

MT-005 ABSORPTION IN WETTED WALL COLUMN



DESCRIPTION: The Absorption column consist of Glass column. The device is equipped with a gas inlet and distributing space at the bottom, a liquid inlet and distributor at the top, gas and liquid outlet at top and bottom respectively. The gas and air are metered separately, mixed and then passed through the bed vertically upwards and absorbed in liquid. All the flow rates can be independently varied to simulate different conditions.

RANGE OF EXPERIMENTS TO BE CARRIED OUT:

- 1. To study the Characteristics of absorption with chemical reaction
- 2. To calculate the rate of absorption per unit volume
- 3. To calculate the interfacial area per unit volume

EXPERIMENTAL SETUP:

Column : Borosilicate Glass Column
Flow Measurement : 3 No. Pre calibrated Rota meter
Feed Tank : 1 No. of stainless steel feed tank

Product receiver : 1 No. SS tank

Gas supply : 1 No. of gas cylinder with

Pressure Gauge

Piping : SS, PVC

Setup Mounting : On sturdy MS stand with

powder coated



SPACE REQUIRED : 1.5 m. (L) x 1.0 m (W) X 2.5 m (H).

SERVICE REQUIRED: Air Supply : @ 6 CFM, at 4 Kg /cm2

CHEMICALS REQUIRED: NaOH, HCL, Phenolphthalein indicator,

Distilled water

WEIGHT : @ 55 Kg