

**Product Name :**  
Single Effect Evaporator**Product Code :**  
ALABS-A104-346**Description :****Single Effect Evaporator**

Evaporation deals with the concentration of a non-volatile solute from a solution by the removal (If required amount of volatile solvent. Usually the solvent is water. By vaporizing part of the solvent, useful product. i.e. the concentrated solution or thick liquor is produced and the vapour is discarded. Long tube evaporators are usually used for the concentration of foamy liquids. The set-up consists of stainless steel tubes surrounded by a stainless steel jacket and fitted with accumulator. Dilute solution is feed to tubes. Steam from a steam generator is supplied to shell to concentrate the dilute feed solution to a desired level. The jacket is fitted with a steam trap and the condensate is collected at the end of trap. The vapours of volatile solvent are condensed in a shell & tube type condenser and the balance nonvolatile solute collected in the accumulator is recycled through the evaporator.

**Experiment:**

To concentrate a solution and to evaluate the following at steady state:

- Material and Heat Balance
- Economy and the capacity of the evaporator
- Overall heat transfer co-efficient.

**Utilities Required:**

- Water supply 5 lit/min (approx.) and Drain
- Electricity Supply: I Phase, 220 V AC, 4 kW.
- Required Chemicals.



## Equipments Exporters

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