

Product Code . JL-HTTLP-9221

Parallel and Counter Flow Heat Exchanger



Description

Parallel and Counter Flow Heat Exchanger

Description:-

Hot water flows through inner tube in one direction only and cold water flows over the inner tube in the outer tube.

A magnetic drive pump is used to circulate the hot water from a re-cycled type water tank, which is fitted with heaters and Digital Temperature Controller.

The heat exchanger is devices in which heat is transferred from one fluid to another.

The direction of cold fluid flow can be changed from parallel or counter to hot water so that unit can be operated as parallel or counterflow heat exchanger.

Flow rates of hot and cold water are measured using Rotameters.

The apparatus consists of a concentric tube heat exchanger.

Experiment:-

To compare the performance of Parallel and Counter flow heat exchanger.

To calculate the following parameters both for parallel and Counter flow arrangement.

To calculate the LMTD Overall heat transfer coefficient.

To find the rate of heat transfer.

Utilities Required:-

Electricity Supply: 1Phase, 220 V AC, 3 kW.

Water supply 10 lit/min (approx.) and drain.

Floor area 2 m x 0.6m.
