# Advanced Instruments Co.,Ltd.





## **Building Material Bomb Calorimeter**

EN ISO 1716: Reaction to fire tests for products-

Determination of the gross heat of combustion(calorific value);

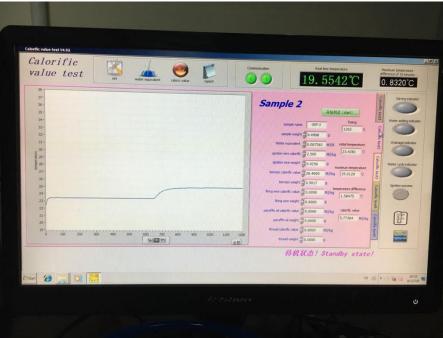
GB/T 14402: Combustion performance test for building materials and products-Determination of the heat of combustion.

www.advanced-instrument.com sandy@advanced-instrument.com +8618502322900

#### Model:OBC-B

### I.Main feature

- 1. The system automatically records the data of temperature and time.
- 2. Based on the input heat capacity, sample quality and additional heat and related data, it can automatically fulfil temperature correction and gross heat of combustion calculation, and give the results.
- 3. Gross heat of combustion and net heat of combustion can read directly, without calculation;
- 4. The outer barrel is dual layers cylinder with insulation cover. The insulation material is filled between inner and outer walls. The inner cylinder is made of polished metal, in which the bomb vessel can totally immerse. And it has automatic water injection device, which can supply water if being lack of water during test. The volume is 2200 mL.
- 5. This equipment is supplied with PC and device for making the "cigarette"
- 6. The computer of the test apparatus has the icon display function, display curve, Excel spreadsheets, print function, data input, command and control functions. In order to perfect the system, the computer system can be added to fault alarm, warning, alarm, etc.
- 7. It contains crucible method and cigarette method;
- 8. The stirrer is drove by constant motor, avoiding heat transmission of calorimeter. And insulation pad is added at the contacting part of stirring shaft.
- 9. The temperature measuring device adopts OMEGA PT100 sensor.



### **II.Technical Specifications**

S.N.	Item	Parameter
1	Gross heat of combustion	0.01MJ / kg ~ 30MJ / kg
2	Repeatability error	Dynamic ≤0.1%
3	Temperature range	0 ~ 50 ℃
4	Temperature resolution	0.0001 °C, using PT100 sensor
5	Volume of bomb vessel	300±50ML,mass:3.25KG
6	Supply pressure	0 ~ 3.5Mpa without leakage
7	Pressure resistance	≥21Mpa pressure
8	Ignition circuit	12V,adjustable current 100mA,firing wire diameter 0.1mm
9	Stirrer power	3W
10	Stirrer vessel speed	375r / min
11	Power	AC 185~245V