

POREFLON™

PTFE MF/UF Membrane Module

HIGH PERFORMANCE IN EXTREME CONDITIONS



News & Highlights

PTFE Membranes Selected for Food-Processing Wastewater

CASE STUDY #0517

Location: Japan (2011)

Goal: Increase treatment capacity within small footprint

Treatment Capacity: 100m³/d (0.03 MGD)

Situation

Japan has a dynamic economy that is driven by a growing population, an aging population, and an ever-growing number of two-career households.

This translates to an increased demand for the convenience of pre-cooked and pre-packaged meals that are taking the place of fresh, individualized ingredients and home-cooked meals.

As a result, food-processing plants in Japan face increased production demands and increases in waste streams, often with little space for the expansion of existing onsite wastewater treatment facilities.

Solutions

In 2011, a food-processing plant in Japan met these growing demands by moving to 24-hour operations, but found itself with a dire need for additional wastewater treatment within a limited footprint. The plant manager chose MBR technology to meet its special needs and undertook rigorous research for membranes on the market to ensure the technology would meet the needs of the plant.

POREFLON™ PTFE hollow fiber

Choose POREFLON™ PTFE membranes for:

- Chemical resistance.
- Tensile strength.
- Mechanical strength.
- Porosity. Hollow fiber.
- Wettability.

POREFLON™ PTFE membranes have proven to operate stably over time at this food-processing plant in Japan, meeting the demands of continuous operations and functional wastewater treatment.

The operators of the food-processing plant in Japan continue to be positive about the membranes from Sumitomo and have recommended our PTFE membranes at other installations.

Treatment Process

membranes were selected for their:

- high mechanical strength for non-stop operations;
- high tensile strength (preventing suspended solids from leaking within the system)
- ability to withstand regular high chemical cleaning with strong acids and alkalis.

from raw wastewater to reusable water

Raw Water → Adjustment Tank → DAF → Aerobic Tank → **IMMERSIBLE Membrane** → Discharge

Water Quality Information

mg/L	Raw Water	Membrane Effluent
SS	800	<1
BOD	1100	<20
N-Hex	300	<1

Do you have challenges in the treatment of manufacturing wastewater?

[Learn more about PTFE membrane technology today.](#)

Contact the Water Processing Group at Sumitomo Electric USA
Phone: (408) 881-2011 | [Email](#)

Video about POREFLON™

The multiple advantages of POREFLON™ PTFE in a Membrane Bio Reactor (MBR) system are highlighted [in this short video.](#)



For specifications & a demo with Sumitomo's POREFLON™ PTFE

With our sales and service teams in the U.S., we look forward to working with our customers in the Americas.

Please visit our product website and subscribe to our newsletter for case studies and additional information on our U.S. installations.



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