

Combustion



# **BOMB CALORIMETER** C200/230



**1** study

#### Features

- Reaction vessel manufactured from Stainless steel
- · Vessel capacity of 300ml
- Suppled complete with electronic digital thermometer, pellet press, ignition wire, pressure gauge & pressure regulator

## Description

The C200 is a conventional bomb calorimeter, with a stirred and highly insulated water vessel. The reaction vessel is machined from corrosion resistant Stainless steel and has a volume of approximately 300ml. The calorimeter allows measurement of heat of combustion of solid and liquid fuels and determination of their calorific value. The calorimeter is provided with high pressure valves and ignition electrodes together with a firing unit. Additional essential components supplied; include an electronic digital thermometer (with a resolution of 2 decimal places), pellet press(for powdered fuel), ignition wire, pressure gauge, safety bursting disc and a bottle pressure regulator for safer oxygen charging and a highly accurate set of digital scales.

#### **Related Laws/Applications**

- • Combustion
- Thermodynamics
- • Energy Conservation
- • Mechanical Engineering
- • Fuel Technology
- Fuel Research

#### Learning capabilities

- • Measurement of Calorific value of liquid fuel
- • Measurement of Calorific value of solid fuel
- · Comparison with a standard fuel



## **Technical Specification**

- Stainless steel vessel with a capacity of 300ml
- · Electronic digital thermometer to 2 decimal places
- · Pellet press
- Ignition wire
- Pressure gauge
- · Safety bursting disc
- Bottle pressure regulator
- · Digital scales

#### **Essential Ancillaries**

• Commercial Oxygen in a suitable vessel capable of pressurising the reaction vessel up to 25 Bar gauge.

### What's in the Box?

- · Stainless steel vessel with a capacity of 300ml
- Water Jacket & Lid
- Offset Stirrer
- · Electronic digital thermometer to 2 decimal places
- Pellet press
- Ignition wire
- Pressure gauge
- Safety bursting disc
- · Bottle pressure regulator
- Digital scales

# Weights & Dimensions

- Weight: 25Kg
- Length: 900mm
- Width: 900mm
- Height: 500mm

# **Essential Services**

- Oxygen: Commercial oxygen in a suitable vessel capable of pressurising the reaciton vessel up to 25 bar gauge
- Electrical: 230/240 volts, single phase, 50Hz (with earth/ground)

# **Ordering information**

To order this product, please call PA Hilton quoting the following code: C200/230

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