

Dairy Product Concentration

PRODUCT CONCENTRATION FOR EVAPORATORS

Reverse osmosis is often used as a supplement to evaporation as it is a very efficient way of removing water from milk or whey (reducing volume) prior to the evaporation stage. By installing a reverse osmosis system upstream of an existing evaporator, the capacity of the evaporator may be reduced considerably, resulting in significant savings in capital and operating costs.

INCREASING SOLID-NOT-FAT (SNF) LEVELS OF MILK

Reverse osmosis is commonly used to concentrate skim milk, whole milk or whey protein to increase solid-not-fat (SNF) levels. Because reverse osmosis primarily removes water, it may be applied as an energy-efficient alternative to other common ways of increasing the SNF levels in milk including evaporation or the addition of milk powder.

WASTEWATER PRODUCT RECOVERY & REUSE

Product recovery using reverse osmosis has increasingly become an option as dairy production facilities attempt to reduce waste and increase the production output. Reverse osmosis systems can treat wastewater streams to minimize disposal costs and to recover water for reuse. In some cases, the concentrate from the waste stream is a valuable consumer product.

TurboClean® Food & Dairy RO elements may be used to concentrate products. TRISEP® ACM2 membrane is commonly used to remove water and reduce volume but will not alter the relative composition of the whey or milk components prior to evaporation. Combined with our sanitary TurboClean outer shell, this membrane is ideal for the concentration of product. This product is available using feed spacers of various thicknesses to account for the total solids content.

Contact

Europe

Germany: +49 611 962 6001
Italy: +39 0721 1796201
info@microdyn-nadir.com

Americas

USA: +1 805 964 8003
sales.mnus@microdyn-nadir.com

Asia

Singapore: +65 6457 7533
China: +86 10 8413 9860
waterchina@mann-hummel.com