

Alfa Laval – the dairy filtration specialists

Sanitary membranes for the dairy industry



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Alfa Laval is the world's largest specialist supplier of sanitary dairy filtration membranes, and many of the world's leading dairy companies use membranes manufactured by us.

We are a world leader in this highly specialized field, and the highquality membrane solutions we supply for use in dairy filtration processes are based on technical expertise and a substantial body of practical insight and experience that are widely recognized and acclaimed.

Alfa Laval is unique in not just being a membrane supplier, but also in developing, designing and manufacturing these technically advanced products. This enables us to deploy extremely comprehensive end-to-end quality assurance procedures, and to provide you with the full benefit of our experience in all aspects of using membrane filtration.

Our commitment to sanitary membrane manufacturing reflects the key role that these elements play in dairy filtration. Selecting the right type of membrane, with the most appropriate configuration, is essential for achieving a filtration process that is as effective as possible as regards efficiency, capacity and yield.



Efficient, reliable service

Purchasing Alfa Laval membranes is easy, rapid and straightforward. We have most types of membrane and spiral membrane in stock at all times, and your order is normally dispatched within 24 hours of us receiving it.

Our specialist sales team ensures that your inquiries receive a rapid, effective response. Sales support is provided by a team of technical specialists who provide you with practical advice about the best types of membrane for any particular application, and how to keep them clean.

Ultrafiltration spiral membranes

The sanitary spiral membranes in Alfa Laval are specially designed and approved for use in dairy processes. They feature materials that ensure the best possible separation, superior flux, and extended service life, as well as being easy to clean. Rigorous quality management procedures ensure a product with strict tolerances, maximum uniformity and full reproducibility.

The basic design of Alfa Laval spiral membranes is partly patented. These spirals are rolled very compactly, with extremely accurate outer diameter measurements. This ensures the best possible fit within the housing and a minimum of mechanical deformation while in use. This means the spiral membranes last longer and also that they are easy to remove and replace.

Combining the spiral membranes with our sanitary ESA ATD kits upgrades the plant capacity while reducing the power comsumption without compromising the cleanliness and sanitary conditions.



Alfa Laval UFPE series

The compact Alfa Laval UFPE spiral membranes feature clearlydefined separation properties, with an exceptionally large membrane surface area and very high flux. This makes them ideal for the filtration of whey and skimmed milk.

Alfa Laval UFPP series

These pH resistant (pHt) spiral membranes feature a special configuration that makes it possible to operate them in conditions with extreme pH values, and to clean them even at high temperatures. This makes UFPP membranes particularly suitable for concentrating products such as milk, cultured milk and cream. The types of membranes commonly used for particular applications are indicated below. These are available with spiral membranes of many different sizes and with appropriate feed spacers, as listed in Alfa Laval product data leaflets.

Both special-duty spiral membranes and spiral membranes with other specifications are, of course, available on request.

New standards in the world of WPC

It is only possible to produce highquality Whey Protein Concentrate (WPC) efficiently if suitable spiral membranes are used. We have developed the Alfa Laval GR61PE, GR70PE, GR61PP and GR70PP spiral membranes specially to tackle the different types of whey used in WPC production, and to deal with the concentration levels, processing temperatures and cleaning procedures involved.

The more lactose removed from the retentate, the less permeate has to be removed in order to achieve any particular overall protein-to-solids ratio (TOP/TS). This then also cuts down on the need to add diafiltration water. Alfa Laval WPC membranes are therefore designed to ensure both high flux and exceptional protein retention as well as high lactose permeability.



We can document that these spiral membranes are able to reduce the total volume of permeate, including diafiltration water, by as much as 10%. This then enables you to either reduce production time or increase production capacity. The amount of protein recovered is also significantly increased.

	Application				
Membrane	Sweet whey	Acid whey	Skim milk	Whole milk, Cream	Fermented milk and cream
UF GR60PE					
UF GR61PE					
UF GR70PE					
UF GR60PP					
UF GR61PP					
UF GR70PP					