



MMS Nordic  
Managing  
Director Niels  
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MMS Nordic new office in Silkeborg



## MMS ready for a new generation of membrane filtration technology

MMS Nordic is expanding the activities in the Nordic countries and sees the need for a new filtration technology to reduce energy consumption and carbon footprint.

MMS Nordic has gained a good foothold in Denmark, operating within a variety of industries and membrane filtration applications. With a current staff of four in Denmark, we are now hiring

additional membrane filtration experts and have moved to a new, prominent office at Randersvej 2A in Silkeborg, close to the freeway.

At the gate of the Nordic countries, MMS Nordic now ensures easy access to the innovative and inspiring environment of MMS AG in Switzerland, who has extensive experience with the separation, fractionation, purification, and concentration of all sizes of molecules for dairy, food, beverage, pharma, biotech, and industrial water applications.

### **Nordic presence**

MMS Nordic has recently teamed up with Thinkflow Oy in Kerava Finland to get even closer to Finnish customers. Thinkflow was founded in 2002 and has developed steadily throughout the years. The company's expertise in the food industry dates back to the beginning of 1979, and consequently, the customer base is well established and industry knowledge is profound. Thinkflow is a sales oriented and entrepreneurial family owned organization. They focus on customer satisfaction, providing

expert advice, fast service and the best solutions to help its customers become more competitive. Thinkflow supplies products from the world's leading component and equipment manufacturers to the food, dairy, beverage, biotech, pulp & paper, and pharmaceutical industries, developing cost-effective processes based on their experience and know-how.

MMS Nordic is currently also looking for possible cooperation partners to strengthen representation in Norway and Sweden.

### **Concentrated, fermented dairy products**

Many traditional Nordic dairy products like quark, cream cheese, yogurt, ymer and most recently also skyr are today widely manufactured by means of membrane filtration.

Initially, the solid content in sweet whole milk was raised slightly by means of ultrafiltration, followed by fermentation and traditional processing into yogurt and ymer.

In the late 70s, DDS (De Danske Sukkerfabrikker) invented a specially designed membrane support plate capable of handling high viscous liquids. With this new invention, it was possible to make fermented dairy products like quark and cream cheese using ultrafiltration instead of separators. This was a much simpler process, which at the same time increased yield due to more whey protein being retained by the membrane. Over the years, ultrafiltration has been the most commonly used technology to produce a wide range of this type of dairy products. Over the last 40 years, new types of fermented, concentrated dairy products have been developed and introduced to the markets. At the same time, consumption has sky-rocketed. Thanks to membrane filtration the original time-consuming process using whey drainage from bags has been turned into a highly automated, high-capacity and continuous process.

However, one downside of using ultrafiltration for this purpose, is the

massive energy consumption required to overcome the substantial pressure drop caused by the high viscosity of the products.

### **Time for a change**

Nonetheless, the 40-year old invention is still state-of-the-art technology. At MMS we believe it is time for a change. A couple of very interesting alternatives to the good old Module 37 are close to commercial breakthrough. Founder of DSS and MMS Nordic, Niels Osterland, was involved in applying the Module 37 to dairy products almost 40 years ago. At that time, energy consumption and climate changes had far less focus than today. The aim of the new concepts is to reduce energy consumption significantly, thereby contributing to lower CAPEX and OPEX, as well as a reduced carbon footprint.

**MMS NORDIC**

**MMS**  
Membrane Systems

## **MMS NORDIC**

**Accessible, flexible, focused**

## **NEW IDEAS AND INPUT TO YOUR PROCESS**

We are open-minded, easy to reach, and provide membrane filtration solutions customized to Nordic needs and expectations. Our business is based on new developments supported by extensive experience.



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