

Flat Sheet Ceramic Membrane

THE AFFORDABLE FILTRATION SOLUTION





SUBMERGED MODULE



PRESSURIZED MODULE

CERAFLO PTE LTD

Advantages of Ceramic Membrane

Energy saving & Small footprint

- Flat sheet structure with optional air back-flush to facilitate more effective cleaning
- Ceramic Membrane Bioreactor requires low volume of scrubbing air thereby reducing energy consumption
- High hydrophilicity means low energy consumption
- Higher-flux results in less than half the footprint compared to that of flat-sheet polymeric membranes

High reliability & Long Life Span

High mechanical strength, resilient to strong chemicals and high temperatures



Superb physical properties

- Robust against all kinds of industrial wastewater containing solvent, oil and/or other chemicals
- High dirt tolerance
- Suitable for separation of hard solids from water
- Pre-treatment system for preventing damage to membrane generally not needed

Easy maintenance

- Simple backwash and on-line cleaning removes the need for daily maintenance
- Membrane surface can be easily cleaned by air scouring or water jet
- Both pressurized and open tank systems available
- Simple system design



Ceramic Membrane Modules

Conventional design that leverages on existing investments in tank housing

Specifications	Model	C\$46	C\$36	
	No of Ceramic Membranes	46 sheets	36 sheets	
	Filtration	Out-In filtration		
	Material	Ceramic – Alumina, Housing – ABS Plastic		
	Pore size (µm)	0.5		
	Membrane surface area (m²)	5	4	
	Flux rate* (LMH)	City water : 200 - 400 River water : 100 - 200	Waste water : 50 - 100 MBR : 30 - 50	
	Operating pressure (bar)	- 0.1 to - 0.5		
	Operating pH, Temperature (°C)	2 to 12, 80		
	Dimensions (mm)	560 x 360 x 143	560 x 360 x 143	
	Dry Weight (kg)	20	18	

^{*}These values have been obtained from verification tests subject to the condition of Influent





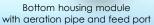
Revolutionary tank-less design

- Reduction of physical footprint from elimination of buffer space within water tank
- Full access to ceramic modules at all times
- Continual operations during cleaning, maintenance and replacement of modules except for affected column

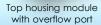
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	Dimensions (mm)	600 x 428 x 145	600 x 428 x 145	
	Dry Weight (kg)	23	21	

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Pilot Plant Single Stacked System



Pilot Plant Dual Stacked System



Pilot Plant Bio-Membrane Trickling filter System[^] Patent pending



About Us

Ceraflo Pte Ltd is a Singapore-based company that has joined the ranks of only a handful of ceramic membrane manufacturers worldwide.

We are the first Asian country outside Japan to manufacture multi-channel flat sheet ceramic membranes in commercial quantities.

We deliver affordable water and wastewater treatment solutions that offer highly flexible configurations and scalability:

- To increase customer's profitability and reduce operating costs.
- To develop new systems for use in harsh and challenging environments.
- To provide safe and low cost drinking water solutions to rural communities.





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