

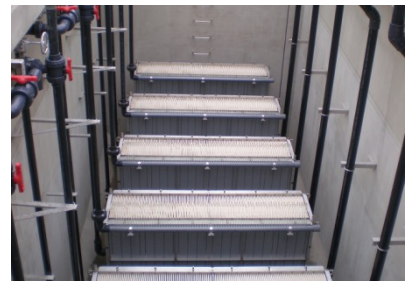
Laundry wastewater treatment

Our customer has been tackling reuse and recycling of fiber resources since its establishment in 1913, when no one knew the "RECYCLE" concept. His activities have been rooted in Japanese traditional "MOTTAINAI" spirit. His works to help customers reuse used rental cloths by cleaning them to rent again. He also recycles rejected cloths into rental cloths.

The MOTTAINAI spirit lives not only in fiber recycling but in water reuse. At the relocation of its factory site, he introduced a membrane bioreactor (MBR) system using KUBOTA Submerged Membrane Unit®, to reuse 80% of its total water use. To treat the thick wastewater rich in oil and grease, the membrane bioreactor system, in combination with an oil-separation and a Dissolved Air Flotation (DAF) systems using its proprietary know-how, is working as expected.



Facility Overview



Installed View of Membrane Units



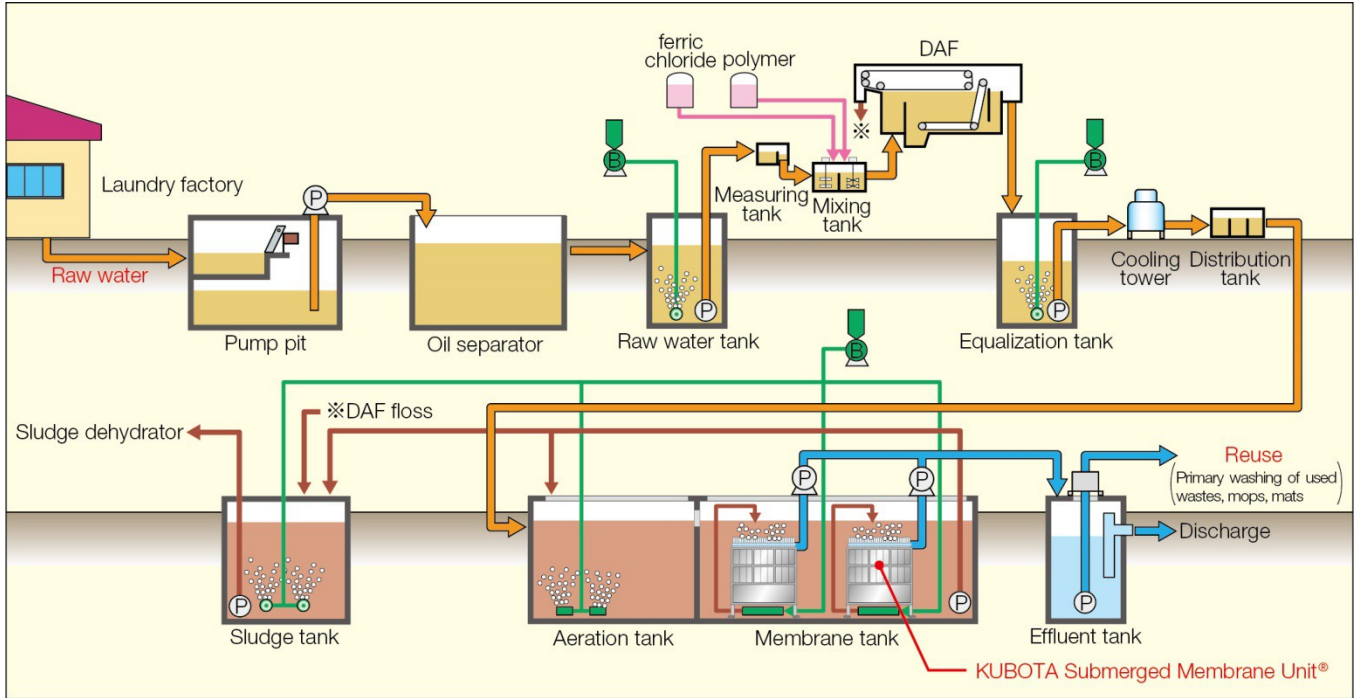
Reusing Equipment (Washers)

Outline of the Facility

Location	Saitama Prefecture, Japan
Type of wastewater	Cleaning Factory Wastewater (by cleaning waste cloth from industries and printing)
Flow	250 m ³ /d (200 m ³ /d is reused)
Commissioned	November 2008

Laundry wastewater treatment

MBR Process Flow Sheet



Design Parameter and Actual Data

Parameter	Influent		Effluent	
	Design	Actual	Design	Actual
BOD5 (mg/L)	5,740	6,730	<600	4.0
SS (mg/L)	1,040	2,900	<600	<2
O&G (mg/L)	19,870	6,160	<30	<3
pH (-)	7.4~10.2	10.1	5.0~9.0	6.8

"Design" values of effluent are the regulatory limits. "Actual" values are average values.

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