Huazheng®

HZNQ-1102

Oil Pour Point Tester

USER MANUAL

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Contents

I.Overview

1.Oil condensation point test tester has the characteristics of exquisite structural design and unique manufacturing technology, and is the latest product updated by modern large-scale industrial production test and analysis means. It conforms to GB/T 3535 and GB/T510 standards and is used to determine the pour point of petroleum products.

2.This instrument adopts compressor refrigeration technology, saving energy, simple operation, long service life, and its main technical indexes, such as cooling rate and cooling capacity, have exceeded similar products abroad.

3.Environmental conditions for use of the instrument: ambient temperature 5℃～30℃, humidity ≤85%, operating power AC220V±10%, 50Hz.

II.The Working Conditions of The Instrument

1.The instrument should be placed on a flat and firm work table, and air convection should be minimized in the environment.

2. Flammable materials may be involved in the use of this product, and no open fire (or devices that generate sparks) shall be allowed around during operation.

3. The instrument should be placed in a dry and ventilated place when not in use.

4. The power supply is single-phase three-wire system, must have a good grounding end.

III.Main Technical Specifications and Parameters

1. Refrigerant: R13 R502

2. Cooling time: ≤100min (ambient temperature ≤30℃)

3. Downtime interval: > 30min

4. Stirring motor power: 22W X 2

5. Allowed temperature rise of stirring motor: 80℃

6. Power: 800W

7. Voltage: 220V±10%,50Hz±1Hz

8. Temperature control range: room temperature ~ -70℃

9. Temperature control accuracy: ±0.5℃

10. Temperature display: LED

11. Temperature sensor: Pt100

12. Timer: LED

IV.Instructions

1、Preparation before testing

1. Before doing the test, please carefully read the standards related to this test. The

relevant standards are: People's Republic of China Standard GB/T3535-2006 "Petroleum Products Pour Point Determination Method", GB/T510, understand and familiar with the standard Test methods, test procedures and test requirements set forth.

2. Prepare various test instruments and materials for testing according to the requirements stipulated by the standards.

3. Check the working status of the instrument to meet the working environment and working conditions specified in the manual.

4. Check the power supply and have a good grounding terminal; check the outer casing of the instrument and it must be in a good grounding state.

5. Inject a proper amount of absolute ethanol (industrial alcohol) into the bath, and it is advisable to put the test tube into the bath bath without overflow.

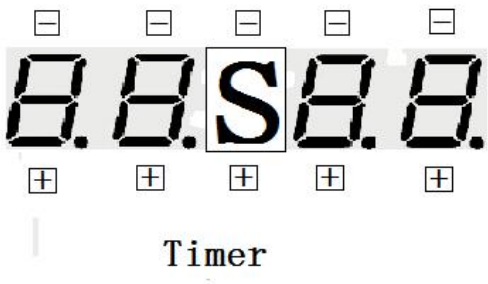
2、Instructions

1. Turn on the power switch, the temperature control table displays the bath temperature, turn on the stirring switch, the bath is stirred to start working, turn on the cooling switch, and the refrigeration unit works.

2. Set the bath temperature point to the desired value according to the needs of the test project.

Temperature control table setting method: The upper row shows the PV red word as the temperature measured by the bath, and the lower row shows the SP green word as the temperature control point value to be controlled. Press the “” function key once and press the ▲ or ▼ key to display the lower row as the desired temperature control point value. Press the “” function key again to return to the standard mode. The temperature control meter is automatically constant at the set temperature point.

3、Timer Settings



1.The setting of the timer time is set by the "+" and "-" keys. The middle "S" indicates the second, the "M" indicates the minute, and the "H" indicates the hour (via the middle "+" and "-" keys. Select "S", "M", "H"). For example, "60S12" marks 60 seconds 12 seconds.

2.When the “Timer” switch is turned on, the timer starts counting. When the number

on the LED matches the set number, the buzzer will start to beep, indicating that the time is up. At this time, the “Timer” switch is turned off to turn off the buzzer.

3.The pour point is tested in accordance with GB/T3535-2006 "Peak Point Determination Method for Petroleum Products". For detailed methods, see GB/T3535-2006 "Pour Point Determination Method for Petroleum Products".

4. If the actual value detected by the glass thermometer does not match the displayed value of the temperature control table, correction is required. For example, if the meter display value is -30.0 °C and the glass thermometer detection value is -29.7 °C, press the "" button for more than 4 seconds, the PV window displays rE, and then press the "" button. The PV window displays rt to make the SP value. It is 0.3 (if the glass thermometer has a detection value of -30.3 °C, the SP value is -0.3). After the correction is completed, press the "" button for 4 seconds or more to exit (the key is automatically returned to the standard mode after 1 minute without pressing the button. (See the specification of the temperature control table for details).

Warning: when the instrument fails, the power should be cut off immediately. After the cold groove of the instrument is restored to room temperature, please ask professional personnel to repair and remove the fault before continuing to use, to prevent accidents!V.Common Troubleshooting

Fault phenomenon	Cause Analysis	Method of exclusion
Power switch does not work	(1) Fuse blown (2) The power cord is loose or the plug is not in good contact.	(1) Replace the fuse (2) Exclude after checking the power supply and plug
Temperature display is confusing or not displayed	(1) Sensor plug contact is not good (2) Sensor damage (3) Internal circuit failure	(1) Re-inserted (2) change sensor (3) Ask the professional to repair
Cooling rate is slow or not cooling	(1) too much dust in the condenser (2) Refrigerant leakage or circuit failure	(1) Open the front door and side door of the refrigerator to remove dust (2) Ask the professional to repair

VI.Matters Needing Attention

1.The instrument should be placed in a ventilated and dry place and kept clean.

2.The instrument power supply must be well grounded.

3.The tilt of the instrument should not be greater than 45° during handling and installation.

4.Do not dry heat heater without medium.

5.If you need to start again after turning off the refrigerator, you must do so at an interval of 5 minutes, otherwise it will damage the compressor.

6.In case of any malfunction of the instrument, professional personnel should be invited to repair or inform the company. Do not disassemble or disassemble the instrument randomly.