Expanded

AEROMIX

AEROMIX

Product Line

Includes

All Major

Wastewater

Aeration

Technologies

TWISTER_{TM}

Low Speed Surface Aerator

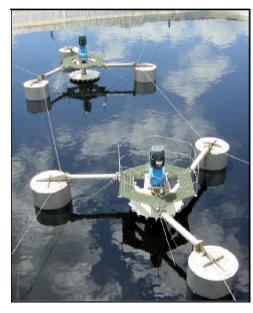
Highest Oxygen Transfer.

The proven TWISTER $^{\text{TM}}$ Low Speed Surface Aerator delivers unmatched oxygen transfer rates, quality and long lasting performance. Featuring a refined high-efficiency design, the TWISTER Aerator effectively stirs the basin while creating intense air-to-water mixing, resulting in the highest oxygen transfer rate available from mechanical aeration technology.

TWISTER Aerators are ideally suited for use with other aeration and mixing technologies. Models are available from 2 to 150 horsepower (1.5 to 110 kW) at 50 or 60 hertz. AEROMIX can recommend configurations best suited for your applications.

Typical TWISTER[™] *Low Speed Aerator on floats.*





Typical TWISTERTM Low Speed Aerator mooring.

Extensive Applications.

TWISTER[™] Low Speed Surface Aerators are ideal for oxygen transfer in a wide range of wastewater applications, including:

- * High Rate Aeration
- * Leachate Treatment
- * Supplemental Aeration
- * Sequencing Batch Reactors

Maximum Durability. Minimal Maintenance.

Ideal for wastewater treatment and supplemental aeration, the TWISTER Aerator provides unmatched durability. All shafts, couplings, gearboxes and support apparatus are oversized to reduce wear, vibration and long-term maintenance.

The FRP (fiberglass reinforced plastic) rotor is wear resistant. It is molded around a central steel frame and filled with closed cell foam for additional structural support. These materials ensure an exceptional resistance to corrosion and abrasion. In addition, the rotor floats! This eases installation and reduces the axial stress on the gearbox. The rotor's special shape is proven to throw off debris — keeping the system working in all conditions. The smooth edge design of each blade prevents ragging while maximizing oxygen transfer. Rotors are appropriately sized to convert the mechanical output of the gearbox into efficient mixing and aeration.



Motors are specifically designed for outdoor use in wet environments and can be supplied to meet any power requirement. Both motor and gearbox parts are available worldwide. As a safety measure, rotor guards, platforms, access ladders and handrails can be added.

Designed For High Oxygen Transfer.

Whether float or fixed mounted, the TWISTER Aerators partially submerged rotating turbine is turned at a slow speed (40 to 100 rpm) by an integral motor and gearbox. As the turbine rotates, specially designed veins create a strong pumping force. A column of water rises and is propelled, nearly horizontal, in a fine spray of small water droplets. A large surface area is created, making an ideal air-to-water interface which creates very high oxygen transfer.

Mechanical Reliability.

Proprietary engineering and meticulous construction specifications ensure that the TWISTER Aerator runs right from the beginning and keeps running without time-consuming maintenance.

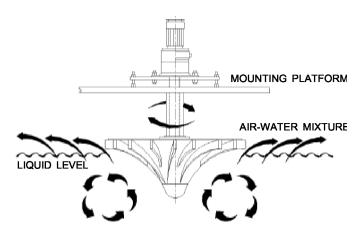
All bearings are ball or roller-type, and standard units are dip or splash lubricated — providing a constant flow of oil to all surfaces without the need for pumps or piping.

The gear reducer features double or triple reduction with a service factor of 2.0 or greater. The high efficiency gearbox lessens power consumption and provides for longer gear life.

A rotor-type coupling is attached to the upper end of the shaft and mates with the speed reducer output shaft coupling.

Available gear box convenience features include a sight glass to allow monitoring of oil level while the unit is operating and gasket covers to allow for inspection of gearing without disassembly of the speed reducer. In addition, factory testing for each TWISTER Low Speed Surface Aerator checks and rechecks that the equipment meets the AEROMIX stringent standards for quality.

TWISTER Aerator THEORY OF OPERATION



Mounting Flexibility.

The TWISTER Aerator offers flexibility to be configured as a floating or fixed mounted unit. Each float mounted aerator installs on a "three-pod" pontoon system. The stainless steel pontoons are filled with closed cell polymer foam, making a rugged long-life float system. With a flotation safety factor of 2, a 250 pound (114 kg) operator can safely step on the fully assembled float and aerator system to check equipment or perform routine maintenance.

Fixed mounted aerators include an adjustable mounting plate for each aerator. The mounting plate accepts 4 mounting rods, allowing for proper leveling and aerator height adjustment.

Aeration Knowledge. Wide Range Of Products.

AEROMIX is your aeration expert. We offer all major wastewater aeration technologies and the expertise to help you select and apply the equipment best suited for your application. Let our technical experts assist you in proper sizing, layout, and operation of your aeration system.



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