

## HOLLOWBRANE MEMBRANE TECHNOLOGIES

**Your Membrane Science and Technology Partner** 

# MEMBRANE BIOREACTOR



Membrane Bioreactor (MBR) membrane with Polyvinylidene Fluoride (PVDF) Polyethylene Terephthalate (PET) Reinforced Membranes for Sewage Treatment (STP) and Effluent Treatment (ETP)

#### **About Us**

Founded in 2021, Hollowbrane Membrane Technologies (HMT) is a manufacturer of Reinforced polyvinylidene fluoride (R-PVDF) and Polymeric Ultrafiltration membranes. HMT has been developing high accuracy membrane filters for Sewage Water Treatment (STP) and Effluent Treatment Applications (ETP). HMT offers MBR membranes and Ultra/Microfiltration membranes with polyvinylidene fluoride (R-PVDF) and Polyether sulfone (PES) and Poly sulfone (PSU) respectively. HMT also design and manufacturer of customized MBR/ MF/UF/NF/ RO membrane filtration machines as per customer's requirement.



HMT has a sound professional management and well experienced team for Membrane production, Design, Process and project execution. We are continuously making effort on research and development on product innovation and process development. We have international renowned consultant with our professional team in our product development process. We are closely working with our customers and OEMs to give professional technical service & support, process evaluation, installation and commissioning.

We are wholeheartedly waiting to join with you and esteemed water and wastewater professional team to alleviate pollution problem of rapid industrialization. As is known MBR and other membrane separation process has great potential market in water and wastewater treatment, pharma, diary, chemical, oil, gas and petroleum industries. Your effort will take new level of business, we are with you to provide our best support, service and technical solutions.

#### **Membrane Bioreactor**

Hollowbrane is an India's first indigenous manufacturer of reinforced hollow fiber membranes for membrane bioreactor. We also provide MBR membrane elements, membrane module with SS frame Skid and compact membrane bioreactor. Our compact MBR system sizes are 5KLD, 10KLD, 25 KLD 50KLD and 100KLD. We also customize the sizes of the plant as per your requirement and site specific.

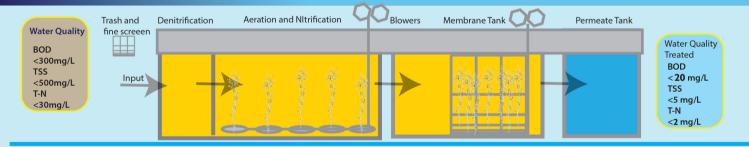
HMT uses Nonsolvent-induced phase separation (NIPS) technology for manufacturing the reinforced PVDF membranes. The membranes are developed using highest quality polymers & chemicals under continuous supervision of well experienced scientific and production team. Periodic R&D is being carried out for every batch of production to optimize the membrane performance. Our R&D team continuously working for further develop of membranes. Our MBR modules specification are given below and also, we provide customised products as per customer needs. Our standard membrane element dimension and features are summarised below.

10 and 15 Sq.m
710*38*1300 &
710*38*1730
0.03 to 0.1 micron
0.04 MPa
0.1 MPa
8 Minute
2 Minute
6000 to 12000 ppm





#### **Cofiguration and Specification of MBR Unit**



#### **Applications**

- Urban, hotel and residential wastewater treatment
- \* Food, slaughter, brewery wastewater treatment
- Fermentation, Chemical, printing, dying petrochemical WW treatment
- Municipal, landfills, composite leachate treatment
- **Existing STP transformation and upgradation**



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#### **Hollow fiber and Membrane Housing properties**

Model	HMT-MBR-1300	HMT-MBR-1730	
<b>Element Size</b>	710*38*1300	710*38*1730	
Connection	Ф12.7mm	Ф12.7mm	
<b>Element parameter</b>			
<b>Effective Membrane Area</b>	10m <sup>2</sup>	15m <sup>2</sup>	
Pore Size	0.03 -0.1μm		
Material	PVDF coating with	PET braid and ABS housing	
Filtration Mode	Negative Pressure		
Hollow fiber ID/OD	0.8/2.0mm		
Designed Flux	10 to 32 LMH		
Operating conditions			
<b>Operation Pressure range</b>	0.02 to	0.05MPa	
<b>Max backwash Pressure</b>	0.1MPa		
Temperature	10-45° (	C	
Run pH	5-9		
Clean pH	2-10		
Aeration rate(Nm³)/Projec	ted Area 100-150	Om/h	
Performance			
Prodcued Water Turbidity	ty Turbidity < 1.0 NTU SS < 5 mg/L SDI < 4		
Wroking Life	≥ 5Year under no	ormal usage	

### **linternational Support TEAM**

Dr Mansour Alhoshan, KSU, Riyadh Saudi Arabia

Dr Fu, BlueOcean Memtech, Singapore

Mr Khalid Alkhuraimi, Consultant, Saudi Arabia

Mr Abdulrahman Alyahyan, Consultant, Saudi Arabia

Dr Alberto Figoli, ITM CNR, Italy

Dr Fauzi Bin Ismail, UTM, Malaysia

Mr Riu, Membrane Manufacturer, China

**Dr David Sindall, Next-ChemX Corporation, USA** 

We are wholeheartedly waiting to join with you and esteemed water and wastewater professional team. Please Contact Us

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