

DISTILLATION COLUMN TRAINER

This setup of the distillation column is design to study the working of Distillation Column with control loops which are Reboiler Level, Reboiler Temperature, Reflux Ratio, Pressure of the column, Reflux Level, Column Temperature, Feed Flow etc.

PROCESS DESCRIPTION:

Hardware:

The process setup consists of a Reboiler tank fitted with RTD, Level Transmitter & Feed Tank, reflux tank, feed tank & feed pump and it is connected to the glass/steel column condenser cooling water tank reflux bottom tank, pneumatic valve, I to P converter, centrifugal pumps. Computer P-IV & Compressor are optional.

Experiments:

1. To study the response of the P, PI, PD, PID Controllers.
2. Response of Auto, Manual, Direct, Reverse mode of controllers, study of PID tuning parameters.
3. Study of performance of, pressure sensor, RTD, Dosing pumps, level sensor, I/P, Control valves etc....
4. Total seven control loops at one time.

