

Dear Client,

Thank you for purchasing our UHV-650 Automatic Closed Cup Flash Point Tester. Please read the manual in detail prior to first use, which will help you use the equipment skillfully.



Our aim is to improve and perfect the company's products continually, so there may be slight differences between your purchase equipment and its instruction manual. You can find the changes in the appendix. Sorry for the inconvenience. If you have further questions, welcome to contact with our service department.



The input/output terminals and the test column may bring voltage, when you plug/draw the test wire or power outlet, they will cause electric spark. PLEASE CAUTION RISK OF ELECTRICAL SHOCK!

**Company Address:**

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- ◆ Fax: 86-27- 87803129
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- ◆ Website: [www.cnuhv.com](http://www.cnuhv.com)

## **SERIOUS COMMITMENT**

All products of our company carry one year limited warranty from the date of shipment. If any such product proves defective during this warranty period we will maintain it for free. Meanwhile we implement lifetime service. Except otherwise agreed by contract.

## **SAFETY REQUIREMENTS**

Please read the following safety precautions carefully to avoid body injury and prevent the product or other relevant subassembly to damage. In order to avoid possible danger, this product can only be used within the prescribed scope.

*Only qualified technician can carry out maintenance or repair work.*

--To avoid fire and personal injury:

### **Use Proper Power Cord**

Only use the power wire supplied by the product or meet the specification of this produce.

### **Connect and Disconnect Correctly**

When the test wire is connected to the live terminal, please do not connect or disconnect the test wire.

### **Grounding**

The product is grounded through the power wire; besides, the ground pole of the shell must be grounded. To prevent electric shock, the grounding conductor must be connected to the ground.

Make sure the product has been grounded correctly before connecting with

the input/output port.

### **Pay Attention to the Ratings of All Terminals**

To prevent the fire hazard or electric shock, please be care of all ratings and labels/marks of this product. Before connecting, please read the instruction manual to acquire information about the ratings.

### **Do Not Operate without Covers**

Do not operate this product when covers or panels removed.

### **Use Proper Fuse**

Only use the fuse with type and rating specified for the product.

### **Avoid Touching Bare Circuit and Charged Metal**

Do not touch the bare connection points and parts of energized equipment.

### **Do Not Operate with Suspicious Failures**

If you encounter operating failure, do not continue. Please contact with our maintenance staff.

### **Do Not Operate in Wet/Damp Conditions.**

### **Do Not Operate in Explosive Atmospheres.**

### **Ensure Product Surfaces Clean and Dry**

## —Security Terms

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Warning: indicates that death or severe personal injury may result if proper precautions are not taken

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Caution: indicates that property damage may result if proper precautions are not taken.

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Thank you for choosing closed cup flash point automatic determination instrument (the machine with electric ignition mode), you in before using the instrument, please carefully read the instructions for use.

## **First, Summary**

closed automatic flash point determination instrument, mainly used for determination of petroleum products closed cup flash point value, the instrument uses the ARM microprocessor technology, color LCD, resistive touch screen technology, Chinese menu, human-computer interaction more convenient; instrument with power failure memory function; instrument with automatic ignition, display, and print results, automatic cooling function lock; instrument with igniter external brightness adjustment function equipment with accurate measurement, good repeatability, stable and reliable performance, simple operation of the advantages. Widely used in electric power, petroleum, chemical industry, commodity inspection, research and other departments, in accordance with D93 GB/T, 261-2008 ASTM standard method requirements.

## **Two, technical parameters**

Display device: color LCD display

Operation mode: touch screen

Measurement range: 40~350

Temperature test: platinum resistance

Repeat: > 110 - 2 Deg. C = 110 - 1 Deg. C

Ignition mode: electric ignition

Information storage: 1000 analysis results can be stored

Cooling method: forced air cooling

Printer: thermal printer

Re: D93 GB/T ASTM 261 standard

230V ± 10V , 50Hz ± 2.5HZ

Power: less than 350VA

Using environmental temperature: 10 ~35

The use of environmental humidity: less than 85%

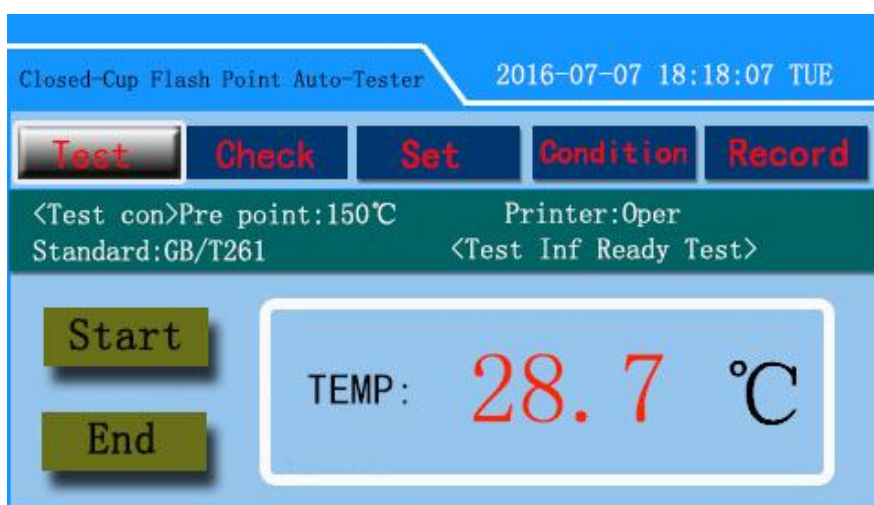
### Three, working principle

Instrument according to the temperature rising heating ASTM D93, GB/T261-2008 approach provides for temperatures approaching the flashpoint value automatically when the ignition, when there is a flash point instrument automatic locking display and printout of results, automatically at the same time the heater cooling.

### Four, using method

(a) test operation

1, on the power supply, the instrument test arm of the automatic lifting, and there is a prompt tone, display instrument name and version number. 2, click on the screen at any position, display test interface:



Click "start", the test arm falls off, start testing; click "stop", stop testing, test arm up. "Test conditions" display setting of test conditions, including expected flash point, printer switch settings, test in the application of the standard. The process information of the test information is displayed on the test information.

In the test interface, click on the "self test", "set", "condition", "record" and so on, can enter the corresponding function interface.

## 2, self check interface

The interface can perform the self check operation of the instrument.

Click the "test arm", and the test arm assembly is raised. Click the "light", and light the fire. Click "stir", start stirring again, close the stir again. Click "open", start running and slide the cup cover, automatic reset. Click "printer" to start the printer to print, the printer will print the test results (not the real test results), to verify that the printer is working correctly.

In the process of the implementation of each component, the corresponding operation information is displayed in the lower part.



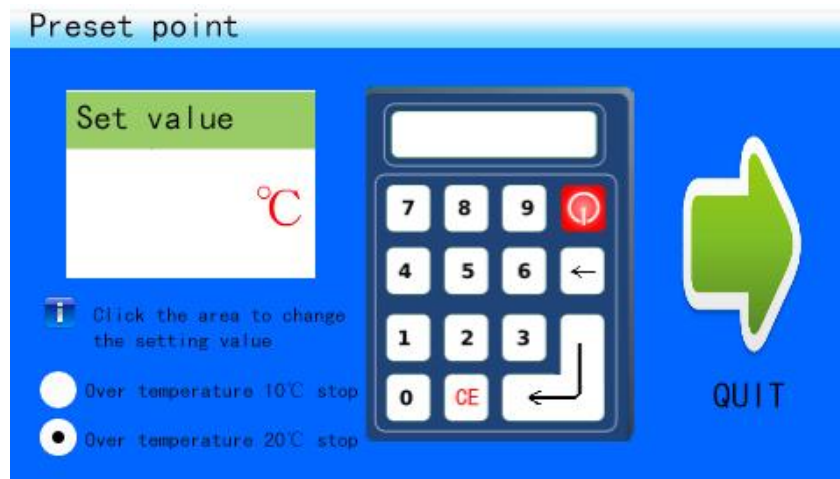
## 3, set the interface



The interface can set is expected to point value and the atmospheric pressure value: click "is expected to flash point" or "high pressure" of the "change", into the expected flash point or pressure setting interface:

(1) is expected to set the flash point



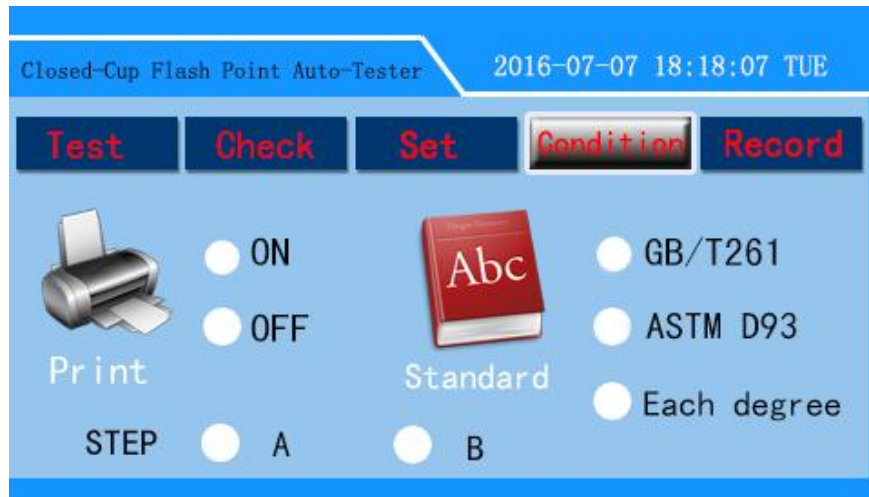


The interface, click the "Settings" regional, above the keyboard is expected to flash point set value input box at the blinking cursor, digital input, and verify input according to the |. To delete a digital input, you can click ".". Click on the upper right corner of the "X", is expected to exit the flash point setting interface. Click on the bottom left of the "over temperature 10 degrees termination test" or "super temperature 20 degrees termination of the trial" is used to select conforms to the national standard method (exceeds a set temperature 10 degrees to terminate the test) or non national standard method (more than set temperature 20 degrees to terminate the test) termination of the test conditions.

#### (1) atmospheric pressure setting

The atmospheric pressure of the test, the region where the values result in different test specimens of closed cup flash point value is different, for correction to standard atmospheric conditions the accurate value of, according to the actual pressure value set. The operation method is expected to participate in the "flash point set".

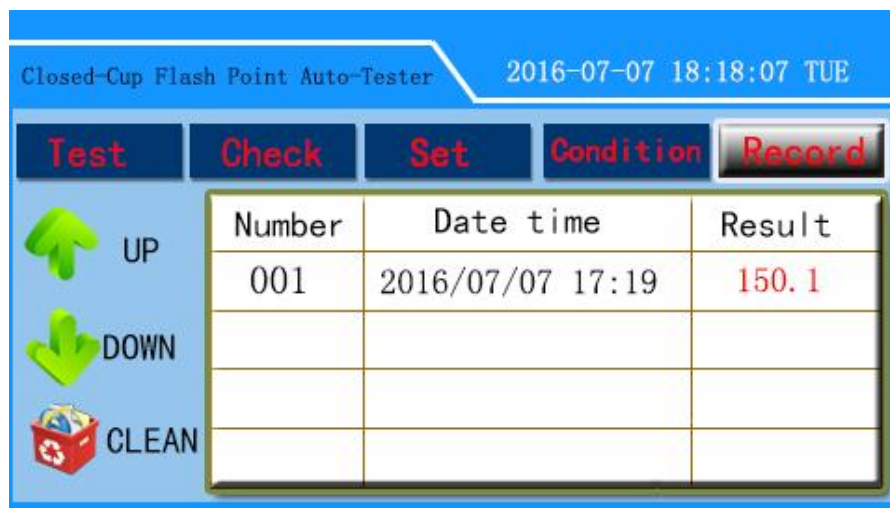
#### 4, conditional interface



The interface is used to set the printer's opening, closing and testing the standard, using the national standard of the sample classification and the use of different test procedures, etc.. Using standard including GB261-2008 and ASTM D93, set to "every degree", after the start of the test sample, in the temperature rise about 5 DEG C, every increase of 1 degree that opening the cover and the ignition time and test whether the flash fire, applicable to the flash point of the specimen is not known. Select the "step A", test the sample by the A test method; select the "step B", then test the sample by the B test method on the GB/T261-2008 request.

Click on the appropriate area to set the conditions of the printer or the application of the standard, test procedures, etc..

#### 5, test record interface



The interface displays the test sample test record. "Turn", "down" button to flip the query "clear" button for empty records store all the data records - click "cleared" after confirmation popup empty records window, avoid misoperation due to accidental delete all the records of the test.

## 6, time setting interface

In the interface of the display real time, click the time display area, enter the time setting interface:



To adjust the date, time, click on the interface above the time display area, the keyboard input box that is to be modified to display (years, months, days, hours, minutes, seconds to show the region to?" Instead, the need to be in the order of one by one, after the number of seconds to enter the digital input, you can click on the "OK" button to complete the change. If you quit, please click Cancel ".

### (two) sample testing

1 use petroleum ether or gasoline to clean the sample cup, the sample is poured into the sample cup, and the sample cup is placed in the apparatus. At the test interface, click "start", the test head automatically falls, the instrument begins to heat up the test.

When the test to the flash point value, the instrument will automatically be test head rises, display and print the value of flash point. If you need to end the test in the test, you can click on the end".

2, when the sample preset temperature is too low or the sample temperature is too high will automatically close test, and the test information display the expected flash point set value is too low "or" sample temperature too high ". Sample test range is 20 degrees to 18 degrees after the preset temperature.

3, when the sample temperature exceeds a preset temperature of 20 DEG C without flash, the instrument will automatically terminate the test.

4, when the test after the need to return to the main menu, press the "delta" or "at" key.

## **Five, note**

### (a) test notes

- 1, the instrument for ignition device, operated under the hood (not open fan).
- 2, the temperature sensor made of glass, and other items do not collide with.
- 3, every time for the sample must be clean, sample cup, the sample heating point, do not have other items into, or will not be able to test.
- 4, the test of the first part of the mechanical automatic transmission, do not use hand force action, otherwise it will cause mechanical damage.
- 5, when the instrument fails to work properly, should first check the signal line is good, and then the instrument's self check function to check, if there is a problem please contact us, do not self demolition repair.

### (two) maintenance

- 1, the sensor part of the instrument is easy to attach grease, it will affect the accuracy of detection, to often use gasoline, oil ether on sensor cleaning, cleaning should be very carefully, so as not to touch bad.
- 2, instrument light don't with corrosive cleaning agents to clean, to avoid damage to the paint surface and is not used for a long time the sample cups into a hole in the heating, in the "calibration" column, select the test head "press" confirm "key to turn it down.