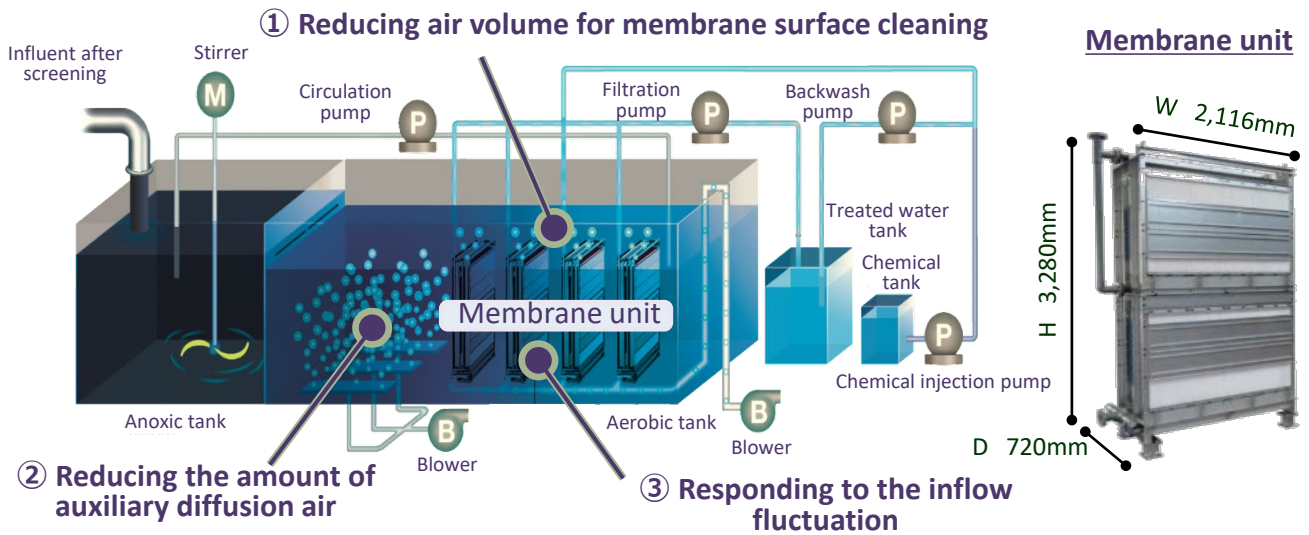


Energy-saving MBR System Using Ceramic Flat Membrane

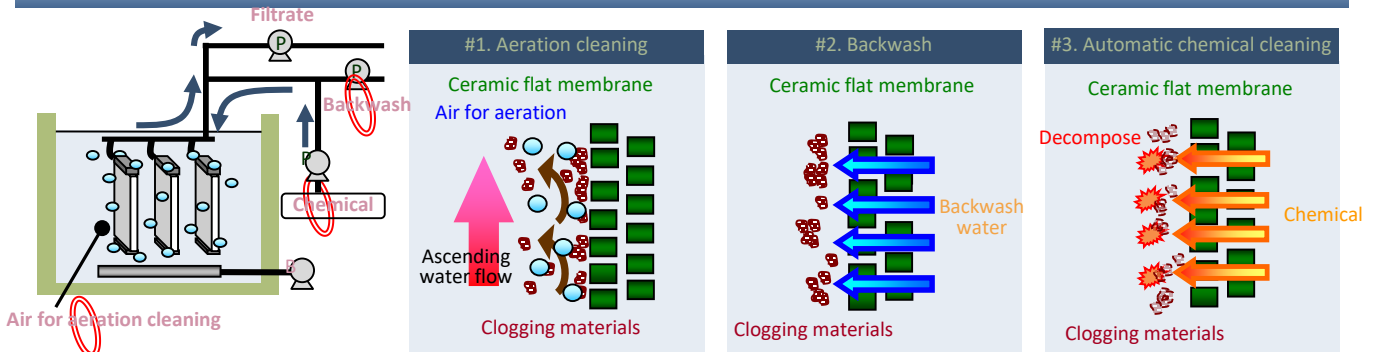
Developers: MEIDENSHA CORPORATION

Membrane cleaning with **alumina-based inorganic membranes, ceramic flat membranes**, and optimization of operations to achieve **energy savings** by reducing aeration volume and **dealing with inflow fluctuations**

Flow diagram of energy-saving MBR



Various cleaning techniques



Needs

- Energy saving
- Responding to temporary inflow increases due to rainfall, etc.

Benefits

- Combining various cleaning techniques reduces aeration rate for cleaning
- Optimized operating conditions of MLSS and DO control reduce auxiliary diffused air rate
- Temporary raising of the flux can respond to inflow fluctuations