

Octopus™ by ENTEX Technologies

Diffused Aeration System



Octopus System Benefits

- All stainless-steel construction for long service life
- High efficiency fine bubble diffusers
- Up to 48 fine bubble diffusers per Octopus
- Induces large airlift mixing cells
- Wet installation into existing basins
- System designed to be operational while single units are shut down for service
- Ideal for lagoons, tanks, SBRs, extended aeration basins, activated sludge, and aquaculture

Octopus is a floating, surface-maintainable aeration system that offers fine or coarse bubble diffusion along with the use of a stainless-steel floats. The system requires no electrical connections in the water.

Client-preferred and application specific diffusers are mounted on the bottom of each of the system's stainless steel legs—offering a total of eight drop legs, each with multiple diffusers. Leg lengths are custom manufactured to reach the lowest possible point in your basin to maximize bubble contact and subsequent OTE.

Air is supplied from a blower located on the shore, and each unit can be valved from an on-shore manifold to keep the remainder of the system in service for diffuser access to a single unit. The manifold system is engineered to maintain a constant pressure throughout the system. Each Octopus is secured with stainless fittings to the tank sides or a stainless mooring station.



Octopus is a flexible floating fine bubble diffuser system

The depth can be set for any level, optimizing oxygen transfer

Each leg can utilize tube or disc type diffusers

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Octopus by ENTEX Technologies, continued

Cost-effective Synergies

Octopus supplements ENTEX's portfolio:

1) For projects that require supplemental aeration along with Webitat or BioBloc, Entex now offers a comprehensive solution of attached growth and aeration.

2) We can also provide an offering for lagoons and other basins that need aeration but not additional biomass.

3) Octopus adds air for industrial facilities that require more aeration, but cannot shut down operations in order to modify floor mounted aeration.

Easy maintenance

Diffusers are easily maintained. Simply shut off the air to the Octopus unit to be serviced, remove each leg as required, and service the diffusers. This process takes no more than five minutes per leg. You do not have to shut down the whole system to service an Octopus unit.

Addresses common concerns

Each unit sets up large mixing cells, eliminates aerosol concerns associated with high speed floating aerators and is well suited for cold weather operation and basin heat retention.

Oxygen transfer efficiency

Oxygen transfer efficiencies are mainly determined by the size of the bubble that is diffused into wastewater and the depth of air discharged (amount of time the bubble remains in the water). The lower the depth and smaller the size of the bubbles, the greater the efficiency of oxygen transfer.

Energy-saving technology

Our Octopus systems are an excellent operator- and energy-friendly replacement for high speed floating aerators. With fine bubble diffusers, they take less than 1/2 the energy of high speed floating aerator. This directly translates into significant energy and maintenance savings for customers rapidly paying off the capital and installation costs.



Advanced Systems. Proven Solutions.

ENTEX engineers have been involved in hundreds of plant installations. We'd like to be involved in yours.

