



S.A.P.D. Jain Pathashala

Walchand Institute of Technology, Solapur


An Autonomous Institute

P.B.No.634, Walchand Hirachand Marg, Ashok Chowk, Solapur - 413006 (Maharashtra)

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Mechanical Engineering Department Lab Details

Lab Photo	
Lab Name	Heat and Mass Transfer
Lab Description	This laboratory serves the practicals for the course Heat Transfer. The laboratory details are as given below. Room No:CM-129 Lab In-charge: Prof. S. P. Mankani
Lab Equipments	List of available Experimental set ups (1) Thermal Conductivity of insulating powder Apparatus(2) Composite Wall Apparatus(3) Thermal Conductivity of metal rod Apparatus(4) Emissivity measurement Apparatus(5) Stefan Boltzmann Apparatus(6) Natural Convection Apparatus(7) Forced Convection Apparatus(8) Pin Fin Apparatus(9) Critical Heat Flux Apparatus(10) Heat Pipe Demonstrator(11) Parallel flow and counter flow Heat Exchanger Apparatus
Lab Floor Area in square meters	86.82

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Practicals Engaged in Lab	<ol style="list-style-type: none">1.To determine the thermal resistance, thermal conductivity of composite wall material and plot temperature gradient along composite wall structure.2.To determine the emissivity of the test plate3.To determine the experimental and theoretical heat transfer coefficient in forced convection heat transfer for internal flow.4.Heat Pipe Demonstrator5.To determine the experimental and theoretical heat transfer coefficient for vertical tube losing heat by natural convection.6.To study the temperature distribution, heat transfer coefficient and efficiency of a pin fin in natural and forced convection heat transfer.
Name of Lab Incharge	Prof.S.P.Mankani
Associated Faculty of the Lab	Prof.S.V.Katkur
Name of Lab Assistant	Mr.A.D.Korabu
Name/s of Lab Menial Staff	Mr.S.V.Bhosale