



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

DEPARTMENT OF MECHANICAL ENGINEERING

HEAT TRANSFER LABORATORY

This lab helps the students to understand all the 3 modes of heat transfer, namely conduction, convection and radiation practically. The role of experimentation in the teaching of subjects such as Heat Transfer is well established. Properly designed experiments reinforce the teaching of basic principles taught in lecture classes and help students to understand these principles more thoroughly. There are other advantages too students learn to use basic instruments and get acquainted with the method used to measure various physical quantities; they also study techniques of analyzing experimental data and presenting them in a proper form.

List of Equipment

S. No	Item	Make	No. of Units	Cost per Unit (Rs.)	Total Cost (Rs.)
1	Transient heat conduction	Mechtrix Engineering	1	43,197	43,197
2	Parallel & counter flow heat exchanger	Mechtrix Engineering	1	36,750	36,750
3	Composite wall apparatus	Devale Engineering	1	20,000	20,000
4	Lagged pipe apparatus	Devale Engineering	1	20,000	20,000
5	Concentric sphere apparatus	Mechtrix Engineering	1	20,000	20,000
6	Thermal conductivity of given metal rod	Devale Engineering	1	20,000	20,000
7	Pinfin apparatus	Devale Engineering	1	20,000	20,000
8	Forced convection apparatus	Devale Engineering	1	20,000	20,000
9	Natural convection apparatus	Devale Engineering	1	20,000	20,000
10	Emissivity apparatus	Devale Engineering	1	20,000	20,000
11	Stefan boltzman apparatus	Devale Engineering	1	20,000	20,000
12	Critical heat flux apparatus	Devale Engineering	1	20,000	20,000
13	Heat pipe apparatus	Devale Engineering	1	20,000	20,000
14	Film and drop wise condensation Apparatus	Devale Engineering	1	20,000	20,000
Total Cost (Rs.)					3,19,947
<i>(In words : Three Lakhs nineteen thousand and nine hundred forty seven only)</i>					

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