



DistilCare™: Sulzer's innovative vacuum distillation technology for the precise and gentle separation of heat-sensitive products

Meet rising purity demands with minimal thermal stress

Today's manufacturing landscape presents two fundamental challenges: meeting increasingly stringent quality and purity requirements while simultaneously addressing operational energy efficiency, sustainability goals, and cost management. For manufacturers working with thermally sensitive, high-value products, these new boundaries create complex trade-offs that conventional distillation methods simply cannot resolve.

DistilCare™ Vacuum distillation technology eliminates these trade-offs entirely. This advanced vacuum distillation technology delivers exceptional purity levels while operating at temperature up to 300°C, and service pressure as low as 1 mbar (abs), significantly lower than traditional methods. This enables manufacturers to protect their most valuable products while achieving substantial energy savings and supporting critical sustainability ambitions.

Why choose DistilCare™

- **Protect product quality:** Achieve ultra purity levels (exceeding 99.99%) while preventing thermal degradation through minimized residence time and precise temperature over stringent pressure control.
 - **Reduce operating costs:** Cut energy consumption by up to 70% with Sulzer's high separation structured packing having low pressure drop and resulting in more compact equipment. Optional feed/product heat recuperation and optimal vacuum operation further drive down costs by enhancing thermal efficiency.
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- **Maximize product recovery:** Secure highest yields and purity, even when boiling points are close, thanks to Sulzer's structured packing's exceptional wetting properties, delivering best-in-class separation even under deep vacuum.
- **Flexible & scalable:** Modular skid-mounted system adapts to customer facility's layout and capacity needs, offering a compact footprint, plug-and-play installation, and rapid delivery time for seamless expansion
- **Customizable to your process:** Beyond standard distillation equipment, the system can be tailored with cold traps, product coolers, heat recuperators, squeezers, and automated control systems—configured to meet your specific process and performance requirements.
- **Support sustainability goals:** Lower carbon emissions and energy use by leveraging Sulzer's electrified distillation, VoltaSplit™, for greener operations.



Advanced engineering behind the results

DistilCare™ uses advanced technology to deliver excellent performance by operating under deep vacuum conditions. DistilCare is the result of Sulzer Chemtech's 60 years of leadership in applying cutting-edge structured packing like Mellapak™ and gauze packing like **BXPlus™** and **CYPlus™** which help reduce pressure and operating temperatures for optimal results. In addition, the **EvapCare™** film evaporators and specially designed overhead system ensure that the vacuum level remains consistently at the lowest level. The system's precise control over vacuum level, heat transfer, and residence time, combined with minimal maintenance requirements, ensures reliable performance across pharmaceutical, fine chemical, natural extract, semiconductors and oil & gas industries.

Ready to optimize your separation processes?

> Contact our DistilCare™ specialists today to discuss how this proven technology can address your specific challenges and deliver measurable results for your operation.

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

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