

Jain Laboratory Instruments







Product Code . JL-HTTLP-9226

Vertical and Horizontal Condenser

Description

Vertical and Horizontal Condenser

Description:-

Condenser consists of the Stainless steel shell, with stainless steel tubes.

Valves are provided to control the flow rates of cold fluids.

The present set-up offers a comparative study of Vertical & Horizontal condenser, which can be operated one at a time.

Cold fluid flows through inside the tubes and steam flows through the shell.

Shell & Tube type condensers are widely used in various industries.

The temperature of inlet and outlet of both hot & cold fluids are measured by temperature sensors.

Shell is fitted with steam traps from where condensate is collected in measuring cylinder.

The flow rate of cold water is measured using a Rotameter.

Specification:-

Condensate Measurement: Measuring Cylinder & Stopwatch

Water Flow Measurement: Rotameter

System: Steam to Water

Condensers: 2 Nos. (Vertical & Horizontal) Insulated by Ceramic wool and cladding, by aluminum

foil.

Shell: Material stainless steel. Inner Dia 100 mm, Length 500 mm (Approx.)

Heaters: Nichrome wire heater

Tubes: OD 12.7mm, Length of tubes 500mm

Steam Generator: Made of stainless steel fitted with level indicator, pressure gauge, safety valve, drain and insulated with ceramic wool & cladding with Aluminium foil.

Experimentation:-

To determine the overall Heat Transfer Co-efficient and film coefficient for the vertical and horizontal condenser.