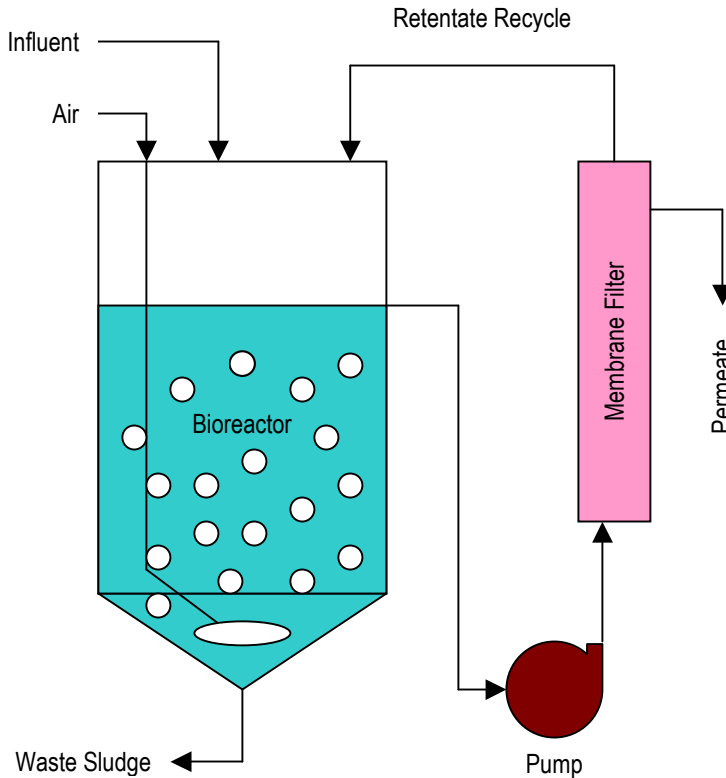


BENCHTOP MEMBRANE BIOREACTOR



A membrane bioreactor (MBR) is the combination of a membrane process like microfiltration or ultrafiltration with a suspended growth activated sludge bioreactor, & is widely used for wastewater treatment.

Modular design, retrofitting flexibility, small footprint, ease of operation, & high effluent quality are typical benefits of MBR technology.

Benchtop MBR's can be used to study wastewater treatment from different sources such as pharmaceuticals, tannery, food, chemicals, municipal, etc.

Models based on experimental results can be developed for these processes.

Treatment of non-Newtonian wastes, BOD & COD removal, nutrient removal, zero discharge, fouling characteristics, & economic aspects can also be studied, among other things.

Salient features :-

1. 10 litre bench mounted bioreactor in rugged stainless steel SS304 construction
2. Bioreactor supplied complete with feed pump, silicon tubing, air compressor, & temperature control system with heater
3. Influent level in bioreactor maintained by an automatic level control device
4. Membrane system supplied complete with variable speed peristaltic feed pump, membrane module, & pressure gauges
5. Various membrane module configurations can be supplied, such as hollow fibre, spiral wound or flat sheet, with a wide range of media to suit the process application
6. Membrane porosities available in microfiltration or ultrafiltration range
7. User friendly; easy to dismantle, clean & reassemble within minutes, without any tools
8. Designed for safe operations for long process cycles with repeatable results
9. Mounted on a sturdy base suitable for tabletop mounting
10. Designed for ease of scale up of laboratory scale experimental results to larger scale
11. Built-in heating device provided for studying effect of enhanced temperature conditions
12. Gas exit port provided for sampling the exhaust gases for subsequent analysis
13. Works on 220 Volts single phase power supply, power consumption 500 W (max.)