

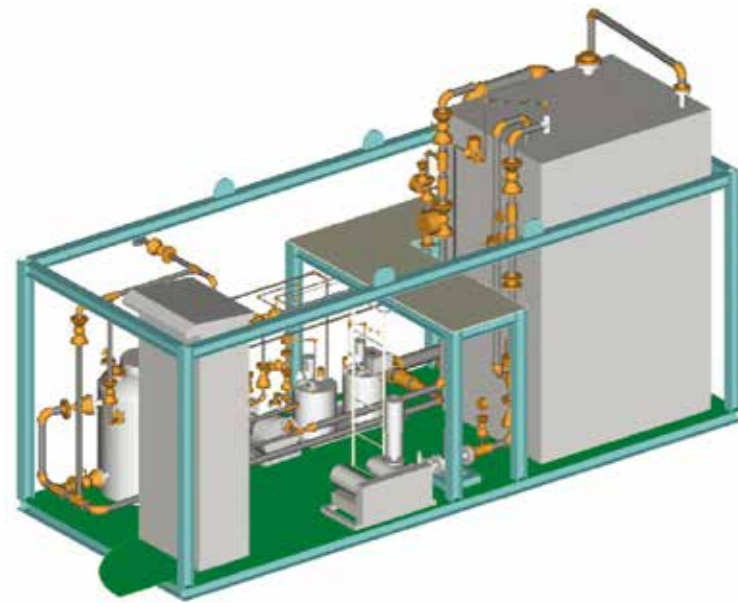
The DiaFellow AM is recommended for new water treatment facilities, or to augment existing facilities.

A variety of optional and customized plans is available to suit your needs.

DiaFellow AM Standard Specifications

Part Number	AM100	AM200	AM400	AM800	AM1600
Membrane Area (m ²)	100	200	400	800	1600
Standard Flux (m ³ /日) *1	50	100	200	400	800
Membrane Material	PVDF (polyvinylidene fluoride) porous hollow fiber				
Fractional Characteristics (μm)	0.4				
Device Dimensions	2.9m (W) × 4.2m (L) × 3.2m (H)	2.9m (W) × 4.6m (L) × 3.2m (H)	2.9m (W) × 5.3m (L) × 3.2m (H)	Membrane separation tank: 2.1m (W) × 2.4m (L) × 4.5m (H) Auxiliary unit: 2.1m (W) × 3m (L) × 2.5m (H)	Membrane separation tank: 2.1m (W) × 4.9m (L) × 4.5m (H) Auxiliary unit: 2.1m (W) × 5m (L) × 2.5m (H)
Electrical Equipment Capacity (kW)	5	6	8	12	23
System Weight (metric tons)	5	5.5	6	8	11
Operational Weight (metric tons)	9	11.5	14	30	50

*1) Displayed values are estimated. Actual applicable flow rates will depend on raw wastewater quality. Please consult with our staff.



DiaFellow AM

Caution

- Read all warnings before using this system, and operate properly.
- Product specifications may be altered without notice for improvement or other purposes.

Distribution Source

MITSUBISHI CHEMICAL AQUA SOLUTIONS CO.,LTD.

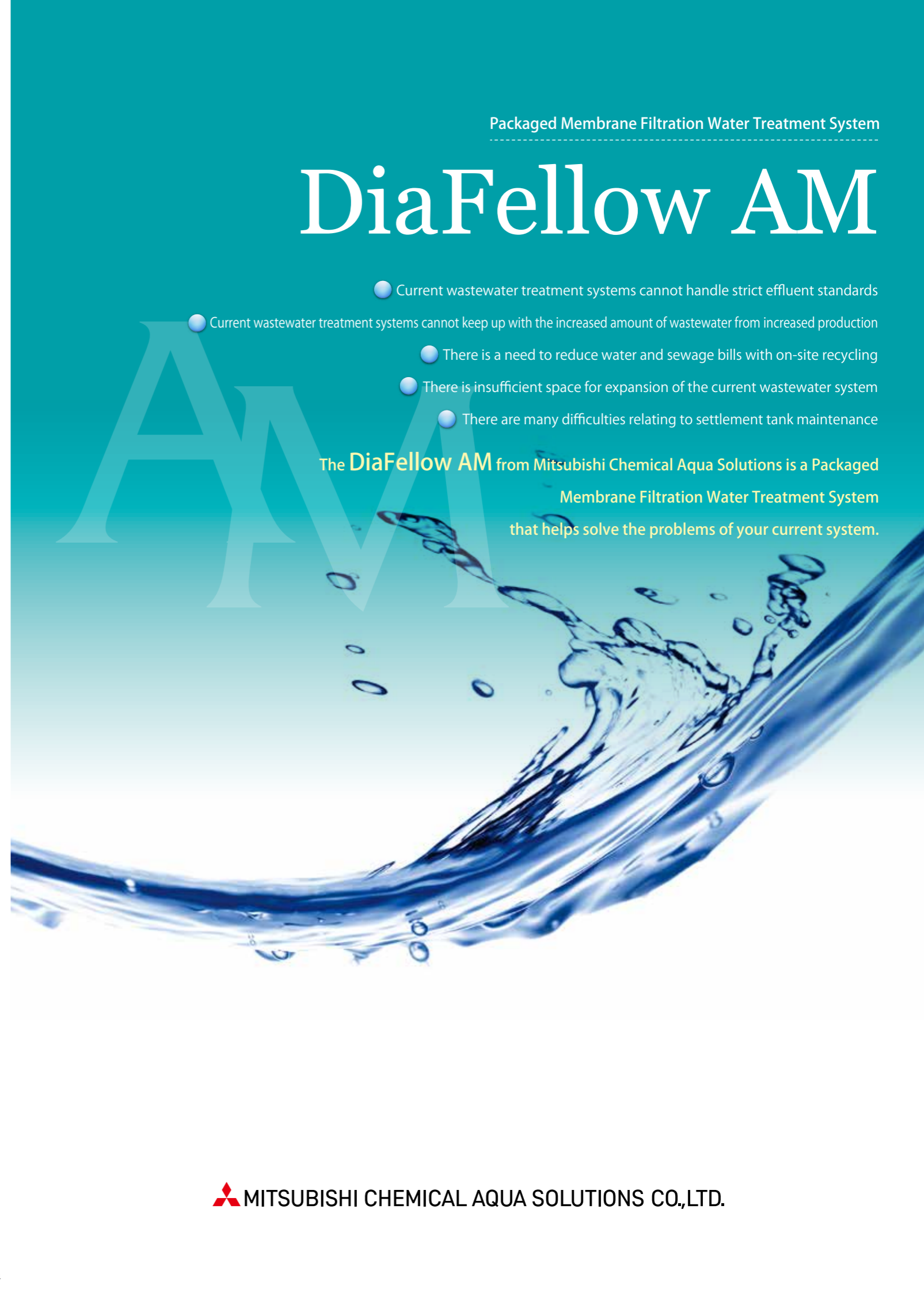
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Packaged Membrane Filtration Water Treatment System

DiaFellow AM

- Current wastewater treatment systems cannot handle strict effluent standards
- Current wastewater treatment systems cannot keep up with the increased amount of wastewater from increased production
- There is a need to reduce water and sewage bills with on-site recycling
- There is insufficient space for expansion of the current wastewater system
- There are many difficulties relating to settlement tank maintenance

The DiaFellow AM from Mitsubishi Chemical Aqua Solutions is a Packaged Membrane Filtration Water Treatment System that helps solve the problems of your current system.



 MITSUBISHI CHEMICAL AQUA SOLUTIONS CO.,LTD.

DiaFellow AM

1. Easily installed wastewater treatment equipment

The DiaFellow AM is an all-in-one package system, complete with membrane filtration tank, suction pumps, aeration blowers, valves and control panel. Just put it in place on site, connect the piping to your existing aeration tank, connect the power, and it is operational.

2. An efficient membrane bioreactor

The DiaFellow AM is a membrane bioreactor, with various benefits compared to traditional activated sludge treatment systems in terms of site space requirements, ease of maintenance, treated water quality and more.

All-in-one standard design for quick turn around

The DiaFellow AM comes with a full complement of standard features to help shorten your turn around times.

Wide range of options

Readily adaptable, with additional functions that include a chemical cleaning unit, raw wastewater pump, expansion tank and more.

Easy maintenance

Aeration provides additional cleaning power and high flux, maintaining stable operation for long-term use.

Recycles treated wastewater

Treated wastewater is cleaned with a 0.4µm microbore system, and can be directly recycled using reverse osmosis.

Uses the hollow-fiber membrane made by Mitsubishi Chemical

The DiaFellow AM uses a high-flow membrane module that is both compact and handles large volumes.

Handles high BOD levels

High density MLSS operation for easy treatment of raw wastewater with high BOD levels.

Full lineup

A variety of models that can handle a wide range of water treatment volume needs, ranging from 50m³/day to 1,600m³/day.

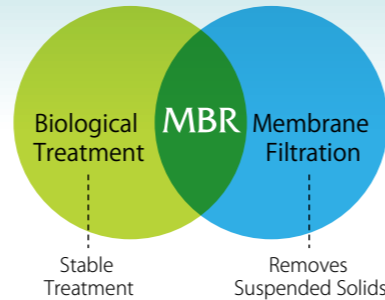
Conserves energy

Lower power consumption costs for water desalination.

Note: Actual applicable flow rates will depend on raw wastewater quality. Please consult with our staff.

What is Membrane Bioreactor (MBR)?

MBR is an innovative water treatment system which combines activated sludge biological treatment and membrane filtration physical treatment. Instead of directly filtering the raw wastewater, the system uses microbes to decompose organic matter in the water and the membrane to then separate liquid from the activated sludge.



The hollow-fiber membrane made by Mitsubishi Chemical features

- Made of PVDF, a material highly resistant to acids and alkalis
- High flux (flux × membrane area = treated water volume)
- Mechanical strength and superior processability

Note: Extended membrane life facilitates large-scale wastewater treatment handling.



MBR world standards

Our MBR systems not only raise the quality of treated domestic and industrial wastewater, but are also acclaimed for their wastewater recycling, with over 3,000 units already installed domestically and abroad (as of 2010).

Space Savings

Operation and Maintenance Manpower & Cost Saving

Recycled Wastewater

- Ever more compact reaction tank thanks to a method with greater handling power of high density MLSS.
- Membrane module in the aeration tank separates liquids out, eliminating the need for a settlement tank. This makes not only for greater space savings than is possible with conventional methods,* but removes all difficulties related to poor sludge settlement, and streamlines maintenance.
- *conventional methods: i.e., compared with traditional activated sludge treatment systems.
- High treatment performance results in high water quality levels. Water filtered through the membrane is clean, containing no suspended solids or E. coli, and can thus be recycled as reclaimed water without further treatment. (For cleaning dryer filter cloths, toilets, landscaping, grassplot irrigation, firefighting, etc.) This helps reduce water and sewage costs, and promotes compliance with mandatory wastewater reuse regulations.

Tap water Treated water Raw water

Cafeteria wastewater		
	Raw water	Treated water
BOD	400	≤5
COD	180	≤10
SS	800	≤5
PH	6.8	6.8

Cafeteria plant		
	Raw water	Treated water
BOD	1500	≤5
COD	1000	≤10
SS	50	≤5
PH	6.3	6.5

Livestock wastewater		
	Raw water	Treated water
BOD	13000	≤10
COD	5000	≤100
SS	2000	≤5
PH	8	6.8

BOD, COD, SS unit: mg/L