



## ***LIQUIVAP Thin-Film-Evaporator***

### **Technical data**

- + Heating surface from 0.1 to 60 m<sup>2</sup>
- + Heating temperature up to 500°C
- + Operating pressure up to 1 mbar absolute
- + Specially customised rotor systems for the product

## LIQUIVAP Thin-Film-Evaporator

A thin-film-evaporator system allows the gentle separation of liquid mixtures.

The input solution is added from above to a distribution system arranged at a rotor. This system spreads a thin liquid film evenly on the heated jacket surface.

The wiper elements arranged at the rotor generate a turbulent flow in the film. Only because of that turbulence a high waste steam is possible. The solution streams spirally along the heating surface, whereby the evaporation of the low boiling components happen.

The concentrate flows into the sump of the thin-film evaporator from where it is discharged by means of a pump.

The heating media used are steam, thermal oils or melted salt.

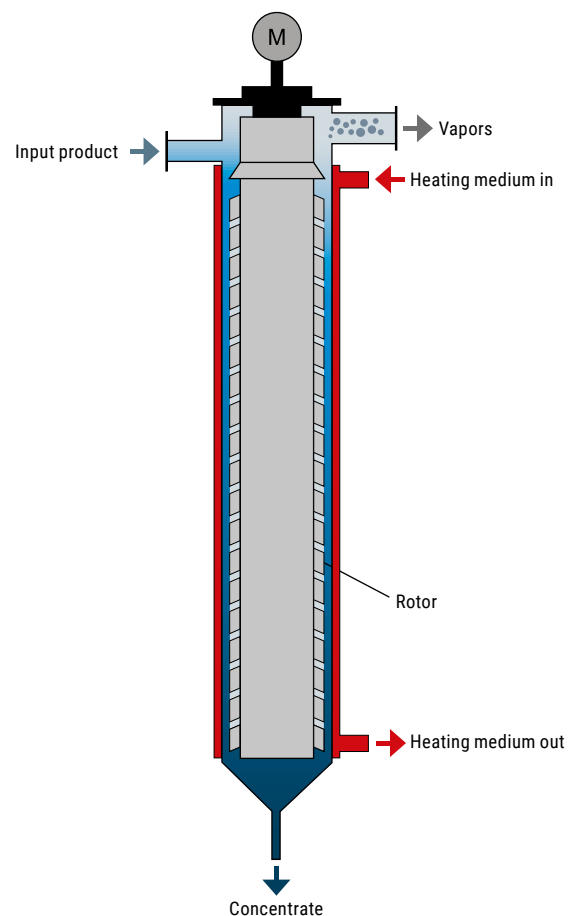
The accumulating vapours are caused to precipitate in a downstream condensation unit. Via a distillation column, the product quality can be further enhanced. Lateral flues allow alternative operating modes, either as separation column or as rectifying column.

Due to Kremsmüller's special know-how, various wiper systems adapted to the respective separation task are used.

In this field, Kremsmüller offers a wide range of applications in its in-house technology centre, starting from feasibility studies to laboratory and semi-industrial tests to the production of sample quantities. In all this, Kremsmüller can rely on its expert employees with decades of experience.

### Typical applications

- + Polymers
- + Waxes
- + Isocyanates
- + Tall oil
- + Fatty acids
- + Oils
- + Sorbitol
- + Glycols
- + Silicone oils
- + Gluten
- + Solvents
- + Pharmaceutical ingredients



Functional principle Thin-Film-Evaporator (LIQUIVAP)