XRY-1A+

Microprocessor Oxygen Bomb Calorimeter

Summary

The instrument is designed and made as per the National Standard of People's Republic of China GB/T213-2008 and ASTM D240 Test Method for Calorific Value of coal, GB/T384-1988 Test Method for Calorific Value of Petroleum Products and Calibration Regulation of People's Republic of China JJG672-2001 Oxygen Bomb Calorimeter, as well as Company Standard of Shanghai Q/YXYY 10 XRY Series Oxygen Bomb Calorimeter.

I. Main technical features

- 1. The instrument adopts technology of single chip machine, touch screen, windows system
- 2. The test procedure is fully automatic. After placing the sample and inputting the right parameters, the instrument will finish all the procedures without manual interference. It will print the test data directly after test is over.
- 3. This instrument adopts sealed oxygen bomb. The whole structure adopts stainless steel material. The strength is enough to resist 20MPa hydrostatic test under room temperature.
- 4. The inner water container is made of stainless steel and the section likes as a pear. Its water volume is 3000g and with electric stirrer to make sure the uniform temperature in water bath.
- 5. The external water jacket is a double container. It will be filled fully with water when testing, and the stirrer in the water jacket will work to ensure the uniform temperature and create the constant temperature condition for test requirement.

II. Main technical specifications

1. Power supply: AC 220V±5%, 50 Hz

2. Total power consumption: ≤ 150 W.

3. Heat capacity: $(14000 \sim 15000) \text{ J/K}$

4. Resolution: 0.001 K

5. Measurement accuracy: ≤60J/g

6. Measuring range: $(10\sim35)^{\circ}$ C

7. Repeatability error: ≤0.2% (Grade C)

8. Pressure endurance of bomb: 20 MPa

9. Temperature measurement range: (15~28)°C

10. Relative humidity: ≤85%

11. Overall dimension: 600mm×480mm×460mm

(Note: Pellet press machine is optional)

