

MORESCO

Oily Wastewater
Treatment

UF Membrane Wastewater Treatment System



Distributor

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We support the Sustainable Development Goals (SDGs) through the widespread use of wastewater treatment systems.

*Contributing to society by providing advanced treatment of
oily wastewater and reducing waste since 1985*

In 1985, MATSUKEN delivered the first oily wastewater treatment system that used membranes. Since then, many customers have regularly used our products while we worked on further reducing waste and recycling water. We will continue to work with our customers to achieve sustainable development goals by utilizing the know-how we have cultivated.

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Fully automatic, low-maintenance, agent-free, sludge and industrial waste treatment cost reduction

While chemical coagulation sedimentation treatment is commonly adopted in many metal processing plants, it requires a lot of work for operators to determine and adjust the amount of agents due to fluctuations in the concentration of wastewater.

The UF Membrane Wastewater Treatment System is fully automated, and efficiently and reliably separates and filters wastewater.

It also saves labor and contributes to cost reduction.



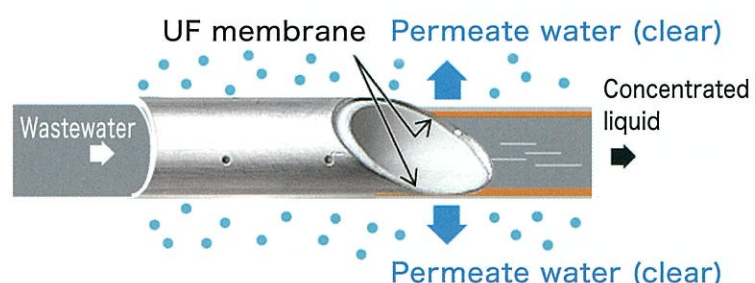
Features

- 1 Since there is no need to adjust agents to suit the fluctuations in concentration, it does not require much labor and facilitates labor-saving for the entire plant.
- 2 It extracts clear permeate from oily wastewater and reduces the volume of wastewater to between 1/10 and 1/30
- 3 Since it adopts physical separation which does not use chemical agents, the treated water can be reused without any increase in the salt concentration.
- 4 Automatic sponge ball cleaning and agent cleaning function maintain stable treatment performance.
- 5 It is easy to check the operation data and change settings from the touch panel.

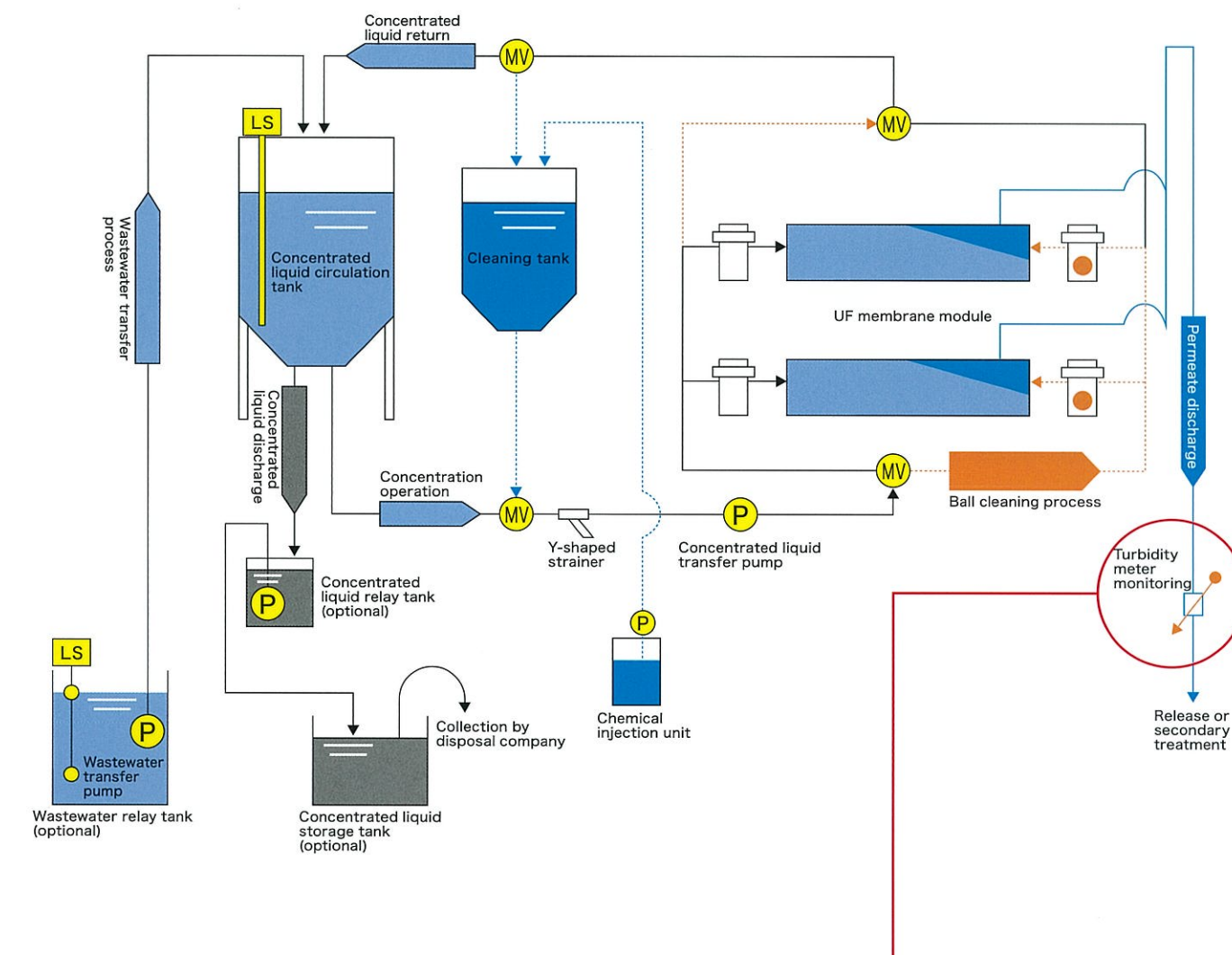
Principle

It adopts tubular membranes to eliminate blockages caused by clogging of the membrane

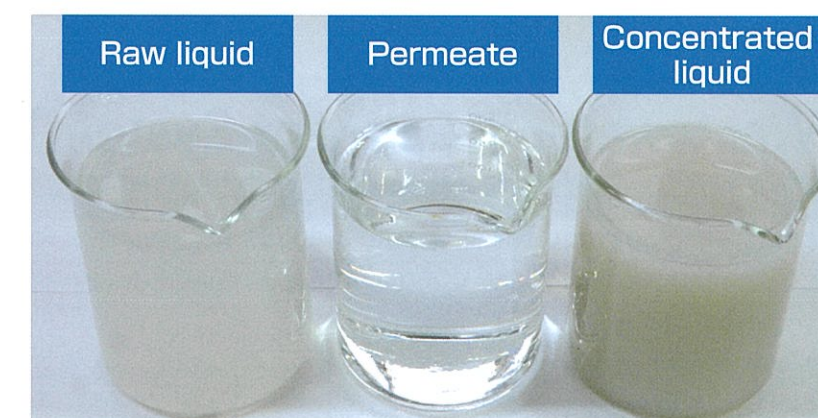
The membrane module consists of 18 tubular membranes connected in series and housed in a casing. Wastewater is passed through these to be filtered.



[Treatment flow]

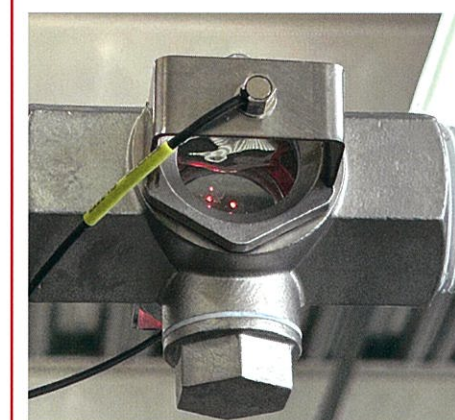


[Treated water]



High-quality wastewater by separation and filtration can be obtained with stability

[Turbidity meter]



The treated water is constantly quantified and monitored with a turbidity meter.

[Benefits of introducing the UF Membrane Wastewater Treatment System]

Wastewater from flexographic ink cleaning



UF
Saving labor with no manned agent treatment
(thanks to automated operation, no need to ensure personnel to adjust the agents)

Wastewater from penetration flaw inspection agent cleaning



UF
Saving labor with stable decolorization performance
(no need to confirm decolorization in agent adjustment at high concentrations)

Wastewater containing die casting lubricant



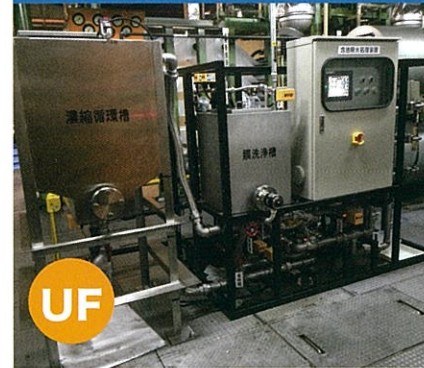
UF
Saving energy at new plants
(processing energy for concentrated liquid transfer pump only)

Wastewater containing water-soluble cutting fluid



UF
Improving treatment efficiency of evaporators
(removal of a large amount of oil content with pre-treatment)

Wastewater containing water-soluble coolant for can processing



UF
Reducing the load on the integrated wastewater treatment equipment
(removal of coolant component with pre-treatment)

Wastewater containing water-soluble cutting oil and wastewater from its cleaning



UF + RO
Cutting disposal costs by reducing industrial waste
(disposal of the entire industrial waste volume reduced to disposal of concentrated liquid with 1/5 volume)
*UF + RO hybrid system specialized in improving treated water quality

[List of specifications]

Item	Unit	UF membrane					UF + RO membrane
		MK1S	MK2	MK6	MK10	MK20	NK2-UF/RO
Treatment capacity ^(*)	L/day	500	1,000	3,000	5,000	10,000	1,000
Membrane module	pieces	1	2	6	10	20	2 each
Unit dimensions ^(*)	mm	W1,700	W3,250	W3,400	W4,000	W5,500	W1,410
		D 700	D1,000	D1,000	D1,400	D1,250	D1,900
		H1,600	H1,950	H1,950	H2,050	H2,550	H1,910
Weight (When no water)	kg	220	430	610	850	2,000	700
Electricity consumption (kW/hr)	kg	1.1KW	1.5KW	4.0KW	7.5KW	18.5KW	3.5 kw
Options	—	pH adjustment unit, remote control system, bucket filter, concentrated liquid relay unit					

■ Treatment capacity varies depending on the conditions such as the concentration and type of wastewater.

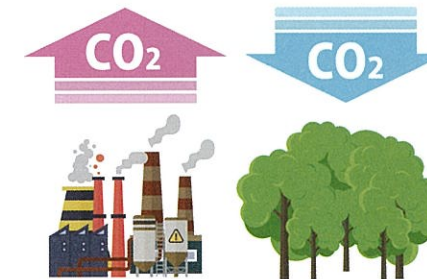
(*) This is the capacity when equipped with a 1.5m type membrane module.

(*) The unit dimensions are for installing the main unit and the concentrated liquid circulation tank.

[Recommended points]

■ Carbon neutrality (contributes to SDGs)

By switching from evaporators that consume fossil fuel, CO₂ is reduced by 26 tons per cubic meter per year



■ Demonstration (long-term field test possible)

To answer the question/concern, "can a UF membrane system really handle this?" our company offers the UF Membrane Demonstration System. It can be installed at actual sites so people can check and experience the "system structure," "treatment process," "treatment capacity," and "easy operation."



■ Remote control and operation system (optional)

You can check the treatment status and operate the system remotely using a mobile device (PC, smartphone, or tablet) without having to go to the site.

Monitoring from PC in the office

Treatment is going well!
It is helpful because there is no need to go all the way to the site to check



■ Maintenance (contract)

Our company's knowledgeable and experienced specialists will take care of every aspect in place of our customers who are busy with one's work

Please leave it to us!



[UF + RO Membrane Wastewater Treatment System]

RO membrane is used for secondary treatment to enable discharge the treated water into river. A spiral membrane with a large membrane area is adopted for suspended solids (SS) removal in the UF membrane for primary treatment. Thanks to the shared control panel, it is space saving and easy to operate.

