

MT-008 WETTED WALL COLUMN



DESCRIPTION: A Thin film of liquid running down the inside of vertical pipe, with gas flowing either concurrently or counter currently, constitutes a wetted wall tower. In this the liquid is dispersed into thin film .Measurement of the rate of evaporation of the liquid in to the gas stream over known surface permits calculation of the mass transfer coefficients for the gas phase

RANGE OF EXPERIMENTS TO BE CARRIED OUT:

1. To study the Wetted wall column

2. To calculate the Gas phase mass transfer coefficient

EXPERIMENTAL SETUP:

Column : Borosilicate Glass Column
Flow Measurement : 2 No. Pre calibrated Rota meter
Feed Tank : 1 No. of stainless steel feed tank

Heater : Nichrome wire heater

Digital Temp Indicator : $0 - 200 \ 0 \ C$, Temp Sensor : CR/AL Type

Pump : FHP Submersible pump

Piping : SS, PVC

Setup Mounting : On sturdy MS stand with

powder coated

 $\begin{array}{lll} \textbf{SPACE REQUIRED} & : & 1.5 \text{ m. (L)} \times 1.0 \text{ m (W)} \times 2.5 \text{ m (H)}. \\ \textbf{SERVICE REQUIRED} & : & \text{Air Supply} : @ 6 CFM, at 4 Kg /cm2} \\ \end{array}$

Power Supply: 230V, 50Hz, A. C.

WEIGHT : @ 55 Kg