

► KHT-01 Thermal Conductivity of Insulating Powder

Specifications:

- Inner sphere dia – 100mm.
- Outer sphere dia–200mm
- Heater-Nichrome wire sandwiched between mica sheets.
- Control Panel consisting of
 - Voltmeter : 0 – 200 Volts
 - Ammeter : 0 – 2 Amp
 - Dimmer stat : 0 – 2 Amp
 - Digital Temperature Indicator, 0-300° C with chromel alumel thermocouples.

Range of Experiments:

- To determine thermal conductivity of insulating powder.



► KHT-02 Thermal Conductivity of Metal Rod



Specifications:

- Metal Bar copper - 25 x 430 mm long (approx)
- Insulating powder shell – 200mm dia (approx)
- Cooling water chamber – 100mm dia x 75 mm Long (approx)
- Control Panel Comprising of –
 - a) Voltmeter : 0 – 200 Volts.
 - b) Ammeter : 0 – 2Amp
 - c) Digital Temperature Indicator, 0-300° C
 - d) Dimmerstat : 0 – 240 volts, 2Amp with Chromel - Allumel thermocouples, cold

junction compensation. Stop clock, measuring flask for flow measurement.

Range of Experiments:

- Determination of temperature distribution along the length of given bar.
- Determination of thermal conductivity of given bar at various temperatures.
- Determination of thermal conductivity of any metal bar other than supplied by proper fitting of bar in the unit.

► KHT-03 Thermal Conductivity of Liquid

Specifications:

- Test setup hot plate assembly. cold Plate Assembly. Ring Guard heater Assembly. Top Guard heater assembly. Coolant water circulation system. Thermocouples (Fe-CN) on Hot plate, Cold plate and Guard heaters. Insulation bags. Enclosure box with leveling screws. Power supply arrangement for Hot plate & Guard heater.

- Control Unit Main ON/OFF Switch. Dimmers for Hot plate and Guard heater
- Power Control of 2 Amps. Capacity each.
- Voltmeter and Ammeter for Power measurement.
- Multi channel Temperature Indicator 0-300°C with high accuracy.

