RDSP-3402 Gas Chromatography for Transformer Oil Analysis

Gas chromatography is a technique for separation and analysis of multicomponent mixtures. Gas Chromatography for Transformer Oil Analysis uses gas as the mobile phase (carrier gas). When the sample is sent into the injector and gasified, the carrier gas is carried into the packed column or capillary column. Due to the differences in boiling point, polarity and adsorption coefficient of each component in the sample, each component is separated in the column. Then, the Gas Chromatography for Transformer Oil Analysis connected behind the column detects each component in sequence according to the physical and chemical characteristics of the component Finally, the converted electrical signal is sent to the chromatographic workstation, and the chromatogram of each component is recorded and analyzed by the chromatographic workstation, so as to obtain the analysis results of each component. RDSP-3402 Gas Chromatography for Transformer Oil Analysis adopts large screen LCD display, which can set various parameters through keyboard. It has the functions of power failure protection, over temperature protection, "0 °C" protection, gas cut-off protection, electronic automatic ignition, etc. It has the advantages of high sensitivity, high accuracy, short analysis time, simple analysis method and

automatic data processing. It is an ideal special gas chromatograph for power industry, transformer manufacturers and related fields.

🕮 Product Features

1. The Gas Chromatography for Transformer Oil Analysis adopts large screen LCD display, which is intuitive, easy to operate, more suitable for the use habits of Chinese people, humanized design interface and one click operation.

2. The instrument computer is connected to the Internet and can be connected with the instrument through the remote computer to realize the remote data acquisition and management. It improves the freedom of the device and promotes the effective application of the laboratory.

3. Through the user-friendly software operation interface, it is very convenient for the user to set the parameters including temperature, lift, detector, bridge flow, etc.; the intuitive operation includes the functions of FID ignition (which has been changed to full-automatic, without manual operation), bridge flow switching, temperature control switching on and off, and various time events.

4. The main control circuit adopts advanced microprocessor and large capacity memory, which makes the data storage more reliable;

5. The temperature control system of microprocessor is adopted, and the temperature precision of controlled object in each heating area is less than 0.1 degree. With over temperature protection device. If the temperature of

any circuit exceeds the set value, the instrument will stop heating and report the fault position on the display.

6. Self-diagnosis function can display the fault location.

7. Data power off protection function, the operation data set by the instrument can be stored for a long time after power off.

8. With stopwatch, counting function.

9. The carrier gas path adopts the dual stable gas path system of first stabilizing pressure and then stabilizing flow.

10. The imported special composite material chromatographic column has good separation effect. One injection, the whole analysis time is short.

11. Automatic fault diagnosis, automatic over limit prompt, three ratio diagnosis, component concentration diagram and other diagnosis methods

12. Startup stable time: < 1.0 hours

📖 Product Specifications and Technical Parameters

1. Technical Parameters

Picture	
Model. No	**RDSP-3402**
Normal working conditions of the instrument	
Ambient temperature	0 ~ 30 ℃
Relative humidity	less than 85%

There is no strong electromagnetic interference and corrosive gas around	
The placement table shall be stable without strong vibration.	
Power supply	AC 220 V ± 10%, 50 Hz ± 0.5 Hz
Power consumption	About 2KW
Technical performance	
(1) Temperature control	
1) Temperature of column chamber	
Temperature control range	Room temperature plus 5 ℃ ~ 420 ℃ (set temperature increment 1 ℃)
Temperature control accuracy	± 0.05 ℃ within 200 ℃
The deviation between the indicated temperature and the set temperature is not more than 0.1 ℃	
The deviation between the actual temperature and the indicated temperature is not more than 1%	
Maximum heating power 1200W	
PT100 corundum ceramic platinum resistor is used as temperature sensing element	
2) Temperature of hydrogen flame detection chamber:	
Temperature control accuracy	± 0.05 ℃ within 200 ℃
Temperature control range	room temperature plus 5 ℃ ~ 420 ℃
Horizontal heating and two 100W internal heating stainless steel heating rods are adopted	
PT100 corundum ceramic platinum resistor is used as temperature sensing element	
3) Temperature of thermal conductivity cell detector	
Temperature control accuracy	± 0.05 ℃ within 200 ℃
Temperature control range	room temperature plus 5 ℃ ~ 420 ℃

Vertical round heating and two 100W internal heating stainless steel heating rods are adopted	
PT100 corundum ceramic platinum resistor is used as temperature sensing element	
4) Reformer temperature	
Temperature control accuracy	± 0.05 ℃ within 200 ℃
Temperature control range	room temperature plus 5 ℃ ~ 420 ℃
Horizontal heating and two 100W internal heating stainless steel heating rods are adopted	
PT100 corundum ceramic platinum resistor is used as temperature sensing element	
(2) Thermal conductivity cell detector (TCD)	
Sensitivity	s ≥ 5000mv · ml / Mg (benzene, H2)
Noise	≤ 0.02mv
Drift	≤ 0.1mv/h
Built in preamplifier	
Semi diffused 100 Ω four arm rhenium tungsten wire	
Power supply mode of constant current source	
(3) Hydrogen flame ionization detector (FID)	
Detection limit m ≤ 5 × 10-12g / S (benzene / carbon disulfide)	
Noise	≤ 5 × 10-13a
Drift	≤ 5 × 10-12a / 30min
Full collector type, corundum nozzle	
Platinum ignition wire	

2.Minimum detection quantity

Minimum detectable concentration (PPM) of dissolved gas in insulating oil							
Component name	H2	CO	CO2	CH4	C2H4	C2H6	C2H2
Minimum detection concentration	two	two	five	zero point	zero point	zero point	zero point

				zero eight	zero eight	zero eight	zero eight

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