

Flat Sheet Ceramic Membrane

The flat ceramic membrane is a new type of high temperature plate porous ceramic membrane, which is prepared by high temperature sintering process using inorganic materials such as alumina. Compared with the organic film, ceramic flat membrane has the advantages of good chemical stability, good reliability, long service life and strong anti-pollution ability.

ADVANTAGES OF FLAT CERAMIC MEMBRANE

- Long life and no degradation
- Strong resistance to acid, alkali and to organic solvent; Suitable for all kinds of wastewater containing solvents and chemicals
- Strong hydrophilic and better anti- pollution property
- Better Mechanical properties, no broken wires phenomenon of hollow fiber membrane
- Easy to wash lower cleaning frequency, suitable for all kinds of membrane cleaning methods
- Low operating cost and energy saving

FLAT CERAMIC MEMBRANE SPECIFICATION

Length (mm)	500-1100
Width (mm)	110, 150, 250
Thickness (mm)	3, 6
Area (m ²)	0.5
Membrane material	Al ₂ O ₃ , ZrO ₂ , TiO ₂
Pore diameter (μm)	0.1
Pure water flux (m ³ /m ² .h)	0.5-1.0
pH	0-14
Breaking strength (MPa)	≥40

FCM APPLICATION AREA

- Membrane Bioreactor (MBR)
- Industrial wastewater treatment (e.g. paper mill wastewater treatment)
- Seawater desalination pretreatment
- Municipal wastewater treatment
- Domestic sewage treatment
- Hospital wastewater treatment
- Landfill leachate treatment
- Pretreatment of RO system

SPECIFICATION AND PARAMETERS OF FLAT MEMBRANE MODULE

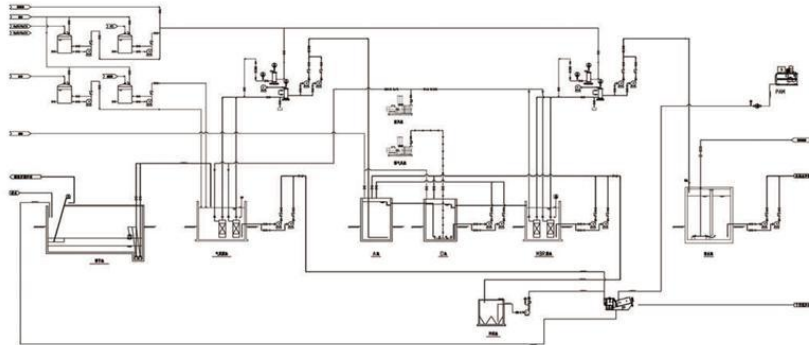
Model	2.5 m ² flat membrane module	5 m ² flat membrane module	50 m ² flat membrane module	100 m ² flat membrane module
Size (L*W*H) mm	460*400*900	750*560*170	1700*302*1790	1740*790*1700
Number	10	46	100	200
Specification	250*6*500	110*3*510	250*6*1000	250*6*1000
Weight (kg)	26	32	800	1100
Frame material	SUS304			
Aeration tube material	PVC			
Collection pipe	PPR & DN32	PPR & DN32	PPR & DN50	PPR & DN50
Filtering method	Negative pressure suction			
Operation pH	2-12			
Operation temperature	≤ 60℃			

CASE OF FLAT CERAMIC MEMBRANE

Case 1: Sewage treatment in Industrial park

Project: 1000 t/d

Process



Project

Membrane area 2600 m², Membrane size: 250*6*1046mm, Membrane material: Al₂O₃, Membrane pore size: 100nm



Case 2: Wastewater treatment in food industry

Project: 200 t/d

Project location: Guangdong

Inlet water:

High oil content, SS, heavy metal ion, COD and BOD, nitrogen, phosphorus

Project

Membrane area 300 m², Membrane size: 250*6*1046mm, Membrane material: Al₂O₃, Membrane pore size: 100nm

