

Catalogue

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1. Melt Flow Index Tester



A. Product description:

It is used to determine the MFR&MVR value of the melt flow rate through the standard die every 10 minutes when various plastics and gums pass through a certain temperature and load in a viscous flow state. It is suitable for melting high temperature polycarbonate, polysulfoxide, fluorine plastics, nylon and other engineering plastics. Also, it is appropriate for the polyformaldehyde, polystyrene, polypropylene, ABS resin polyformaldehyde, polycarbonate resin and other low temperature plastic melting test. The machine is widely used in plastic production, plastic products, petrochemical and other industries as well as related universities, scientific research units and commodity inspection departments.

B. Test standards

- B-T3682-2018 Determination of melt flow rate and melt volume flow rate for thermoplastics
- ISO1133: 1997 Determination of melt mass flow rate MFR and melt volume flow rate MVR for thermoplastics
- ASTM D1238 Standard test method for determination of flow rate of thermoplastics melt by extruded plastimeters

C. Product advantages:

1. The heating cylinder is made up of 304 stainless steel or alloy, for the reason that in high temperature metal material is easily oxidation rust while the melting flow index tester usually performs long-time work at high temperature(up to 400~500 degrees).
2. The melting flow index rate instrument is equipped with dual sensor configuration to get precise temperature

control and better temperature gradient so that the instrument can work longer.

3. According to the national standard, function that four minute countdown after feeding is added in the machine.
4. The RS232 interface is available to be connected to the computer to output data(optional).
5. The last test conditions can be directly displayed after boot-strap to avoid users resetting test parameters each time ,reducing the workload of the operators.
6. The maximum temperature can be up to 450~500°C。 (optional, special instructions when ordering) .
7. After long time test of strong corrosive plastic such as full fluorine plastic, the accuracy of the instrument is non-destructive.
8. Meeting standards: ISO 1133, ASTM D1238, GB/T3682

D. Product usage:

This kind of instrument can be used to test the melt flow rate(MFR) figures of all kinds of plastic and resin in the viscous flow state. It is not only suitable for the high melting temperature engineering plastics of polycarbonate, polyarylsulfone , fluorine plastic and nylon but also suitable for some other low temperature plastic products which are made up of polyethylene(PE), polystyrene(PS), polypropylene(PP), ABS resin, polyoxymethylene(POM) and polycarbonate. So it is not only widely used in the plastic production, petroleum and chemical industry but also in the relevant institutions such as scientific research units and the community inspection departments.

The melt flow rate instrument is suitable for measuring the thermoplastic melt mass flow rate following the determination in the standard "GB/T3682-2000 thermoplastic melt mass and volume flow rate measurement". The standard is equivalent to the requirement in the ISO 1133:1997 and can meet the ASTM D1238 test.

Considering the beautiful appearance and convenient operation ,the desktop structure of the melt flow rate instrument makes the equipment performance reliably and stably. Besides, the high-precision control instrument using fuzzy PID algorithm for temperature control has the feature of high sampling precision and high speed control.

E. Product advantage:

- 1、Fast heating speed, minimal overshoot
- 2、High precision of constant temperature
- 3、A constant temperature can be quickly restored after packing .
- 4、Test parameter calibration and correction is convenient.
- 5、Manual and automatic cutting test methods are optional.

- 6、 The instrument is equipped with LCD working platform.
- 7、 The test results are automatically printed putout equipped with a printer.

F. Specifications :

Items	Melt flow indexer tester
Temperature Range	RT-450°C
Temperature drift	4hour, ≤0.5°C
Display Device	Keystroke controlled
Temperature fluctuation	± 0.2°C
Temperature uniformity of 10mm-70mm above the die	± 1°C
Temperature display resolution	0.1°C
Time display resolution	0.1S
Cutting timing range	1-999S adjustable
Mouth mold diameter	Φ2.095±0.005mm (Mouth Radius : 1.05 mm + 0.005)
Discharge hole length	8.000 ±0.025mm
Piston rod diameter	9.474 ±0.007mm
Piston rod length	6.35 ±0.13mm
Loading container diameter	Φ9.550 ± 0.007mm
Test range	0.1-150g / 10min
Farmar precision	±0.5%
Displacement measuring encoder	Omron photoelectric rotary encoder
Testing scope of mass method	0.1-150g /10min
Test range by volumetric method	50-5000cm ³ /10min (It can measure up to 5000 cm ³ /10min by using the plugging die)
Output way	Micro automatic printout
Blanking way	Hand automatic cutting can be switched
Test farmar (weights)	total 8 grades, 8 sets of weights

Power supply	AC220V ±10% 50HZ
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G. Accessory

No.	Name	Unit	Quantity	Remark
1	counterweight	Set	1	0.325 kg、1.2 kg、2.16 kg、3.8 kg、5.0 kg、10.0 kg、12.5、21.6k g (in a load within)
2	counterweight tray	Set	1	in a load within
3	charging hopper	Set	1	
4	die cleaning load	Set	1	
5	loader bar	Set	1	
6	barrel cleaning load	Set	1	assemblies
7	rod	Set	1	(in a load within)
8	die	Set	1	
9	gauze	Roll	2	
10	printer paper	Roll	2	

H. Illustration



2. Digital Izod and Charpy Combined Impact Test Machine



Model: GC-XJL-5.5D

A. Product introduction

This instrument is a new multifunctional cantilever beam and simply supported beam integrated impact testing machine. It is easy to disassemble the fixture and sample holder. The cantilever beam and simply supported beam test methods are automatically switched. It is easy to use, simple to operate, and has high test accuracy. Mainly used for the determination of the impact toughness of non-metallic materials such as hard thermoplastic molding and extrusion materials, hard thermoset molding materials, and fiber-reinforced thermoset and thermoplastic composite materials.

B. Test standards

- ISO179—2000 Determination of Impact Strength of Plastic-Hard Material Simply Supported Beams
- GB/T 21189 Inspection of Pendulum Impact Tester for Plastic Simply Supported Beam, Cantilever Beam and Tensile Impact Test
- GB/T1043—2008 Impact Test Method for Rigid Plastic Simply Supported Beam
- JB/T8762—1998 Plastic Simply Supported Beam Impact Testing Machine
- GB/T 18743-2002 The Impact Test Method of Simply Supported Beam of Thermoplastic Pipe for Fluid Transport (applicable to pipe fittings.)
- ISO180—2000 Plastics - Hard materials - Determination of IZOD impact strength
- GB/T1843—2008 Rigid plastics - IZOD impact testing machine
- JB/T8761—1998 Impact test machine for plastic IZOD
- ASTM D256-2010 Test Method for Determining IZOD Pendulum Impact Strength of Plastics

C. Features

- Cantilever beam and simply supported beam are integrated impact, just simply dismantle the clamp and sample holder
- High precision intelligent controller, equipped with liquid crystal display, can directly and accurately read the data
- Use high strength carbon fiber swing rod (Patent applied), in the direction of impact, the rigidity of the material is improved, and the maximum impact quality is concentrated on the center of mass of the pendulum, so that the shock-free test is truly achieved and the service life is increased.
- Use imported high-resolution digital encoder, higher precision and more stable Angle test
- The impact hammer and imported ball bearings in line with the aerodynamic principle greatly reduce the friction loss caused by the machine
- Automatically calculate the final result, and 24 groups of test data can be saved and averaged

• Chinese and English operating interface can be selected, test results can be selected in J/m, KJ/m², kg-cm/cm, ft-ib/in and other units

• Built-in microprinter prints test data

D. Specifications

Item	Digital display cantilever beam and simple supported beam combined impact testing machine	
Model	XJL-5/5.5D	
The pendulum energy	IZOD	2.75J、5.5J
	simply supported beam	1J、2J、4J、5J
Pendulum pre-evaluation angle	150°C	
Impact velocity	3.5m/s、2.9m/s (can be designated)	
Distance between Pendulum and the impact blade	335mm, 230mm	
Simply beam support distance	60mm、70mm、95mm	
Cantilever impact edge radius	R=0.8±0.2mm	
Simply supported beam impact edge radius	R=2mm±0.5mm	
Distance between impact blade to upper mouth	22mm±0.05mm	
Impact angle	30 °±1 °	
Power	AC220V ±10% 50HZ	

3. Double column servo universal testing machine



Model: GC-WS-2000S

1. Product Introduction:

WS type computer servo system double-column universal material testing machine is a new generation of dual-space computer-controlled electronic universal testing machine specially designed for colleges and universities and scientific research institutes. The design of the main engine and auxiliary equipment of the testing machine draws on international advanced technology, with beautiful appearance, convenient operation and stable and reliable performance. The computer system controls the rotation of the AC servo motor through the controller and the speed regulating system. After deceleration by the deceleration system, the moving beam is driven up and down by the precision screw pair to complete the tensile, compression, bending, shearing and other mechanics of the sample. Performance test, no pollution, low noise, high efficiency, very wide speed regulation range and beam moving distance, and equipped with a wide variety of test accessories, in the mechanical properties test of metal, non-metal, composite materials and products, with Very broad application prospects. This machine is widely used in material inspection and analysis of building materials, aerospace, machinery manufacturing, wire and cable, rubber and plastics, textiles, home appliances and other industries.

2. Features:

The plastic tensile machine is suitable for testing the mechanical properties of rubber materials such as tension, compression, bending, shearing, tearing and peeling. The functions of cycle load cycle, deformation cycle and displacement cycle. Obtain elongation, tensile strength, flexural modulus, elastic modulus, yield strength, net energy, return energy, total energy and other indicators. It can be equipped with high and low temperature test chambers, high temperature furnaces and other expansion devices.

PC is used for data processing and analysis, and the test results can be automatically saved. After the test, the test curve can be recalled, and the test process can be reproduced through the curve traversal, or the curve comparison and curve amplification can be performed. The test software under Windows and visit platforms has strong data and graphics processing functions, and can print out complete test reports and test curves in real time.

3. Test Standard:

GB/T 1040-2006	Tensile Properties Test Methods
GB/T 1041-2008	Test method for compression properties of plastics
GB/T 9341-2008	Test method for flexural properties of plastics
ISO 527-1993	Determination of tensile properties of plastics
GB/T 13022-91	Plastic film tensile test method
ISO 604-2002	Plastics - Determination of Compression
ISO 178-2004	Plastic bending determination
ASTM D 638-2008	Standard Test Method for Tensile Properties of Plastics

4. Technical Parameter:

- Load cell: 20KN
- Strength Resolution: 1/300000
- Strength accuracy: $\leq 0.5\%$
- Power magnification: 7-segment automatic switching
- Displacement resolution: 1/1000MM
- Displacement accuracy: $\leq 1\%$
- Resolution of metal extensometer: 1/1000 (to be ordered separately)
- Metal extensometer accuracy: $\leq 0.5\%$
- Accuracy of large deformation extensometer: $\pm 1\text{mm}$ (need to be ordered separately)
- Speed range: 0.01-500mm/min (special test speed can also be customized according to customer needs).
- Test stroke: 600mm (excluding gripper, special test space can also be customized according to customer needs)
- Test width: 400mm (special test width can also be customized according to customer requirements)
- Power supply: $\phi 220\text{V } 50\text{HZ}$.
- Power: about 1000W
- Machine size: about 500×500×1500 mm (length×width×height)
- Machine weight: about 250kg

5. Parameter configuration:

- High-precision force sensor: 0~20KN. The force accuracy is within $\pm 0.5\%$.
- Full strength maximum resolution 1/1000,000
- Capacity segmentation: seven gears in the whole process: $\times 1$, $\times 2$, $\times 5$, $\times 10$, $\times 20$, $\times 50$, $\times 100$
- Adopt high precision 24 bits A/D
- Power system: servo motor + Japanese planetary reducer + Taiwan rolling stone ball screw + polished rod linear bearing + High-precision force sensor.
- The speed control system adopts AC servo speed control system and AC servo motor, with stable and reliable performance, and has protection devices such as overcurrent, overvoltage and overload.
- Control system: Pulse Command control method is adopted to make the control more precise. The speed control range is 0.001~1000 mm/min.
- Data transmission mode: RS232 transmission
- Display mode: UTM107+WIN-XP test software computer screen display
- Safety devices: overload emergency shutdown device, upper and lower travel limiting device, leakage automatic power-off system, automatic breakpoint shutdown

6. Software function (with computer system)

- Test standard modularization function: provide users to set test standard settings for required applications, covering GB, ASTM, DIN, JIS, BS, etc.
- Provide the user to set all the test product data, and input the data once and reuse it permanently. You can add formulas by yourself to improve the fit of test data
- Dual report editing: Completely open user editing report for testers to choose their preferred report format (the new built-in EXCEL report editing function in the test program expands the previous format of a single professional report)
- Each length, force unit, and display digits are dynamically exchanged. The force units are T, Kg, N, KN, g, and lb, and the deformation units are mm, cm, and inch.
- The graph curve scale is automatically optimized (Auto Scale), so that the graph can be displayed in the best scale. Real-time graphics can be dynamically switched during testing. With load-displacement, load-time, displacement-time, stress-strain, load-2 point extension diagram, and multi-curve comparison
- Test results can be output in EXCEL, PDF, WORD and other report formats
- Automatic archive and manual archive at the end of the test, automatic calculation of maximum strength, upper and lower yield strength, hysteresis loop method, step-by-step approximation method, non-proportional elongation strength, tensile strength, compressive strength, and fixed elongation at any point after the test is completed Strength, elongation at any point, elastic modulus, elongation, maximum, minimum, average value, net energy, reentrant energy, total energy, flexural modulus, breaking point displacement x% load, breaking point load X % displacement, etc. Data backup: test data can be saved in any hard disk partition
- Three languages randomly switch: Simplified Chinese, Traditional Chinese, English

7. Configuration list:

	Name	Brand
1	AC motor	Taiwan Delta
2	AC drive	Taiwan Delta
3	Low-noise, high-efficiency deceleration system	Turbine worm
4	Ball screw rod	Rolling Stones (Taiwan)
5	Relay	Omron (Delta)
6	Force sensor	High-precision force sensor
7	Limit protection switch	FOTEK(Taiwan)
8	Control system	All-digital closed-loop control system
9	Encoder	Taiwan Shilin
10	High strength rack	Rolling Stones (Taiwan)
11	computer	A set of industrial computers
12	Test fixture	Specify a set of fixtures
13	Tool	Provide special tools and checklists required for installation, maintenance and operation



4. Electronic Sample Impact Notch Machine



Model: GC-QK-E

A. Product introduction

The plastic electric notch prototype machine(GC-QK-E) is a sample making equipment used in the impact toughness test of non-metallic materials by IZOD and simply supported beam impact testing machine. The impact notching prototype machine can be used by laboratories of scientific research institutions, colleges and universities, non-metallic materials manufacturers and other units to make notched samples.

B. Reference standard for tool notch of prototype

ISO180—2000 Plastics - Hard materials - Determination of IZOD impact strength

GB/T1843—2008 Rigid plastics - IZOD impact testing machine

JB/T8761—1998 Impact test machine for plastic IZOD

ASTM D256-2010 Test Method for Determining IZOD Pendulum Impact Strength of Plastics

ISO179—2000 Determination of Impact Strength of Plastic-Hard Material Simply Supported Beams

GB/T1043—2008 Impact Test Method for Rigid Plastic Simply Supported Beam

JB/T8762—1998 Plastic Simply Supported Beam Impact Testing Machine

C. Technical index

Table stroke: > 160mm

Feed speed: 30mm/min

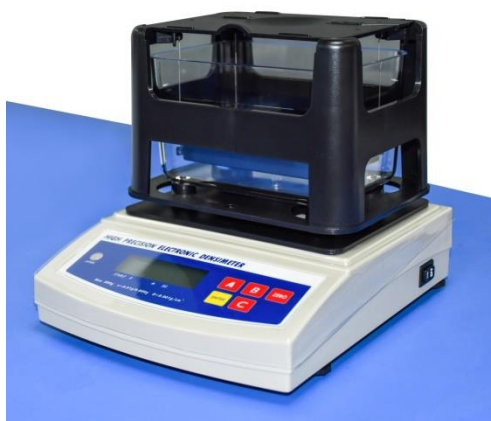
Sample type: Type 1、Type 2、Type 3

Gap type: TypeA、TypeB (optional) 、TypeC (optional)

D. Tool parameters of plastic notch prototype machine

TypeA	$45 \pm 1 \text{ } ^\circ r=0.25 \pm 0.025$
TypeB	$45 \pm 1 \text{ } r=1.0 \pm 0.025$
TypeC1	$45 \pm 1 \text{ } r=0.1 \pm 0.02$
TypeC2	thickness $1=2 \pm 0.1 \text{ } r \leq 0.1$
TypeC3	thickness $2=0.8 \pm 0.1 \text{ } r=0.2 \pm 0.05$

5. Electronic Densimeter



Model: GC-DH-300

A. Product introduction

GC-DH densimeter is suitable for the research laboratories of new materials such as rubber, wire and cable, aluminum products, plastic particles, powder metallurgy, mineral rocks, precision ceramics, glass industry, metal products, precision ceramics, refractory materials, alloy materials, mechanical parts, metal recycling, mineral and rock, cement manufacturing and jewelry industry.

B. Test standards

ASTM D792-2007 Methods of test for density and relative density of plastics

ASTM D297-2013 Methods of test for rubber products - Chemical methods

GB/T2951-2008 Test methods for the mechanical and physical properties of wires and cables - density Determination - Suspension method

GB/T533-2008 Vulcanized or thermoplastic rubber - Determination of density

ISO 2781-2008 Vulcanized or thermoplastic rubber - Determination of density

ISO 1183-2008 Immersion method, liquid specific gravity method and titration method

C. Specifications

Item	Electronic densimeter
Mode	GC-DH-300
Weighing range	0.005g-300g
Specific gravity accuracy	0.001g/cm ³
Measuring time	About 10 seconds
Set	Temperature compensation setting, solution compensation setting

6. Moisture meter



Model: GC-MM-A

A. Product introduction

GC-MM-A moisture analyzer is equipped with high-precision imported weighing sensor and high-efficiency imported halogen lamp heating device on the basis of professional precision electronic balance to achieve fast and accurate moisture determination. Application industry: it is widely used in grain, private chat, tobacco, paper, food (dehydrated vegetables, meat, noodles, flour, biscuits, pies, aquatic processing), tea, beverages, grains, chemical raw materials, pharmaceutical raw materials, textile raw materials and other industries, to test the free moisture contained in the sample.

B. Specifications

Item	Moisture meter
Model	GC-MM-A
Range accuracy (g)	120-0.001
Readability	0.01%
Measurement results display mode	Moisture content, solid content, percentage ratio, real-time temperature, moisture content curve
Measuring range	0.01-100%
Operating temperature requirement	At normal temperature
Weighing pan size(mm)	90
Boot-up preheating (minutes)	20-30
Baud rate	9600
Displayer	LCD liquid crystal display
Temperature range (°C)	RT~200
Humidity display mode	Relative humidity
Stop mode	Automatic shutdown, manual shutdown, scheduled shutdown
Setting time	0~99 minutes in one minute intervals
Print (optional)	Thermal printing (external), output printing results

7. Hot air circulation oven



Model: GC-30A

A. Box size and structure

Internal size	W35cm×H32cm×D32cm
Approximate external dimensions	subject to the actual product
Power supply	Voltage 220V 50Hz
Heating power	about 4.5KW
The controller is located above the machine, with a single door, stainless steel luxury handle, and explosion-proof door lock.	
The inner material is 304 mirror stainless steel, the inner cavity is clean and smooth, easy to clean, and has strong corrosion resistance.	
All interior materials use low pollution materials	
All internal parts are welded with non-marking argon arc welding.	
The outer material is SECC steel plate with a thickness of 1.0mm and is treated with fine powder baking paint.	
The thermal insulation material is imported high-density glass rock wool, which has good thermal insulation and maximizes temperature thermal insulation.	

B. Temperature Control System

The temperature control is automatically calculated by the PID microcomputer, and the PV/SV is displayed at the same time. The required temperature can be freely set according to personal wishes within the allowable range of the machine temperature, and the accuracy of its temperature control can be ensured through the PID parameter setting in the table. The system in the watch itself calculates the appropriate temperature control parameters.

The temperature sensing input CA(K) TYPE output is 12V.

The current controller is SSR contactless relay, which maintains high current stability.

The heating material is imported nickel-cadmium alloy heating wire, which is pollution-free and has a long service life.

Temperature range RT~300°C. , commonly used within RT ~ 300 °C can be adjusted to use

Accuracy: control accuracy $\pm 0.5^{\circ}\text{C}$, distribution temperature $\pm 1^{\circ}\text{C}\%$ (no load)

C. Air supply system

Forced horizontal air supply circulation, the air source is driven by the circulating motor to drive the wind wheel through the electric heater, and the hot air is sent from the air duct to the inside of the oven, and the hot air after use is sucked into the air duct as the source for recirculation heating, thereby reducing energy loss and reducing energy consumption. To ensure the temperature uniformity in the box, when the door opening and closing action causes disturbance, the air supply circulation system can quickly restore the temperature value of the operating state.

The motor is imported from Taiwan with long shaft and high temperature resistance, and the power is 1HP50Hz

The fan is a multi-blade turbine type with high strength, and an adjustable air deflector is installed inside to make the air path run more smoothly.

Heating rate: RT~100°C for about 10 minutes.

D. Safety Protection

Ultra-high temperature protection, no fuse switch, porcelain fuse, motor overload protection.

Timer: 9999 seconds to 9999 hours (H.M.S switchable and decimal point position setting).

When the temperature is reached, the power is turned off, and the heating stops and alarms.

8. DSC300 Differential Scanning Calorimeter



A. Product Description:

DSC is a differential scanning calorimeter with the highest precision launched by the company. The sensor is made of imported E-couple with high sensitivity. Signal acquisition circuit shielding protection, strong anti-interference, high baseline stability.

The differential scanning calorimeter is a touch screen type, which can be used for glass transition temperature test, phase transition test, melting and enthalpy value test, product stability, curing, specific heat, oxidation induction period test and other tests. Wide range of applications.

B. Technical Parameters:

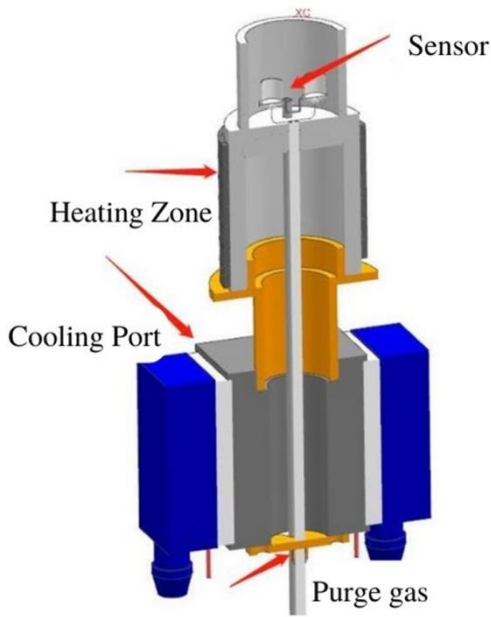
1. Temperature range: room temperature~ 600℃
2. Temperature resolution: 0.001℃
3. Temperature fluctuation: ± 0.01 ℃
4. Temperature repeatability: ± 0.1 ℃
5. Heating rate: 0.1~100℃/min
6. Cooling rate: 0.1~20℃/min

7. Constant temperature time: program setting \leq 24h
8. Curve scan: heating scan, cooling scan
9. DSC range: 0~ \pm 800mW
10. DSC resolution: 0.01 μ W
11. DSC accuracy: 0.001mW
12. Temperature control mode: heating, constant temperature, cooling
13. Working power supply: AC220V/50Hz or customized
14. Atmosphere control gas: nitrogen, oxygen (automatic switching of the instrument)
15. Gas flow: 0-300mL/min
16. Gas pressure: 0.3MPa
17. Display mode: 24bit color, 7-inch LCD touch screen display
18. Data interface: standard USB interface
19. Parameter standard: equipped with standard substances (indium, tin, lead), users can correct the temperature by themselves
20. The instrument has multiple sets of thermocouples, a set of test sample temperature, and a set of test instrument internal ambient temperature
21. Software with automatic analysis function
22. Multi-stage temperature rise and fall test, five-stage program setting

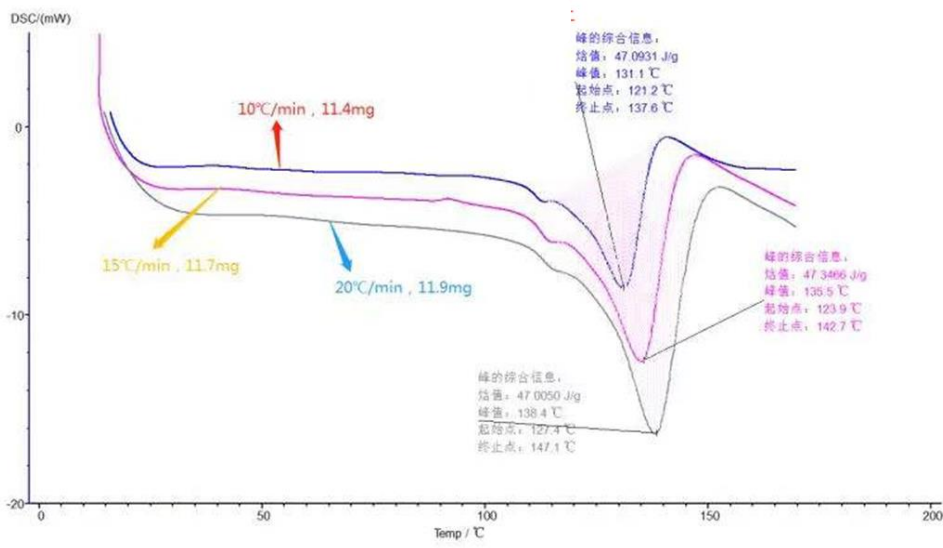
C. Technical Features:

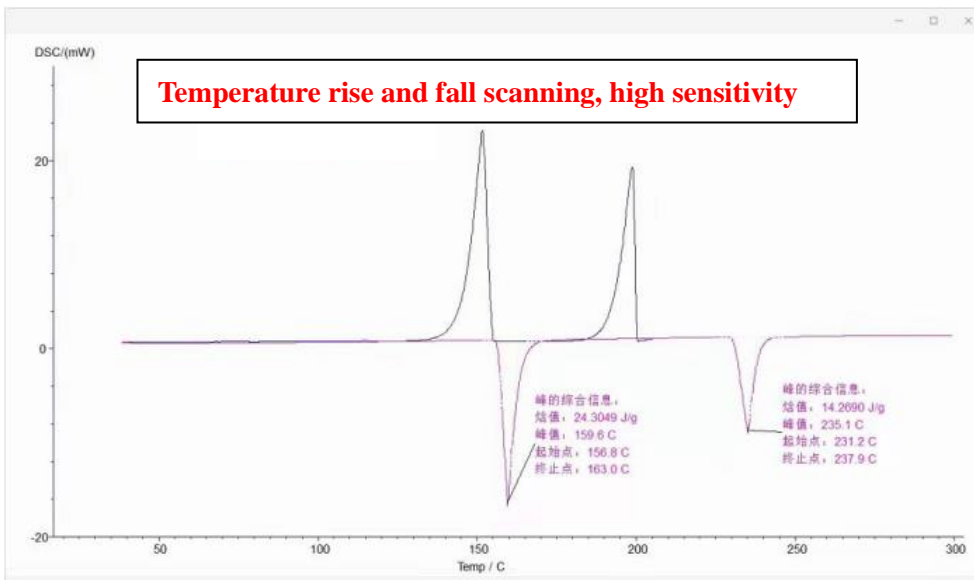
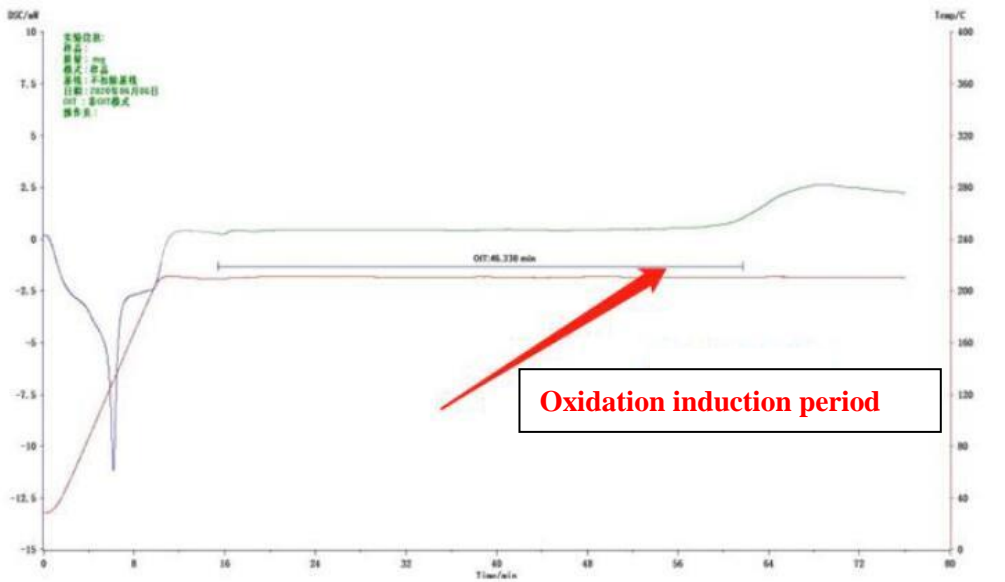
1. Industrial-grade 7-inch touch screen with rich display information.
2. New metal furnace body structure, better baseline and higher precision. The heating adopts the indirect conduction method, which has high uniformity and stability, and reduces pulse radiation, which is better than the traditional heating mode.
3. USB communication interface, strong versatility, reliable and uninterrupted communication, supports self-recovery connection function.
4. Automatic switching of two air flow rates, fast switching speed and short stabilization time. At the same time, add a protective gas input.
5. The software is simple and easy to operate.

Furnace structure:



Multiple spectra can be opened at the same time for comparative analysis





9. Heat Deformation Vicat Softening Point Tester



Model: GC-WDK-300D

I.Product introduction

Thermal deformation vicat, softening point temperature measuring instrument using PLC programmable controller temperature adjustment using computer display operation. The product is simple to operate, easy to use, stable performance, high precision, and in the test process can be real time monitoring test temperature and deformation; At the end of the test, the system automatically stops heating, and the test report and test curve can be printed. This series of models is the quality inspection units, colleges and universities and enterprises of the necessary instruments for self-inspection.

II.Product features:

With the lifting function of the sample frame, can be lifted or lowered at the beginning or end of the test on the sample frame, the machine is mainly used for non-metallic materials such as plastic, rubber, nylon, electrical insulation materials such as thermal deformation temperature and vicat softening point temperature determination.

III.Execution standard:

- GB / T1633 《Thermoplastics - Determination of Vicar softening temperature (VST)》
- GB / T1634 《Plastics - Determination of load deformation temperature - Part 1: General test method》
- GB/T8802 《Determination of softening temperature of plastic pipe fitting》

- IS075-2013 《Plastics - Determination of load deformation temperature》
- ASTM D 648 《Test method for thermal deformation temperature of plastics》
- ASTM D 1525 《Test method for softening temperature of plastics Vicat》

IV.Product advantages:

- Intelligent PID control, accurate heating rate, accurate temperature control and no difference
- The thermal deformation test of various standard splines can be done
- Vicar softening point test of various standard splines can be done
- Thermal deformation and Vicar softening point tests can be carried out simultaneously
- The required load can be calculated automatically according to the test standard and the spline size
- Two heating rates can be selected, free to switch, simple operation
- Support a variety of test, test curve color separation processing, intuitive to see the test process of each group of samples
- After the test is completed or the temperature exceeds the upper limit, turn off the temperature control and shut down
- Software overtemperature protection and external mechanical overtemperature protection dual protection
- Diversified report Settings, perfect report printing function

V.Technical parameters:

- Temperature Control Range: $R_t-300^{\circ}\text{C}$
- Heating Rate: $(120\pm 10)^{\circ}\text{C/h}$ $(12\pm 1)^{\circ}\text{C}/6\text{min}$ / $(50\pm 5)^{\circ}\text{C/h}$ $(5\pm 0.5)^{\circ}\text{C}/6\text{min}$
- Temperature Indication Error: 0.1°C
- Temperature Control Accuracy: $\pm 0.5^{\circ}\text{C}$
- Maximum Deformation Indication Error: $\pm 0.001\text{mm}$
- Range Of Deformation Measurement: $0-10\text{mm}$
- Number Of Sample Holders: 3 个
- Load Bar And Pallet Quality: 68g
- Test Span Range: According To 64 Or 100mm

- Tank Volume: About 25l (Customers Buy By Themselves)
- The Heating Medium: Methyl Silicone Oil Or Transformer Oil
- Cooling Way: Natural Cooling Above 150 Degrees, Below 150 Degrees Water Cooling Or Natural Cooling
- Heating power: 4kw

VI. Accessories:

Number	Name	NO.
1	Computer	1 Set
2	Printer	1 Set
3	Electric Cabinet	1 Set
4	Equipment Host	1 Set
5	Sample Frame	1 Set
6	heat Deformation Indenter	1 Set
7	Methyl Silicone Oil	20L (Customers Buy By Themselves)
8	Weights (Including Boxed Weights)	1 Set(Table)
9	Multi-Purpose Power Socket	1 Set

VII. Table :(Accept Non-Standard Customization):

Weight	Number	Weight	Number
1000g	12	932	3
500g	3	200g	6
100g	3	50g	3
20g	6	10g	6
5g	3	2g	3
1g	3		

10. Muffle Furnace



Model: GC-HF-1000

Product Introduction:

Digital display box type high temperature ash furnace, also known as muffle furnace, can be used for chemical analysis, physical determination and general small steel heat treatment in laboratories of industrial and mining enterprises and scientific research institutes.

Features:

The shell of this series of electric furnace is made of thin steel plate by flapping welding and drawing, and the inner lining is rectangular integral lining made of silicon carbide refractory material. The heating element made of helical iron chrome aluminum alloy wire is threaded into the upper, lower, left and right grooves of the inner furnace lining. The furnace is sealed structure. The furnace mouth brick and door brick are made of light refractory material. The insulation layer between the furnace and the shell is made of refractory fiber and expanded perlite products. The appearance is made of cold plate processing, and the surface is bright and smooth with electrostatic spraying.

Parameters:

Type	GC-HF-1000
Temperature Range	100°C-1000°C
Volatility	±2°C
Display accuracy	1°C
Furnace size	80*120*200mm
Heating rate	Average≤10°C/min

Total power	2.5KW
Power	220V, 50Hz
Furnace shell material	The outer box shell is made of high-quality cold plate, treated with phosphoric acid film salt, and sprayed at high temperature, and the color is computer gray
Furnace material	Using high aluminum inner tank, good wear resistance, high temperature furnace up and down, left and right sides heat up
Insulation method	Thermal insulation brick and thermal insulation cotton
Temperature measurement port	The thermocouple enters from above the rear of the furnace
Terminal	The heating wire terminal is located at the bottom of the furnace body
Controller	Located under the furnace body, built-in control system, compensating wire connected to the furnace body
Heating element	High temperature resistance wire
Standard packaging	Wooden box
Temperature measurement	K - metric nickel - chromium - nickel - silicon thermocouple
Control System	PID adjustment, display accuracy 1°C
Complete sets of electrical appliances	Adopt brand contactor, cooling fan, solid state relay
Time system	Working time can be set, constant temperature time arrives, automatic shutdown
Over temperature protection	Built - in two - level over temperature protection device, double insurance. Over-temperature alarm, over-temperature cut-off
Operation mode	Full range adjustable constant temperature, constant operation
After-sales service	A. Responsible for remote technical guidance to users B. Provide equipment spare parts and accessories in time C. Provide technical consultation and support during the use of equipment D. Respond immediately within 8 working days after receiving customer failure notification

11. Rockwell hardness tester



Model: HRS-150A

Application and Scope:

Determination of plastics, composite materials and various friction materials and soft metal, non-metal materials hardness.

Main features:

- Lever loading, manual operation, reliable and durable; Frictionless spindle, high precision of test force;
- Dial direct reading, HRE, HRL, HRM, HRR, and optional other Lowe's scales;
- Precision hydraulic buffer, smooth loading and adjustable speed;
- The accuracy conforms to JB/T7409 standard

Main technical parameters:

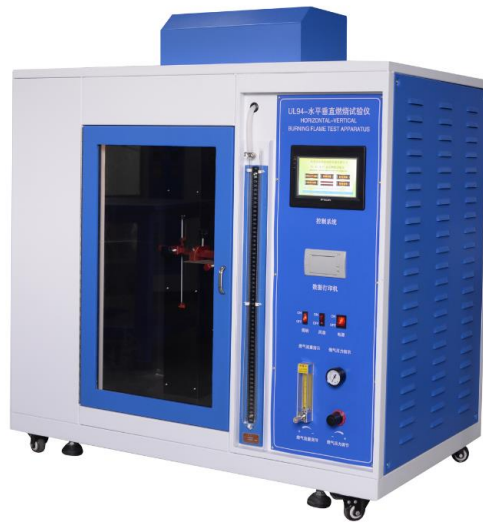
- Measurement range: 70-100hRE, 50-115HRL, 50-115HRM,50-115HRR;
- Test force: 588.4, 980.7, 1471N (60, 100, 150kgf);
- Maximum height of sample allowed: 170mm; Distance from the center of the head to the wall: 135mm;
- Hardness resolution: 0.5HR;
- Dimensions: 466*238*630mm; Weight: 70KG.

Accessory box standard configuration:

- Large table, small table, V-type table
- Diamond cone indenter: 1 PCS; ϕ 3.175, ϕ 6.35, ϕ 12.7 steel ball head: 1 each;

Standard Plastic Rockwell Hardness Blocks: 4 pieces.

12. UL94 vertical horizontal combustion test machine



1. Product introduction:

This tester is suitable for inspecting and evaluating the combustion characteristics of plastic materials. It is designed and manufactured according to the relevant provisions stipulated in the US UL94 standard and GBT2408 standard "Flammability Test of Plastic Materials for Equipment and Appliance Parts". Carry out horizontal and vertical flammability tests, and is equipped with a gas flow meter to adjust the size of the flame, and the operation is simple and safe. This instrument can evaluate the flammability of materials or foam plastics, such as: V-0, V-1, V-2, HB, 5V, HF-1, HF-2, HBF levels.

2. Reference standard:

- UL94 fire test
- GBT2408-2008 "Determination of Combustion Properties of Plastics - Horizontal and Vertical Methods"
- IEC60695-11-10 "combustion fire test"

3. Technical parameters:

- Inner volume of the box: ≥ 0.5 cubic meters, with glass observation door
- Appearance size: 1150*650*110mm
- Flame application time: 0 ~ 99 minutes and 99 seconds can be set
- Afterflame time: 0 ~ 99 minutes 99 seconds can be set
- Afterburn time: 0 ~ 99 minutes 99 seconds can be set
- Burning angle: 20°, 45°, 90° (ie 0°) adjustable

- Dimension parameters of the burner: the inner diameter of the nozzle is $\varnothing 9.5\text{mm}$, the effective length of the nozzle is 100mm, and there is an air adjustment hole
- Flame height: can be adjusted from 20mm to 175mm according to standard requirements
- Alignment method: the spline is aligned front, rear, left, and right driven by the motor
- Product features: It is also equipped with lighting device, air extraction device, gas flow regulating valve, gas pressure gauge, gas pressure regulating valve, gas flow meter, gas U-shaped pressure gauge and sample fixture
- Power supply: AC 220V, 50Hz

4. Advantages:

- Touch screen control operation
- Automatic recording of test time
- Automatic display of test results
- Automatically save data sheet
- Automatic calculation of combustion test ratings
- Micro printer
- Automatic timing, automatic ignition
- Automatic alarm system
- Automatic return of the Bunsen burner after the end of the flame application

13. Constant temperature and humidity test chamber



1. Introduction

This test chamber provides a simulated environment of high temperature, low temperature, high humidity and low humidity to detect the material and strength of rubber, plastic, electronic products before and after testing. The machine can also simulate the container environment to detect the fading and shrinkage of rubber and plastic under high temperature and high humidity. Test the heat resistance, cold resistance, dry resistance and humidity resistance of various materials. It is suitable for quality control testing of factories in electronics, electrical appliances, batteries, universities, research institutes, inspection and quarantine bureaus, paper products, food, vehicles, auto parts, metals, chemicals, building materials and other industries.

2. Features


- High-quality appearance, the body adopts arc shape, the surface is treated with matte stripes, and adopts non-reaction handle, easy to operate, safe and reliable.
- Rectangular floating layer glass viewing window, which can be used to observe the test items in the test. The window is equipped with an anti-sweat electric heater device to prevent water vapor from condensing and water droplets, and a high-brightness PL fluorescent lamp to keep the inside of the box illuminated.
- The double-layer insulation of the box door is tight and airtight, which can effectively isolate the internal temperature leakage.
- With an external water supply system, it is convenient to supplement the water supply of the humidification barrel, and it can be recycled and used automatically.
- The compressor circulation system adopts the French "Tecumseh" brand, which can more effectively remove the lubricating oil between the condenser tube and the capillary tube, and the whole series adopts environmentally friendly refrigerants (R23/R404/R507)

- The controller adopts self-developed LCD display screen, which can display the measured value, set value and time at the same time.
- The controller has multi-segment program editing and temperature, humidity can do fast (OUICK) or slope (SLOP) control.
- The built-in moving pulley is easy to move and place and has the potential to set the screw to fix the position.

3. Technical Parameter

Item	Illustrate
Name	Constant temperature and humidity test chamber
Model	GC-TH-80Z
Quantity	1 set
Standard	<ol style="list-style-type: none"> 1. GB11158 Technical Conditions of High Temperature Test Chamber 2. GB10589-89 Technical Conditions of Low Temperature Test Chamber 3. GB10592-89 Technical conditions of high and low temperature test chamber 4. GB/T10586-89 Technical Conditions of Damp Heat Test Chamber 5. GB/T2423.1-2008 Low temperature test chamber test method 6. GB/T2423.2-2008 Test method for high temperature test chamber 7. GB/T2423.3-2006 Damp heat test chamber test method 8. GB/T2423.4-2008 Test method for alternating damp heat 9. GB/T2423.22-2002 Test method for temperature change 10. IEC60068-2-1.1990 Low temperature test chamber test method 11. IEC60068-2-2.1974 High temperature test chamber test method 12. GJB150.3 high temperature test 13. GJB150.4 low temperature test 14. GJB150.9 Damp heat test
Features	Perfect shape design, high-quality appearance, low noise equipment, simple operation, safe and reliable
Prohibited items for experimental equipment	<ol style="list-style-type: none"> 1. Test or store samples of flammable, explosive and volatile substances 2. Corrosive substance samples for testing or storage 3. Testing or storage of biological samples 4. Test or storage of samples of strong electromagnetic emission sources
Inner box size and outer box size	Inner box size: (W*H*D) 400mm*500mm*400mm
Box volume	80L
Temperature range	-40~ +150°
Humidity range	20~98%
Temperature and humidity control range	
Control stability	Temperature $\pm 0.5^{\circ}\text{C}$; Humidity $\pm 2\%$

Uniformity of distribution	Temperature $\pm 2.0^{\circ}\text{C}$; Humidity $\pm 3.0\%$
Resolution	Temperature: 0.01°C ; Humidity: 0.1%R.H
Heating time	Average $3^{\circ}\text{C}/\text{min}$, non-linear heating
Cooling time	Average $1.5^{\circ}\text{C}/\text{min}$, non-linear cooling
Temperature limit	Maximum temperature $+150^{\circ}\text{C}$; Minimum temperature -70°C
Brief introduction of box structure	The whole is divided into three combinations: the laboratory, the electric control cabinet, and the machine room: the upper left side is the laboratory, which is composed of the thermal insulation layer laboratory tank, and the single door to the left is used to enter and exit; the electric control cabinet is located on the right side, and the panel It is mainly composed of a temperature controller, a switch button, and a fault protection indicator light; the engine room is placed below the laboratory and consists of filters, solenoid valves, circuit parts, compressors and other accessories.
Shell material	Steel plate paint
Inner box material	SUS#304 stainless steel plate
Insulation material	Polyurethane rigid foam + glass wool
Press	1 Silicone foam pressing
Rack	There are 2 stainless steel shelves with adjustable height in the box
Heater	Adopt Taiwan imported stainless steel fin type radiator tube heating tube
Humidifier	Split humidification cylinder design
Fan	motor Stainless steel extension shaft Multi-wing fan blade aluminum alloy wind wheel Special adjustable louver air supply and circulation system
Box door	Single door, Double door, recessed non-reaction flat handle Three-layer vacuum glass to enlarge the window Electric heating automatic defogging, LED lighting
Water tank	1 built-in removable water tank (easy to clean) 1 automatic water supply pump (automatically transport the water supply from the lower tank to the upper layer) Water shortage alarm device
Tripod	The bottom of the fuselage is equipped with 4 polyurethane movable universal wheels
Refrigeration system features	Multi-stage automatic load capacity adjustment technology Compressor ~ French "Tecumseh" brand hermetic compressor Condenser ~ fin type with Taiwan cooling fan Evaporator ~ Fin type multi-stage automatic load capacity adjustment Expansion valve ~ European and American imported components Refrigerant ~ Eco-friendly Frozen Refrigerant Accessories ~ Desiccant, Oil Separator, Refrigerant Window, etc...

<p>Controller picture</p>	
<p>Control method</p>	<p>The balance temperature and humidity control system (BTHC) controls the SSR in a P.I.D. way, so that the heating and humidifying amount of the system is equal to the heat and humidity loss, so it can be used stably for a long time.</p>
<p>Controller Features</p>	<p>Independent research and development design Programmable Logic Controller LCD, color screen display Touch screen direct key type Temperature and humidity at the same time programmable controller Chinese and English display 7 inch true color large screen Large LCD controller with high contrast and adjustable backlight function.</p>
<p>Controller Specifications</p>	<p>Accuracy: Temperature $\pm 0.1^{\circ}\text{C}$, Humidity $\pm 1\%\text{R.H}$ Resolution: Temperature ± 0.1, Humidity $\pm 0.1\% \text{R.H}$. With upper and lower limit standby and alarm functions Temperature and humidity input signal selection PT 100$\Omega$$\times 2$ (dry bulb and wet bulb) 9 groups of P.I.D control parameter settings, P.I.D automatic calculation Wet and dry bulb automatic correction</p>
<p>Screen display function</p>	<p>Adopt screen dialogue type, no need to input keys, the screen directly touch the options Temperature and humidity setting (SV) and actual (PV) values are directly displayed Can display currently executing program number, segment, remaining time and cycle times Operation accumulated time function The temperature and humidity program setting value is displayed in a graph curve, with the real-time display program curve execution function With a separate program editing screen, each page can input at least 5 segments of temperature, humidity and time Chinese and English can be switched arbitrarily. The fault prompt screen is displayed. The screen can be adjusted for backlight The screen display protection function can be set as timer, TIMER or manual shutdown.</p>
<p>Program capacity and control functions</p>	<p>Available program groups: max. 120 PATTEs Usable memory capacity: 1200 SEGMENTS in total Repeatable commands: each command can be executed up to 999 times The production of the program adopts the dialogue style, with functions such as editing, clearing, and inserting.</p>

	<p>SEGMENTS time setting 0~99Hour59Min</p> <p>With power-off program memory, it will automatically start and continue to execute program functions after power-on</p> <p>Graphical curves can be displayed in real time during program execution</p> <p>With scheduled start and shutdown functions</p> <p>With date and time adjustment function</p> <p>Key and screen lock (LOCK) function</p>
Compressor	French "Tecumseh" brand hermetic compressor
Compressor pictures	
Condenser	Fin type with Taiwan cooling fan
Evaporator	Fin-type multi-section automatic load capacity adjustment
Expansion valve	European and American imported components
Refrigerant	Environmentally friendly frozen refrigerants (United States Honeywell environmentally friendly refrigerants R404A and R23)
Features	Adopt multi-stage automatic load capacity adjustment technology
Refrigeration Auxiliary	Desiccant, Oil Separator, Refrigerant Window, etc...
Water storage tank	1 built-in water tank
Water quality	Add purified water or distilled water (tap water will have dirt, which will easily block the pipeline and affect product testing)
Protective device	<ol style="list-style-type: none"> 1. Zero-crossing thyristor power controller 2. Heating air-burning protection switch 3. Compressor overpressure protection switch 4. Compressor overload and overcurrent protection switch 5. Phase loss protection switch 6. No fuse overload protector 7. Water tank water shortage protection switch 8. Heating and humidifying fast insurance
Use voltage	220V ±10% 50HZ
Power	7KW
Environment allowed	0 ~30°C
Performance Guaranteed Environment	5 ~ 25°C
Screw cap	Ø50mm test hole on the left side of the fuselage with screw cap 1 set
Non-woven	Standard test non-woven fabric 3 pieces
Specifications	Provide a copy when ordering
Manual	A device manual

4. Part of the parts list

Serial number	Name	Brand	Picture
1	controller	joint venture	
2	AC contactor	Schneider	
3	Thermal relay	Schneider	
4	Solid state relay	Megel	
5	Intermediate relay	Schneider	
6	Sensor	Tiankang	
7	Time Relay	Jiayang	
8	Fuseless switch	Schneider	
9	Over temperature protection	Omron	
10	Power switch button	Ritar	
11	Motor	Yizheng	

12	Wind mill	Jianyu	
13	Compressor	Tecumseh	
14	Condenser	Keweili	
15	Evaporator	Keweili	
16	Heater	Wade	
17	Humidification tube	Wade	
18	Condenser fan	Marr	
19	The refrigerant	R404A Honeywell	
20	The electromagnetic valve	Hong Sen	
21	Humidifying water cup	Customization	

14. UV Aging Test Chamber

product description

Leaning Tower



A3 steel plate spray
plastic outer box



304 stainless steel
outer box

【Product name】 UV Aging Test Chamber

【Product Model】 GC-UV-A

【Product Description】

The test equipment simulates the damage caused by the sun's ultraviolet light, and the weather resistance test is carried out on the material by exposing the tested material to light under controlled high temperature. It uses ultraviolet lamps to simulate the radiation of sunlight, and simulates dew and rain through condensation and water spraying. In just a few days or weeks, the ultraviolet irradiation equipment can reproduce the effects of outdoors that take months or even years. Damage that takes time to occur, including fading, color change, tarnish, chalking, cracking, cracks, wrinkling, blistering, embrittlement, strength reduction, oxidation, etc. The test results can be used to select new materials and improve existing There is a change in the material, or the formulation of the evaluation material.

【Standard】

- GB/T14552-2008 "National Standard of the People's Republic of China--Plastic, Coating, Rubber Materials for Mechanical Industry Products-Artificial Climate Accelerated Test Method" a, Fluorescence UV/condensation test method.
- GB/T16422.3-1997 GB/T16585-96 related analysis methods.
- GB/T16585-1996 "National Standard of the People's Republic of China - Test Method for Artificial Weathering

of Vulcanized Rubber (Fluorescent UV Lamp)".

- GB/T16422.3-1997 "Plastic laboratory light source exposure test method" and other corresponding standard items design and manufacture standards.
- Comply with international testing standards: ASTM D4329, ISO 4892-3, ISO 11507, SAE J2020 and other current UV aging test standards.

【The main technical parameters】

1. Volume and dimensions	Working room size (mm)	1140*500*400 (D depth×W width×H height)
	Outer box size (mm)	1300×700×1630 (D depth×W width×H height)
2. UV lamp parameters	Lamp model	UVA-340 (315~400nm) This solution requires 8 lamps, and the standard configuration is UVA-340
	Lamp brand	UV-340
	Center distance between lamp tubes	70mm
	The distance between the test frame and the lamp tube	plate base frame test plate (adjustable up and down)
	Radiation intensity	not adjustable, the lamp output at 100% maximum power
3. Temperature & Humidity indicators	Temperature range	normal temperature +10~70℃ adjustable
	Humidity range	≥90%RH
	Temperature fluctuation	±3℃
	Temperature resolution	0.1℃
4. Black panel thermometer	Measuring range	45~80℃
	Tolerance	±3℃
5. Temperature control method:	PID self-tuning temperature control method	

【Technical Features】

- Provide comprehensive and detailed real-time monitoring and curve recording (controller with recorder function)

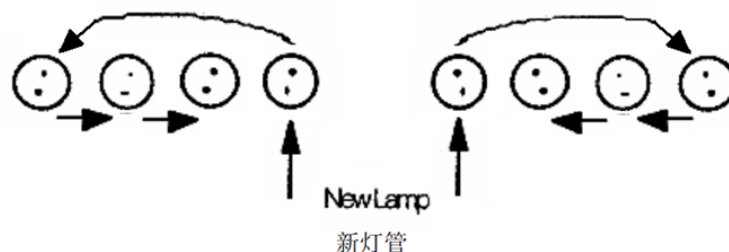
for important test parameters such as irradiance, temperature, time, etc. Reports and curve printing can also be generated through the computer.

- Radiation/condensation/water spray test can be carried out independently, and any combination of radiation/condensation/water spray test can also be programmed.
- It adopts Taiwan industrial level 7-inch true color touch screen control system, which has good stability, monitoring, operability and maintainability.
- Provide life reference for ultraviolet lamps with expensive materials (the lamps are consumables with a lifespan of about 1600 hours), which is convenient for users to confirm the replacement time of the lamps and saves the cost of use.
- Adopt automatic water supply and drainage design, and use high-cost high-power water mercury to ensure the flow rate and uniformity of water spray.
- Most of the main components are international brands, and a small part are domestic brands, which improves the safety and reliability of the product. (For details, please refer to the attached list of main accessories.)
- The installation and wiring of the electrical part of the equipment shall be carried out in accordance with international electrical standards. Perfect and professional after-sales service.

【Introduction to equipment function area】

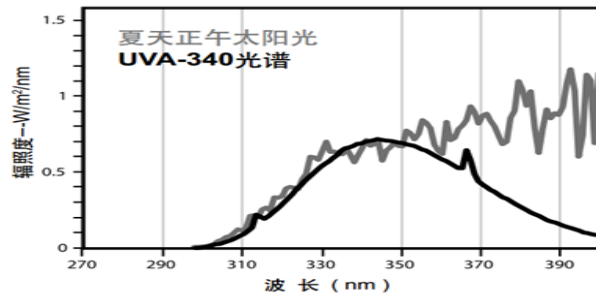
1. Irradiation system (simulated sunlight):

- **Light source:** 8 imported ultraviolet fluorescent lamps with a rated power of 40W. There are UVA-340 and UVB-313 light sources for users to choose and configure. Like other lamps, the aging of the QUV lamp will cause the lamp output to drop. The QUV without the sun eye control system uses the method of rotating the position to compensate. This system can be used for many application standards, but it has inherent limitations. This method of rotating positions cannot compensate for the impact caused by different batches of lamp tubes or differences in the surrounding environment.



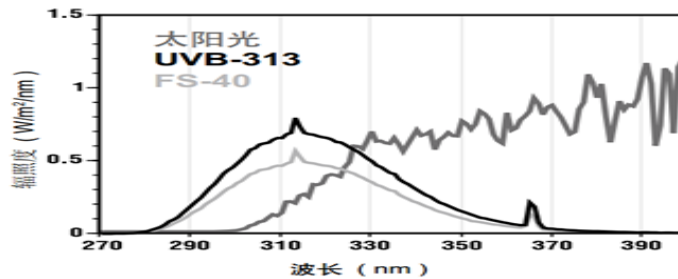
- a) **UVA-340:** It can emit the wavelength of sunlight from 315nm to 400nm, and its radiation peak is at 340nm. UVA-340 is especially useful for controlled testing of different experiments, best simulating sunlight in the

short-wave UV range.



UVA-340 灯管在短波紫外线波段可最佳模拟太阳光。

b) **UVB-313:** The wavelength range is between 280nm and 315nm. UVB-313 tubes cause faster material degradation than UVA-340 lamps, but their shorter wavelength than the solar cutoff can produce impractical results for many materials.



UV-B 灯管利用短波紫外线达到最快加速老化的目的。对特别经久耐用材料的测试或质量控制非常有用。

➤ **UV cycle temperature control:**

The components of the UV circulation system include a blower, air heater, air distribution system, black panel temperature sensor.

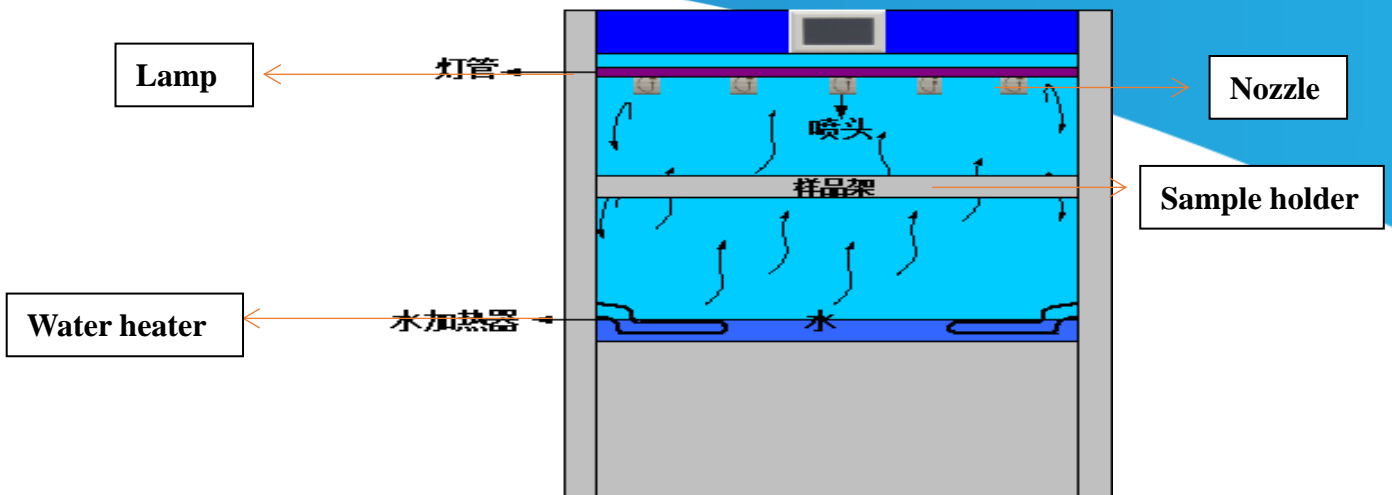
a) **Blower:** Installed at the air duct opening of the lower box of the equipment, the blower works continuously during the whole UV cycle.

b) **Air heater:** installed in the air duct above the blower, used to heat the air blown by the blower when needed.

c) **Air distribution system:** the air blown by the blower enters the test room through the air duct in the center of the water tray, and then is guided by the air guide to fill the whole test room

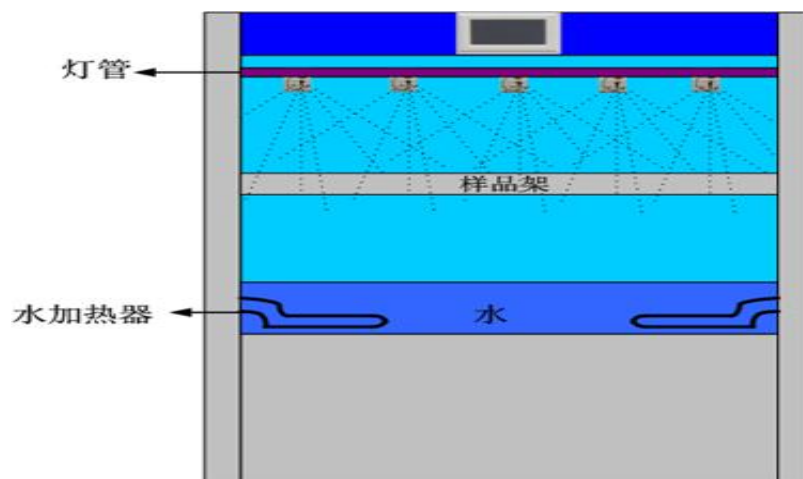
2. Condensation system (simulated dew):

The QUV condensing system is essentially where evaporated water vapor is confined within the chamber by the chamber's template. During the condensation cycle, the water is heated by the heating element in the water pan. The water vapor fills the test chamber and reaches equilibrium at 100% humidity. The water vapor continuously condenses on the sample and finally flows back into the water pan.



3. Sprinkler system (simulated rainwater):

The QUV sprinkler system consists of a high-power water pump, 5 nozzles, connecting pipes, control valves and drainage parts. Nozzles are installed between the lamps, and in the spray cycle, water is sprayed onto the sample to create a thermal shock or erosion effect.



4. Box structure features:

- The cabinet is made by full numerical control, with advanced technology, smooth lines and elegant appearance
- The whole box is made of SUS304 high-grade stainless steel plate
- Stainless steel dense hole sample holder



- The sample rack is adjustable up and down
- Door-type opening devices are used for each opening of the test box shell, which is easy to open
- In order to facilitate movement, casters are installed at the bottom of the instrument, and the position of the

testing machine is fixed with a U-shaped ring after the position is fixed.

5. Control panel: (The specific buttons and indicators depend on the actual configuration)

- QTEST-UV 7-inch programmable display
- RS232 communication port
- Operation button
- Alarm indicator light
- Irradiation timer

6. Operation laboratory:

- UV lamp, blackboard temperature sensor.
- Heating and humidifying device
- Inlet and drainage, spraying device

7. Mechanical room:

- Intake and drainage device
- Sprinkler system installation
- Condensing system installation
- Blower, air heater
- Alarm device

8. Power distribution control cabinet:

- Power distribution board, main power circuit breaker, cooling fan, etc.

9. Heater:

- Heater material: stainless steel 304 fin heat dissipation electric heating tube
- Heater control mode: non-contact equal-period pulse width modulation, SSR (solid state relay)

10. Humidifier:

- Humidification method: shallow water basin heating
- Humidifier material: stainless steel armored
- Humidifier control mode: non-contact equal-period pulse width modulation, SSR (solid state relay)
- Humidifier device: water level control device, heater anti-dry device

11. Electrical control system:

- Controller (model): Taiwan programmable touch screen controller (QTEST)
- Display: 7-inch true color touch screen

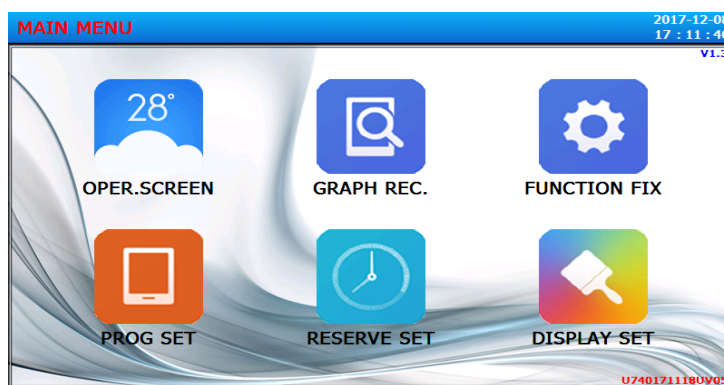


- Operation mode: program mode, fixed value mode
- Setting method: Chinese menu, touch screen input
- Program capacity: 30 groups of memory programs, each program group contains 30 program segments, all cycles, up to 999 times
- Black panel temperature monitoring: Standard Pt-100 black panel temperature sensor is used to precisely control the sample surface temperature during the test.
- Subsidiary functions: fault alarm and cause, processing prompt function, power-off protection function, timing function (automatic start and automatic stop operation), self-diagnosis function.

12. QTEST controller operation:

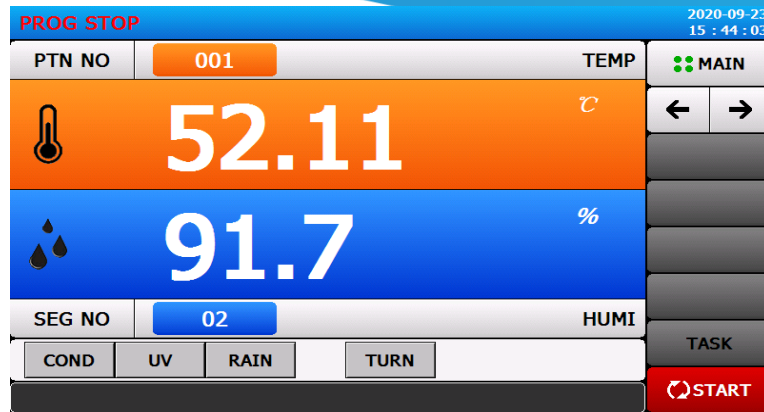
➤ Initial screen

Users can switch to other screens through the main menu screen, as shown in the figure below



➤ Fixed value operation function

Users can use this function to realize the continuous UV test function. In the customized running screen, the user can manually control the opening and closing of each function. In this screen, the temperature setting can be realized, and it has the function of automatic temperature calculation.



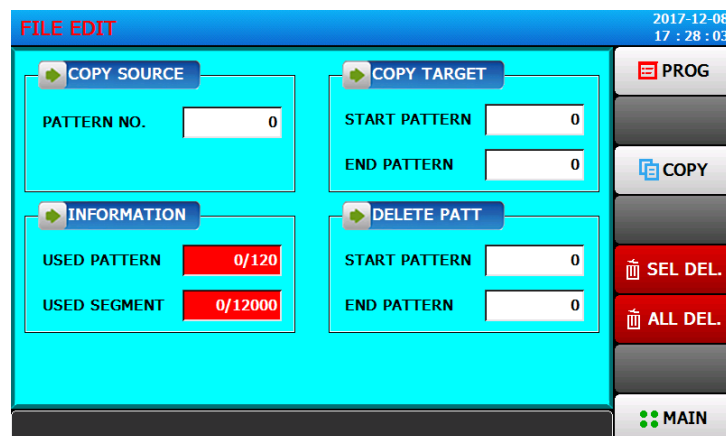
➤ **Program test run function.**

In the program control screen, the user can automatically run the device according to the edited program. When the program is running, the device has functions such as keeping the jump. And can visually observe the basic information such as the total running time of the program, the segment running time of the program segment, and the program number. At the same time, the running status of each system will also be intuitively displayed on the screen.



➤ **Document management function**

This device has powerful document recording, management and storage functions



【List of main accessories】

Serial number	Name	Brand of origin

1	True color touch screen controller	QTEST, Taiwan
2	Ultraviolet lamp UVA (standard configuration)	UVA-340
3	AC contactor	Chint, China
4	Timer	Omron OMRON, Japan
5	Over temperature protection	RAINBOW, South Korea
6	Solid State Relay SSR	MAGER, China
7	Temperature Sensor	Xuan Rong, Taiwan
8	Leakage switch	Chint, China
9	Circulation fan	SUNON, Taiwan
10	Heater	Longxing, Taiwan
11	Sprinkler pump	Lingxiao, Guangdong

【Safety protection device】

- Fan duct over-temperature protection
- Shallow water pan heating tube anti-dry protection
- Water tank water shortage alarm protection
- Water tank water failure alarm protection
- Short circuit protection, over current protection

【Conditions of use (the user guarantees the following conditions)】

1. Venue:

- The ground is flat and well ventilated, free of flammable, explosive, corrosive gases and high-concentration dust
- There is no strong electromagnetic radiation source nearby
- No direct sunlight or direct radiation from other heat sources
- There is a water supply and drainage device near the equipment
- Ground area and load-bearing capacity of the venue: not less than 234×353cm and 500kg/m²
- Appropriate maintenance space is reserved around the equipment

2. Environmental conditions:

- Temperature: 5℃~32℃, preferably installed in an air-conditioned room. This keeps the room temperature at

21 ℃ to 27 ℃.

- Relative humidity: \leq 85%RH
- Air pressure: 86~106kpa

3. Power requirements:

- Power 3.5KW, voltage 220V \pm 10%, single-phase three-wire system, 50/60Hz

15. Company Information

a professional testing equipment manufacturer

Provide a variety of testing equipment customization solutions



5000 +

Covering an area of more than 5000 square meters, with independent research and development, production capacity and sales venues.

15 +

The founder started as an industrial technical engineer in 2008 and has 15 years of technical experience .

10000 +

From the establishment of the company to the present, our online and offline customers have accumulated more than 10,000, and continue to grow.

The company was established in Dongguan City, the "world factory" of China's manufacturing center. It is a private enterprise engaged in R&D, production, OEM and sales of scientific and technological instruments and equipment manufacturing. We have a high-quality and experienced instrument research team and a professional sales team. It has 15 years of experience in the production of testing instruments, providing reliable and accurate testing equipment and good service quality.

Main Products

Mechanical material testing equipment

Tensile testing machine, impact testing machine, etc.

Environmental testing equipment

Constant temperature and humidity, UV aging, thermal shock, etc.

Plastic & rubber testing equipment

Melt flow index tester, pendulum impact tester, HDT Vicat, etc.

Material combustion, flame retardant testing equipment

UL94 Horizontal and vertical combustion tester, glow wire tester, tracking tester, etc.

For details of other testing instruments, please consult customer service



FACTORY TOUR

Provide a variety of testing equipment customization solutions



Quality and after-sales service guarantee

Provide a variety of testing equipment customization solutions



The company has product designers, accessories processing equipment and technology research and development team, which can complete the research and development, processing and production of standard and non-standard equipment and guarantee product workmanship and measurement accuracy.



The company will regularly communicate with technical personnel, provide training for pre-sales and after-sales personnel, and ensure pre-sales and after-sales services

Company patents and certificates

Provide professional technology and reliable service



With more than 30 certificates and patents, and has obtained China's high-tech enterprise qualification certification and international ISO certification.

Our Customers and Exhibitions

Provide professional technology and reliable service

