

## XRY-1A+ Oxygen Bomb Calorimeter

### Summary

The instrument is designed and made as per the National Standard of People's Republic of China GB/T213-2008 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/YXY 10 XRY Series Oxygen Bomb Calorimeter.

### I. Main technical features

1. The instrument adopts technology of single chip machine, LCD screen, high accuracy temperature sensor and high performance A/D conversion device. It is a highly intelligent instrument.
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.

### II. Main technical specifications

Heat capacity	14000 J/K~15000 J/K
Measuring range	(10~35)°C
Resolution	0.001 K
Measurement accuracy	± 60J/g
Repeatability error	≤0.2% (Grade C)
Pressure endurance of bomb	20 MPa
Temperature measurement range	10 °C~28 °C
Relative humidity	≤85%
Power supply	AC 220V±5%, 50 Hz
Overall dimension	600mm×480mm×460mm



### 11. Packing List

No.	Name	Unit	Quantity
1	XRY-1A+ Main unit (including single chip, oxygen bomb, water jacket, water bucket, stirrer)	set	1
2	Oxygen bomb head holder	set	1
3	Oxygen bomb seat	set	1
4	Temperature sensor	piece	1
5	Thermometer (0-50°C)	piece	1
6	Stopper for thermometer (silica gel stopper 2 #)	piece	1
7	Ignition wire (Φ0.1 Nickel-Chromium wire)	meter	10
8	Crucible	piece	2
9	Discharging valve	piece	1
10	Oxygen decompression device	piece	1
11	Oxygen pipe	pair	1
12	O type seal ring (φ20×2.4mm)	piece	5
13	O type seal ring (φ8×1.9mm)	piece	5
14	O type seal ring (φ6×1.9mm)	piece	5
15	Airproof ring (largest O type)	piece	2
16	Benzoic acid	piece	10
17	Water aspirator	piece	1
18	Printing paper	roll	1
19	Stopping ring for thermometer (1#)	piece	4
20	Fuse 2A (Φ5×20)	piece	2
21	Silicon stopper (7#)	piece	1