



Water, Wastewater Treatment and Water Reuse Using Membrane

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Descriptions of Research Topics

- Water treatment using membrane (MF, UF, NF, RO)
- Wastewater treatment (sewage, facility wastewater)
- Water reuse using membrane (UF/RO)
- Membrane distillation
- Membrane degassing
- Membrane process and fouling control

Applications:

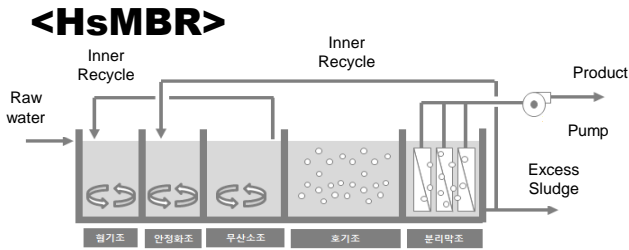
- Water and wastewater treatment
- Water reuse (from WWTP to industry)
- Energy efficiency of membrane process
- Membrane process optimization



Research Fields 1 water and wastewater treatment 2 water reuse

Keywords Membrane, Water reuse, Energy efficiency, process optimization, fouling control, Membrane process, Distillation, Membrane degassing

1. MBR using submerged membrane for wastewater treatment



<Yongin-RESPIA>



<Busan-Sooyoung>



<Busan-Southern>



<Hanam>

2. Advanced water treatment by NF and Package system

- MF and NF treated water blending for reducing hardness and harmful substances
- Recycling of brine for maximizing recovery
- Package system for drinking water of decentralized region



<Samcheok-NF>



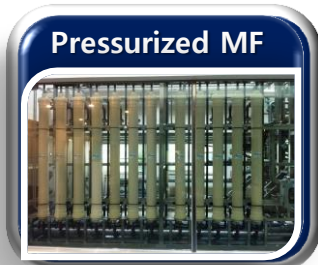
<Yeongwol-NF>



<Cambodia Package>



<Ghana Package>



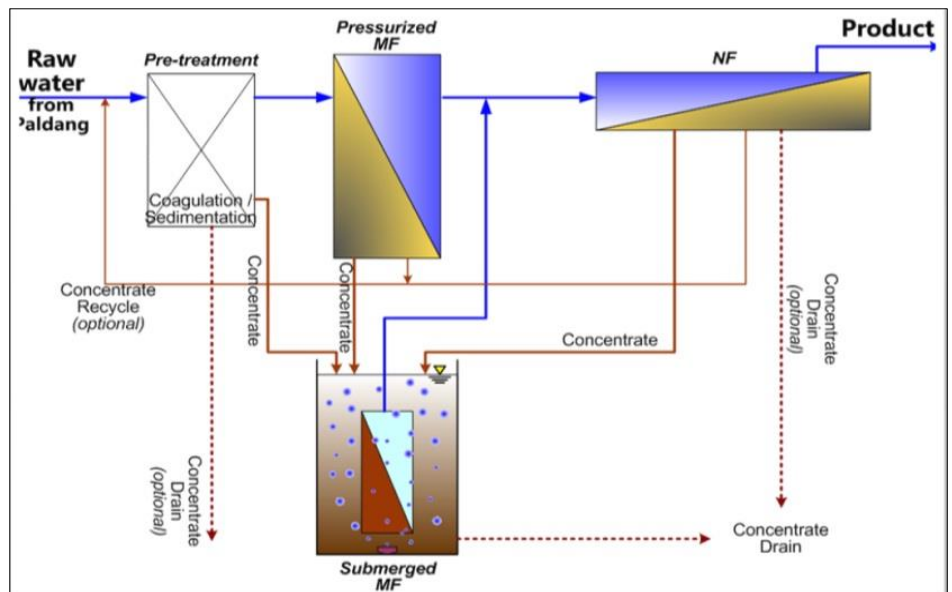
Pressurized MF



NF

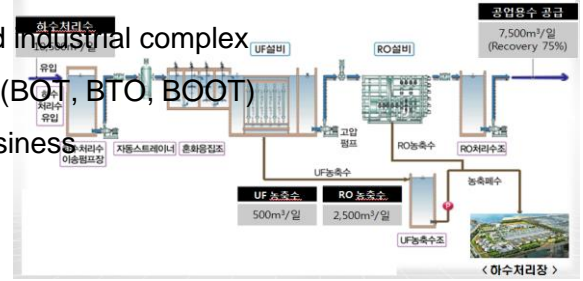



Submerged MF



3. Water Reuse Business

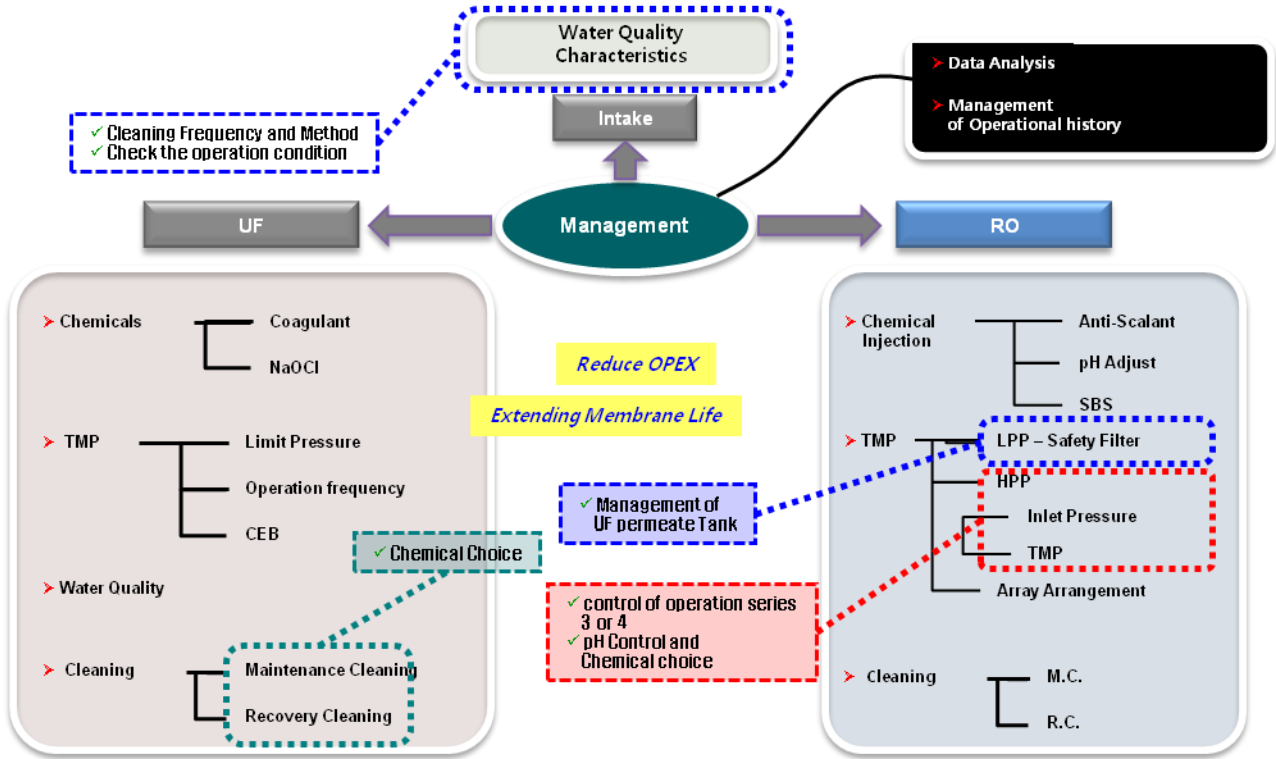
- UF/RO process for sewage treatment plant effluent
- Supply of treated water by UF and RO to industrial and industrial complex
- Business development with private investment project (BOT, BTO, BOOT)
- Private investment project and reuse facility supply business



Facility	Gajwa Reuse Center	Pocheon Reuse Center
Location	Incheon	Pocheon
Capacity	7,500 T/D	22,000 T/D
Supply to	D-steel manufacturing	Jangja Industrial Park
Duration	15year + α	20year
		



4. Membrane Process Efficiency



5. Membrane Degassing

