



MECHANICAL POWER LAB

S.No ·	Item Name	Model	Manufacturer	Usage	Picture
1	Thermal expansion Apparatus	HL 101	Gunt Hamburg	Learning Objectives A. Thermal expansion of different materials such as PVC, PE, copper and steel B. Determination of thermal expansion coefficients and the expansion force. C. Measurement of pipe elongation D. Effect of varying pipe diameter E. Expansion compensator	
2	Rankine Cycler	772 WUSA	Turbine Technologies LTD	Learning Objectives. To study the working and performance analysis of Rankine Cycle	
3	Four Stroke Petrol Engine Model	BSC-502	Best Scientific Company	Learning ObjectivesA. Demonstration engine model is mounted on metal base with mounted diagram.B. Ignition is shown by means of miniature.C. Carburetor and fuel supply are sectioned.	
4	Radial Heat Exchanger Apparatus	TD1006	Tequipment	Learning Objectives A. To determine heat transfer through uniform disc. Calculation of thermal conductivity.	
5	The Linear Heat Conduction	TD 1002	Tequipment	Learning Objectives A. Allows the investigation of the basic laws of heat transfer by conduction through a solid.	T



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6	Boiler control and demonstrati on and fault simulator unit	P7665/14 7	Cussons Technology	Learning Objectives A. Designed to provide demonstration. B. Investigation of: Automatic operational functioning of an oil/gas fired boiler. C.Predetermined faults imposed on the system D.Safety control operation	
7	Thermal expansion study apparatus	No Model Number	Senior Design Project Students	Learning Objectives A. Thermal expansion of different materials such as PVC, PE, copper	
8	Radiation heat transfer apparatus	TE- 61/EV 1	Elettonica Veneta	Learning Objectives A. Inverse square law (or Lambert's distance law/area law) B. demonstrating radiation is inversely proportional to distance squared C. Stefan-Boltzmann law, demonstrating the relationship between radiation and source temperature	
9	Model centrifugal pump	HM 700.17	Gunt Hamburg	Learning Objectives A.Working Study of centrifugal pump and functions of its parts.	
	Model centrifugal pump	HM 700.20	Gunt Hamburg	Learning Objectives A.Working Study of centrifugal pump and functions of its parts.	
10	Temperatur e measureme nt and calculation	TQ 278604- 002	Atlab Tequipment	Learning Objectives A.Measuring temperature by the devices and sensors. B. Plotting the calibration graph between these measurement.	p