



OM METALS & ENGINEERS

AN ISO 9001 : 2008 Company

FALLING FILM TUBULAR EVAPORATOR

Continuous milk evaporation system



Working Principle

The liquid to be concentrated is supplied to the top of the heating tubes and distributed in such a way as to flow down the inside of the tube walls as a thin film. The liquid film starts to boil due to the external heating of the tubes and is partially evaporated as a result. The downward flow, caused initially by gravity, is enhanced by the parallel, downward flow of the vapour formed.

Residual film liquid and vapour is separated in the lower part of the calandria and in the own stream centrifugal droplet separator. It is essential that the entire film heating surface, especially in the lower regions, be evenly and sufficiently wetted with liquid. Where this is not the case, dry spots will result that will lead to incrustation and the build-up of deposits. For complete wetting it is important that a suitable distribution system is selected for the head of the evaporator.

Wetting rates are increased by using longer heating tubes, dividing the evaporator into several compartments or by recirculating the product.

Features

- Low energy consumption
- High-heat transfer coefficients
- Optimum thermal efficiency
- Flexible operation
- Short residence time
- Easy building conversion and adaptation to existing facilities

Features

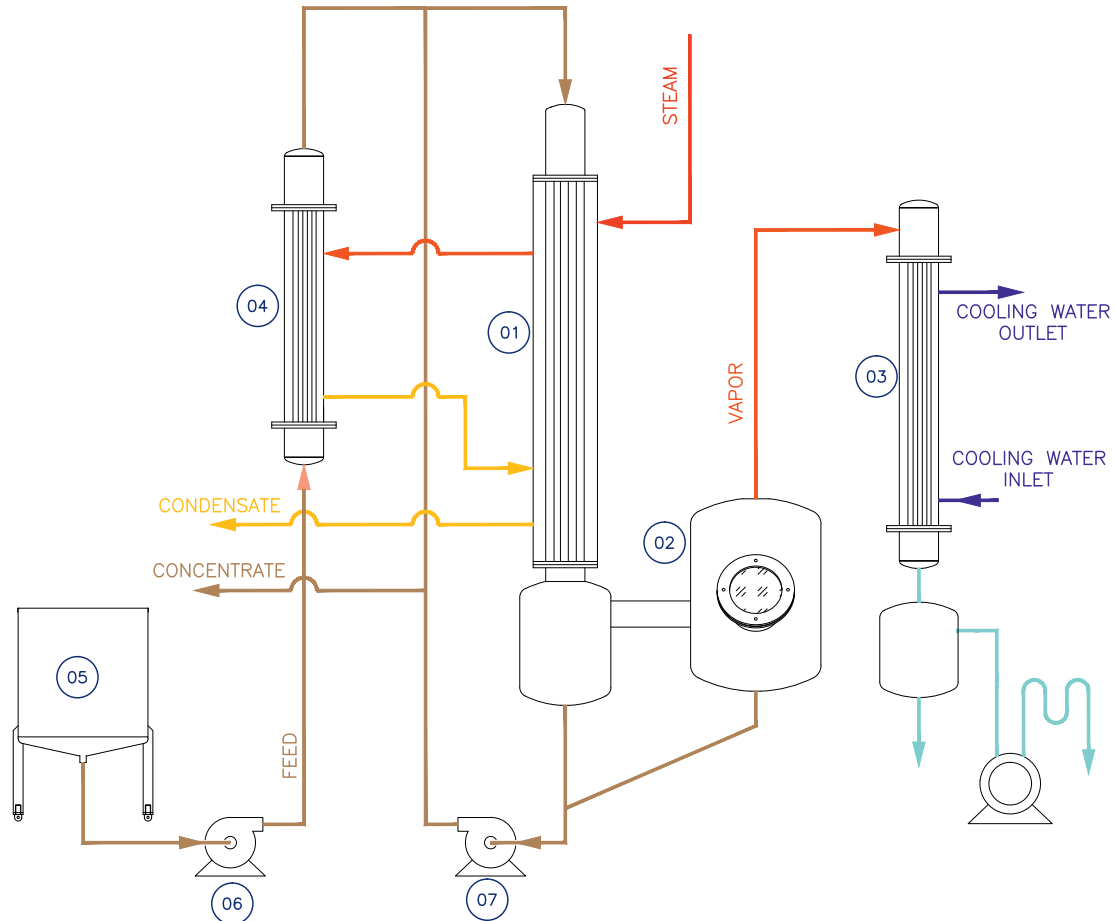
- Whole and skimmed milk, condensed milk, whey and whey derivatives, buttermilk proteins, lactose solutions, lactic acid.
- Particularly suited for temperature-sensitive products.
- For liquids which contain small quantities of solids and have a low to moderate tendency to form incrustations.

Highlights

- Long production runs due to high hygienic standard.
- Proven technology
- Cleanable system (Cleaning in place)

Capacity

- Capacity of the evaporator system depends on milk composition and milk intake.
- Water evaporation capacity 10 to 700 liters/hr.



Scope of supply

- | | |
|----------------------------|-----------------------------------|
| 1. Falling Film Evaporator | 2. Vapor Separator |
| 3. Surface Condenser | 4. Pre-heater |
| 5. Balance tank | 6. Feed Pump |
| 7. Feed Pump | 8. Instrumentation |
| 9. Ducting | 10. Documentation and engineering |

Contact Us

098508 46493 | 098508 25694 | 9075008943

Add : Sr. No. 170, Dnyaneshwar Colony, S. V. Engg. Comp., Pune - 411 035.

Our Website : www.ommetal.co

Our Emails : ommetalspune@gmail.com | sales@ommetalsindia.in | md@ommetalsindia.in