



MBR20 Series

Membrane Bioreactor(MBR) Module

Description

MBR20 Series reinforced PVDF Membrane Bioreactor(MBR) Module is made of modified PVDF material and polyester interlayer support net, which has good water permeability, mechanical properties, chemical resistance and anti-pollution ability, and the filtration rating is 0.1 micron. PVDF MBR membrane module is installed with a hollow fiber ultrafiltration membrane with ID 1.0mm and OD 2.2mm. The filtration method of reinforced PVDF MBR membrane is external pressure, the raw water is driven by the pressure difference and penetrates through the hollow fiber from the outside to the inside in the radial direction. Species such as bacteria, colloids, suspended solids and microorganisms are trapped in the MRB membrane tank.



Feature

- PVDF MBR membrane is stable operation & continuous membrane
- Membrane filaments of PVDF MBR module are long and neatly arranged
- PVDF membrane bioreactor is high throughput and high pollution resistance
- Reinforced PVDF MBR is High strength, no peeling, high pressure pulse backwash
- Using modified PVDF & polyester interlayer support net to reinforce high-strength structure
- PVDF MBR membrane is Permanently hydrophilic, good stain resistance, can be stored in dry membrane

Application

- Water reuse
- RO pretreatment
- Waste penetrant treatment
- Domestic sewage treatment
- Municipal sewage treatment
- Industrial wastewater treatment
- Seawater desalination pretreatment

Specification

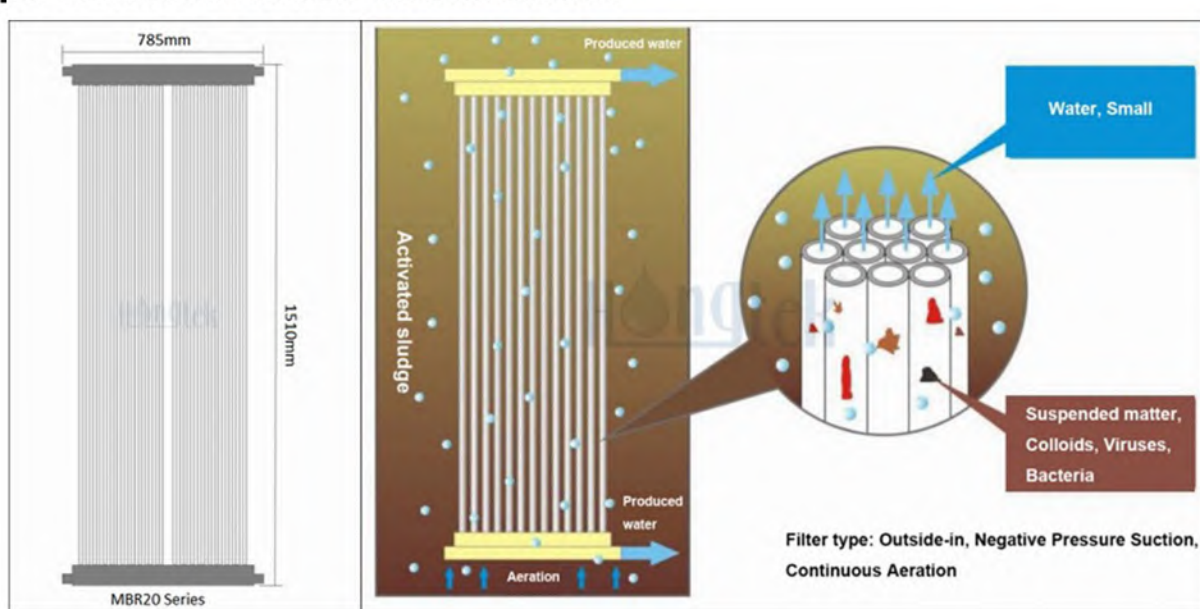
Module	MBR20
Element size	785x40x1510mm
Membrane material	Reinforced Modified PVDF
Filter type	Outside-in, Negative Pressure Suction, Continuous Aeration
Active membrane area	20m ²
ID/OD of hollow fiber	1.0mm/2.2mm
MWCO	200000 Dalton
Filtration rating	0.1 micron
Sealing material	Epoxy Resins + Polyurethane (PU)
Material of housing	ABS
Connector Size	DN20
Ultrafiltrate turbidity	≤1NTU
Ultrafiltrate SDI	≤3
Ultrafiltrate TSS	≤1mg/L



Performance

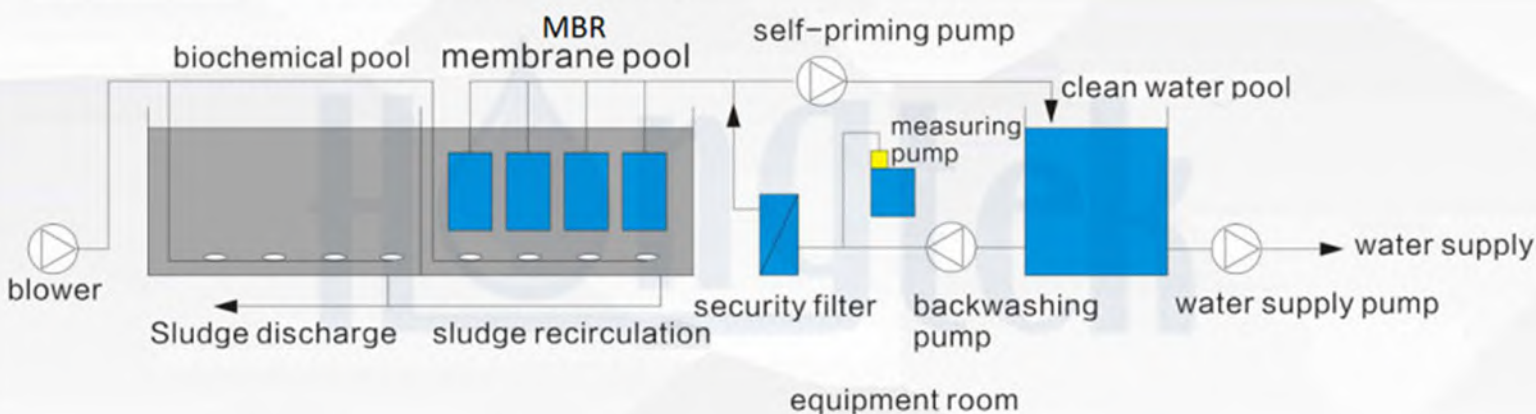
Design Flux	Pure Water Flow	600L/m ² .h
	Operating Flux	10-25L/m ² .h
	Backwashing flux	30-60L/m ² .h
Aeration Rate	Frame Projected Area Aeration Rate	50-100 m ² /m ² .h
Feed Condition	Sludge Concentration	<10000mg/L
	PH	5-9 (Washing 2-12)
	Temperature	5-45 °C
Operating Pressure	Transmembrane Pressure	≤ 50 KPa
	Backwashing Pressure	≤ 0.1MPa
	Maximum Operating Pressure	Negative 50KPa
	Suggested Operating Pressure	Negative 10KPa to -30KPa
Cleaning Frequency	Backwashing Frequency	2-4h
	Chemical Enhanced Backwash(CEB)	When TMP reaches 50kpa (every 2-4days)
	Clean In Place(CIP)	When flux can not be recovered by backwashing & CEB(every 6-12 months)
Operating Mode	8min. Operation & 2min. Pause or 9min. Operation & 1min. Pause	

Work principle of reinforced PVDF MBR membrane



Tech Support

PVDF MBR Membrane Module Processing



Project Case of MBR20 Membrane Bioreactor PVDF MBR Module



Pharmaceutical wastewater treatment(3000m³/d)

Process: Pharmaceutical Wastewater-Biochemical Treatment-MBR membrane module-Discharge Compliance

Equipment parameters: MBR20 MBR Membrane Module, 40pcs/group, 12 groups, 480pcs in total, design operating flux 15L/m².h

Hongtek Filtration Co., Ltd.

Tel: +86-752-2203959, Fax: +86-752-2203820

Web: www.hongtekfiltration.com, Email: sales@hongtekfiltration.com

Address: T21 Creative Industrial Park, No.21, Yunshan East Rd, Jiangbei, Huizhou, Guangdong, China

