

Building wastewater treatment

: Semi-Centralized Wastewater Treatment and Reuse

Our customer's building is the most impressive landmark in the trendy Omote-Sando area of Tokyo and includes a wedding hall, office and commercial complex. All wastewater (except from WC facilities) is collected, treated and reused without leaving the building.

Wedding hall kitchen wastewater is treated by Dissolved Air Flotation (DAF) while all other building wastewater comes into a pumping station without pre-treatment. The two streams are then combined and pumped into the Kubota Membrane Bioreactor (MBR) Process. Since the Kubota MBR permeate is crystal clear, it is recycled within the building as toilet flushing water. This wastewater reuse system is very compact and has been providing excellent treated water quality for more than 10 years.

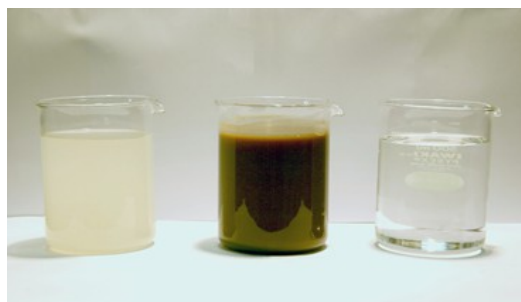
Just like at Aoyama Palacio, many famous buildings and facilities have adopted the Kubota MBR process as the best integrated solution to their wastewater treatment/reuse needs.



MBR facility overview

Outline of the Facility

Location	Tokyo Prefecture, Japan
Type of wastewater	Wedding Hall Kitchen Wastewater ,Miscellaneous Wastewater (Office, Wedding Hall, Shops, etc.)
Flow	113.5 m ³ /d (MBR)
Commissioned	March 1999



Water Quality Sample

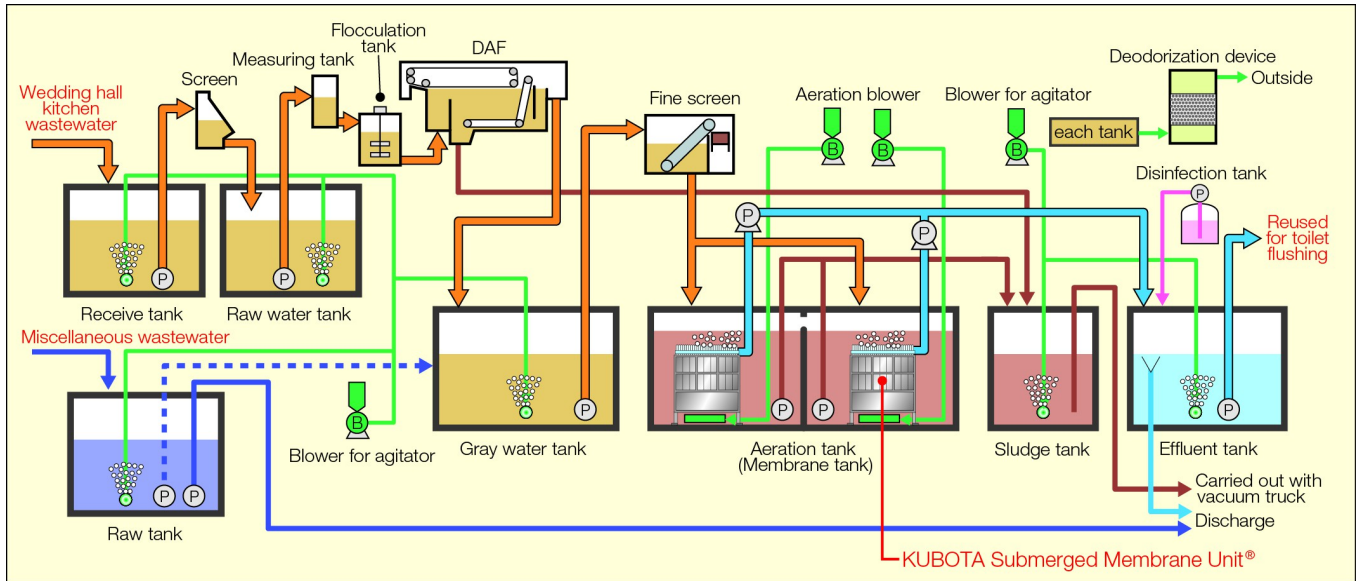
Left Raw Wastewater

Center Membrane Tank Mixed Liquor

Right MBR Effluent

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MBR Process Flow Sheet



Design Parameter and Actual Data

Parameter	Influent (Before DAF)		Effluent	
	Design	Actual	Design	Actual
BOD5 (mg/L)	600	300	<10	1.1
O&G (mg/L)	150	100	<10	1.1
Coliform (cfu/mL)	-	-	<10	N.D.

“Design” values of effluent are the regulatory limits. “Actual” values are average values.

KUBOTA Corporation
Membrane Systems Dept.
<http://kubota.co.jp/membrane>

Kubota Membrane Europe Ltd.,
<http://www.kubota-mbr.com/>

Kubota Membrane U.S.A. Corporation
<http://www.kubota-membrane.com/>

: 1-3, Kyobashi 2-Chome,
Chuo-ku Tokyo 104-8307, Japan
Tel:+81(0) 3-3245-3773

: 3rd Floor Horatio House, No.1
Farrier's Yard 77-85
Fulham Palace Road
London, W6 8JA, United Kingdom
Tel:+44(0) 20-8741-5262

: 11807 North Creek Parkway S, Suite
B-109, Bothell, WA 98011, USA
Tel:+1-425-898-2858