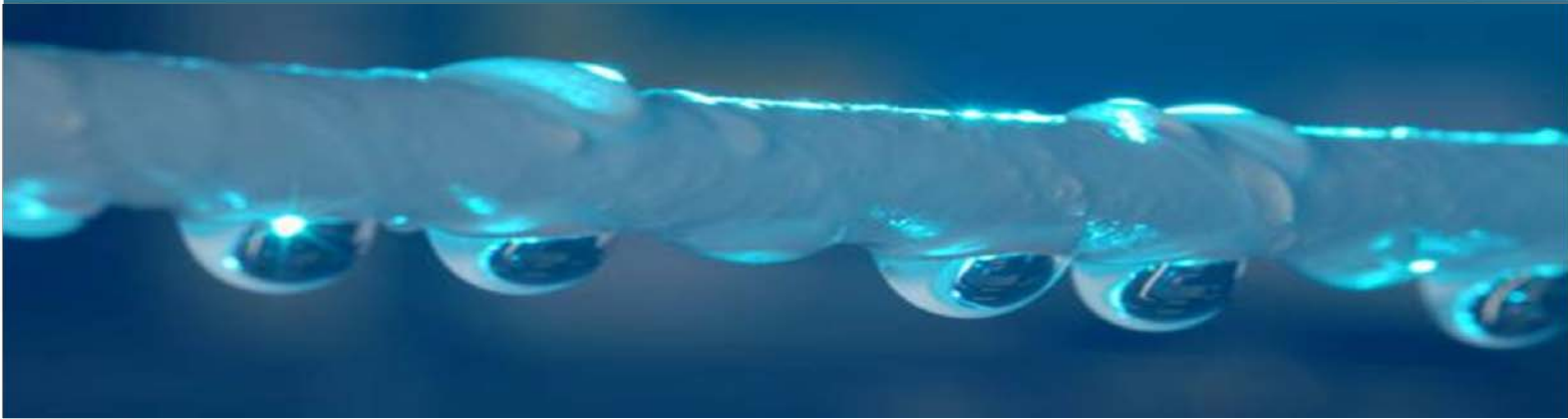


BioPULSE™ Airlift External MBR Systems



6D bioPULSE™ Membrane Skid

The BioPULSE™ Airlift External MBR systems are highly efficient and compact membrane systems that can be applied to both existing and “new build” biological treatment systems. Within each vertically mounted tubular membrane module, the wastewater is air-lifted through the modules via a dedicated air diffuser that is integral to each membrane in order to maximize the flux potential of the membrane process. Due to the high velocity air lift, the membranes are continuously air scoured to sustain higher flux values for extended periods of time minimizing “clean-in-place” (CIP) chemical cleaning processes. As a result, the Airlift MBR flux is nearly twice that of “in basin” MBR membrane technologies. The TMP requirements for the BioPULSE™ Airlift is “ultra-low” resulting in lower energy consumption, attractive life cycle costs, and low “OPEX” operational expenses.

- **Compact System Footprint**
- **Ultra Low Energy Consumption**
- **Low Chemical Consumption**
- **Sustained High Membrane Flux**
- **Easily Maintained Membrane Process**
- **Simple Civil Works – Flat concrete slab**
- **Operator Friendly**

BioPULSE™ Airlift Membrane Skid	SI Units	US Units
Skid Dimensions (l x w x h)	1.6m x 1.6m x 4.6m	5.25ft x 5.25ft x 15ft
Nominal Surface Area	198 m ²	2,130 ft ²
Membrane Pore Size	0.03 microns	
Nominal flux	45 – 65 lmh	25 – 40 gsf/d
Trans membrane Pressure (TMP)	0.05 – 0.3 bar	0.75 – 4.4 psig
Nominal Power Consumption	0.25- 0.35 kWh/m ³	0.95 -1.30 kWh/1000 gal
Materials of Construction	PVDF housed in PVC casings	



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