

# Thin-Film Evaporator



Thin – film Evaporators are vertical, Mechanically Operated Continuous Film Evaporator designed for difficult concentration, extremely heat sensitive materials wherein the unit operations like Distillation, Evaporation and Stripping can be conducted.

This technology gives the ability to remove volatile components from less volatile materials that are heat – sensitive, viscous, foaming, or contain solids. It offers short residence time, thin film formation by the centrifugal force of the rotating wiper system, the speed of which, can be adjusted to the viscosity of the product to be evaporated, which increase the evaporation efficiency. This is possible by the creation of the uniform film on the smooth heated surface of the glass body.

## Salient Features

- Maximum Evaporation in Single Pass
- The Roller – wiper system (fully corrosion resistant construction) makes possible to attain a homogenous mass of liquid mixture and high wiping speed maximise evaporation efficiency.
- Minimal to no degradation of thermally unstable materials.
- The Capability of Handling High Viscosities.
- High surface to volume ratio
- Higher Heat Flux due to uniform film formation
- Easy to clean, install and maintain
- Thin- Film – Evaporators are available in DN-80 X 0.15m<sup>2</sup> to DN-150 X 0.5m<sup>2</sup> Evaporation surface Area.
- Thin – Film – Evaporators can be run up to 200°C Product side and 230°C Jacket Side.
- Thin – Film- Evaporators can be run under Jacket Pressure of 2.0 bar (g) and evaporator can be operated at the vacuum of 5mm Hg to 0.005mm Hg.