

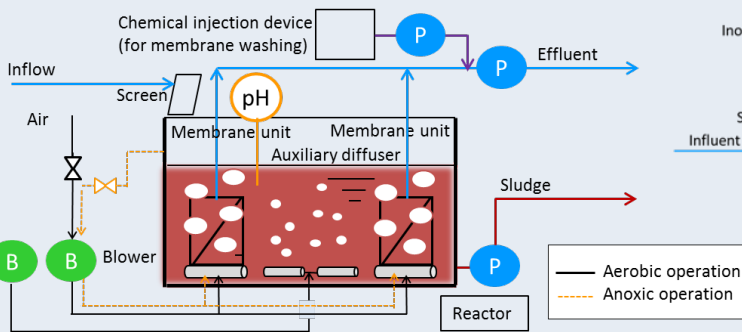
Temporary Wastewater Treatment Unit Using Single Tank MBR and High-rate Coagulation Settling System

Developers: Hitachi Plant Services Co., Ltd.

Portable wastewater treatment unit for **temporary treatment** using single tank MBR and/or high-rate coagulation settling (HS) unit with steel plate. Enable **stable, low-cost** wastewater treatment during the construction period of small-scale WWTP

Single tank MBR unit

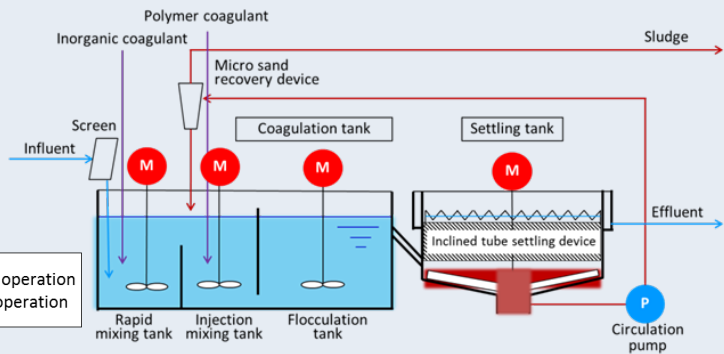
with daily maximum capacity of 300m³



Immersion type single tank MBR can switch aerobic/anoxic operation depending on pH inside a tank and recover alkalinity with no pH conditioner.

High-rate coagulation settling unit

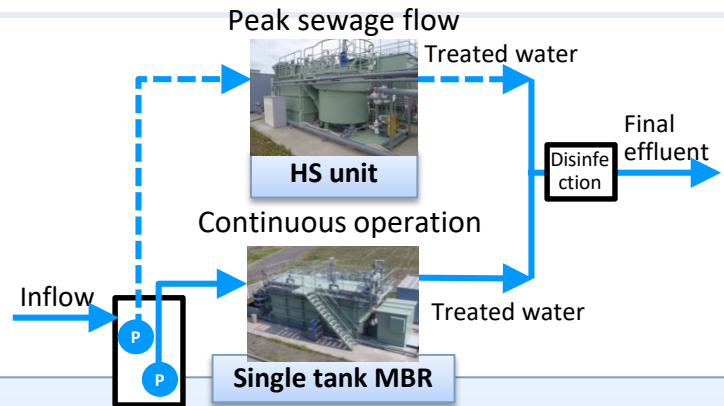
with hourly maximum capacity of 500m³/day



High-rate coagulation settling unit using micro sand simplifies O&M by coagulant (inorganic + polymer) addition with fixed quantity and adoption of inclined tube settling device.

Treatment flowchart

- ☆ Continuously operate single tank MBR unit with excellent quality of effluent
- ☆ Concurrently use HS unit to apply to hourly fluctuation of sewage inflow



Needs

- Need retrofit while having only one tank of a wastewater treatment facility
- Need continuous wastewater treatment performance during retrofitting works, and temporary wastewater treatment at the time of disasters

Benefits

- Secure wastewater treatment performance and treated water quality with no additional trains or tanks
- Can reduce in construction period, footprint, and costs for temporary treatment facilities