

HEAT TRANSFER & THERMAL ENGINEERING LAB

FACULTY IN-CHARGE : MR. V. S. BAGADE

SEATING CAPACITY : 30 STUDENTS

EXPERIMENTAL SET-UPS :

HEAT TRANSFER

SR. NO.	DESCRIPTION OF EQUIPMENTS
1	Emmissivity Measurement Apparatus [Aluminum test plate & Black reference plate, wooden chamber, MICA insulated heaters , set of Thermocouples, control panel, consisting of voltmeter(0 -250 v), Ammeter (0-2A) , selector switches, Dimmer -stat]
2	Thermal Conductivity of Metal Bar Apparatus [test rod of copper ; band heater; cooling chamber; Thermometers; set of Thermocouples; Shell with insulation powder; control panel with Voltmeter & Ammeter; 12 channel digital temp. indicator]
3	Thermal Conductivity of Insulating Material Apparatus [Inner sphere & outer sphere of copper; Mica insulated nichrome heater; set of thermocouples; control panel consisting of Voltmeter & Ammeter; 18 channel Digital

	Temp. Indicator ,Dimmer stat]
4	Parallel and Counter Flow Heat Exchanger [M.S. Storage tank of 100 liters ; Inner & Outer Tubes Electrical & Industrial heater 8KW Centrifugal Pump of 0.5 H.P. for circulation of hot water ; Rota meter (0-110LPM) ; Control Panel consisting of main switch sockets ; set of thermocouples ; 12 channel Digital Temp. Indicator]
5	Heat transfer in Forced Convection
6	Heat transfer in Natural Convection
7	Shell & Tube Heat Exchanger

THERMAL ENGINEERING

SR. NO.	DESCRIPTION OF EQUIPMENTS
1	Model of Babcock and Wilcox boiler
2	Model of lever Safety valve
3	Model of Spring Loaded Safety Valve
4	Model of Feed Check Valve
5	Model of Blow off Cock
6	Model of Fusible Plug
7	Model of Anti Priming pipe
8	Model of Expansion Steam Trap

9	Model of Lancashire Boiler
10	Model of Loeffler Boiler
11	Model of Velox Boiler
12	Model of Gas Turbine or Turbojet
13	Model of Two Stroke Diesel Engine
14	Model of Four Stroke Petrol Engine
15	Rotary Air Compressor Test Rig
16	Two Stage Reciprocating Air Compressor Test Rig