

# EDI BioMizer™ System

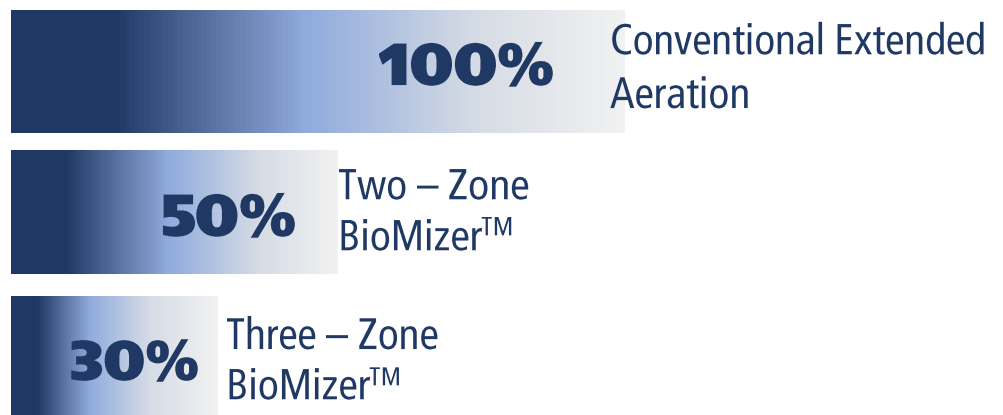
## Sequencing Mixing Solutions

sequenced  
aeration for  
maximum  
efficiency



- Reduce operating energy requirements up to 70% in mixing limited applications
- Enhance total nitrogen removal in nitrifying systems
- High degree of process flexibility with field adjustable mixing zones and sequencing
- User friendly PLC interface
- Low maintenance reliable electrical motor actuated valves
- Solves mixing limited aeration applications

### **Mixing Energy Requirements**

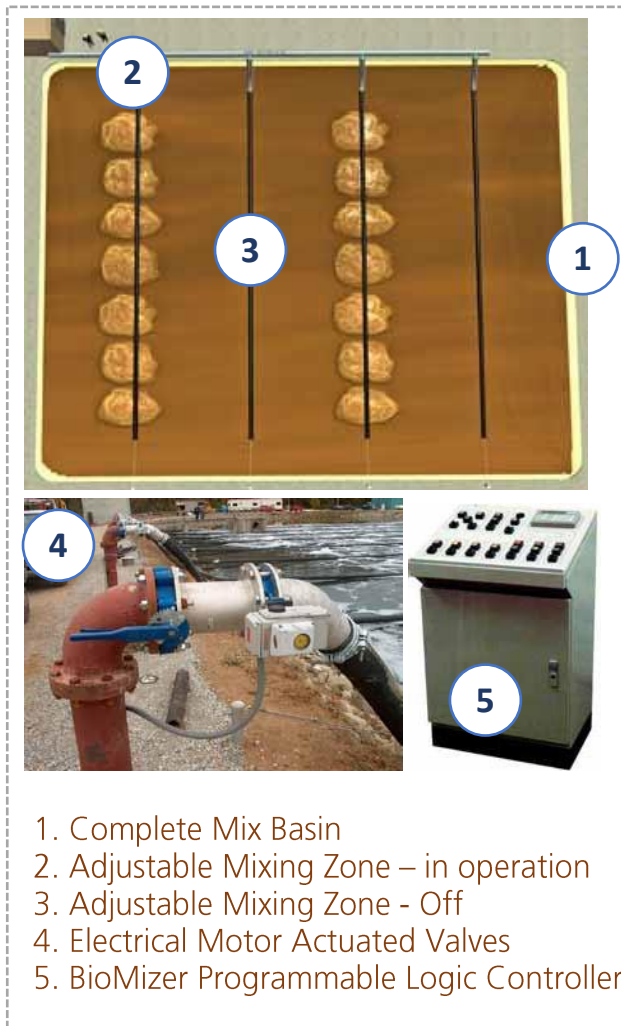


To learn more about the EDI BioMizer™ System, call or visit us online today.

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# EDI BioMizer™ System | Sequencing Mixing Solutions



Environmental Dynamics Inc. offers the patented BioMizer™ sequencing aeration system for optimum biological treatment system performance. Ideal applications for the BioMizer technology include the following applications:

- Extended aeration or other low f/m activated sludge systems
- Nitrification systems
- Denitrification systems
- Aerobic digesters
- Equalization basins
- Complete mix aerated lagoons

The BioMizer™ technology is an innovative concept emphasizing the use of high efficiency diffuser systems in a broad range of applications including mixing limited applications and nutrient reduction systems. Total system process control is achieved using a programmable BioMizer™ sequencing controller and multiple aeration zones within the system. Unlike conventional aeration systems that continuously aerate the entire reactor volume, the BioMizer system sequentially operates defined zones within the system. This allows the aeration and mixing intensity in the active zone to be adjusted to satisfy the specific requirements of process independent of the total air flow to the system for oxygenation.

By decoupling aeration and mixing, the system air requirement may now be based on oxygenation requirements only. For mixing limited applications including complete mix aerated lagoons and extended aeration activated sludge plants, the BioMizer system has the potential to reduce the overall operating energy requirement for the system by as much as 70%.

The BioMizer technology also has applications in nitrifying plants where supplemental control of nutrients is desired. Operating the system at a low dissolved oxygen condition in combination with sequential operation of aeration zones provides for full nitrification and substantial denitrification with no additional reactors or process equipment. Optimizing process conditions for denitrification provides benefits of alkalinity recovery and lower operating energy requirements in addition to effective nutrient removal.

BioMizer technology is one of many innovative aeration and biological treatment systems offered by EDI. For detailed information on how BioMizer can reduce operating cost or improve nutrient control in your WWTP, contact EDI or your local EDI representative.



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