



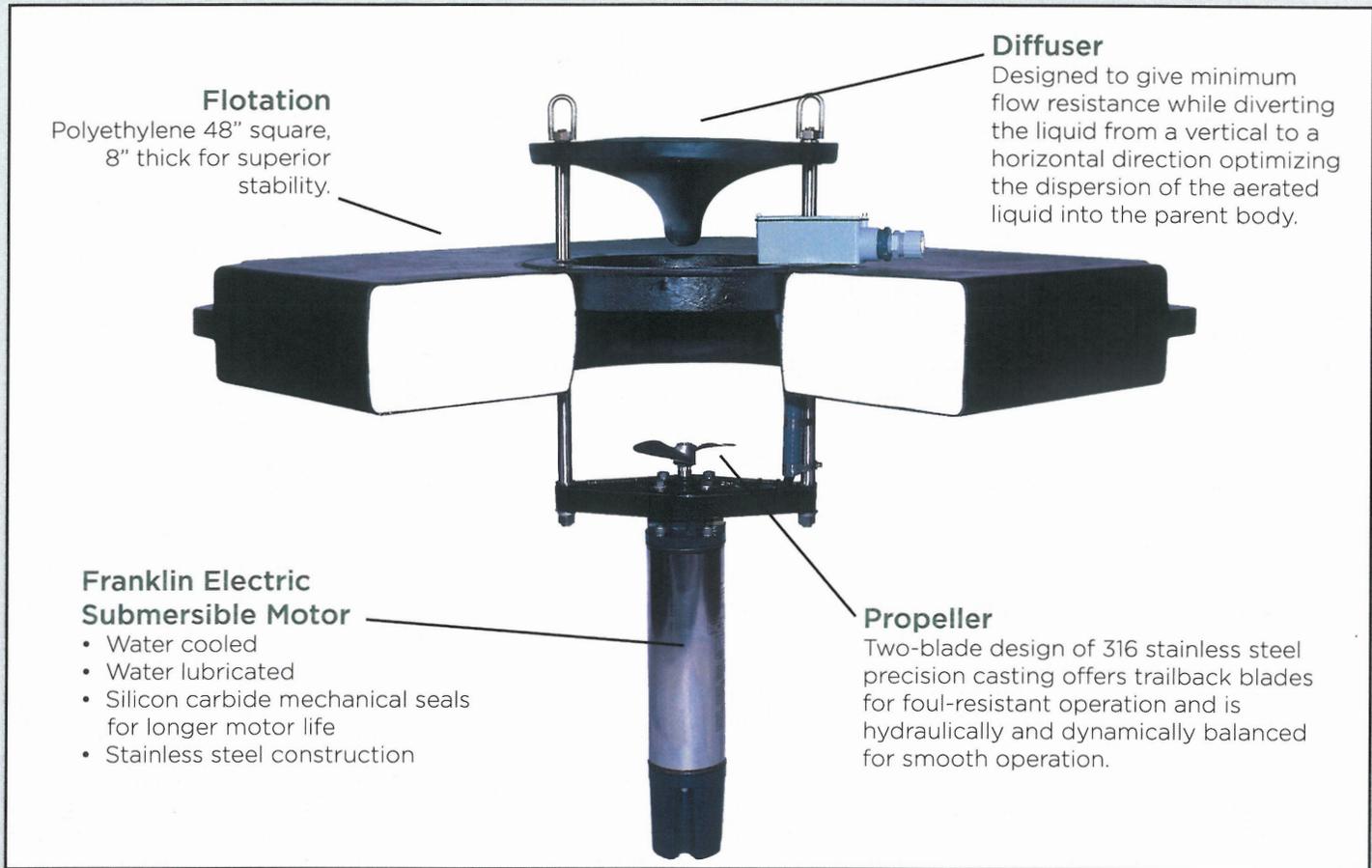
AQUARIAN[®]

QUANTUM



MECHANICAL FLOATING AERATORS 5 HP - 20 HP

QUANTUM AT A GLANCE

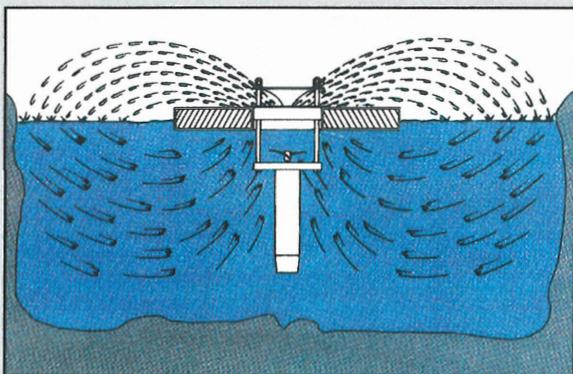


HOW IT WORKS

The **Quantum** was originally designed and engineered for the tough wastewater lagoon environment as a cost saving solution for municipalities both large and small. **Quantum** is also a formidable solution for industrial point source applications and the aquaculture farming industry. Additional uses are cattle, hog, and chicken, etc. retention applications.

The **Quantum** produces a large volume of water from 3400 gpm for a five horsepower unit up to 8300 gpm for a 20 horsepower unit. The **Quantum** diffuser redirects the water column from the propeller to an omni-directional pattern that is propelled at right angles to the water surface from the unit outward. As the redirected water flow from the diffuser is propelled through the air at a tremendous velocity, oxygen is being added at a substantial rate.

At the same time the water is being propelled through the atmosphere, evaporative cooling is occurring, which allows the water being pumped into the atmosphere to cool therefore permitting more attainable oxygen transfer rates. A sizeable induced flow creates maximum directional flow as well as maximum dispersion of aerated water in the basin being treated.



Quantum floating aerators are designed to perform two basic functions:

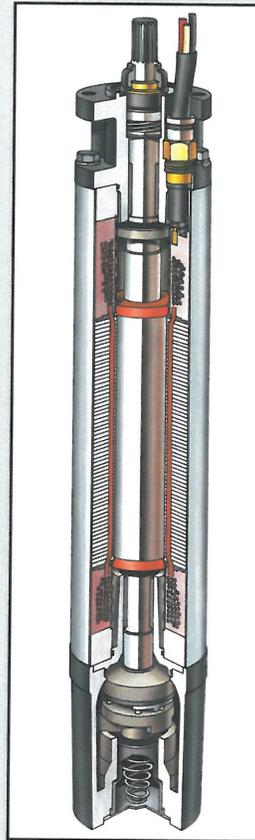
- Create a large continuous air/water interface to transfer atmospheric oxygen to the liquid being aerated.
- Mix the liquid contents and keep degradable solids in suspension.

ADVANTAGES

- Rugged, stainless steel Franklin Electric submersible motor, UL778 recognized, water cooled, water lubricated.
- Easy installation. The Quantum floating aerator is known for its ease of installation. No special tools or heavy equipment is necessary.
- Eco-friendly motor.
- Maintenance free operation. The Quantum floating aerator operates in its own inexhaustible lubrication and cooling environment and requires NO MAINTENANCE.
- Clog-resistant design. The Quantum propeller is not tightly enclosed in an intake volute. This prevents the possibility of jamming due to a solid foreign object becoming wedged between the propeller and the walls of an intake tube.



LOOK INSIDE



- Silicone carbide seal for longevity.
- Motor leads are flexible for easy handling.
- Removable water-block lead connector for easy replacement of damaged leads.
- Up-thrust bearing.
- Hermetically sealed stators with welded stainless steel liners and outer shell prevents fluid contact with windings.
- Grooved radial carbon bearings with material specifications selected for prefilled water lubrication.
- Kingsbury type thrust bearing is self aligning and carries thrust and rotor weight.

All-Season Performance

With over 95% of the weight of the aerator beneath the liquid surface, the **Quantum** is unconditionally guaranteed not to capsize due to ice or turbulence.

PERFORMANCE DATA

Model	HP	Volts	Oxygen Transfer LBS/HP/HR (MIN)	Pumping Rate (GPM)	Zone of Complete Oxygen Dispersion	Min. Oper. Depth
SA-50	5.0	230-V, 1-PH	3.0	3400	195'	39"
		230/460-V, 3-PH				
SA-750	7.5	230-V, 1-PH	3.0	3800	210'	42"
		230/460-V, 3-PH				
SA-100	10.0	230-V, 1-PH	3.0	5000	230'	43"
		230/460-V, 3-PH				
SA-150	15.0	230/460-V, 3-PH	3.0	6200	260'	46"
SA-200	20.0	230/460-V, 3-PH	3.0	8300	285'	50"

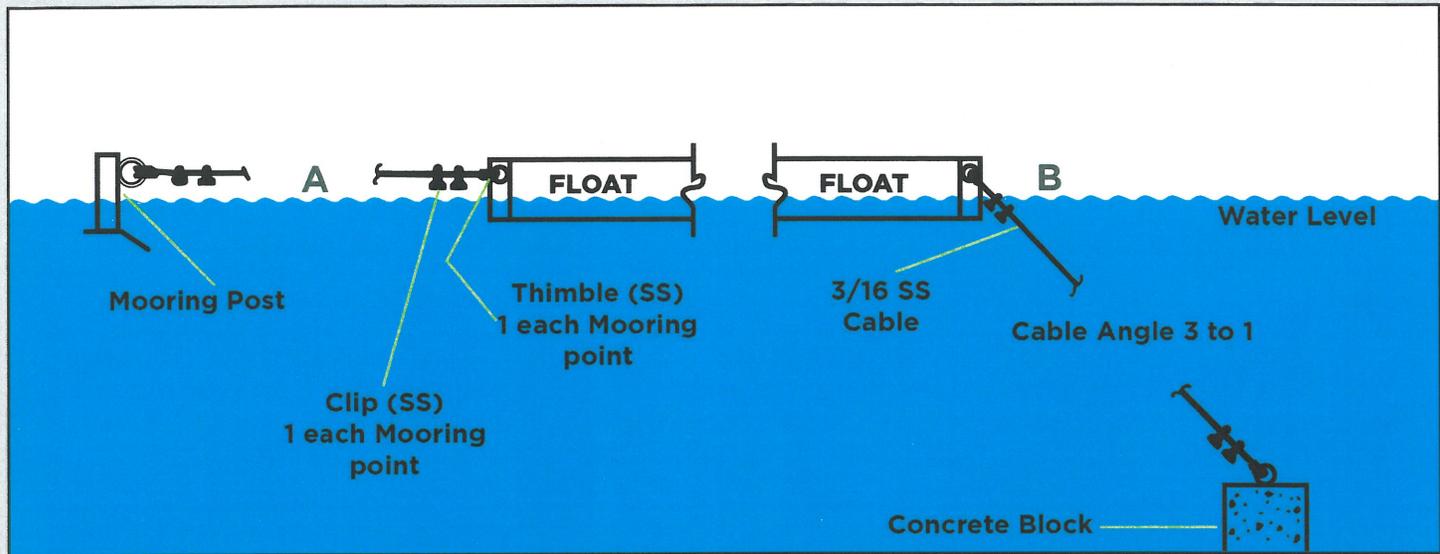
Oxygenation tests were conducted under controlled standardized conditions in clean municipal tap water on December 31, 1972.

Oxygen transfer rate was determined by industry standard.

The pumpage rates were achieved by actual tests and use of empirical data involving high speed screws.

All gallonage figures are US gallons.

TYPICAL SHORE MOORING OR ANCHOR MOORING



OPTIONAL ACCESSORIES

SUBMONITOR



With Franklin Electric's Submonitor, you can protect against adverse conditions such as:

- Under/overload
- Under/overvoltage
- Current unbalance
- False start (chattering)
- Overheated motor (subtrol-equipped)
- Phase reversal

ADDITIONAL OPTIONAL EQUIPMENT

3/16" SS Mooring cable and mooring hardware
SEOW Power cable (12 ga, 10 ga, & 8 ga)
NEMA3R Custom built control panels

ABOUT AIR-O-LATOR

For over 40 years, Air-O-Lator has been manufacturing De-Icers, Aerators, Fountains, Mixers, and Aspirators for water treatment. Our high performance and dependable products are engineered to improve water quality bringing about a healthy water eco-system along with aesthetic beautification.

Today, more than ever, in our environmentally challenged world, protecting and managing water (one of our most important natural resources) is our goal. The Air-O-Lator product line is designed to provide the most natural, energy efficient way to treat water quality problems while being easy to use and maintain. Each unit is made in the USA and constructed from the highest grade components.

Our products are backed by our outstanding customer service guarantee. When customers call, they speak to an experienced, knowledgeable, and personable employee who can answer questions or handle any product issues.

AIR-O-LATOR®

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