Huazheng®

HZ-1025
Petroleum and synthetic liquid water separability tester

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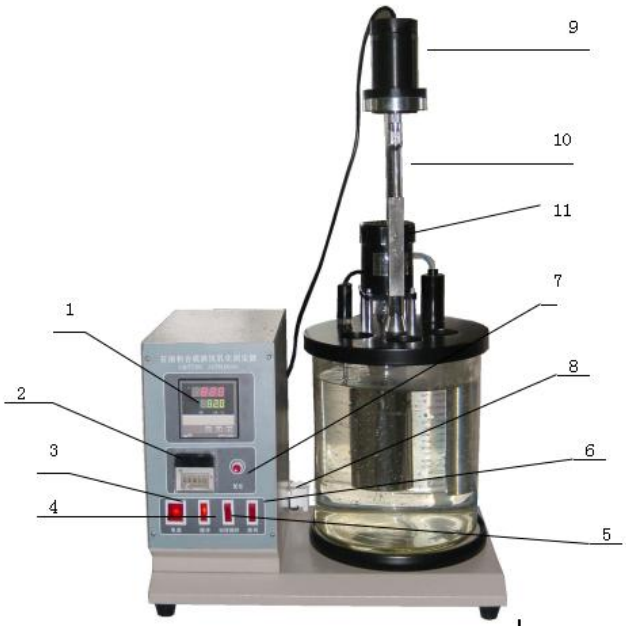
Contents

I. Overview

The HZ-1025 petroleum and synthetic liquid water separability tester is designed and manufactured in accordance with the national standard GB/T7305 ASTM D1401. This instrument is suitable for measuring oils with a kinematic viscosity of 28.8～90mm² /s at 40℃. The test temperature is 54±1℃. It can also be used to determine oils with a kinematic viscosity greater than 90mm² /s at 40℃, but the test temperature is 82±1℃.

II. Key Function and Feature

1-Temperature control table
2-Chronograph
3-Power switch
4-Mixing switch
5-Sample stirring switch
6-Lighting switch
7-Reset switch
8-lamp holder
9-Sample stirring motor
10-Pole
11-Stirrer



The HZ-1025 petroleum and synthetic liquid water separability tester is mainly composed of thermostat, control device and heating device.

The thermostat is composed of a thermostat and a stirring motor.

The control device consists of a potentiometer and a control switch.

The heating device is composed of a heating tube.

III. Major Technical Indicators

1. Input power: ＜830W
2. Heating power: 800W
3. Power supply: AC220V/50Hz
4. Temperature control range: room temperature～85℃
5. Temperature control accuracy: ±0.2℃
6. Number of test holes: 3 holes

IV. Assembly and use

After unpacking the instrument, carefully remove the packaging, and install it as shown in the figure after checking that there is no damage.

1. Place the instrument steadily and the tilt angle is less than 45 degrees.

2. Insert the sensor plug, bath stirring motor plug, and heating tube plug into the corresponding sockets on the rear panel.

3. Clamp the test tube containing the sample with a clamp and place it on the upper cover steadily.

4. Connect the power supply and ground the instrument well.

5. Turn on the power switch (Figure 3) and the stirring switch (Figure 4), and set the required values for the test according to the temperature control meter operation mode.

After the instrument is powered on, the upper row of the temperature control meter displays the main control temperature measurement value, and the lower row displays the main control set value.

- If the upper row shows OVER, it means the sensor is open or the input signal exceeds the measurement range.

- Set value change method

Press the key, the upper row displays SP. Press ▲ or ▼ key to make the lower row display the required value. Press again or go to standard mode.

- Control parameter change method

Press the key for more than 4 seconds, the upper row displays the prompt of the control parameter, and press the ▲ or ▼ key to make the lower row display the required value. Continue to press the key, the upper row will display the prompts of each parameter in turn, press the ▲ or ▼ key to make each control parameter the required value. Press the key for more than 4 seconds to return to the standard mode. (It will automatically return to the standard mode after 1 minute without key press)

- The function parameters are shown in the table below

Prompt	name	set range	description	Initial value
rE Re	RESET	-99（99.9）~100（100.0）℃	RESET Only used to adjust the static difference of proportional control instrument	0

During the auto-tuning process, press the ▲ or ▼ key for 8 seconds and then the AT light will go out, the auto-tuning will be terminated, and the meter will control according to the original PID parameters.

V. Fault analysis and troubleshooting

Under normal circumstances, turn on the power switch, and the power indicator does not light up. After starting up, if the above process is found to be abnormal, it can be analyzed and handled according to the following situations:

Fault description	Failure analysis	Troubleshooting
Turn on the power switch, the indicator	Fuse blown	First check whether the circuit is short-circuited and replace the insurance

light is off	Poor power connection	Check the circuit for short circuit
	The power switch is damaged	Replace the power switch
Turn on the water bath stirring switch, the motor does not rotate	There is a problem with the stirring switch	Replace the stirring switch
	There is a problem with the stirring motor	Replace the mixing motor
	Open circuit	Check and exclude
The bath temperature is not constant	Solid state relay is broken	Replace solid state relay
	Damaged heating tube	Replace heating tube
	Sensor damaged	Replace the sensor
	Temperature control table is damaged	Replace the temperature control table
The timer does not show	Timer open	Check the line
The timer does not count or clear	Bad timer contact	Check the connection
	Timer malfunction or button switch is broken	Replace timer or button switch

VI. Precautions

1. Keep the instrument clean, do not get water or damp into the electronic control part, and prevent dirt such as oil samples from being spilled on the instrument.

2. The instrument should be well grounded before use to ensure the safety of operators.

3. When the instrument fails, please professional and technical personnel to deal with it, and do not disassemble it at will.

4. This instrument is guaranteed for one year.

Packing List

Product model name	HZ-1025 Petroleum and synthetic liquid water separability tester GB/T7305

Random files and accessories

NO.	Name	Specification type	Unit	Quantity
1	Certificate and manual		Pieces	1
2	Host		Set	1
3	Measuring cylinder	100ml	Pieces	3
4	Test tube fixture		Set	3
5	light		Pieces	1
6	Test stirring device		Set	1
7	Fuse tube	15A	Pieces	2
8	thermometer	-1～105℃	Pieces	1
9	Thermometer rubber stopper		Pieces	1
10	"O" ring	Φ32(inside diameter)x5	Pieces	3