



AQUA-AEROBIC SYSTEMS, INC.



OxyMix[®]

PURE OXYGEN MIXER

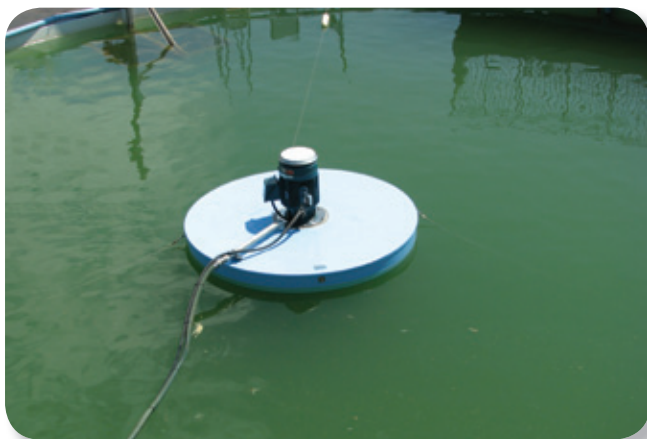
Since 1969, Aqua-Aerobic Systems, Inc. has led the industry in surface aeration and mixing with thousands of installed units throughout the world. For those wastewater applications that require an efficient means of introducing oxygen into a system, the OxyMix pure oxygen mixer is an economical solution compared to other pure oxygen devices.

Features and Advantages

- Single unit is capable of mixing up to a 105 foot (32 meter) diameter basin
- No blowers or diffusers required
- Single equipment item for both mixing and aeration needs
- Floating unit offers easy access and operates in varying water depths
- High oxygen transfer provides operational cost savings
- Independent aeration and mixing offers full oxygen control for process optimization
- Completely mixed conditions provide enhanced process control and mass transfer
- Minimal maintenance; no submerged couplings or bearings
- Installs in existing basins without dewatering
- 10 HP or 40 HP units available; standard Endura® Series high efficiency motor



OxyMix® Pure Oxygen Mixer in operation.



OxyMix® Pure Oxygen Mixer allows control of oxygen flow.

Typical Applications

- Supplement oxygen to existing air-based systems
- Retrofit existing air-based installations
- High strength industrial wastes
- Activated sludge systems with clarifiers
- Sequencing batch reactors
- Membrane bioreactors
- Aerobic digesters

Operation Description

The regenerative mixing pattern of the OxyMix pure oxygen mixer provides top-to-bottom mixing of the biomass and even distribution of oxygen (see illustration to the right). The proprietary gas injection device (GID) is designed to ensure oxygen is evenly distributed to the bulk liquid. The GID injects oxygen at multiple points below the unit's impeller where liquid velocities are highest. The downward liquid movement draws the oxygen down into the basin where it has the maximum residence time for efficient oxygen transfer.

