







- Proven Südmo valve technology and trusted hygienic components.
- Modular skid-mounted units for fast, flexible deployment.
- High-efficiency X-Flow membrane filtration.
- Full lifecycle support from engineering to service.



advanced technologies and services that meet strict regulatory standards and support global producers.

With a leading portfolio of Südmo hygienic and aseptic process valves, Pentair delivers

offer a cost-effective way to prevent contamination, spoilage, and saves space by allowing membrane-only replacements.

• High filtration performance for maximum efficiency.





DAIRY MEMBRANE FILTRATION

As demand for native whey protein continues to rise, a reliable, cost-effective, and sustainable solution to separate whey from casein in skimmed milk is key. X-Flow hollow fiber membranes are engineered to master this challenge to deliver high performance with a low environmental footprint.

These straw-like membranes are crafted from polyether sulfone, a high-performance polymer renowned for its foodgrade safety, chemical resistance, and thermal stability.

BENEFITS OF HOLLOW FIBER MEMBRANES:

- Higher flux and longer membrane life.
- Compact system design with vertical orientation.
- Low water and chemical consumption.
- Easy retrofit into existing spiral-wound / ceramic membrane setups.
- Robust operation with minimal downtime.

COMPLETE WATERMANAGEMENT SOLUTIONS

Clean, high-quality water is essential at every stage of dairy and food production. We help you manage this vital resource efficiently by reducing water usage, lowering your carbon footprint, and supporting your sustainability goals.

Pentair's expertise in water utilization and membrane technology enables tailored solutions for every process:

- X-Flow Membranes
 Deliver consistent water quality from multiple sources, ensuring flexibility, safety, and compliance.
- Membrane Bioreactors (MBR)
 Use advanced membranes to separate water from biomass in biological treatment systems - ideal for compact, energy-efficient wastewater treatment.
- Effluent Polishing with Capillary Membranes
 Achieve high-quality water reuse with significantly lower energy consumption compared to traditional tubular systems.

BIOGAS **UPGRADING**

Biogas is a key renewable energy source for a sustainable future. In dairy and food production, byproducts like whey, process water, and organic waste from food processing become valuable feedstock.

Biogas upgrading opens the door to multiple sustainable applications:

- Grid injection. Store energy by feeding biomethane into the natural gas grid.
- Clean transport fuel. Power fleets with bio-CNG or bio-LNG.
- Circular economy. Fuel milk trucks with biomethane.
- High quality, liquid CO, as an additional value stream.





CONNECT WITH US









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