

XRY-1C Oxygen Bomb Calorimeter



Summary

The instrument is designed and made as per GB/T213 “Test Methods for Calorific Value of Coal”, GB/T384 “Test Methods for Calorific Value of Petroleum Products” and Calibration and Inspection Regulation of People’s Republic of China JJG672 “Oxygen Bomb Calorimeter”, as well as the Company Standard of Shanghai Q/YXYY 10 “XRY-1 Oxygen Bomb Calorimeter”.

The instrument for intelligent data sampling process, computer-controlled, automatic test of combustible material calorific value of automation testing instrument, the instrument can be widely used to determine calorific value of combustible substance such as coal, oil, coke and paraffin, etc. It is the best choice of companies in the field of thermoelectricity, smelt, cement, chemical, and scientific research institutes, and institutions of higher learning.

I. Main technical features

1. The instrument adopts a high precision temperature sensor and a high performance A/D converter and uses an SCM to form the temperature collection and transportation system.
2. The instrument configuration laptop, composed of a high degree of automation, easy to use, convenient and intelligent data compilation instrument.
3. The instrument is fully automated in the testing process, after the sample in place, correct input various parameters automatically without manual intervention to complete each test process; you can print measurement data directly on the A4-format printer configuration after the end of the trial.

II. Main technical specifications

1. Heat capacity: (14000 ~ 15000) J/K;
2. Temperature resolution: 0.001 K;
3. Thermal error: ≤ 60 J/g;
4. Temperature measurement range: 10 °C ~ 35 °C;
5. Repeatability error: $\leq 0.2\%$ (Grade C);
6. Pressure endured by Oxygen bomb: 20 MPa;
7. Ambient temperature: 15 °C ~ 28 °C (room temperature), The temperature fluctuation during each test should be not more than 1 °C;
8. Ambient humidity: less than 85%;
9. Power supply: AC (220 \pm 5%) V, 50Hz;
10. Dimensions: 600 mm \times 460 mm \times 430 mm (length \times width \times height, PC is not included).

Note: If the test sample is pulverized coal samples, in order to obtain better test results, we recommend separately of the company’s private press cake machine.