

BOMB CALORIMETER (DIGITAL) (with safety device)



www.shivamlabinstruments.com | www.shivaminstruments.in | www.shivamlabinstruments.net | www.mufflefurnaceindia.com | www.coaltestinginstruments.com

Creating standards with
Commitment to quality

www.shivamlabinstruments.com | www.shivamlabinstruments.in | www.shivamlabinstruments.net | www.mufflefurnace.com

Shivam Instruments

Corporate Office

Add. : C-14/1, Front Side, Wazir Pur Ind. Area, New Delhi - 110 052, (India)

Phone : +(91)-(11)-47087933 Fax : +(91)-(11)-47087933

Mobile : +(91)-9312838091

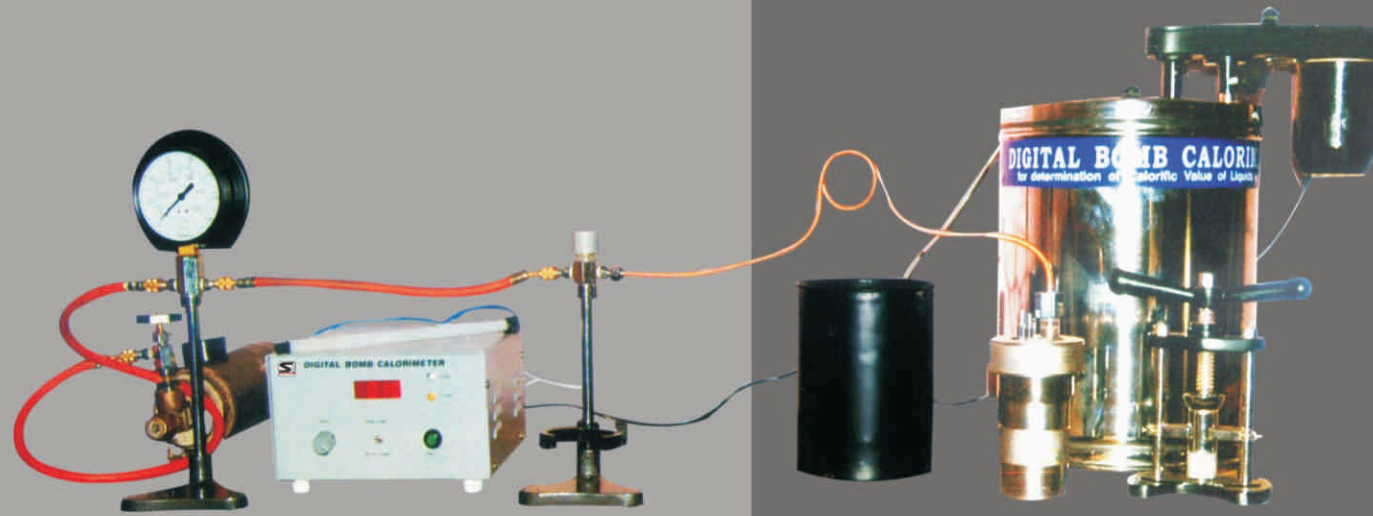
Email : info@shivamlabinstruments.com | mverma746@gmail.com

Reg. Office

Address : 746/45, Tri Nagar, New Delhi - 110 035, (India)

BOMB CALORIMETER (DIGITAL)

(with safety device)



Supplied with following Accessories

- Benzoic Acid
- Crucible
- ring for stirrer
- Valve
- Schrader Valve
- Pallets Press
- Spanner for Oxygen tube connection
- Ignition wire 5 mts.
- Cotton Thread
- Operating Manual.

www.shivamlabinstruments.com | www.shivaminstruments.in | www.shivamlabinstruments.net | www.mufflefurnaceindia.com | www.coaltestinginstruments.com

BOMB CALORIMETER (DIGITAL) (with safety device)

BOMB CALORIMETER (DIGITAL) (with safety device)

Description

SHIVAM INSTRUMENTS is today one of the eminent and reputed manufacturer of Scientific Instruments. Ever since its existence from 1981, it has maintained its bright image worldwide with its high quality scientific instruments on indology at reasonable prices. We at SHIVAM INSTRUMENTS are constantly working for producing instruments that are widely use in all type of industrial laboratory & in research areas. We have more than 300 instruments on various fields of scintific, viz., LABORATORY OVEN, INCUBATOR, B.O.D. INCUBATOR, MUFFLE FURNACE, LAMINAR FLOW BENCH, AUTOCLAVES.

Products

We manufacture exclusive laboratory instruments so that they easily meet the international quality parameters. These are also highly durable and completely safe to use. With strict compliance to various international standards, our products are of superior quality. Our laboratory instruments are manufactured using premium quality raw materials and widely used in various research labs, etc. Tested for both specific features and performance, our products are cost effective and manufactured after intensive research and development.

MANUFACTURING FACILITY

We have a strong infrastructural set up. Our manufacturing unit is equipped with latest machines and tools to manufacture defect free products. We are equipped with state-of-the-art production unit and laboratory, which is continuously upgraded from time to time. Our machinery facilitates the production of hi tech instruments which serve the purpose they are destined for. We can supply customized products in volumes as per the demand of our customers. Our unit is installed with the most modernized and sophisticated production facility which can easily churn out instruments in bulk quantities in least turnover time. Our production unit functions round the clock in an efficient manner to provide the best to our clients.

TEAM

We have a strong and dedicated team of professionals and lab experts who successfully undertake everything from planning and designing to testing. Our team is completely focused to achieve the desired targets within the shortest possible time by reducing the amount of wastages. Right from conceptualization to final development each production process in undertaken by our proficient team which has wide knowledge and experience. Our team works in complete coordination with all the departments so as to develop the most flawless and superlative quality product.

For determination of heat combustion of organic matter and calorific value and sulphar content of coal, solid and liquid fuels. The bomb has a capacity of 300ml approximately a provided with a high pressure schroder valve. Tested as per the recruitment of institute of petroleum (IP 12/63T). Supplied with, bomb calorimeter vessel with bomb support, water jacket, combined lid for calorimeter vessel and water jacket, stirrer, connecting leads, connecting tube to connect to bomb and pressure gauge. Connecting tube with fine adjustment valve to connect pressure gauge and oxygen cylinder pressure gauge. Connecting tube spanner for oxygen tube connection, ignition wire (2 meter) Nicrome, cotton reel, stand for unit, pallets press, digital beckman, thermometer benzoic acid, 'O' ring small, 'O' ring for stirrer. Valve for bomb and valve key. Supplied without oxygen cylinder (optional).

BOMB CALORIMETER OUTFIT

Provides a simple and inexpensive method for determination of heat of combustion of organic matter and the calorific value & sulphur content of solid & liquid fuel. The outfit supplied is complete for analysis as per the method recommended by british standard institution BS 1016. All parts of the outfit have been finished and tested according to the specifications laid down by institute of petroleum and british standard institute.

TESTING OF BOMB

Each bomb is tested before it leaves the factory, in accordance with the requirements of the institute of petroleum (I.P. 12/63 T. Appendix1) and a works certificate is issued with each bomb. This certificate gives the results of hydraulic testing under a pressure of 300 atmosphere (4000 p.s.i) maintained for a period of ten minutes without sign of leakage. The maximum deformation must not exceed the specified limits. Combustion bomb certified by National Test House/Regional Testing Centre/ any other reputed institute can be supplied on extra charges.

CALORIMETER VESSEL

The vessel is made up of copper and is chromium plated or S.S.it

includes a bomb support that ensures proper positioning of bomb in the vessel.

WATER JACKET

The outer container of jacket is made up of copper and is chromium plated both inside and outside or S.S. The top is closed by a Bakelite cover. A terminal block is fitted on the top of the container so that connections can be made from the firing control.

OFFSET STIRRER

The stirring mechanism supplied gives sufficient turbulence for effective stirring, whilst no heat is imparted to the calorimeter water. It consists of an impeller driven by a stirrer at constant speed. The offset arrangement whereby the motor drives the impeller via belt precludes any possibility of heat transference between motor and calorimeter vessel contents.

ELECTRONIC FIRING UNIT WITH DIGITAL BACKMAN THERMOMETER & PRINTER

The unit incorporates a digital backman. Thermometer for the precise measurement of the rise in temp, and an electronic circuitry that provides an electrical means for firing the samples. This unit also has a printer that prints the temp. readings after every 30 sec(Approx). As the rise in temp, readings are being recorded by the printer continuously so the operator is totally free to do any other job thus saving operators time and the human errors involved with recording the readings are also eliminated. Socket for stirrer & terminals for fuse wire are also provided at the back side of the unit.

CRUCIBLE

Various types of crucible are available but the standard supplied with the outfit being a stainless steel crucible of 8ml. capacity which fits in the standard support ring provided with the outfit.

HEAT ENERGY

In the metric system, heat energy is often expressed in units of calories per gram per degree Celsius (cal/g-oc)