

### Features

- Stainless Steel tanks and wetted parts
- Superb Painted structure
- Simple to operate & maintain
- Compact & stand alone set up

Sieve Plate Distillation Column 32389 is designed to demonstrate principles of distillation in a Sieve Plate Column.

The column is made of Stainless Steel material with seven sieve trays. An electrically heated reboiler is installed at the bottom of the column. The bottom product is collected in the tank. The vapors from the top of column are condensed in the shell and tube type condenser by circulating cooling water supplied by laboratory overhead tank. The condensate is divided into reflux and distillate by automatic reflux divider and R/D Ratio can be varied. Reflux is fed back to the column and distillate is received in a receiving tank. The complete column is insulated for minimizing the heat loss. Instrumentation is done for pressure & temp. Measurement wherever is necessary

### Specifications

- Distillation Column: Material Stainless Steel, Dia @110mm, 6-8 sieve trays.
- Pressure Gauge: Bourdon type, 0-2 kg/cm<sup>2</sup>.
- Rotameter: For cooling water flow measurement.
- Steam Generator: Stainless Steel, provided with Pressure Gauge & Level Indicator, Safety valve & insulated with ceramic wool and cladding with Aluminum foil.
- Reflux Divider: Arrangement to change R/D ratio automatically.
- Condenser: SS Shell & Tube type.
- Bottom Product Tank: Made of Stainless Steel, capacity 5 Litre.
- Distillate Tank: Made of Stainless Steel, capacity 5 Litre.
- Heaters: Ni-Chrome wire heater.
- Temp. Sensors: RTD PT-100 type
- Control panel comprises of: Digital Temp. Controller: PID Controller, 0-199.9°C,  
- For Steam Reboiler Digital Temp.  
- Indicator: 0-199.9°C, with multi-channel switch
- Reflux timer: For changing R/D ratio on/off switch, Mains Indicator etc.

### Experiments

- To study the Sieve Plate Distillation Column

### Required Services

- Water Supply 2 LPM at 5 m head
- Drain
- Electricity Supply: 1Phase, 220 V AC, 6.5 kW
- Required Chemicals
- Refractrometer for analysis



Note: Specifications are subject to change.

### **Tesca Technologies Pvt. Ltd.**

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