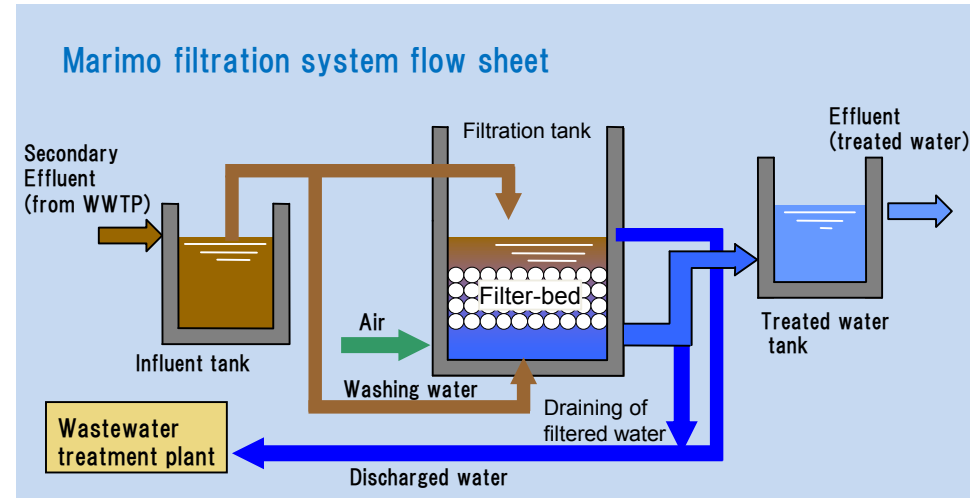
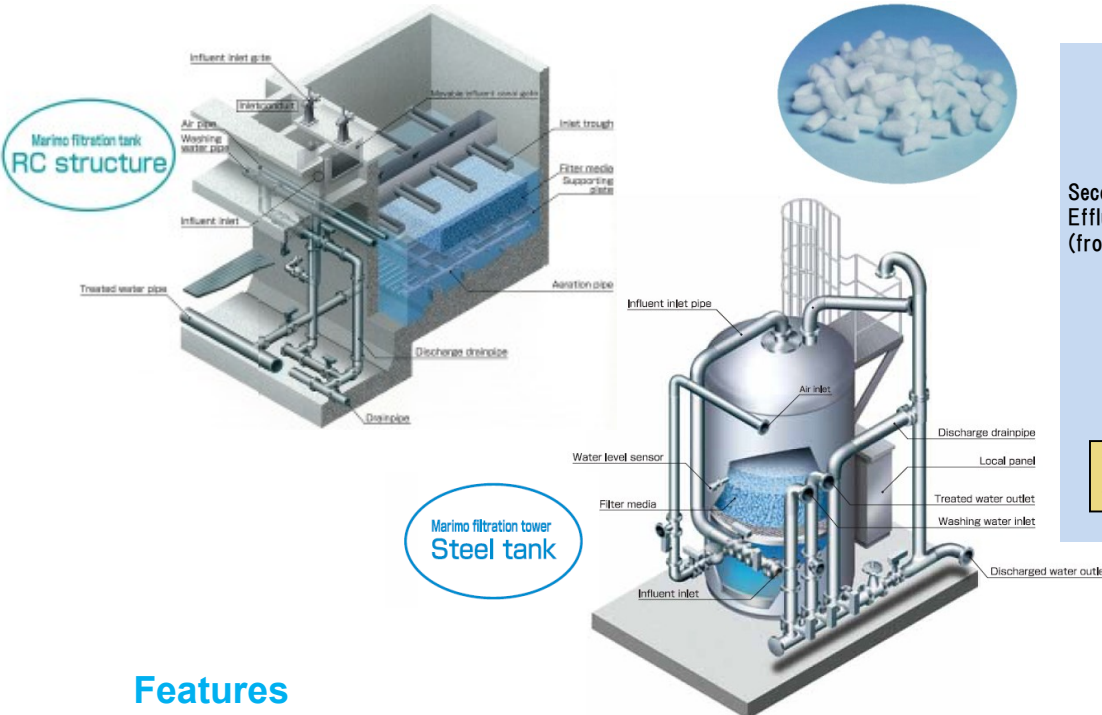




High-rate Fiber Filtration System MARIMO

-Hitachi Zosen Corporation-

MARIMO achieves High-Rate and High-Performance filtration in advanced sewage treatment.



Features

- The filtration head loss during water treatment is very low.
- The filtration speed can be increased to over 1,000m/day (max. 1,500m/day) while reducing the system's size and footprint (approx. half of the conventional rapid sand filtration).
- This system achieves high-performance filtration through the highly efficient fiber filter media.

Overview (Technical principles, actions, etc.)

This system is the filtration equipment filled with fiber filter media and the filter-bed captures SS by down-flow filtration. The SS-removal rate is approximately equal to that of rapid sand filtration. The high porosity of the filter-bed makes it possible to increase filtration speed while reducing the system's size and footprint. The backwash should be done by air and washing water and the amount of wastewater is less than 2% of that of filtered water per cycle.

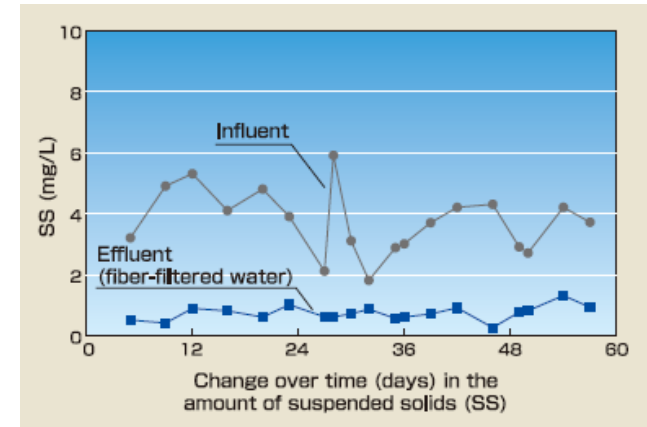
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Performance /specifications of technology / product

Items	MARIMO filtration system
Filtration speed	1000m/day
Hydraulic head loss	~1.0mH
Amount of SS captured	6kg-ss/m ³ -bed
Amount of wastewater	Less than 2% per cycle
SS (remaining in the treated water)	5mg/L or Less
SS removal rate	50~80%
Footprint	1/2 or 2/3 of that of rapid sand filtration
Maintenance cost	Roughly equivalent to that of rapid sand filtration



Usage examples / result

- MARIMO has been operated by many government and private organizations in Japan.
- MARIMO also installed in overseas including China, the Soviet Union, Malaysia, Indonesia and Philippines.

Applications: Advanced sewage treatment, Recycled water (on-site recycled water, water for landscaping, water for recreational use), Water for Industrial use ...etc.

