Double Effect Evaporator

Product Categories: Engineering Equipment, Heat Transfer Lab
Product Page: https://www.labappara.com/product/double-effect-evaporator/

Product Description

Double Effect Evaporator

Technical Description:

Evaporation deals with the concentration of a non-volatile solute from a solution by the removal of required amount of volatile solvent. Usually the solvent is water. By vaporizing apart of the solvent, use ful 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 is consist soft evaporators fitted in series. Each is made up of Stainless Steel tubes surrounded by a Stainless Steel jacket and fitted with accumulator. Dilute solution is feed to the first evaporator. Steam from a steam generator is supplied to evaporator to concentrate the dilute feed solution to a desired level. The jacket is fitted with a steam trap and the condensate is collected attheend of trap. The vapour so volatile solvent produced in first evaporator are supplied to the second evaporator. The vapours of volatile solvent are condensed in a shell & tube type condenser and the balance non-volatile solute collected in the accumulator is recycled through the evaporator.

Technical Specification:

Evaporator (1st) : Shell Dia-75 mm, Length-500 mm, Made of Stainless Steel Tubes Dia -12 mm, Length-500 mm
Evaporator(2nd) : Shell Dia-75 mm,Length-500 mm, Made of Stainless Steel Tubes Dia -12 mm, Length-500 mm
Feed Tank : Material Stainless Steel, Capacity 30 Ltrs.
Flow measurement : Rota meters(One each for feed & cold water).
Steam Generator : Made of Stainless Steel provided with Pressure Gauge &Level Indicator, Safety valve and drain etc. & insulated with ceramic wool and cladding with Aluminium foil.
Piping : Stainless Steel and PVC, size ¼”.
Condenser : Shell & Tube type made of Stainless Steel.