

FAL-022 BOMB CALORIMETER



RANGE OF EXPERIMENTS TO BE CARRIED OUT:

1. To determination the Calorific value of liquid and solid fuels

TECHNICAL DESCRIPTION :

The apparatus consists of following parts.

1. **Bomb** : The Bomb consists of three parts viz. Bomb body, Lid & Cap. The upper side of the lid is also provided with small hook rod lifting it and with a Schrader valve for filling oxygen in the Bomb. The Schrader, valve is provided with a metallic cap.
2. **Water Jacket** : It is made of Stainless Steel polished on the inside and also outside to minimize radiative losses. The top of jacket carries a rod to hold the stirrer unit, a threaded adopter to support the Beckman thermometer holder rod, and a small pipe through which water is added.
3. **Offset Stirrer** : It consists of a stirrer driven at constant speed by a motor through a heat insulator rubber belt.
4. **Calorimeter Vessel** : Is made of stainless steel and is polished outside.
5. **Bomb Firing Unit** : The firing unit is operated by A.C. Mains (230 Volts, 50 Hz). The electric box is provided with terminals for the stirrer unit, the ALARAM unit and for the Bomb Fuse wire.

6. Pressure Gauge On Stand :An accurate pressure gauge is supplied for measurement of pressure of oxygen in the Bomb.

7. Gas Release Valve : It is to remove the excess of oxygen. It is screw on the Schrader valve provided on the Lid of the Bomb.

8. Pellet Pressure :

The pellet pressure has 10 mm. Diameter punch and die Coal or other powdered samples are compressed into pellets

9. Crucible :The stainless steel crucible is offered as standard with instrument.

10. Ignition Wire : It is nichrome wire

DIMENSIONS AND WEIGHT :

Size :0.5 m.(L)x 0.5 m(W) X 0.6m (H)

Weight :Approx. 30 Kg

SERVICE REQUIRED :

Power Supply : 230v AC Single Phase

SCOPE OF DELIVERY:

1. Experimental Setup
2. Instructional Manual