



AUTOMATIC - ISOPERIBOLIC BOMB CALORIMETER

APPLICATION

The "CI" Bomb Calorimeter can be used to measure the heat generated from several applications.

The calorific value of the following groups of materials can be measured :- Building Materials, Coal, Coke, Fuels (gasoline, kerosene, diesel and gas (turbine fuels), Hydrocarbon fuel, Food supplements, Crops, Waste and refuse combustible materials, etc., USAGE UP TO 40000 CALORIFIC VALUES.

COMPLIANCE : ASTM D240; D 4809; D5865; D1989; E711;
ISO 1928; DIN 51900; BS 1016 ; IS 1350-2

MODELS

11007-00 BASIC - MICROPROCESSOR BASED WITH TEMP. LOGGING

11007-01 AUTOMATIC WITH SERIAL / PRINTER INTERFACE

11007-02 FULLY AUTOMATIC WITH TOUCH SCREEN, PC AND BALANCE INTERFACE

FEATURES OF 11007-01

- * Automatic nichrome check and firing
- * Automatic test sequence
- * Weight data feeding through keypad.
- * Audio visual alarm and end of test indication
- * Sensor open detection with alarm
- * Temperature scanning resolution of 0.01°C
- * Soft touch keypad with 15 keys.
- * Self explaining messages for ease of testing.
- * Automatic filling and removal of water from test container.



SIZE:

WEIGHT:



- * Automatic pressure charging. The user only connects a quick turn coupling to the test vessel and the oxygen is filled to the preset value. If, not an error message is displayed.
- * Automatic water equivalent determination and calorific value calculation.
- * Reduced water consumption and higher number of test with the same water
- * Interface to printer via RS232 for report printing with company name (factory set), date, timing and other test details.
- * User selectable units for temperature, pressure and calorific value
- * User settable temperature scanning interval for testing of samples with calorific value to very high calorific values.
- * Automatic monitoring of water level and alarm if water level is low or water temperature is high.
- * 16 x 4 line alpha numeric lcd display with back light for easy monitoring
- * Ergonomically designed incorporating all the necessary systems occupying minimum table area.
- * Leak and maintenance free quick charging and discharging setup.
- * Reduced operating time and cost due to lesser number of operations and spares.
- * Inbuilt lid stand
- * Inbuilt nichrome wire length measurement and cutting system.

Features of 11007-02

All features of **11007-01** with the additional below mentioned features :

- * Colour touch screen user interface
- * Balance interface for automatic transfer of weights to the unit.
- * PC interface for data logging and full system control via computer.
- * User selectable temp. resolution of 0.01°C, 0.001°C





- * User set able company name and address for test report
- * Multi point calibration/water equivalent determination. The user can set from 1 - 5 times. The system has to determine water equivalent and then the system automatically records these values and averages the value at the end of the last test.
- * Possible for pre-setting correction values for the NET calorific value to be calculated and displayed.
- * Automatic Pre/Post/Process diagnostic features
- * Automatic System self diagnostic feature for easy maintenance
- * LAN enabled for seamless operation and REMOTE support
- * Automatic/Electric Top Lid operation and holding.

STANDARD ACCESSORIES

11007-10 Top lid with Stirrer	1 Set
11007-11 Inner Insulation plate	1 No.
11007-12 Test Vessel(Bomb)	1 Set
11007-13 Sample SS Crucible	1 No.
11007-14 Firing Lead	1 No.
11007-15 Process Sensor	1 No.
11007-16 Tablet making Pellet Press	1 No.
11007-17 Oxygen Regulator	1 No.
11007-18 Charging Tube	2 Meter
11007-19 Charging Valve	1 No.
11007-20 Discharging Valve	1 No.
11007-21 Cotton thread,	1 Roll
11007-22 Nichrome wire	2 Meter
11007-23 Benzoic acid powder	500 Gm
11007-24 Spare Bomb 'O' ring	2 Nos.
11007-25 Spare Charging 'O' ring	2 Nos.

OPTIONAL ACCESSORIES

- 11007-40 Benzoic Acid tablets of known calorific value.
- 11007-41 Platinum Crucible approx. 10gms.
- 11007-42 Platinum wire 44 swg
- 16002-xx Digital Weighing balance with Interface



FEATURES 11007-00

- * 0.01°C RESOLUTION BRIGHT LED DISPLAY
- * 10 READINGS MEMORISING CAPABILITY
- * FULLY INTEGRATED UNIT WITH STIRRER, NICHROME CHECK, AND FIRING.
- * CAN ALSO BE USED TO DETERMINE SULPHUR BY BOMB METHOD.
- * DISPLAYS BOTH AMBIENT AND PROCESS TEMPERATURE.
- * LOGGING TIME INTERVAL CAN BE SET AS PER USER REQUIREMENTS.
- * OPERATION ON 230V SINGLE PHASE, 50Hz.

STANDARD ACCESSORIES

11007-03 uP Firing Unit.	1 No.
11007-04 Inner Test Vessel.	1 No.
11007-05 Bomb with SS Crucible.	1 No.
11007-06 Connecting leads.	1 SET
11007-08 Bomb lifting hook.	1 No.
11007-09 Bomb Lid Stand.	1 No.
11007-16 Tablet making Pellet Press	1 No.
11007-17 Oxygen regulator	1 No.
11007-18 Charging Tube	2 Mtr.
11007-28 Charging Valve	1 No.
11007-29 Discharging Valve	1 No.
11007-21 Cotton thread	1 Roll
11007-22 Nichrome wire	2 Mtr.
11007-23 Benzoic acid powder	500 Gm
11007-24 Spare Bomb 'O' ring	2 Nos.
11007-25 Spare Charging 'O' ring	2 Nos.
11007-26 Spanner.	1 No.
11007-30 Process Sensor	1 No.
11007-31 Bath Sensor	1 No.



OPTIONAL ACCESSORIES

11007-32 Spare Schrader Valve.



NOTES

DESIGNED & MANUFACTURED BY:



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