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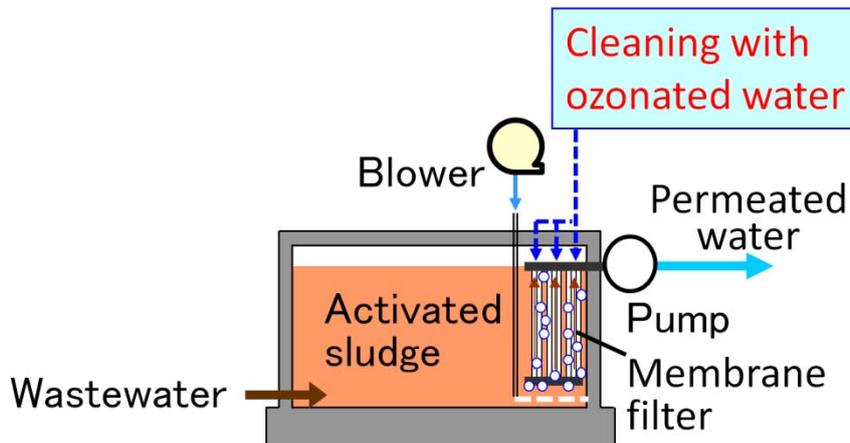
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Mitsubishi Electric Develops Compact, Energy-saving Membrane Bioreactor that Uses Ozonated Water to Clean Membrane Filter

TOKYO, March 8, 2016 – [Mitsubishi Electric Corporation](http://www.mitsubishielectric.com) (TOKYO: 6503) announced today that it has developed a compact membrane bioreactor (Eco-MBR) that recycles municipal and industrial wastewater with low-energy consumption and dramatically increases the quantity of permeated water per membrane filter surface area (flux) by cleaning the filter with ozonated water. Commercial use in municipal and industrial wastewater reuse systems is envisioned in 2018.



Schematic diagram of Eco-MBR

The Eco-MBR achieves a high flux of 1.6 m³/m²/day and cuts the required number of membrane filters by intermittently cleaning the filters with ozonated water to efficiently remove organic substances for increased permeability. The Eco-MBR also features a compact footprint and reduces energy consumption by lowering the air flow rate that the blower uses to clean the membrane surface with bubbles.

In the conventional activated-sludge process, treated water is separated from activated sludge by sedimentation, which requires a large surface area and produces water quality not suitable for reuse. In the case of conventional MBRs, a sodium hypochlorite solution is commonly used to clean the membrane filtration, but oxidation power is relatively weak so high flux is not possible. Also, the process requires a large number of membrane filters.

Mitsubishi Electric will continue working toward commercial application of its Eco-MBR in municipal and industrial water-reuse systems, aiming at playing an important role in the effort to achieve water sustainability worldwide.

Mitsubishi Electric is jointly developing the Eco-MBR with professor Hiroshi Nagaoka of Tokyo City University's Faculty of Engineering.

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About Mitsubishi Electric Corporation

With over 90 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Embracing the spirit of its corporate statement, Changes for the Better, and its environmental statement, Eco Changes, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 4,323.0 billion yen (US\$ 36.0 billion*) in the fiscal year ended March 31, 2015. For more information visit:

<http://www.MitsubishiElectric.com>

*At an exchange rate of 120 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2015