

# Automatic Bomb Calorimeter

## LABC-B10



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## Automatic Bomb Calorimeter LABC-B10

Automatic Bomb Calorimeter LABC-B10 comes with automatic oxygen filling and releasing, fully automatic bomb raising and lowering system. Equipped with propeller to achieve high stirring efficiency, and faster oxygen bomb heat transfer to reduce test period. It is in accordance with international standards ASTM D5865, ISO 1928.

### Features

- Unique bucket water circle system, automatic determination water volume
- Easy assembly and disassembly of stainless steel oxygen bomb
- Built-in intelligent water tank with heating and cooling function
- Helix tube multipoint isothermal technology
- Independent jacket and bucket water system
- Large heat capacity with stable and accurate results
- Self-protection, self-diagnostic function
- Analysis, statistics report, system monitor
- Unique crucible support design, easy to use

### Applications

Used in determination of calorific value of solid and liquid combustibles such as coal, coke, oil, petroleum material, biomass, cement and others.

### Specifications

Model no.	LABC-B10
Calorimeter type	Isoperibol
Oxygen filling	Fully automatic oxygen filling & releasing, fully automatic bomb raising & lowering
Bomb volume	250 ml
Analysis time	< 8 min full test process: <10 min
Bomb washing	Manual
Bomb pressure (maximum)	20 MPa
Bomb identity	Yes
No. of Tests	6/hour
Temperature resolution	0.0001 K
Precision (RSD)	≤ 0.01 %
Heat Capacity Stability	≤ 0.25 % within three months
Gas requirement	99.5 % oxygen
Water requirements	Distilled water
Energy measurement range	0 to 50000 J
Bucket filling	Automatic
Stirring method	Propeller
Reproducibility	0.10 % (analysis of 1 g of benzoic acid)
Temperature Increase	2°C (average)
Temperature measurement	Pt1000 (temperature probe)
Temperature measurement	≤ 32°C
Working temperatures	Refrigerating device
Cooling type	Yes
Network	0.6 kW
Maximum Power	No
Power Inverter	220 V ± 15 to 10 %, 50/60 Hz
Power supply	Yes
Advance Calculations	Main body: 440 × 550 × 460 mm
Dimension	Water Tank: 390 × 550 × 440 mm
Weight	50 kg

### Optional Accessories

Accessories no.	Name	Unit	Qty.
01	Ignition thread (500 pieces) Box	Box	20
02	Standard Benzoic Acid (1 gm * 10 pieces)	Bottle	10
03	Gasket Ring for Oxygen Filling Facility (big, middle, small)	Set	15
04	Heating Crucible	PC	60
05	Oxygen bomb gasket ring (big, middle, small)	Set	15
06	Plastic insulation cover	Set	5
07	Special Oxygen filling pipe	PC	2
08	Electrodes	Set	1