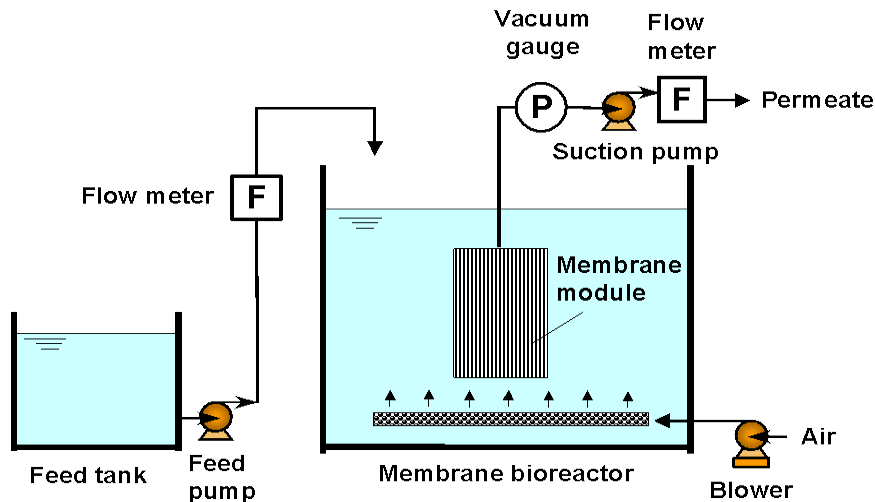


# ADVANCED BIO-TREATMENT

## MEMBRANE BIOREACTOR (MBR)



### Introduction

**Membrane bioreactor (MBR)** is a biological system coupled with a membrane to enhance solid-liquid separation and biological reaction. The membrane of MBR is made of cost-effective non-woven fibrous materials. It has many outstanding properties such as controllable pore size and easy fabrication of the membrane module for desired surface area. The MBR can achieve desired permeation rate at low transmembrane pressure.

### Applications

- Industrial wastewater treatment
- Municipal wastewater treatment
- Reuse and recycling of treated effluent



▲ MBR treating wastewater from glass fiber manufacturing plant

### Features

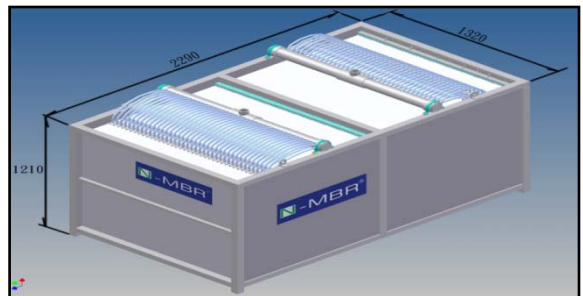
- Controllable pore size distribution
- Easy fabrication of the membrane module
- High specific permeate flux at low transmembrane pressure

### Benefits

- Stable operation and superior effluent quality
- Easy retrofitting of existing plants
- Easy process control
- Small footprint
- Less sludge production

### Patents

- US 6,808,628, US 6,982,037, US 7,288,197
- CN ZL01144422.3, CN ZL02146630.0,
- TW I284120, TW 207296, TW I284119



▲ MBR Membrane module made of non-woven fibrous materials