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**Product Name :**  
Thermal Conductivity Apparatus

**Product Code :**  
LBNY-0005-10200024



#### **Description :**

The apparatus consists of a vertical stack of specimens clamped between an electrically heated source at the top and a water cooled base, all contained within a Dewar vessel and furnished with a radiation shield and anti convection baffle. The heating current is supplied from a variable voltage power pack and displayed on a digital ammeter. The specimens are fitted with very small thermocouples at known distances apart and connected via a selector switch to a digital temperature readout. Cooling water is supplied from the constant head water tank mounted above the Dewar vessel. The water cooled base is designed as a calorimeter to measure the heat flow and fitted with very accurate thermometers in the water circuit.

#### **Technical Specification :**

##### **Experimental Capability:**

- To demonstrate that heat flow is directly proportional to cross sectional area
- To determine the thermal conductivity of insulation materials
- To derive the thermal conductivity of materials of high thermal conductance
- To demonstrate that heat flow is directly proportional to temperature differences between specimen faces.



**Laboratory Instrument India**

