

Overview of A-JUMP

A-JUMP (Advance of Japan Ultimate Membrane Bioreactor Technology Project)

The government-initiated project to demonstrate the validity of MBR to an actual system with model municipalities. (FY2009 ~ 2010)

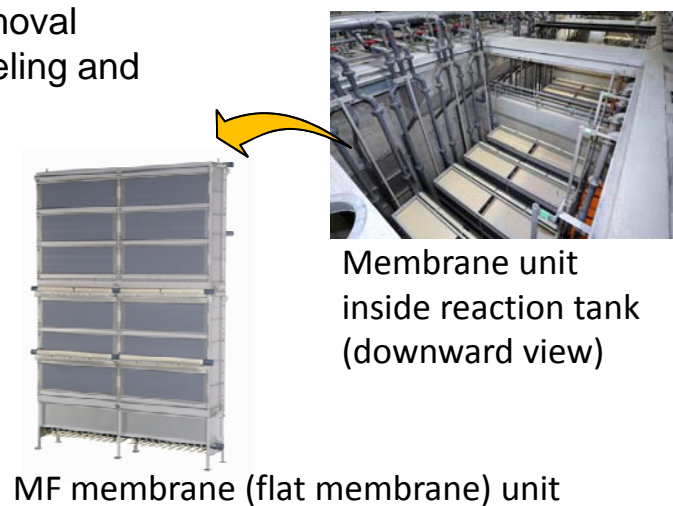
Model cases① : renovated MBR demonstration project

- Immersed MBR combined with biological phosphorous removal
- Demonstration of the applicability of MBR based on remodeling and utilization of existing facilities
- Review efficiency based on use of air-lift pumps, etc.



- Advanced treatment using existing facilities is possible, without having to expand facilities
- Significant reduction of power consumption is possible

- Treatment capacity: 5,000 m³/day
- Treatment method: Anaerobic-Anoxic-Oxic MBR



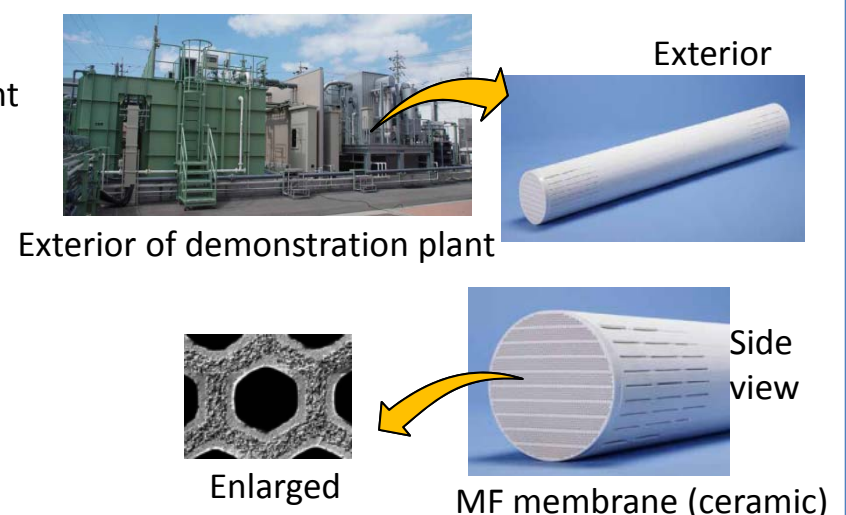
Model cases② : satellite MBR demonstration project

- MBR using ceramic MF membrane
- Demonstration of applicability of MBR in satellite treatment systems.
- Review operating efficiency such as of the establishment of high permeation flux that makes use of the characteristics of ceramic



- Possible to ensure favorable treatment water quality that is adapted to reuse
- Stable treatment even at pump locations, etc. is possible

- Treatment capacity: 360 m³/day
- Treatment method: Circulating nitrification-denitrification MBR



Satellite treatment system: It incorporates an intermediate treatment facility that intakes sewage from sewage pipes before they reach the sewage treatment plant to facilitate reclaimed water use in distant areas.



Results of A-JUMP are published as “Guidelines for Introducing Membrane Treatment Technology into Sewerage [2nd edition]”