

APPLIED BIOMIMETIC

DairySep™ Ultrafiltration Elements

Applied Biomimetic UF membranes
are a new class of high performance membranes
uniquely manufactured for the dairy industry



It All Starts With The Membrane

Applied Biomimetic has developed a cutting-edge casting technology that creates a unique membrane morphology.

The DairySep™ UF Membrane has the **Highest**

- Membrane porosity serving the dairy industry
- Membrane permeability, even at high solids levels
- UF element throughput

Applied Biomimetic created this technology and manufactures membranes at its state-of-the-art Membrane Development and Life Science Research Center in Gaithersburg, Maryland USA.

Save Time, Save Money

DairySep™ Elements allow dairies to process more milk and whey, substantially reducing the throughput time, and helps relieve plant production bottlenecks.

For some processing plants, production runs can be shortened.

These high productivity elements increase overall dairy plant production and avoids the need for adding additional skids to keep up with peak flows.

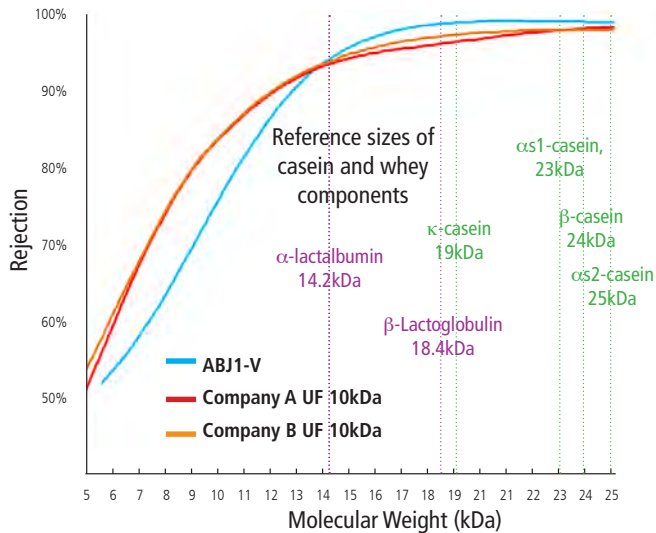
This reduces the needs for new plant capex and eliminates increasing equipment footprint.



DairySep™ Ultrafiltration Elements

A Better Membrane: a Purer Protein Retentate

Rejection Comparison



A Better Membrane

Most common UF membranes on the market have a wide distribution of pore size. This less sophisticated approach leads to a lower quality retentate, which requires further refining downstream.

The superior pore size control in AB's casting process means that targeted proteins are retained, and more non-protein solids pass through in the permeate.

The **Result** is a dairy retentate with more of what you want, and less non-protein solids in the retentate to be removed in diafiltration downstream.

Retrofitting is Easy

The DairySep™ Elements are available across a wide variety of diameters and feed spacer thickness configurations, which makes retrofitting into an existing production skid simple and fast. They are available in both full fit outer net wrap, and sanitary polypropylene hard shell housing.

The DairySep™ UF element has been in real field environments at some of the largest dairy and enzyme plants in the world since 2016.

The DairySep™ UF element is certified by USDA for food contact and meets 3-A Sanitary Standard #45-03 for Crossflow Membrane Modules.



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