



AUTOMATIC CALORIMETER

Automatic Calorimeter TT-5865

Automatic Calorimeter TT-5865 complies with ASTM D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, ASTM D5865 Standard Test Method for Gross Calorific Value of Coal and Coke, and ISO 1928 Solid mineral fuels — Determination of gross calorific value by the bomb calorimetric method, and calculation of net calorific value.

It finds application across various industries including electrical power, coal, papermaking, petrochemical, cement, farming, medical research, and education, enabling the measurement of the Calorific Value of combustible materials.

APPLICATIONS

The primary application of the Automatic Calorimeter TT-5865 is to determine the **Calorific Value (Heat of Combustion)** of various combustible materials. In compliance with standards such as **ASTM D240** (for liquid hydrocarbon fuels) and **ASTM D5865** (for coal and coke), the instrument measures the amount of energy released when a sample is burned under controlled conditions. This is a fundamental test for assessing the energy content and quality of fuels.

Key Industries

- **Electrical Power:** Power generation plants use this calorimeter to test the energy content of their primary fuels, such as coal and fuel oils, which is essential for optimizing boiler efficiency and for commercial transactions.
- **Coal Mining & Processing:** The coal industry relies on this test for quality control and grading of its products. The calorific value is the main specification that determines the price and suitability of coal for various applications.
- **Petrochemical:** Petrochemical plants and refineries use this instrument to measure the heat of combustion of liquid hydrocarbon fuels, which is a critical quality parameter for products like gasoline, diesel, and jet fuel.

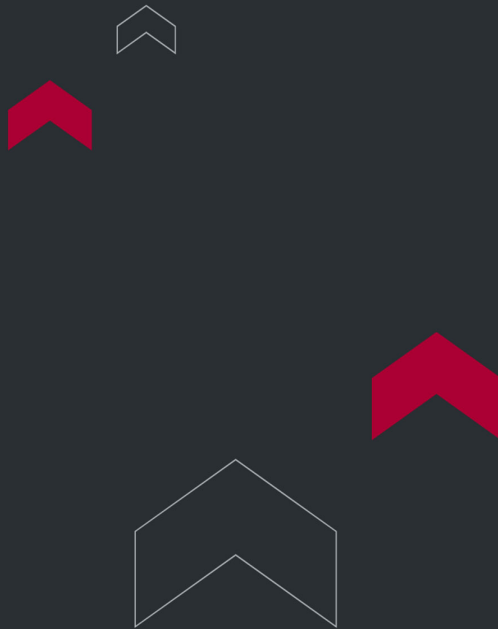
FEATURES

- Utilizes a semiconductor water refrigeration system.
- Automatically determines the refrigerating capacity and balances the circulation system based on the calorific value from the previous test.
- Eliminates the need for manual measurement of water and adjustment of water temperature throughout the entire test.
- Incorporates an advanced small oxygen filling instrument with a low malfunction rate.
- Enables automatic water replacement by connecting the drainpipe.
- Features advanced USB technology, allowing one computer to control 1-4 calorimeter buckets or other instruments, facilitating the creation of a synthesized testing instrument.
- Capable of linking with an electronic scale and sharing data over long distances through a network.

TECHNICAL SPECIFICATIONS

1. Calorimeter type: Isoperibol
2. Temperature range: 5 to 40°C
3. Temperature resolution: 0.0001°C
4. Precision (Precision mode): Relative Standard Deviation (RSD) $\leq 0.1\%$
5. Testing time (Precision mode): 8 minutes
6. Rated voltage: 220V, 50Hz (110V also available)
7. Power: $\leq 1.5\text{KW}$
8. Dimensions: 540mm x 420mm x 420mm

9. Weight: 45kg



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