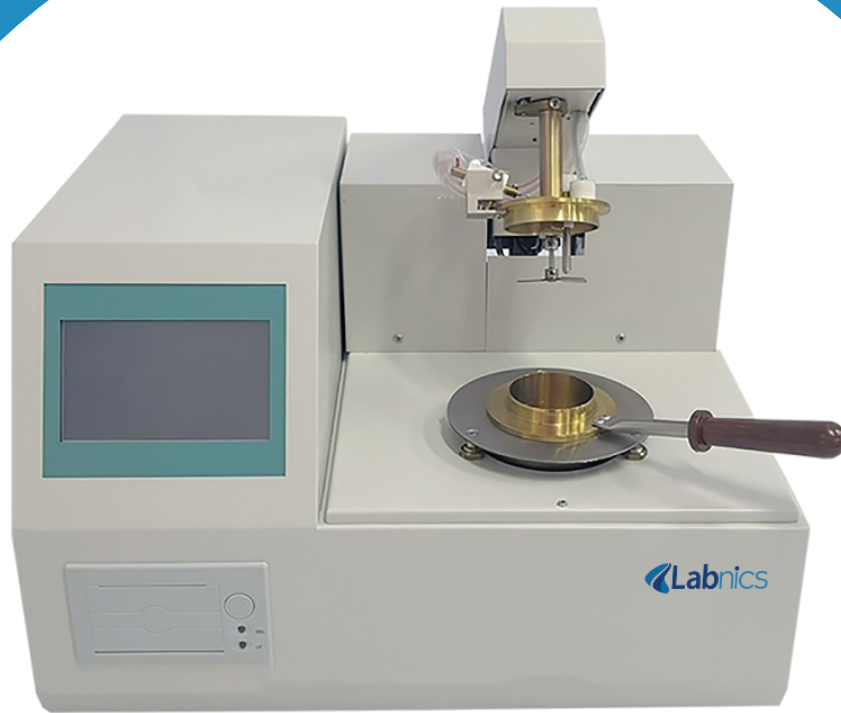




Flash Point Tester

NFPT-101

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1. Safety Measures

- The instrument for the ignition device is operated under the hood (not open fan).
- The temperature sensor is made of glass and is designed to avoid contact with other objects.
- The sample cup must be clean each time, and there should be no other items present at the sample heating point. If there are any contaminants, the test will not be accurate.
- During the initial testing of the mechanical automatic transmission, do not use manual force. Doing so may cause mechanical damage.
- when the instrument fails to work properly, check the signal line is good, and then the instrument's self-check function.

2. Introduction

Flash Point Tester NFPT-101 measures temperatures between 40°C and 350°C to determine the flammability of various liquids. It utilizes ARM microprocessor technology for precise and reliable temperature measurements. Our unit features automatic ignition, which lights the sample automatically for enhanced ease and efficiency. It features a color LCD with a resistive touch screen, providing intuitive control and easy navigation.

3. Features

- Power failure memory function
- Automatic cooling lock system
- Print results option
- Reproducible and accurate measurements
- Equipped with a thermal printer
- Complies with ASTM 261 standard

4. Specifications

Model	NFPT-101
Type	Closed-Cup
Measurement Range	40 to 350°C
Temperature Test	Platinum resistance
Environmental Temperature	10 to 35°C
Environmental Humidity	less than 85%
Repeatability	> 110 - 2°C = 110 - 1°C
Ignition Mode	Electric ignition
Data Storage	1000 analysis results
Cooling Method	Forced air cooling
Printer	Thermal printer
Display Device	Color LCD display
Power Consumption	< 350VA
Power Supply	220V + 50Hz, 11V + 2.5HZ
Dimensions	520 × 385 × 340 mm
Packaging Dimensions	560 × 425 × 380 mm
Net Weight	16 kg
Gross Weight	21.7 kg

5. Applications

Flash Point Tester is used for measuring the flammability of liquids by determining their flash point. It is essential for safety and quality control in various industries, including chemical, pharmaceutical, and automotive.

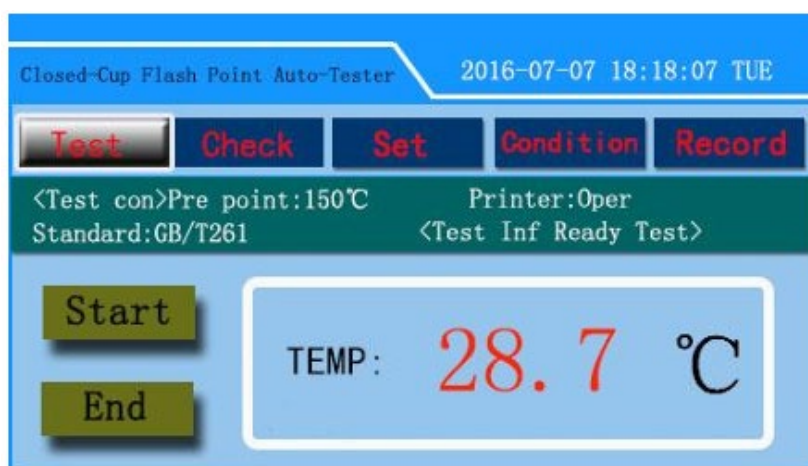
6. operations

The instrument operates according to the temperature-rising heating methods. It automatically detects when the temperature approaches the flash point. Upon ignition, the instrument locks the display, prints the results, and simultaneously begins cooling the heater.

6.1 Four Using Method

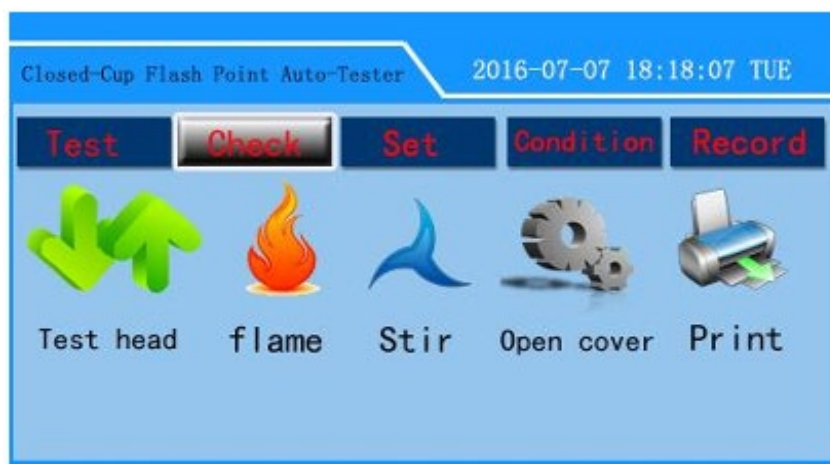
6.1.1 Test operation

When powered on, the instrument's test arm automatically lifts, accompanied by a prompt tone. The display shows the instrument's name and version number. To access the test interface, simply click anywhere on the screen.



- Click "**Start**" to lower the test arm and begin the testing process. To stop the test, click "**Stop**," and the test arm will raise.
- The "Test Conditions" section allows you to set parameters such as the expected flash point, printer settings, and the applicable testing standards. During the test, process information will be displayed on the screen for your reference.
- In the test interface, you can click on options such as "**Self-Test**," "**Set**," "**Condition**," and "**Record**" to access their respective function interfaces.

6.1.2 Self-Check Interface



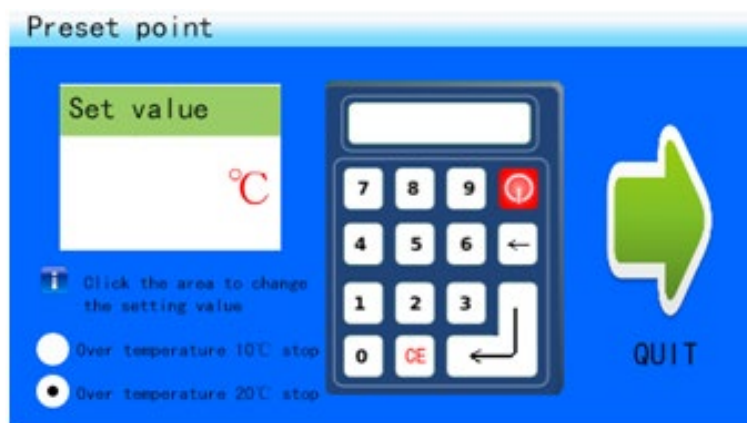
- The interface can perform the self-check operation of the instrument.
- Click "**Test Arm**" to raise the test arm assembly. Click "**Light**" to ignite the flame. Click "**Stir**" to start stirring and click again to stop stirring. Click "**Open**" to initiate operation and slide the cup cover for automatic resetting.
- Click "**Printer**" to activate the printer, which will print the test results (not actual test results) to verify that the printer is functioning correctly. During the operation of each component, the corresponding information will be displayed at the bottom of the screen.

6.1.3 Set the Interface



The interface allows you to set the expected flash point value and the atmospheric pressure. Click on "**Expected Flash Point**" or "**High Pressure**" to enter the respective setting interface.

Expected Flash Point: Here, you can input the desired flash point value.



- In the interface, click on the **"Settings"** area, and a keyboard will appear with a blinking cursor in the input box for the expected flash point value. Enter the desired number and verify the input accordingly. To delete a digit, click the "." button.
- To exit the expected flash point setting interface, click the "X" in the upper right corner.
- On the bottom left, you can select either "Over Temperature 10 Degrees Termination Test" or "Over Temperature 20 Degrees Termination Test." This allows you to choose between the national standard method (which terminates the test if it exceeds the set temperature by 10 degrees) or the non-national standard method (which terminates the test if it exceeds the set temperature by 20 degrees).

Atmospheric Pressure Setting

The atmospheric pressure during testing can affect the flash point values of different specimens in a closed cup. To ensure accurate results that conform to standard atmospheric conditions, you should set the actual pressure value.

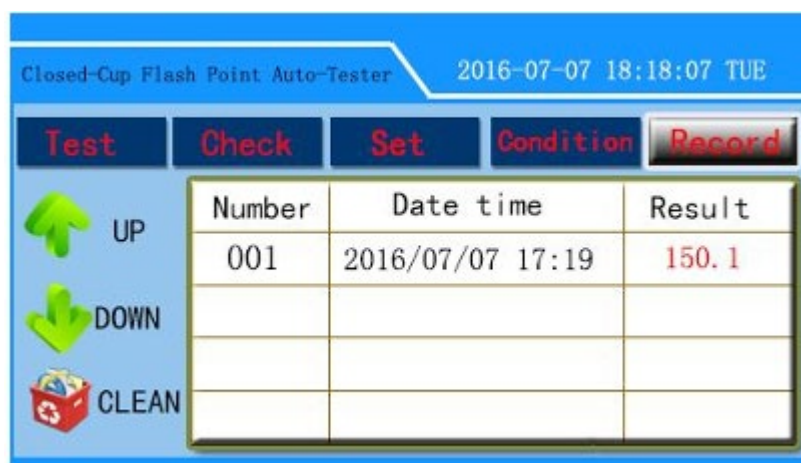
To do this, follow the procedure in the "Expected Flash Point Set" section to input the necessary corrections.

6.1.4 Conditional Interface



- The interface allows you to set the printer's status (open or closed) and select the testing standard. It accommodates different sample classifications and testing procedures.
- When set to "Every Degree," the instrument will start testing the sample. For every 5°C increase in temperature, the cover will open, and ignition will be tested for flash fire. This method is useful when the flash point of the specimen is unknown.
- You can select "Step A" to test the sample using Method A or select "Step B" to test the sample according to Method B.
- Click on the appropriate area to set the conditions of the printer or the application of the standard, test procedures, etc.

6.1.5 Test Record Interface



The interface displays the test records for the sample. You can use the "Up" and "Down" buttons to scroll through the records. The "Clear" button allows you to delete all stored data records. After clicking "Clear," a confirmation popup will appear to prevent accidental deletion of all test records.

6.1.6 Time setting Interface



- In the interface of the display real time, click the time display area, and enter the time setting interface:
- To adjust the date and time, click on the time display area at the top of the interface. A keyboard input box will appear, allowing you to modify the year, month, day, hour, minute, and second in order. After entering the desired values, click the "OK" button to save the changes. If you wish to exit without making changes, click "**Cancel**".

6.2 Sample testing

- 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, and the instrument begins to heat the test. When the test to the flash point value, the instrument will automatically test head rises, display, and print the value of a flash point. If you need to end the test in the test, you can click on the end.
- If the preset temperature for the sample is too low or if the sample temperature is too high, the test will automatically terminate. The test information display will indicate either "Expected Flash Point Set Value Too Low" or "Sample Temperature Too High." The testing range for the sample is between 20 degrees and 18 degrees above the preset temperature.
- When the sample temperature exceeds a preset temperature of 20 DEG C without flash, the instrument will automatically terminate the test.
- When the test after the need to return to the main menu, press the "delta" or "at" key.

7. Maintenance

- The sensor part of the instrument can easily accumulate grease, which may affect detection accuracy. It is important to regularly clean the sensor using gasoline or ether. Take care during the cleaning process to avoid damaging the sensor.
- Do not use corrosive cleaning agents to clean the instrument, as this can damage the paint surface. If the sample cups are not used for an extended period, place them in the heating hole. In the "Calibration" section, select the test head and press the "Confirm" button to lower it.

8. Accessories

Accessories	Quantity
Sample cup	1 Pc
C power line (220V)	1 Pc
Printing paper (Sensitive)	



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