

# Supratec<sup>®</sup>

## Membrane Bio-Reactor

### Innovation & Top-quality MBR product

H series MBR membrane systems utilize our braid supported proprietary polyvinylidene fluoride (PVDF) hollow fiber ultrafiltration membrane with a nominal pore size of 0.03  $\mu\text{m}$ . This product is made of strong and durable braided hollow fibers without any breakage (>600N) and high peeling strength.

Through high porosity and narrow pore distribution fiber, optimum structure and patented siphon aerator design, H series MBR have higher flux, lower fouling rate, longer life time and optimizes the efficiency of air scour which reduce air to permeate ratio (SADp) as low as 3:1 in MBR application. H series MBR provide widely application and excellent performance to save the cost.



**+50%**  
Higher flux  
(30+LMH flux in municipal wastewater)

**-50%**  
Aeration energy consumption

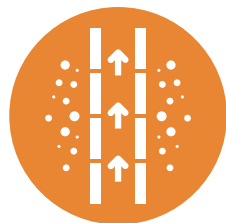
**+50%**  
Longer life time



A leading membrane  
for the future

#### Key Features

- **Longer Service Life**
  - Supported membrane with reinforced braid, unbreakable
  - Double-layer potting process by European standard
  - Robot automatic wire arrangement technology
- **Cost Saving**
  - Smaller footprint
  - Higher packing density
- **Simple Installation and Maintenance**
  - Integrated modular design
  - Less downtime, easy to clean and lower frequency cleaning
  - Less Chemicals, 12-18 months recovery cleaning
- **Higher Quality Production**
  - Reinforced PVDF hollow fiber
  - Pore size of fiber is 0.03 $\mu\text{m}$
  - Higher removal rate of bacteria and viruses
- **Higher Flux**
  - Uniform pore size and high porosity
  - Pure water flux up to 3000LMH/bar (20°C)



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## Specifications

Module	Module Type	Supratec HA1006	Supratec HA1512 (Single Row/Double Row)	Supratec HA2024s
	Materials	Proprietary PVDF	Proprietary PVDF	Proprietary PVDF
	Effective Area (m <sup>2</sup> )	276	876	2452
	Nominal Pore Size (μm)	0.03	0.03	0.03
	Fiber ID/OD (mm)	1.3/2.3	1.3/2.3	1.3/2.3
Dimensions	Nominal Dimension(mm L*W*H)	1142*895*1990	2175*895*2440 1142*1775*2440	2175*1775*3030
	Permeate Mainfold Size	DN 100	DN 100	DN 150
	Air Manifold Size	DN 100	DN 100	DN 100
Materials	Permeate Mainfold	UPVC	UPVC	UPVC
	Air Manifold	UPVC	UPVC	UPVC
	Portting	Polyurethane	Polyurethane	Polyurethane
Operation Conditions				
Operation Parameters	Temperature range(°C)	1-40	1-40	1-40
	pH Range (Continuous)	2-10.5	2-10.5	2-10.5
	Max.NaClO (ppm)	4000	4000	4000
	Flow Rate (L/m <sup>2</sup> ·h)	10-60	10-60	10-60
	Air Demand (m <sup>3</sup> /h)	40.0-80.0	80.0-160.0	160.0-320.0
	CIP pH Range	2-11	2-11	2-11
	Max. TMP (kPa)	-60	-60	-60

## Innovation Applications



### ● Municipal Wastewater:

New sewage plant, water reuse plant, advanced retrofit and capacity expansion for conventional.

### ● Municipal Drinking Water:

New drinking plant, water quality improvement, advanced retrofit and capacity expansion for conventional.

### ● Industrial Wastewater:

Diverse and variable influent quality is always a topic for industrial wastewater, so more robust and tolerance absorbed membrane like H series is a good opportunity to keep your plant safer.

### ● Landfill Leachate/Pharmaceutical:

Well-known for its biodegradable difficulty and Harsh environment, H series membrane can still serve this application in a smooth way.