

# BOMB Calorimeter Apparatus (EDC-HT-33)

#### **EXPERIMENTAL DATA:**

- Finding the calorific value of Coal.
- Finding the calorific value of Kerosene Oil.
- Finding the calorific value of Diesel Oil.



#### **DESCRIPTION:**

The bomb calorimeter is the most communal device for measuring the heat of combustion or calorific value of a material. The bomb calorimeter is a type of constant-volume calorimeter used to measure the combustion heat of oxygen-burnable samples. With this apparatus a test sample of quantified mass is burned under standardized conditions. The heat of combustion resolute under these conditions is designed on the basis of the experimental temperature rise while taking account of heat loss. This Oxygen Bomb Calorimeter can be used to measure the heat produced from several submissions e.g., coal, kerosene oil, Diesel oil and many other burning fuels.



## Thermodynamics and Heat Transfer



#### **SPECIFICATIONS:**

- Bomb calorimeter with embedded computer control, user-friendly interface, LCD display.
- Oxygen bomb and bucket (calorimeter vessel)
- Supplied complete with water bucket made of Stainless-Steel sheet.
- Stain less Steel Bomb
- Motorized stirrer for uniform water circulation.
- Ignition unit built-in.
- Gas releasing Valve, Stain less Steel crucible.
- Sample Benzoic Acid with known calorific value.
- Ignition Wire (Nichrome).
- Temperature sensor of resolution 0.01 degree centigrade
- Full feature digital controller.
- Pellet making Machine.

#### **TECHNICAL DATA:**

- Housing Material:
  - o Stain less steel water vessel
  - o Stain less steel Bomb
- Oxygen fill, vessel fill with water and bomb washing all are manual.
- Power.
  - o 220/230V (50 Hz).

### **DIMENSIONS AND WEIGHT:**

- L x W x H (mm): 400 X 400 X 400 approx.
- Weight: 65 kg approx.

#### **SCOPE OF DELIVERY:**

- 1 x EDC-HT-33
- 1 x Instructional Manual

