

## MT-019 EQUILLIBRIUM FLASH DISTILLATION SETUP



**DESCRIPTION :** The apparatus consists of an overhead tank which contains liquid undergoing distillation. The liquid from the tank is metered through the Rota meter & then goes inside the copper coil in the boiler. Steam condenses outside the coil. The liquid then enters the flash chamber after being throttled by a valve. In the flash chamber the liquid flashes into vapors partially. The vapors are left to the condenser where they are condensed by water. Condensed vapors are collected & quantity measured. The enriched liquid at the bottom of the chamber is collected & measured.

### **RANGE OF EXPERIMENTS TO BE CARRIED OUT :**

To study equilibrium flash distillation .

## EXPERIMENTAL SETUP :

Reboiler	:	Material Stainless Steel
Column	:	Material Stainless Steel
Condenser	:	SS , Shell and Tube type Condenser
Flow Measurement	:	2 No. Pre calibrated Rota meter
Flash Chamber	:	Material Stainless Steel.
Steam Generator	:	Electrically heated with Pressure Gauge, Safety Valve
Digital Temp Indicator	:	0 – 400 0 C .
Temp Sensor	:	CR/AL Type
Distillate Receiver	:	Material Stainless Steel
Piping	:	SS , PVC
Setup Mounting	:	On sturdy MS stand with powder coated
<b>SPACE REQUIRED</b>	:	1.5 m. (L) x 1.0 m(W) X 3 m (H)
<b>SERVICE REQUIRED</b>	:	<b>Power Supply</b> : 440 V, 50 Hz, A.C. <b>Water Supply</b> : @ 2 lpm b Specific Gravity Bottle
<b>CHEMICALS REQUIRED</b>	:	Methanol Or Ethanol
<b>WEIGHT</b>	:	@ 65 Kg