Product name:	Product code:
Free And Forced Convection Experiment	Transfer Lab0021

Description

Free And Forced Convection Experiment

Technical specification

- K-type thermocouples measure the air temperature in the duct before and after the heater as well as the surface temperature of the heat transfer surfaces.
- The airflow is manually adjustable up to 10m/s.
- The airflow is measured by an air velocity sensor, which is inserted inside the duct.
- A comprehensive instruction manual is included

Free And Forced Convection Experiment

Specification of Free And Forced Convection

NAUGRA®

Civil Laboratory Equipment Manufacturers and Suppliers India Civil Lab Exportrs India

Email us at: export@civilmechanicalindia.com

- A bench mounted unit specifically designed to demonstrate the phenomena of free and forced convection and to measure temperature profiles from three different heat transfer surfaces
- Comprises of a vertical air duct, with a transparent front for visibility mounted on a fan at the base of the duct, three heat transfer surfaces, airflow, and temperature probes
- Technical data is included for each of the three heat transfer surfaces, which will enable students and researchers to compare practical results with theoretical analysis for free and forced convection
- Three heat transfer surfaces supplied:
- A flat plate surface area 0.011m2
- Pinned extended surface area 0.0525m2
- Finned extended surface area 0.1414m2
- Vertical duct incorporates a transparent front wall allowing complete visualisation of the process and identification of the airflow and temperature sensors.
- Each heat transfer surface is fitted with its own heater (240W) and thermocouples, to allow for easy interchange.
- All heat transfer surfaces incorporate guards to allow safe use outside of the duct for performing free convection experiments
- Arm Soft software for includes separate exercises for each of the heat transfer surfaces in free or forced convection and records of all measured variables for analysis and comparison of the performances