5	Protected against water jets - Water projected at all angles through a 12.5mm nozzle at a flow rate of 100 liters/min at a pressure of 100kN/m ² for 3 minutes from a distance of 3 meters.
IPX-6	Protected against heavy seas - Water projected at all angles through a 12.5mm nozzle at a flow rate of 100 liters/min at a pressure of 100kN/m ² for 3 minutes from a distance of 3 meters.
IPX-7	Protected against water immersion - Immersion for 30 minutes at a depth of 1 meter.
IPX-8	Protected against water submersion - The equipment is suitable for continual submersion in water under conditions which are identified by the manufacturer.

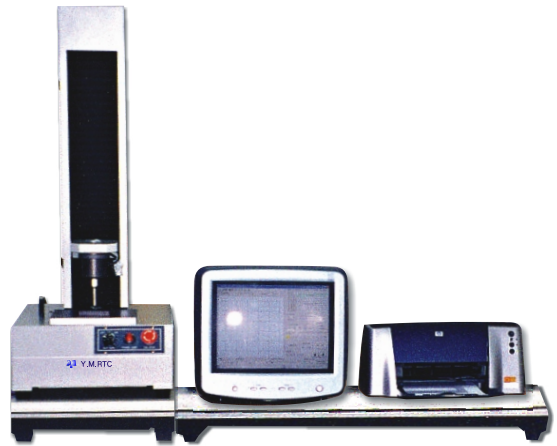
Specification (IPX 1- IPX 9 test specification of ISO 20653)

MODEL		YM RST 1100	REMARKS
DIMENSION	Internal (WxDxH)	1,100×1,100×1,350	Dimension depend on customer requirement
	External (WxDxH)	1,850×1,350×2,250	
MATERIAL	Internal	SUS 304 1.0mm thickness	
	External	SUS 304 1.2mm thickness	
TURN TABLE	RPM	0~10 RPM	
	Motor	AC 90W Gear motor with inverter	
SPRAY SYSTEM	Pressure	0~3 kg / cm ²	
	Nozzle	IPX 1 ~ IPX 9	



Peel tester (인장강도 시험기)

Description	Peel tester
Model	YM-DL
Volts	380V 60Hz 3Φ
Watts	2KW / APPROX
Dimension	685(W)×455(D)×1550(H)mm
Tensile	400mm
Load Indicator	DIGITAL DISPLAY
Accuracy	± 0.5%
Max Capa.	30KGF
Weight	150kg
Test Speed	10~30mm/min



SALT SPRAY TESTER (염수 분무 시험기)

Model	YH-SST-900	
Power Supply	AC 220V, 60Hz, 1Φ	
Spray System	Material : Teflon	
CONTROL	PROGRAM TYPE	
Temperature range	RT~50°C	
Humidity range	95±5%	
Temperature heating up time	RT~50°C/50min	
Material	Interior	ALL PVC
	Exterior	SUS 304



Vibration Tester (전기식 진동 시험기)

Description	Vibration Tester	
Model	YM-VTS-400	
Specification	Power	AC 220V, 60Hz, 1phase
	Direction	X.Y.Z
	Dimension	400(W)×400(D)mm
	Load Weight	10kg
	Vibration Width	0.5~3.2mm
	Vibration Motor	220V 3phase 2HP
	Frequency	5~100Hz
	Timer	0.1 sec~99.9hrs





휴대폰 관련 시험기류

■ 휴대폰 개폐시험기

- 220V, 60Hz, 1Φ
- Speed Control 가능
- COUNTER : 999999 / 2EA (누적카운터 포함)
- 2대씩 별도시험 가능



■ 휴대폰 마모시험기(알콜리빙)

- 220V, 60Hz, 1Φ
- Speed Control 가능
- COUNTER : 999999 / 2EA (누적카운터 포함)
- 2대씩 별도시험 가능

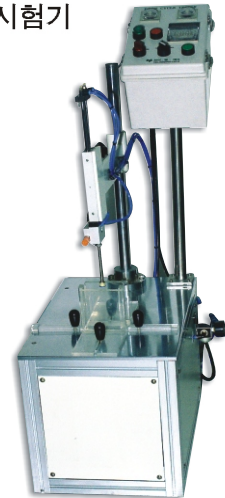


■ 휴대폰 낙하시험기

- 220V, 60Hz, 1Φ
- 높이 : 1700/1800 자동조절
- 자유낙하방식



■ 휴대폰 10Cm 낙하시험기



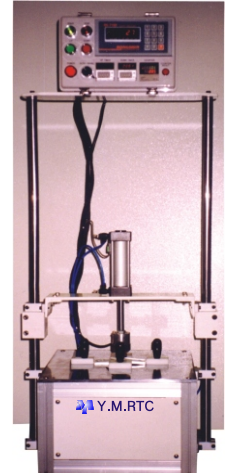
■ 휴대폰 KEY PAD 시험기

- 220V, 60Hz, 1Φ
- 시료 : 4EA 동시시험 가능
- Program Type
- 원하는 번호만 별도로도 시험가능
- Speed Control 가능



■ 휴대폰 PUSHING 시험기

- 220V, 60Hz, 1Φ
- 최대 100kg 가능
- Speed Control 가능
- COUNTER : 999999





Rounding Tester (folding tester)



Features

- ◆ Rounding test by using R value
- ◆ Easy to move around (On Wheel)
- ◆ Programmable control the device
- ◆ Changeable rounding angle (180) and speed

■ 220V, 60Hz, 1 Φ

PC Control

Able to measure FPC resistance while rounding

Bending Tester (Silding tester)



Features

- ◆ Test steady bending radius through Guide
- ◆ Easy to move around (On Wheel)
- ◆ Programmable Control the device
- ◆ Adjustable setting of bending radius
- ◆

■ 220V, 60Hz, 1 Φ

User Friendly Control with PC

Able to measure FPC resistance while bending