

EvapCare™-F: Sulzer avant-garde falling film evaporator technology



Safeguarding your most valuable products with maximum efficiency

Falling film evaporators are essential in distillation and evaporation processes across various industries. While they provide efficient solutions for handling **heat-sensitive** or **thermally unstable products**, combining falling film evaporation with distillation often results in **product degradation** and **energy inefficiencies**.



EvapCare™-F — Sulzer's next-generation Falling Film Evaporator, transforms your operation through optimized efficiency, reduced thermal stress and superior product integrity. By mastering the Marangoni effect – a phenomenon driven by surface tension gradients to ensure wettability on the tube surface, **EvapCare™-F** distributes evenly the liquid across the surface, preventing dry spots and minimizing product degradation. Built for modern feedstock and challenging chemical processes, its innovative liquid inlet distribution system delivers the consistent performance demanded by today's high-value applications such as **fine and specialty chemicals, pharmaceuticals, bio-based** or **petrochemicals**.



Why EvapCare™-F

- **Higher-value end products**
Deliver higher yields, especially under vacuum, by ensuring short residence times, high heat transfer, and minimal pressure drops, while preserving product integrity.
- **Increase production uptime**
Achieve up to 50% reduction in production interruptions with an advanced technology that prevents fouling and scaling, extending run times between maintenance cycles, allowing for lower Operation Expenses (OPEX).
- **Improved energy efficiency**
Reduce heat consumption by over 40% with EvapCare™-F advanced pressure drop management on tubes and shells, enabling heat recovery from operation units in multi-effect arrangements, for both steam and chemicals.

How can we help you?
Contact us today to find
your best solution.

sulzer.com
evapcare@sulzer.com



E10973 en 5.2025, Copyright © Sulzer Ltd 2025

This brochure is a general product presentation. It does not provide a warranty or guarantee of any kind. Please contact us for a description of the warranties and guarantees offered with our products. Directions for use and safety will be given separately. All information herein is subject to change without notice.

Overcoming challenges in complex applications: EvapCare™-F features a unique liquid distribution system, proven for handling large diameters over 4 meters, and tube lengths up to 12 meters. It is tailored for challenging applications, including processing sensitive organic media such as monomers.