





Manufacturer & Exporters of : LABORATORY TESTING INSTRUMENTS



CE GMP **NSIC**



An ISO 9001:2008 CERTIFIED An ISO 10002:2004 CERTIFIED



Digital Bomb Calorimeter



Digital Bomb Calorimeter

Bomb Calorimeter Outfit provide 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 specification laid down by Institute of petroleum and British Standard Institute.

IT IS SUPPLIED WITH:

Digital Firing Unit, With Digital Differential Thermometer, Calorimeter Vessel with Bomb Support, Water Jacket, Combined Lid for Calorimeter Vessel and water jacket, Stirrer, connecting leads, Connecting tube to connect bomb and pressure gauge, connecting tube with fine adjustment valve to connect pressure gauge, pressure gauge on stand

, Spanner for oxygen tube connection, ignition wire (2 meters nichrome wire), Cotton reel, stand for bomb lid. Hook for lifting bomb, stainless steal crucible, gas release value, vibrator, benzonic acids. 'O' Ring Big, 'O' Ring Small, 'O' ring for Stirrer valve for Bomb, Valve key & Gelatin Capsule. Instruction Manual.

Testing of Bomb

Bomb is made of SS 316. Each Bomb is tested before it leaves the factory in accordance with the requirement of the Institute of Petroleum (I.P. 12/63 T.Appendix 1)

Calorimeter Vessel:

The vessel is made 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 of copper and is chromium plated both inside and outside or S.S. The is closed by an ebonite cover. A terminal block is fitted to the of the container so that connection can be made from the firing control.

The stirring mechanism supplied gives sufficient turbulence for effective stirring whilst no heat is imparted to the calorimeter water. It consists of an impeller stirrer driven at a constant speed of approximately 800 r.p.m. The offset arrangement whereby the motor drives the impeller via a belt precludes any possibility of heat transference between motor and calorimeter Vessel

| Temperature Indication | 3 ½ Digit Digital display |
|---------------------------------|---------------------------|
| Differential Temperature range | 0 - 10° C |
| Reading Accuracy of temperature | 0.01° C |

LED Indication for filament continuity LED Indication for Bomb Combustion

Crucible:

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

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