

**TO DETERMINE THE THERMAL CONDUCTIVITY OF A NON METALLIC SOLID (BAD CONDUCTOR) BY LEE'S DISC METHOD. OMEGA TYPE ES-400**



**OMEGA TYPE ES-400** Experimental Set-Up has been designed specifically to find the to determine the thermal conductivity of a non metallic solid (bad conductor) by lee's disc method.

The set up is complete in all respect and requires no other apparatus.

Practical experience on this set up carries great educative value for Science and Engineering Students.

**OBJECT:- To determine the thermal conductivity of a non metallic solid (bad conductor) by lee's disc method.**

#### FEATURES

The Complete Experimental Set-up consists of following items:

- 1 Lee's apparatus:- Lee's disc apparatus consist of a metallic disc resting on a 5 cm deep hollow cylinder (steam chamber) of same diameter. It has inlet and outlet tubes for steam. In addition, it has radial holes to insert thermometers (temperature sensor)
- 2 A circular disc of poor conductor (Cardboard, glass, plywood)
- 3 Boiler for generating steam

#### 4 DIGITAL MULTIPLE TEMPERATURE METER

It shows Temperature in °C. It can measure the temperature of two different objects at a time. T1, T2

- 4.1 Temperature : -50°C to 125°C
- 4.2 Resolution temp. : 0.06°C
- 4.3 Display : 16x2 LCD Display
- 4.4 sensor type : water proof
- 4.5 Temp. sensors : 02 Nos.
- 4.6 Accurecy : ± 0.5°C

#### 5 DIGITAL STOP CLOCK

Digital Stop Clock with LCD display with resolution of 0.01 mills seconds. It has Start/Stop and Reset button with lap timer.

- 5.1 Start / Stop : operation by means of push button.
- 5.2 'Reset' : by a push button.
- 5.3 Starting time : 00 . 00 . 00
- 5.4 Max. range : infinity
- 5.5 Resolution : 0.01 mS
- 5.6 display : 16x2 LCD
- 5.7 Accurecy : ± 0.001%.

#### 6 Vernier calipers

#### 7 Screw gauge.

We are committed to the continuous development of our products. and therefore reserve the right to amend specifications without prior notice.

**OMEGA ELECTRONICS**