

Physics Lab Equipments & Experimental Setups

ME 941 - Jolly Apparatus

Objective:

- To determine the coefficient of increase a volume of air at constant pressure / Constant volume

ME 942 - To determine the thermal conductivity of a nonmetallic solid (bad conductor) by Lee's disc method.



Setup Consist of:

- Lee's apparatus
- Steam boiler
- Hot plate
- Thermometer : -10 to 110 Degree C (2 Nos.)
- Stop watch : Least count - 0.01 Sec
- Vernier caliper : Least count - 0.01cm Range :15cm
- Screw gauge : Least count - 0.01mm
- Soft rubber pipe : 1 Meters
- Optional: Digital weigh machine (1000gm)

ME 943 - Heat Efficiency of an Electric Kettle

Objective :

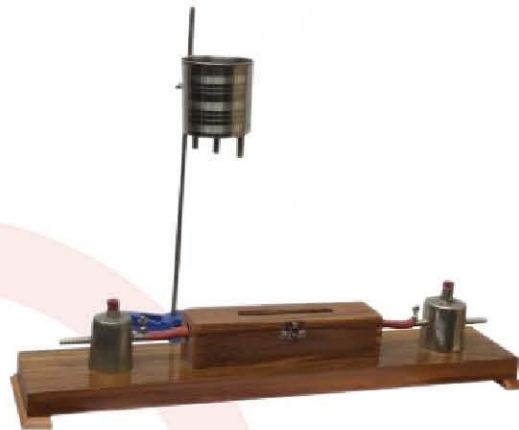
- Heat Efficiency of an Electric Kettle is designed to study the Heating efficiency of an electric kettle with varying voltages.



Setup Consist of :

- Power Supply Unit
 - Output Voltage : 0-230V AC/ 2Amps
 - Variac : Varying the AC Supply voltage to the kettle
 - Digital Voltmeter : 0-300V AC
 - Two point power socket provided for kettle supply
 - Mechanism housed in a metallic box
- Electric Kettle
 - Range : 220V / 450Watt element
 - Capacity : 1½ Liter.

ME 944 - To determine the Mechanical Equivalent of heat (J) by the Callender and Barnes method.



Setup Consist of :

- Callender and Barne's calorimeter
- AC mains with a step down transformer (12 V) ME 227
- Ammeter : 3A AC
- Voltmeter : 12V AC
- Rheostat : 100 ohm/1Amp
- Stop watch : Least count - 0.01 Sec
- Measuring jar : 500 ml
- Thermometer : -10 to 110 Degree C (2 Nos.)

GN 7432 - To verify triangle and parallelogram law of forces with the help of Gravesand's apparatus.



Setup Consist of :

- Gravesand's apparatus
- Weight : 250G - 5 pcs (with hanger arrangement)
- Thread : 2 Meters