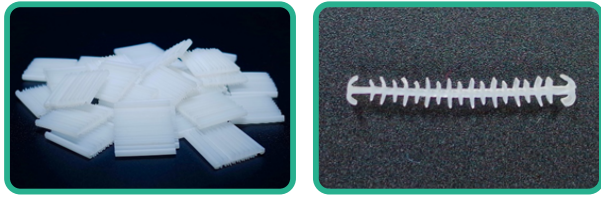






SBEF-C4 Carrier

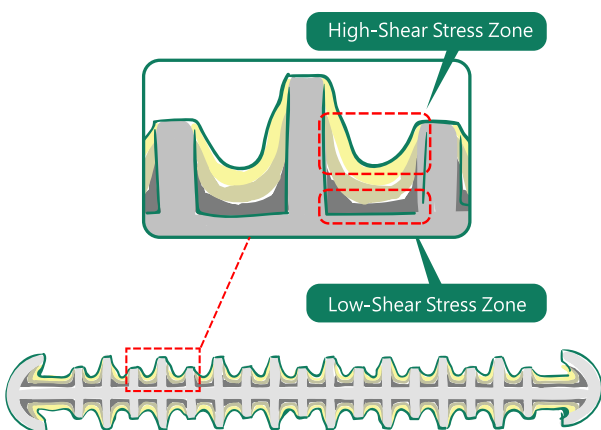


 SBEF-C4 has an effective specific surface area of $800\text{m}^2/\text{m}^3$, which is 1.6 times that of the international common carrier.

 SBEF-C4 has a unique geometric structure with a surface divided into a high-shear stress zone and a low-shear stress zone. The thickness of biofilm is stable, and the biofilm attaches fast.

 This carrier can be used under high organic load and low aeration intensity without causing any clogging.

 Many biological carriers on the market have patent infringement concerns. Since C4 is a SBEF patented product, our clients can use it confidently without worrying about patent infringement.

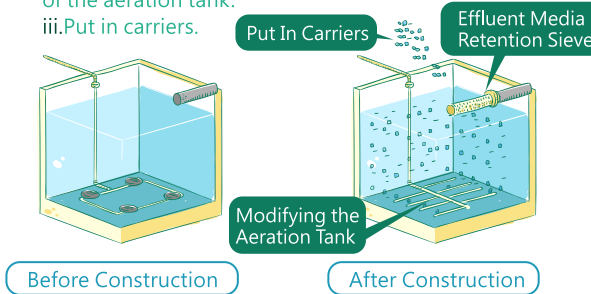


MBBR's (Moving Bed Biofilm Reactor) Advantages in Wastewater Treatment



It takes only 4 to 30 working days to upgrade the activated sludge process to the MBBR processing system, and the process is divided into three steps :

- i. Replace the aeration system in the aeration tank.
- ii. Add an effluent media retention sieve to the outlet of the aeration tank.
- iii. Put in carriers.



The volumetric BOD loading of the MBBR reaction tank is about 1.7~5 times that of the activated sludge process, which can significantly reduce the required volume of the biological treatment reaction tank.



In the demands of low contaminants concentration and high flow (e.g. river water treatment or aquaculture recirculating water treatment), MBBR has an absolute cost advantage over MBR or the activated sludge process.



MBBR can achieve low sludge yield and prevent sludge bulking during low-load operation.



The biofilm system is more resistant to the influent fluctuations and inhibitory substances in the water, and thus it has a more stable outflow water quality.



The system is easy to operate and control. It is friendly to operators by saving time and effort on sludge management.



In the A/O process, the aerobic autotrophic nitrifying bacteria can be continuously attached to the biological carriers in the aerobic tank, and their activity will not be affected by the aerobic/anoxic environmental changes in the A/O cycle.

SIMPLE BUT EFFECTIVE

SBEF Moving Bed Biofilm Reactor

MBBR Treatment Technology - The Best Option for Upgrading the Wastewater Biological Treatment System

Over the years dealing with numerous cases in wastewater engineering, SBEF has helped our clients solve many engineering problems, including the expansion of the wastewater biological treatment system. The reasons for its expansion are listed as follows :



The expansion of factory, which thereby increases not only the factory' s capacity but also the volume of wastewater.



The changes in the process, which also changes the characteristics of raw materials and wastewater.



The increasingly strict wastewater discharge regulations, which makes some of the current effluent quality indicators difficult to meet the new effluent standards.



To increase wastewater reclamation in line with government policies.

When planning the expansion of wastewater biological treatment system in the past, we often encountered some problems that affected the client' s schedule of production line and even caused the engineering project to be cancelled halfway, which wasted a lot of time for both factory clients and engineering companies. The most frequent problems that we encountered include :



Insufficient space for construction.



Insufficient project budget.



The construction schedule failed to keep up with the factory' s expansion plan.

If you or your clients have the need to expand the wastewater biological treatment system, and you have concerns about the space, budget and construction period, then we sincerely recommend you the world' s most suitable treatment technology for improving the existing biological treatment system - MBBR.



Company Profile

SBEF, named from the idea of 「Simple But Effective」 has determined to provide clients with a simpler but more efficient wastewater treatment system that allows them to operate more easily and safely. Our core members are professional teams with years of experience in the whole process of the wastewater treatment system, including design, plan drawing, construction, and test running. We have extensive experience in the design planning and construction regarding organic, ammonia nitrogen, sawing and grinding, fluorine, arsenic, and heavy metal wastewater.

SBEF currently owns two invention patents for MBBR, one is for MBBR carriers, and the other one is for the MBBR application in recirculating aquaculture. MBBR is an innovative water treatment technology with high efficiency and space-saving capabilities, and it has been widely applied to dealing with industrial organic wastewater, domestic sewage, ammonia-nitrogen wastewater, and recirculating aquaculture system in the whole world. SBEF' s goal is to positively develop MBBR, making this technology with enormous potential to be more mature and reliable in the future. If you are interested, please contact us, and we will offer detailed consultation for you. Cooperation proposals from industry peers are also sincerely welcomed.

In addition, SBEF is more than willing to share years of experience and expertise in water treatment, hoping to achieve better communication and trust, as well as to create a win-win situation by reducing the information asymmetry between professional teams and customers.



Wastewater Treatment System Design &
Construction

MBBR Carriers Supply

TEL : +886-422030332

E-Mail : sbef.tw@gmail.com

Add : 2F., NO.143, YUDE RD., NORTH DIST., TAICHUNG CITY 40442, TAIWAN(R.O.C.)

www.sbef.com.tw