



# Aiming to Restore **Water** in the World

The Sumitomo Electric Group has developed a POREFLON™ membrane-separation wastewater treatment system. Highly valued for its performance and durability, the system is currently used not only in Japan but also worldwide, mainly in China and other Asian countries. This article introduces the product, which also contributes to resource saving through the reuse of process water as well as to environmental conservation.

We will help to solve various water-related problems in the world through our products

## ▶ We meet customer's requirements with our original technologies and products

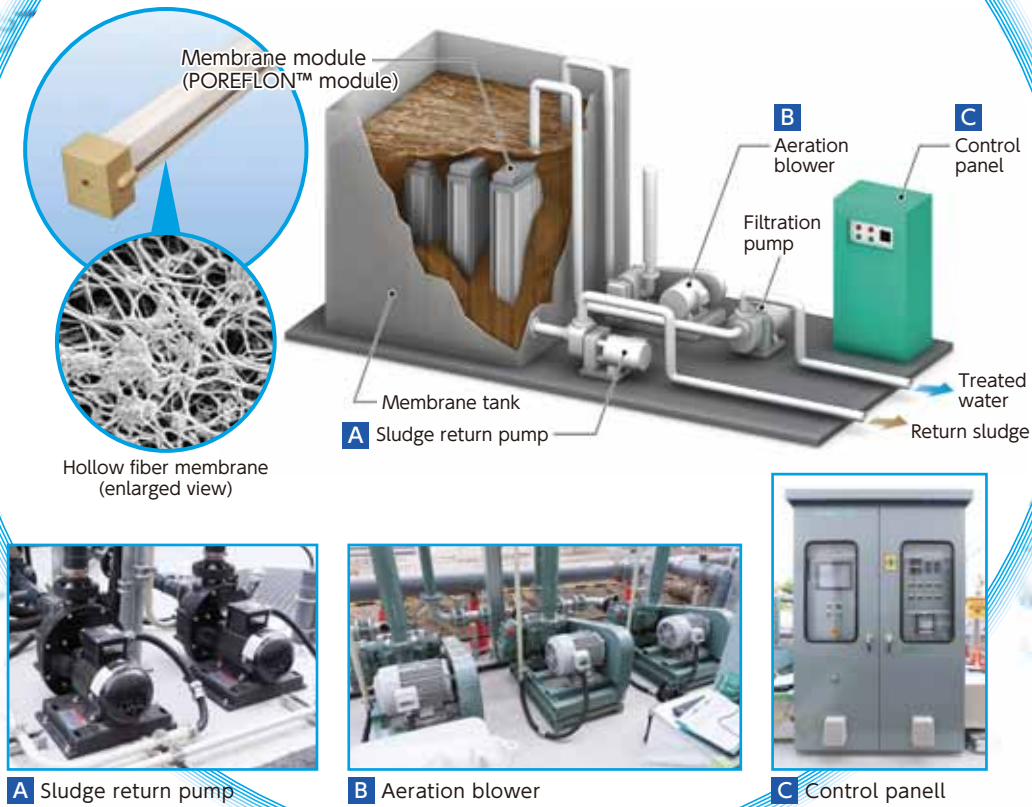
The POREFLON™ membrane-separation wastewater treatment system using the POREFLON™ module is a wastewater treatment system based on the polytetrafluoroethylene (PTFE) membrane created with the technology of the Sumitomo Electric Group. The combination of membranes enables the system to treat activated sludge at a higher concentration than the sludge treated by the conventional standard activated sludge process, ensuring the stable quality of the treated water. Chemical cleaning can be applied because the system is durable and resistant to chemicals. As a result, the burden of maintenance work can also be reduced. Another advantage of this product is that it can be designed according to the specific uses intended by the customer and its equipment. It has been installed in plants, buildings, commercial establishments and various other places in Japan and overseas.



Wastewater treatment system operated in our Osaka Works

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## POREFLON™ Membrane-Separation Wastewater Treatment System



My department engages in the design of the system at the stage of equipment establishment. We also provide after-sales services including performance checks after the installation and regular inspections, and work with customers to handle the situation concerning wastewater, which has been becoming more difficult due to regulations and other issues. For overseas customers, in particular, the system is required to have proper specifications that satisfy up-to-date local standards because the quality of treated wastewater is so significant that it can influence the operation of the plant.



Inspection of the operational status of the system

### We will keep addressing global water issues

The quality of wastewater is now a social issue around the world. This product has potential to keep solving various water-related problems through continuous improvement. Currently marketed mainly in Asia and installed in plants that require difficult wastewater treatment, the product is supporting efforts to prevent river and marine pollution based on its stable treatment performance.

Due to climate change, population growth, economic development in emerging countries and the other reasons, water shortage is becoming a conspicuous problem all over the world. We will continue to orchestrate the efforts of the Sumitomo Electric Group on a global scale to contribute to society in the aspect of water reuse.

### Delivered POREFLON™ membrane-separation wastewater treatment systems to Kaihara Co., Ltd.

We delivered this system to the plants of Kaihara Co., Ltd., a leading manufacturer of high-quality denim, in Kisa, Hiroshima and the Ratchaburi Industrial Estate, Thailand. Before the delivery, we carried out a pilot test with actual wastewater for a year and a half jointly with Kaihara and Shinyu Co., Ltd. Then, Kaihara introduced the system into each of the plants and started to operate them in 2015. These systems have

enabled Kaihara to treat industrial wastewater in a stable manner and have substantial effects on the reduction of industrial waste, energy costs and equipment installation space.



Wastewater treatment system installed in the Kisa Plant



Wastewater treatment system installed in the Thailand Plant