### Mitsubishi Chemical Aqua Solutions' DiaFellow DM provides the best solution for various water treatment sites.

#### Great for these uses:

- Car wash wastewater treatment and recycling
- Compressor drain treatment
- Oil, power and steel plant wastewater treatment

- Garage wastewater treatment and recycling
- Degreasing and rinsing treatment
- Factory rainwater and wastewater treatment

- Coolant water treatment and recycling
- Tank yard wastewater treatment
- Other general mineral oil and oily wastewater treatment

#### DiaFellow DM Standard Specifications

Model			DM1			DM2		
			03	05	10	03	05	10
			One-tower model			Two-tower model		
Treatment capacity m <sup>3</sup> /		m³/H	3	5	10	3	5	10
Est. dimensions	Frontage W	mm	1,700	2,000	2,400	3,000	3,600	4,000
	Depth L	mm	1,500	1,850	2,400	1,500	1,900	2,400
	Height H	mm	2,800	2,900	3,150	2,300	2,450	2,600
Weight	Operating	ton	approx. 1.9	approx. 2.4	approx. 4.2	approx. 3.0	approx. 4.3	approx. 7.0
	Empty	ton	approx. 0.8	approx. 1.1	approx. 1.8	approx. 1.3	approx. 2.0	approx. 3.0

Note: Equipment specifications are decided by analyzing actual water details during actual design.





DiaFellow DM

#### Caution

- ■Read all warnings before using this system, and operate properly.
- $\blacksquare \text{Product specifications may be altered without notice for improvement or other purposes}.$

Distribution Source

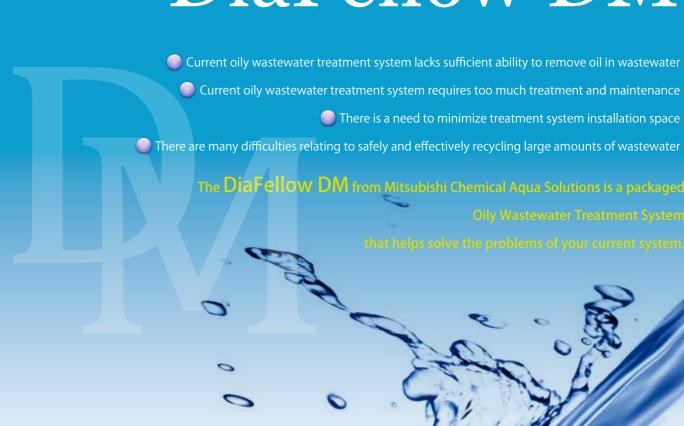
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Packaged Oily Wastewater Treatment System

# DiaFellow DM



MITSUBISHI CHEMICAL AQUA SOLUTIONS CO.,LTD.

# DiaFellow DM

# 1. Easily achieves concentrations of 5mg/l or lower with a powerful oil adsorbent.

The powerful DiaFellow DM oil adsorbent, developed by Mitsubishi Chemical, cuts surface oil, dispersed oil, emulsified oil and oil otherwise mixed in with wastewater. DiaFellow DM also enables you to remove oil emulsion, which has been difficult to treat until this point.

#### 2. Recycles wastewater and cuts costs.

The DiaFellow DM Oil Adsorbent

The DiaFellow DM is a powerful oil adsorbent

lipophilic polyolefin compound and a mineralized material is loaded into the adsorption tower. The

product then passes through the oily wastewater and

adsorbs the oil, removing it.

researched and developed by Mitsubishi Chemical. A granular product comprised of a high molecular

Water treated by the DiaFellow DM is exceedingly clear, allowing wastewater to be recycled. Expect significant cost savings from water used for car washes and coolant

DiaFellow DM - SB(Cut)

# Oil droplet Oil droplet Oil droplet

Microscopic negatively charged oil droplets are adsorptively removed

**Fully enclosed** 

The fully enclosed system

allows you to keep

the environment clean.

- 2. The porous, granular body greatly increases adsorbed oil amounts
- 3. Works with dispersed oil, emulsified oil and a wide range of oily waters

#### DiaFellow DM Oil Adsorbent Varieties

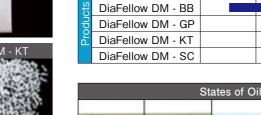
#### DiaFellow DM Oil Adsorbent Performance with Oil States

n-hexane extract

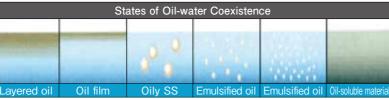
ed oil Emulsified oil Oil-soluble mater







DiaFellow DM - SB



## Reliable, stable treatment

The system removes not only oil, but also high rates of chemical oxygen demand (COD) and suspended solids (SS), providing stable treated water quality.

#### Compact design

The system's compact design with few components allows for lower facility costs and smaller installation areas.

#### Easy maintenance

With fully automated operation possible, there is no need to replenish additives or treat sludge.

Normal maintenance consists only of adsorbent replacement and equipment inspections, allowing for the reduction of maintenance costs.

## Handles high oil concentration

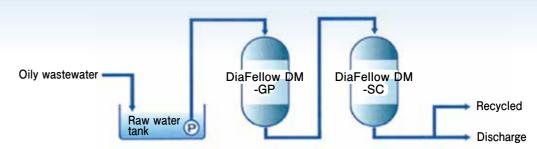
Depending on the characteristics of what is to be treated, various combinations of pretreatmen and post-treatment facilities are possible.

#### Recycles wastewater

With no additives, treated water can be recycled for a wide variety of uses with DiaFellow DM as a water recycling system.

Note: Generally, "oil" is represented as n-hexane extract. There are also "mineral oils," "plant and animal oil" and "non-oil components." DiaFellow DM treats all but plant and animal oils.

#### DiaFellow DM Basic Treatment Flow



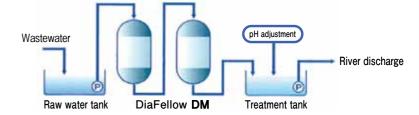
#### Case Studies

- 1 Railcar center wastewater treatment
- Drainage 24m³/day
- Discharge standards Mineral oil: 5mg/l or less

Raw water: 45mg/I

Treated water: 2mg/l or less

Switched from flocculation-floatation facilities to DiaFellow DM.



- 2 Recycled wastewater bus wash
  - Treatment capacity: 5m<sup>3</sup>/hr.
  - Raw water: 7mg/l
  - Treated water: 3mg/l or less
- Treatment capacity: 4m³/hr.
- Raw water: 50mg/l
- Treated water: 3mg/l or less
- $\begin{tabular}{ll} \hline \end{tabular} \begin{tabular}{ll} \hline \end{$ 
  - Treatment capacity: 3m³/hr.
  - Raw water: 100mg/l
  - Treated water: 5mg/l or less