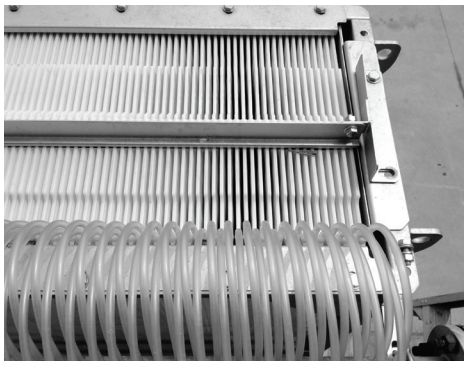
A FLEXIBLE APPROACH TO WASTEWATER TREATMENT

THE RIGHT TECHNOLOGY TO MEET YOUR NEEDS

At H_2O Innovation, we provide a flexible approach to wastewater treatment that allows us to customize our systems to meet your needs. Whether the priority is to minimize energy use, achieve superior effluent quality, minimize footprint or cost, our toolbox for wastewater treatment has the perfect solution. Large or small, with concrete or steel tanks, site assembled or transportable, we will work with you to find the right approach to meet your needs.



BIO-WHEEL™

The Bio-Wheel™ is a technology that utilizes rotating IFAS technology allowing the minimization of energy required for activated sludge aeration. Air is trapped within the Bio-Wheel™ and released within the Bioreactor, eliminating head-loss through aeration piping and diffusers as well as the noise associated with blowers. The Bio-Wheel™ surface area is used for the development of fixed-film bacteria that enhance nutrient removal and increase the average SRT of the system. The biofilm is exposed to environmental air as the wheel turns further enhancing oxygen transfer to the biomass.

MEMBRANE BIOREACTOR (MBR)

Membrane Bioreactors provide superior effluent quality that can meet the most strigent effluent criteria in North America through the use of a conventional activated sludge process combined with membrane filtration for solids separation. The membrane filters have tiny pores eliminating solids in the effluent and providing superior treatment. The high mixed-liquor suspended solids in our MBR allows for minimized plant footprint and sludge production rates.

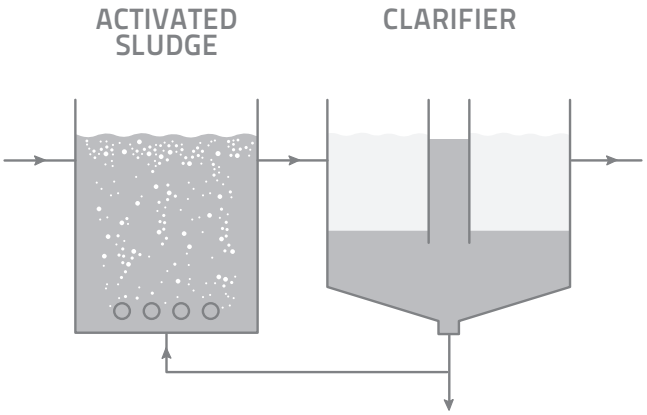
BIO-BRANE™

The Bio-Brane™ system includes a Bio-Wheel™ to provide aeration for the activated sludge process and also employs membrane filters for solids separation. This approach to wastewater treatment provides a reduction of energy for oxygen supply and superior effluent quality – the best of both worlds.

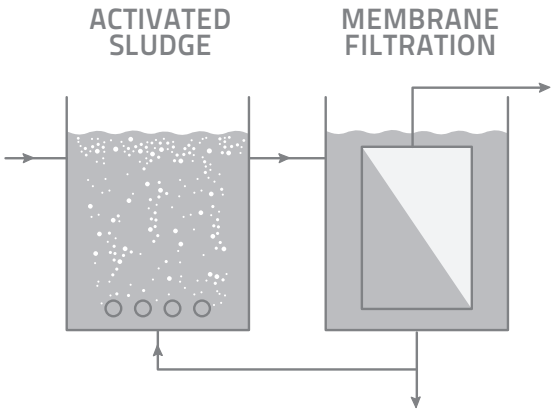
TOOLS IN THE TOOLBOX

MINIMIZED **ENERGY CONSUMPTION**

CONVENTIONAL APPROACH



MEMBRANE BIOREACTOR

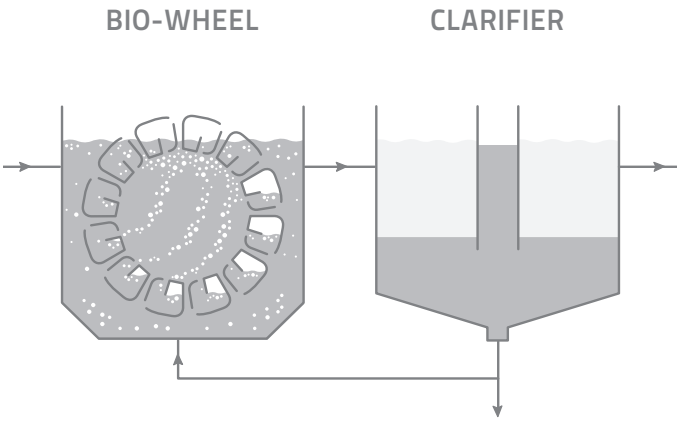


ADVANTAGES

- Superior effluent quality
- Minimized plant footprint
- Minimized sludge production
- Enhanced nutrient removal

SUPERIOR **EFFLUENT QUALITY**

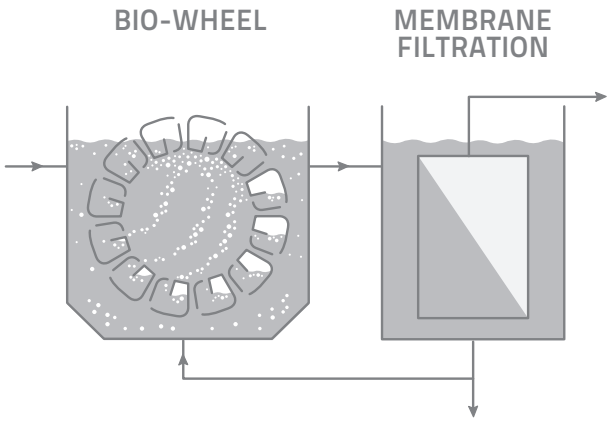
BIO-WHEEL™



ADVANTAGES

- Enhanced nutrient removal
- Resistance to shock loads
- Reduced sludge production
- Low cost

BIO-BRANE™



ADVANTAGES

- Superior effluent quality
- Reduced sludge production
- Enhanced nutrient removal
- Reduced plant footprint