

# AERATION CIRCULATION 50 HZ

Water in AIR / AIR in Water

# EVOLVING AERATION

A CONSTANT EFFORT  
TO IMPROVE PERFORMANCE  
AND EFFICIENCY IN ALL  
OUR AERATION AND  
CIRCULATION SOLUTIONS

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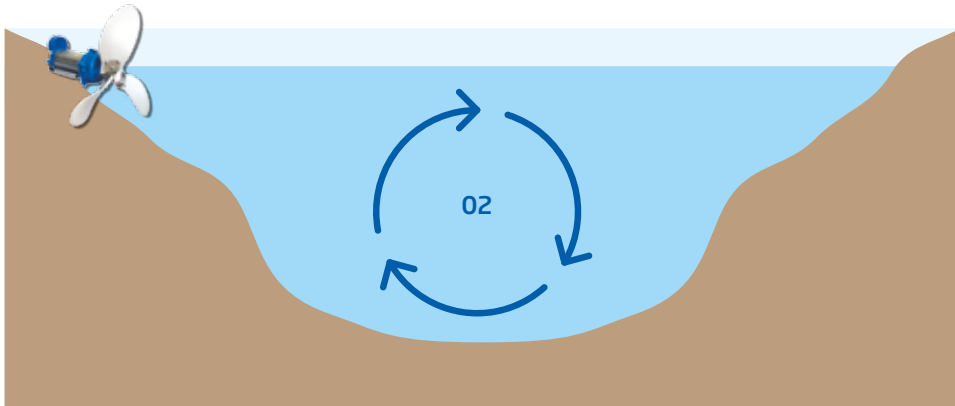
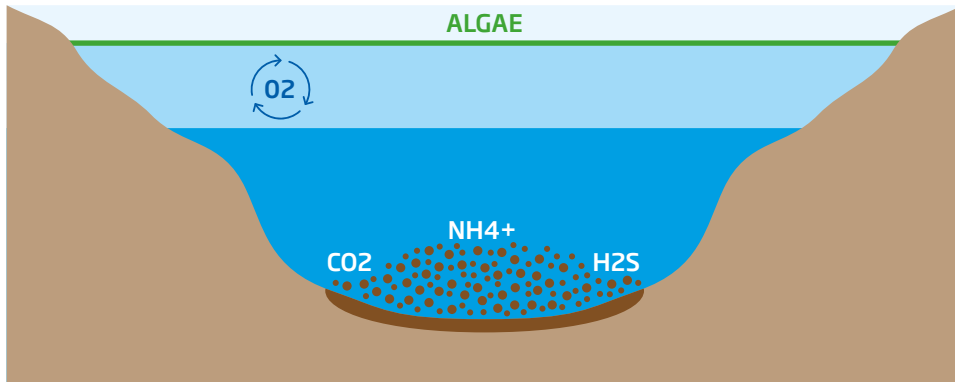
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# CIRCULATION



Homogenization of the water column is fundamental for the health of the aquatic ecosystems as it allows for proper concentration of nutrients, oxygen, and temperature is usually blocked or stratified in the first water layer depending on the particular shape of the reservoir.

Sometimes the natural effect of wind contributes to partial mixing of the upper water layers, but often this is not sufficient for complete homogenization. Circulators are required in these cases as they have a deeper, more effective and continuous action on the entire water column, especially for aquaculture activities. Good circulation can help avoid bottom sanitation operations, which results in money saving.

The circulator creates water currents that are oxygenated and naturally rich in nutrients, which enhances the growth and production of farmed species as well as quality and at the same time reduces the mortality of plankton.

Good circulation reactivates contaminated and unhealthy water, revitalizes the bottom soil and thus eliminates the risk of pollution and the formation of gases resulting from organic decomposition. Circulation is also a solution for limiting algal blooms without causing turbidity or erosion. The position and angle of the device can be adjusted so as to control the flow.



# BRIO



BRIO is a high flow cost-effective circulator and the featured motor is adjustable to the desired depth.

The flow may be oriented for better adaptation to the tank or basin shape.

With its strong mixing action BRIO ensures destratification and circulation in ponds or water basins up to 3.000 m<sup>2</sup>.

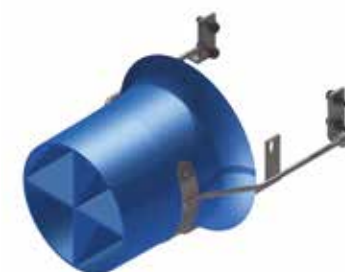
Equalization enables BRIO to distribute all the nutrients and oxygen over the entire volume of water.

BRIO is suitable for fresh and salt water applications.

## PLUS

- > High flow
- > Lightweight
- > Adjustable motor depth and orientation
- > Energy efficient
- > Fast speed motor available

## OPTIONAL CONVEYOR



## SUPPORTS



### FLOATING INSTALLATION

Light weight and easy to install, for standard aquaculture applications.



### STATIC INSTALLATION

Guiding pole system solution, easy to remove. Suitable for deep tank application.



### DOCK MOUNT INSTALLATION

Useful for lake de-icing, weed/algae removal and destratification.

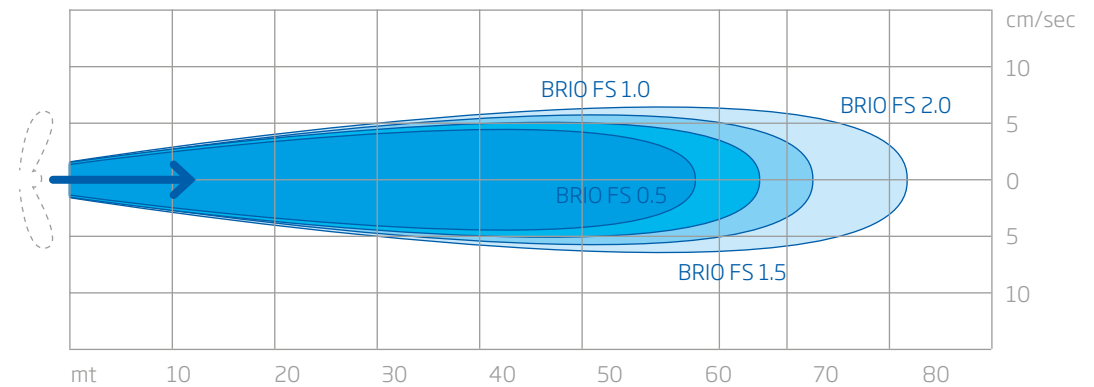
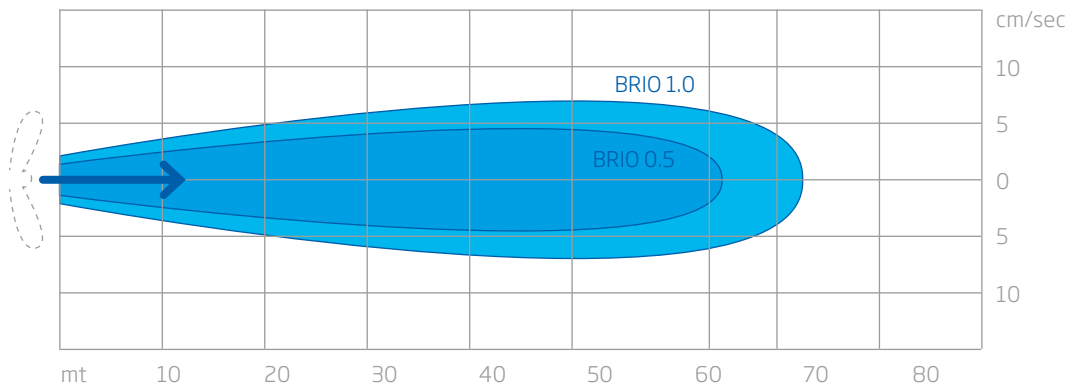
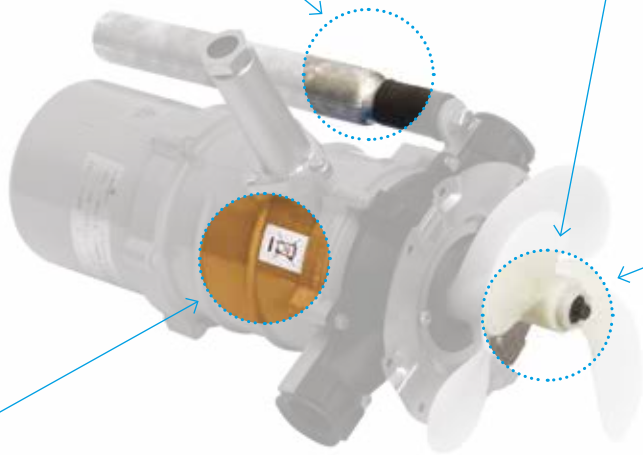
Customized solutions on request

SINGLE PHASE 230 V	THREE PHASE 400 V	NOM. POW. HP	NOM. POW. KW	AMPERAGE SINGLE PHASE	AMPERAGE THREE PHASE	R.P.M./1"	WEIGHT KG
BRIO 0,5 M BRIO 1 M	BRIO 0,5 T BRIO 1 T	0.55 1	0.37 0.75	3.2 4.5	1.3 2.0	1400 1400	16.5 17.5
BRIO FS 0,5 M BRIO FS 1 M BRIO FS 1,5 M BRIO FS P 2 M	BRIO FS 0,5 T BRIO FS 1 T BRIO FS 1,5 T BRIO FS P 2 T BRIO FS P 3 T	0.5 1 1.5 2 3	0.37 0.75 1.1 1.5 2.2	2.6 5.1 7.5 10.0	1.6 2.0 2.5 3.2 4.8	2800 2800 2800 2800 2800	15 16.5 16.5 20/17.5 20

Anode in Al-Zn to avoid motor corrosion in the most demanding environment

Propeller in light weight reinforced plastic, high mixing action from 600 to 1200m<sup>3</sup>/h

Motor body in marine brass suitable for seawater and resistant to galvanic currents





RIO is a compact and powerful circulator, with very high flow and minimum energy consumption.

The motor angle can be adjusted up or down by 15° so as to direct the water flow to the target.

RIO moves up to 3000 m<sup>3</sup> of water per hour, which ensures destratification in basins with a surface area of up to 10,000 m<sup>2</sup>.

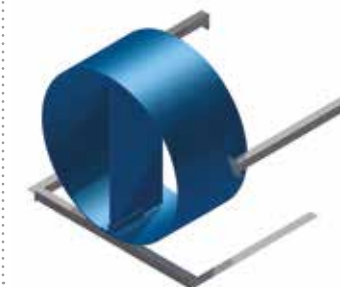
RIO low level of Revolutions Per Minute ensures very quiet operation in order to prevent disturbance to aquatic animals in the water basins, tanks or ponds while minimizing the environmental impact on the aquatic ecosystem.

Useful to control and equalize many parameters such as temperature, oxygen and nutrients in the water column, essential to keep the bottom clean in big water basins, thus avoiding problems in connection with sedimentation, helpful to avoid de-icing in winter.

## PLUS

- › Great water flow with very low consumption
- › Best circulator for heavy-duty applications
- › Conveyor available
- › Inverter to adjust the RPM according to the needs available
- › Suitable for biofilter application (moving bed)

## OPTIONAL CONVEYOR



## SUPPORTS



### FLOATING INSTALLATION

Light weight and easy to install, for standard aquaculture applications.

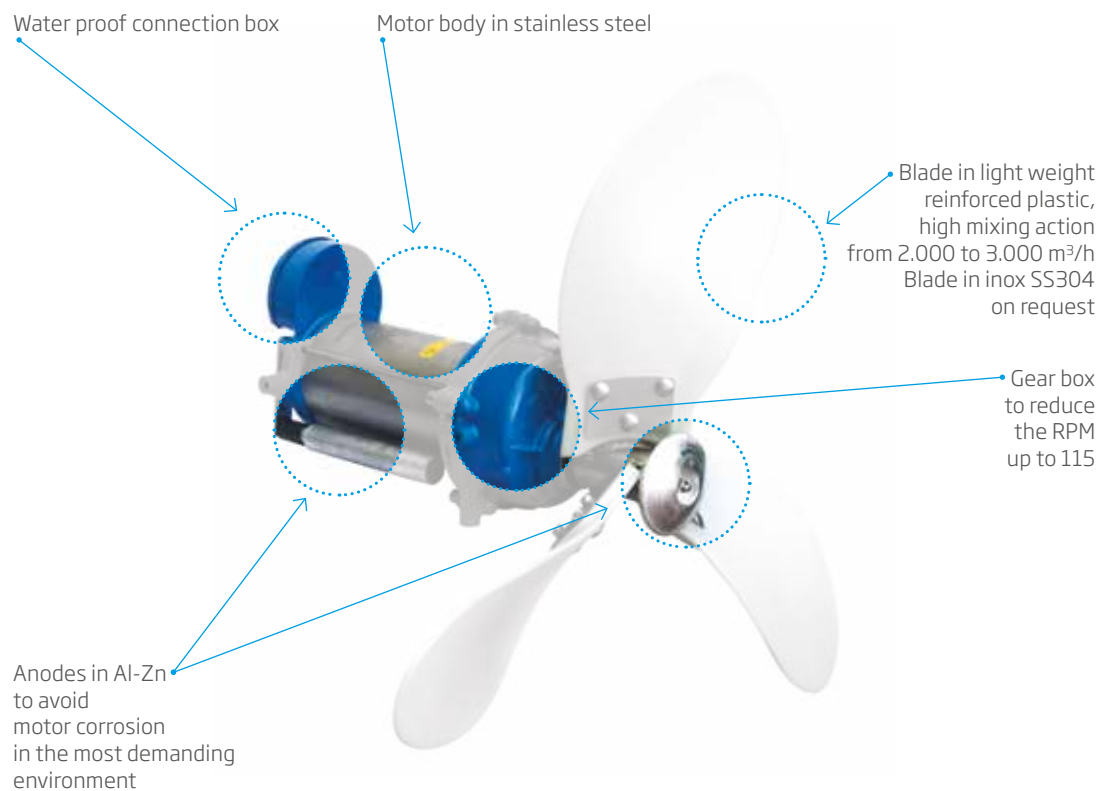


### STATIC INSTALLATION

Guiding pole system solution, easy to remove. Suitable for deep tank application.

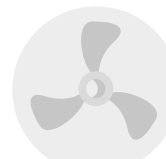
SINGLE PHASE 230 V	THREE PHASE 400 V	NOM. POW. HP	NOM. POW. KW	AMPERAGE SINGLE PHASE	AMPERAGE THREE PHASE	R.P.M. PROP.	REDUCTION RATIO	R.P.M./1"	WEIGHT KG
RIO AG 10 M	RIO AG 10 T	1	0.75	6.5	2.5	123	1/11.35	1400	38
RIO AG 20 M	RIO AG 20 T	2	1.50	11.8	4.3	115	1/12.15	1400	42

Customized solutions on request



**AG 10**

860 mm



1.0 HP

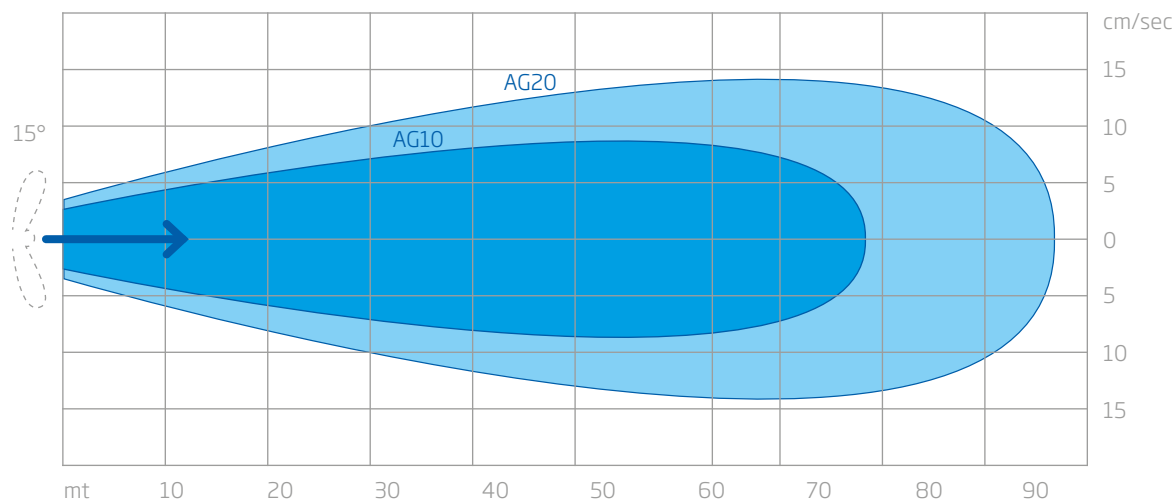
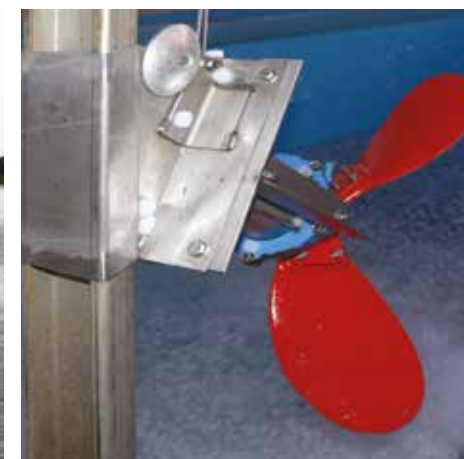
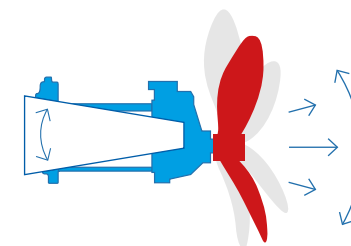
**AG 20**

740 mm



2.0 HP

**ADJUSTABLE MOTOR ANGLE**



# SURFACE AERATION

**SURFACE AERATION** is required and highly recommended in all situations where degassing is fundamental. In many applications the removal of harmful gases, which are very dangerous for aquatic animals and for the health of the water basin, is far more important than mere water oxygenation. Every fish and shrimp farmer will need a surface aerator to avoid high concentrations of ammonia and CO<sub>2</sub> and to create a perfect environment for the species they breed.

The aerator is mainly used to push water in the air so that the two elements come into contact and to finally transfer oxygen from air to water.

The two most important features to select a surface aerator are the following:

- › water flow (m<sup>3</sup>/h) - this is a must to be considered in all aerators
- › water suction depth

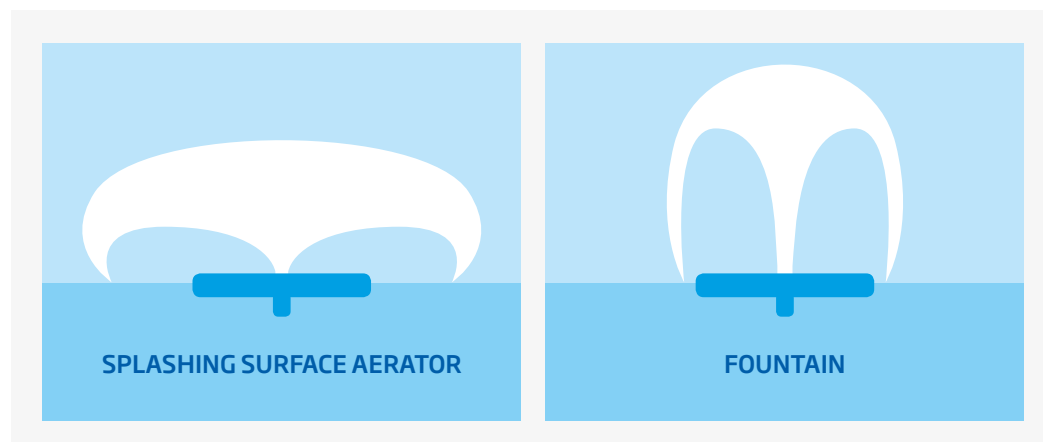
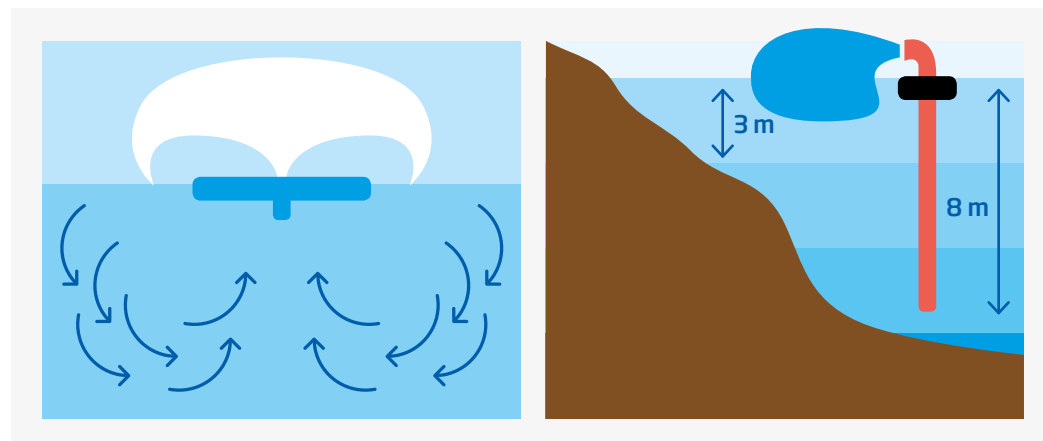
In the area of influence of a surface aerator, there will be well oxygenated and mixed water, no stratification, and, finally, a better water environment.

Aeration efficiency is an important consideration when selecting an aerator; it can be calculated by measuring the oxygen transfer in relation to the energy used per nominal horse power. Energy costs are very important and they have to be evaluated in practical conditions.

The aesthetical appearance of a surface aerator is produced using energy to push limited volumes of water as high as possible, where the same energy may be used to push larger volumes, yet at lower heights. This reduces the practical performances and the aeration efficiency of the aerator.

The energy dedicated to lift water higher is lost to capacity; capacity is essential to increase aeration efficiency. Generally, the oxygen transfer rate of a water capacity aerator (splashing surface aerator) is 100% higher than a water pressure aerator (fountain).

## WATER IN AIR





# SPLASH



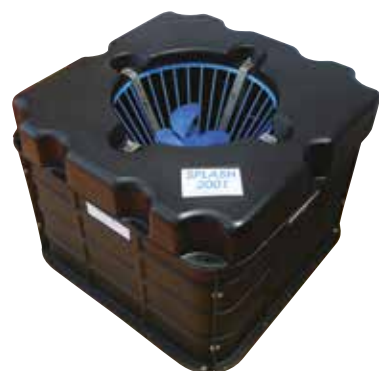
**SPLASH** is a vertical surface aerator.

The huge amount of water pushed in contact with the air contributes to remarkable oxygen transfer efficiency, while degassing the water from nitrogen, carbon dioxide (CO<sub>2</sub>), hydrogen sulfide (H<sub>2</sub>S) and ammonia (NH<sub>4</sub>).

## PLUS

- › Double propeller for great flow in order to have the best oxygen transfer rate
- › Lightweight, easy to handle and move from a basin to another
- › Best performances in fresh water applications, also useful for brackish and seawater installations
- › Low energy consumption
- › Corrosion resistant

## OPTIONAL CONVEYOR



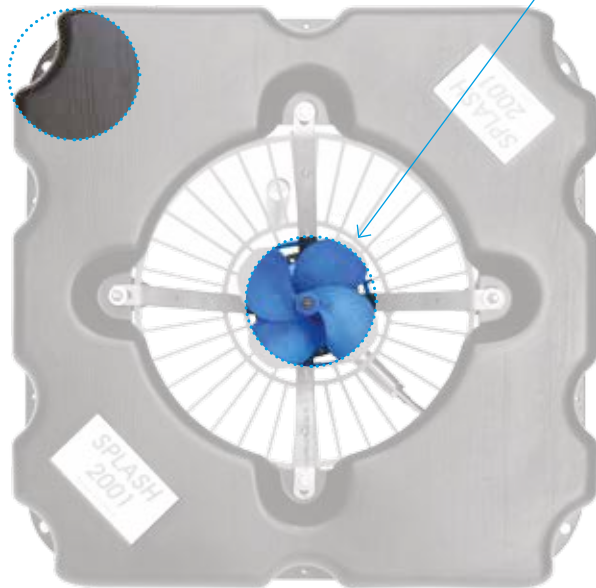
## OPTIONAL CAGE



SINGLE PHASE 230 V	THREE PHASE 400 V	NOM. POW. HP	NOM. POW. KW	AMPERAGE SINGLE PHASE	AMPERAGE THREE PHASE	CAPACITY L/MIN.	R.P.M./1"	WEIGHT KG
SPLASH 2001 0.5 M SPLASH 2001 1 M	SPLASH 2001 0.5 T SPLASH 2001 1 T	0.5 1	0.37 0.75	3.2 4.5	1.3 2.0	2000 3200	1400 1400	24 25
SPLASH 2008 1.5 M SPLASH 2008 2 M	SPLASH 2008 1.5 T SPLASH 2008 2 T SPLASH 2008P 3 T	1.5 2 3	1.1 1.5 2.2	7.5 10.0	2.5 3.2 4.8	3100 3700 5400	2800 2800 2800	24 25 27

Modular black floaters in UV resistant plastic.  
Floating regulation screw under sticker

Propeller in light weight  
reinforced plastic



Anode in Al-Zn to avoid motor corrosion  
in the most demanding environment

Teflon Propeller protection  
in two pieces, easy to replace

Motor body in marine brass suitable  
for seawater and resistant to galvanic current



# BRIO-OX 44



BRIO-OX 44 is classified as surface aerator. The best features of this equipment include circulation, degassing, oxygenation and at the same time low power consumption. These machines are compact and powerful. They feature a motor which can be tilted upward to produce a spray effect and provide for effective work in both oxygenating and degassing mode. BRIO-OX 44 can achieve good circulation within the basin thanks to a rear water booster which is designed to allow for destratification and to avoid working on the surface layer only, as is typically the case with traditional systems.

### PLUS

- › Lightweight, easy to handle and to move from tank to tank or from pond to pond
- › Sturdy and durable
- › Suitable for use in freshwater as well as in salt water
- › Conveyor available to direct the flow in order to obtain a longer direct effect
- › Floating and dock mount support versions available

SINGLE PHASE 230 V	THREE PHASE 400 V	NOM. POW. HP	NOM. POW. KW	AMPERAGE SINGLE PHASE	AMPERAGE THREE PHASE	CAPACITY L/MIN.	R.P.M./1"	WEIGHT KG
BRIO-OX 44 0.5 M	BRIO-OX 44 0.5 T	0.5	0.37	2.6	1.6	1050	2800	15
BRIO-OX 44 1 M	BRIO-OX 44 1 T	1	0.75	5.1	2.0	2100	2800	16.5
BRIO-OX 44 1.5 M	BRIO-OX 44 1.5 T	1.5	1.1	7.5	2.5	3100	2800	16.5



### SUPPORTS



**FLOATING INSTALLATION**  
Light weight and easy to install,  
for standard aquaculture applications.



**DOCK MOUNT INSTALLATION**  
Usefull for lake de-icing,  
weeds/algae removal and destratification.

Customized solutions on request

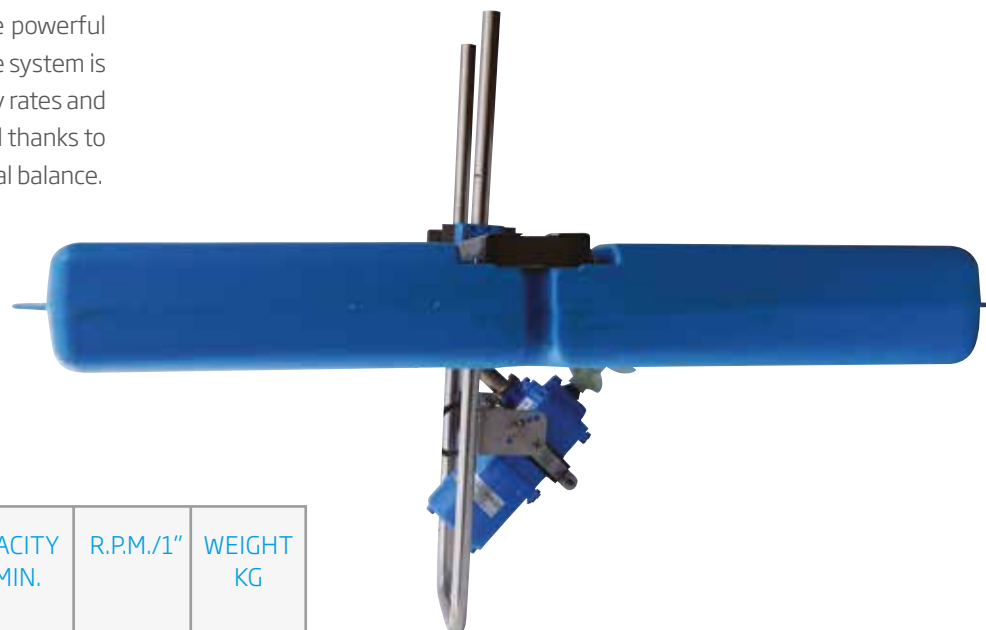
# BRIO-OX 47

BRIO-OX 47 is a surface aerator designed for great circulation, degassing and aeration effect. The powerful motors with which the aerator is supplied are the big brothers of the BRIO-OX range. This innovative system is the ideal solution for the oxygenation and degassing of huge volumes of water at the best efficiency rates and lowest energy consumption. Quick destratification of water basins, tanks and ponds is implemented thanks to the massive action of this cost-effective machine, which helps prompt recovery of the environmental balance.

## PLUS

- › Lightweight, easy to handle and to move from tank to tank or from pond to pond
- › Sturdy and durable
- › Suitable for use in freshwater as well as in salt water
- › Conveyor available to direct the flow in order to obtain a longer direct effect
- › Floating and dock mount support versions available

SINGLE PHASE 230 V	THREE PHASE 400 V	NOM. POW. HP	NOM. POW. KW	AMPERAGE SINGLE PHASE	AMPERAGE THREE PHASE	CAPACITY L/MIN.	R.P.M./1"	WEIGHT KG
BRIO-OX 47 1.5 M BRIO-OX 47 P 2 M	BRIO-OX 47 1.5 T BRIO-OX 47 2 T BRIO-OX 47 P 3 T	1.5 2 3	1.1 1.5 2.2	7.5 10	2.5 3.2 4.8	3100 3700 5400	2800 2800 2800	16.5 20/17.5 20



## SUPPORTS



### FLOATING INSTALLATION

Light weight and easy to install, for standard aquaculture applications.



### DOCK MOUNTING INSTALLATION

Usefull for lake de-icing, weeds/algae removal and destratification.

# ELEWATER



**ELEWATER** is a high flow and low-head water lift. With minimum energy consumption, this lift can circulate a very large volume of water. Its circulation effect combined with its aeration and degassing action make **ELEWATER** very useful in lakes and ponds where the need exists to transfer water from deeper layers to the surface in order to mix and oxygenate it at the same time. This system helps renovate and de-stratify water, which results in the concentration of nutrients being more evenly spread throughout the water column.

## PLUS

- › Ideal to enhance the recirculation water flow in RAS (Recirculating Aquaculture System) and to minimize energy consumption
- › Very versatile and easy to move, where required, and in cases when water needs to be transferred from one tank to another or from one basin to another
- › Floating or static support (fixed on the tank/basin bottom) available
- › Motor depth up to 10 meters

SINGLE PHASE 230 V	THREE PHASE 400 V	NOM. POW. HP	NOM. POW. KW	AMPERAGE SINGLE PHASE	AMPERAGE THREE PHASE	R.P.M./1"	WEIGHT KG
ELEWATER 0.5 M ELEWATER 1 M	ELEWATER 0.5 T ELEWATER 1 T	0.5 1	0,37 0,75	3.2 4.5	1.3 2.0	1400 1400	13 20

## SUPPORTS



### FLOATING INSTALLATION

Light weight and easy to install, for standard aquaculture applications.

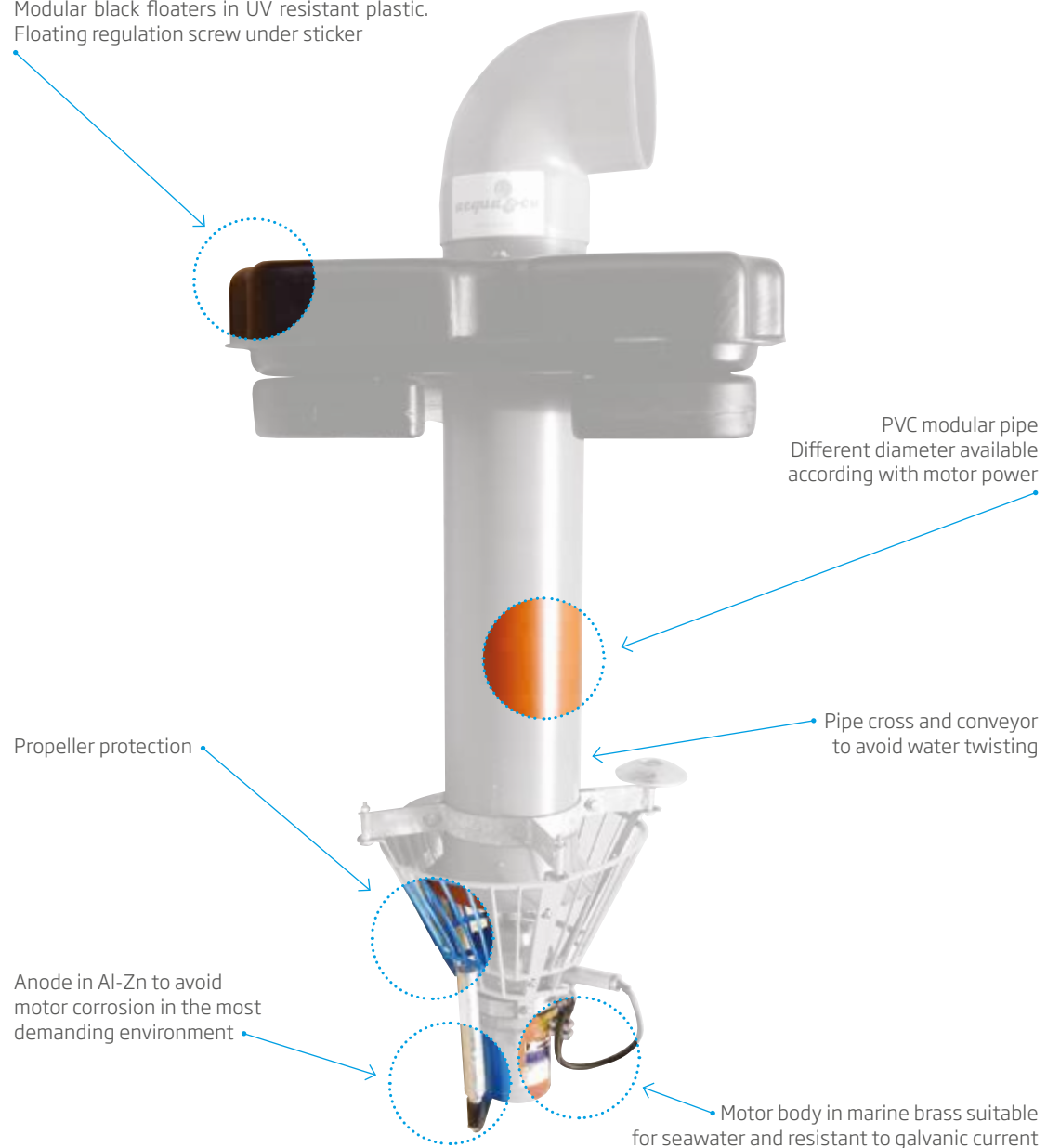


### STATIC INSTALLATION

Fixed solution for standin applications. Suitable for deep tank application.

Customized solutions on request

Modular black floaters in UV resistant plastic.  
Floating regulation screw under sticker

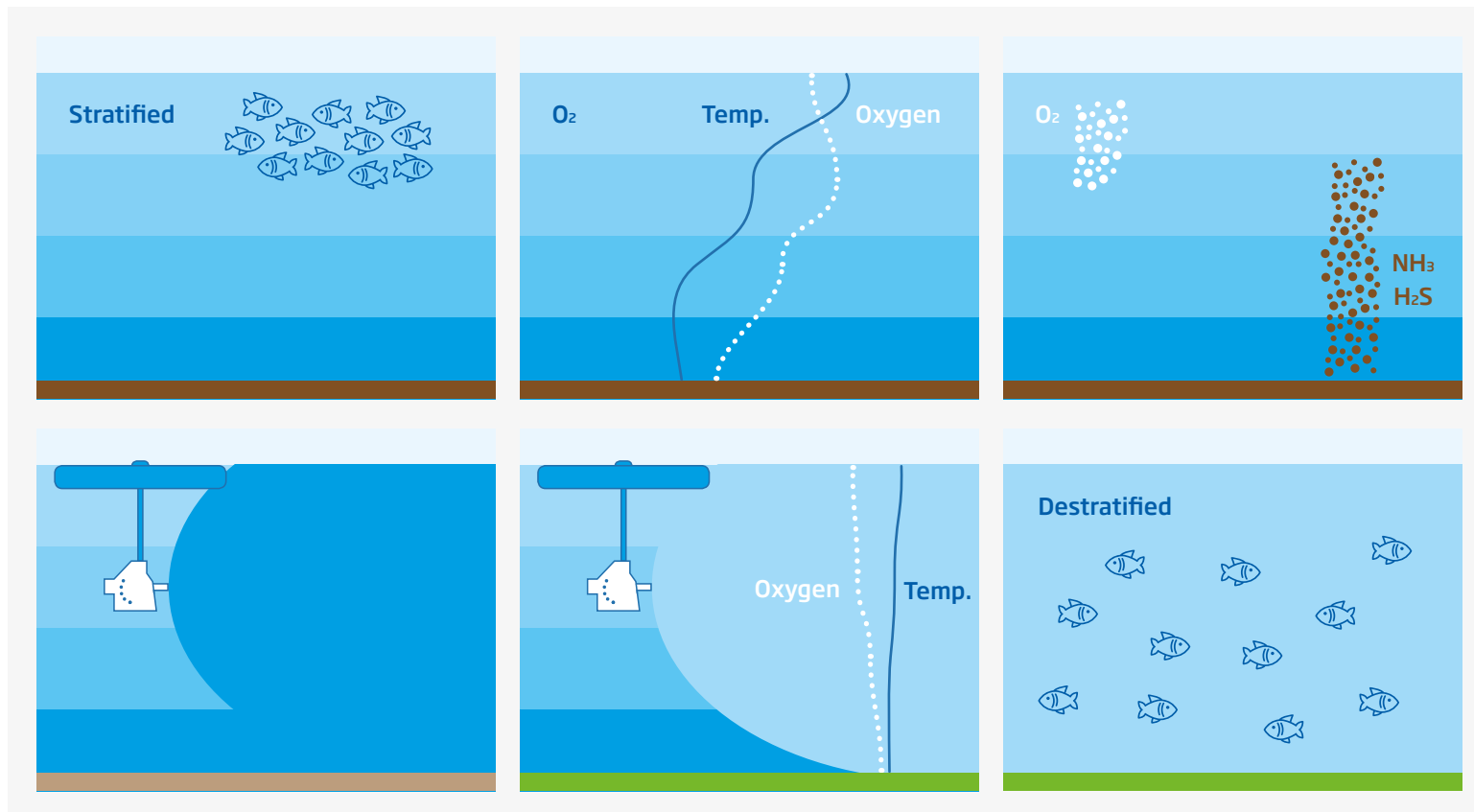


# SUBMERSIBLE AERATION

## AIR IN WATER

Multiple studies have shown that the amount of gas dissolved in a solution (water) is directly proportional to the pressure of the gas in the solution. They have also shown that oxygen is only a small percentage of the gases that make up air. The oxygen transfer is calculated as the difference between the oxygen level in the air and in water. The larger this difference, the greater the transfer. True exchange occurs, and the system finds itself in a situation of saturation, when a balance is achieved between the gases in the air and those in water.

Submersible Aeration is provided through systems that inject air at a depth and dissolve the air/oxygen in microbubbles. The high contact surface of these microbubbles enhances oxygen transfer throughout the entire water column (air in water). With the horizontal flow these systems increase the time of contact between air (oxygen) and water, thus avoiding the loss of oxygen and greatly increasing the oxygen transfer rate. Deep horizontal flow is also important to avoid soil erosion in all the applications concerning water basins with a natural bottom. The whole water column in the area of influence of submersible aerators will be well oxygenated, mixed and circulated, which helps create a healthy water basin.



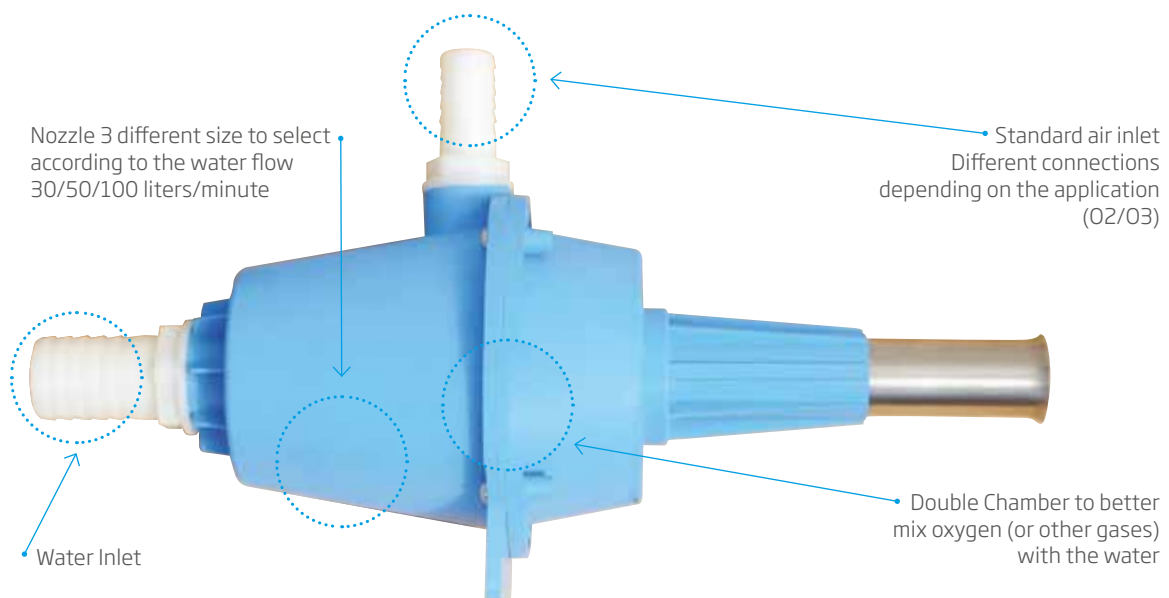


# ECO2

ECO2 is a Venturi injector specifically designed for aquaculture. It works hydraulically, exploiting the pressure of water flowing through a nozzle placed in a pressurized chamber, without requiring additional energy to the system. With this simple device it is possible to enrich water with air or pure oxygen using a pump or by gravity. Through its contact chamber ECO2 provides for high dissolution of injected gas by increasing both the surface area and the time of contact between oxygen and water. ECO2 has been designed to optimize the water supply by the injection of air with minimum waste for enhanced oxygenation and homogenization.

## PLUS

- › Suitable to inject air, pure oxygen, ozone and chemicals
- › 3 different nozzles available, from 30 to 100 liter/minute, for better adaptability to every situation
- › Maintenance-free
- › Fresh and salt water applications
- › Easy to handle and install



## O2/O3 DEDICATED INLET



## 3 DIFFERENT NOZZLES

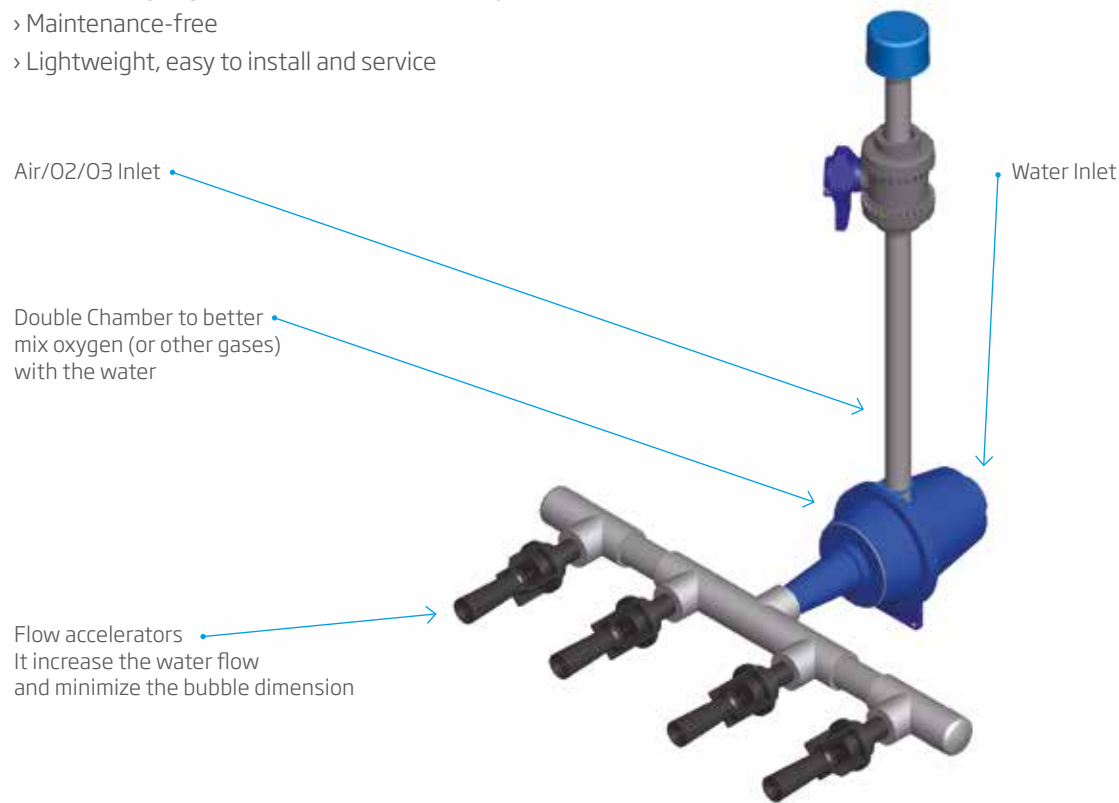


# ECOMAT

ECOMAT is an innovative Venturi system. It includes the traditional Venturi concepts with nozzles, but also new flow accelerators. Thanks to the micronization of the air bubbles mixed to the water, this aerator can dissolve up to 3 times more oxygen than a traditional Venturi, thus greatly increasing efficiency. Besides increasing the amount of dissolved oxygen, ECOMAT also contributes to considerably increasing the water flow. The featured flow accelerators help raise the circulation and mixing effect in the water column, compensating friction losses.

## PLUS

- › Highly recommended in Pure Oxygen and Ozone applications
- › Ideal in applications where gentle stream and best dissolution rate is needed
- › For hatchery, algae, broodstock fish and many others fields
- › Maintenance-free
- › Lightweight, easy to install and service



# FORCE7



**FORCE7** is classified as a powerful high efficiency aspirator aerator. **FORCE7** self-injects a large volume of air and micro bubbles are dissolved in a wide area, thus optimizing oxygen dissolution in water with the best oxygen transfer rate. The high RPM propeller also creates a powerful stream of water that enhances circulation. It can be installed at different depths and at different angles of incidence, in order to prevent thermal stratification and to make the ecosystem homogenized. When compared with other technologies, additional circulation helps improve and speed up the process of oxygen dissolution in water as a result of longer bubble retention time. This versatile aerator can achieve proper water aeration and destratification as well as removing harmful gases and keeping the soil clean.

## PLUS

- › Best oxygen transfer rate
- › Suitable for pure oxygen and ozone dissolution with great dissolution efficiency
- › Available in floating version, with static support or with dock mount support
- › Suitable for aquaculture application (fresh, brackish and marine water) in tanks (high density) or ponds
- › Different propellers for different applications and needs

## SUPPORTS



### FLOATING INSTALLATION

Light weight and easy to install, for standard aquaculture applications.



### STATIC INSTALLATION

Guiding pole system solution, easy to remove. Suitable for deep tank application.

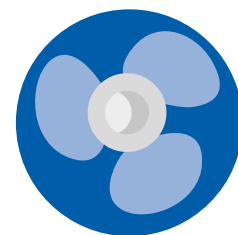
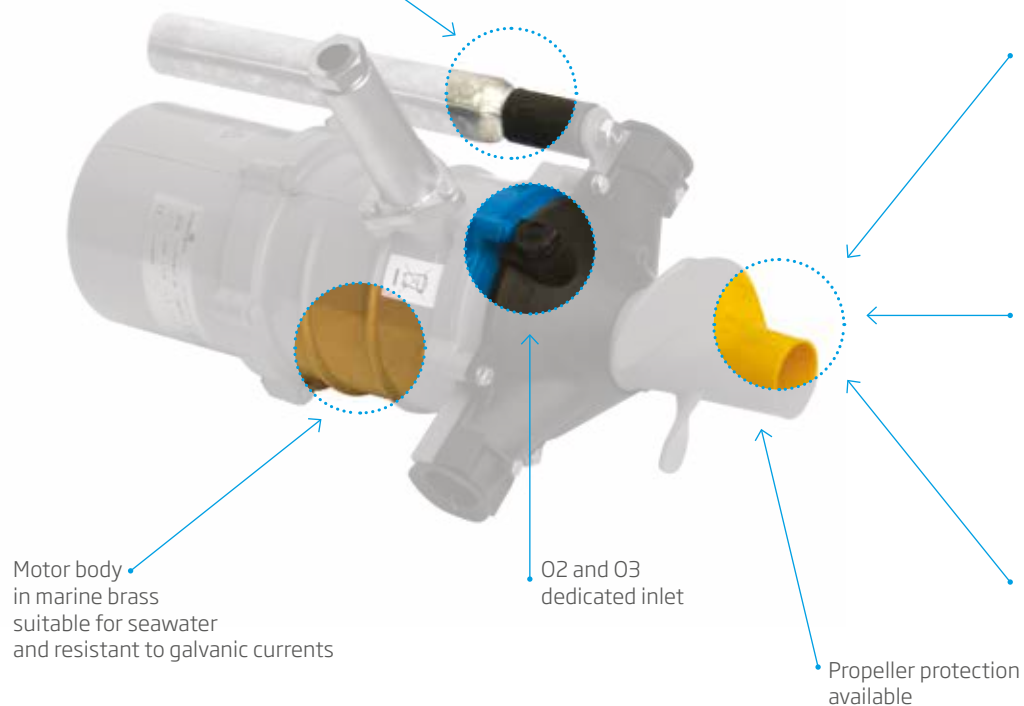


### DOCK MOUNT INSTALLATION

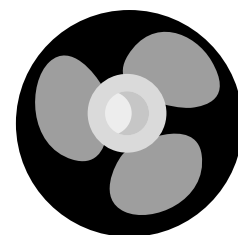
Usefull for lake de-icing, weeds/algae removal and destratification.

SINGLE PHASE 220 V	THREE PHASE 380 V	PROP.	NOM. POW. HP	NOM. POW. KW	AMPERAGE SINGLE PHASE	AMPERAGE THREE PHASE	R.P.M./1"	WEIGHT KG
FORCE 7 0.5 M	FORCE 7 0.5 T	A	0.5	0.37	2.6	1.6	2800	16
FORCE 7 1 M	FORCE 7 1 T	A	1.0	0.75	5.6	2.5	2800	17
FORCE 7 2 M	FORCE 7 2 T	A	1.5	1.1	7.5	3.2	2800	17.5
FORCE 7 0.5 M	FORCE 7 0.5 T	C	0.5	0.37	2.6	1.6	2800	16
FORCE 7 1 M	FORCE 7 1 T	C	1.0	0.75	5.6	2.5	2800	17
FORCE 7 2 M	FORCE 7 2 T	C	1.5	1.1	7.5	3.2	2800	17.5
FORCE 7 0.5 M	FORCE 7 0.5 T	INT	0.5	0.37	2.6	1.6	2800	16
FORCE 7 1 M	FORCE 7 1 T	INT	1.0	0.75	5.6	2.5	2800	17
FORCE 7 2 M	FORCE 7 2 T	INT	1.5	1.1	7.5	3.2	2800	17.5
FORCE 7 2+ M	FORCE 7 2+ T	INT	1.7	1.3	7.5	3.2	2800	20

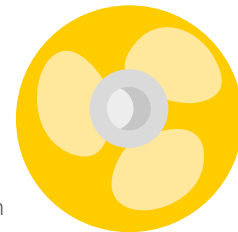
Anode in Al-Zn to avoid motor corrosion in the most demanding environment



**BLUE PROPELLER**  
Great circulating effect.  
Suitable for air applications.

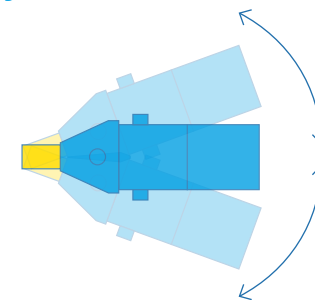


**BLACK PROPELLER**  
Best aeration efficiency.  
Pure oxygen and high density applications.

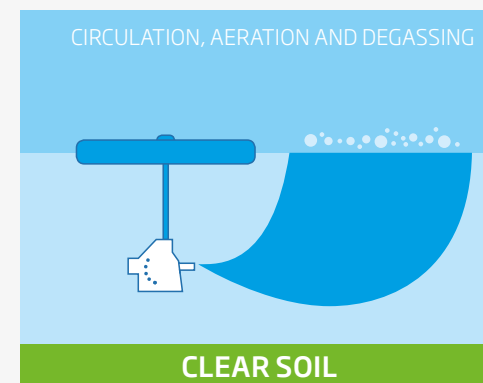
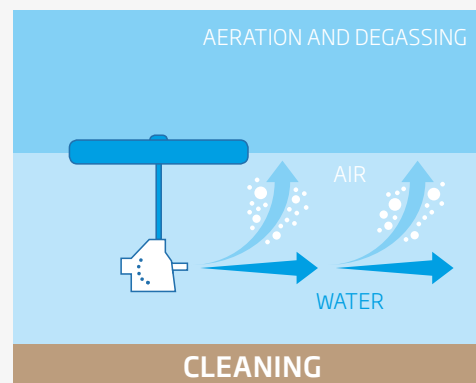
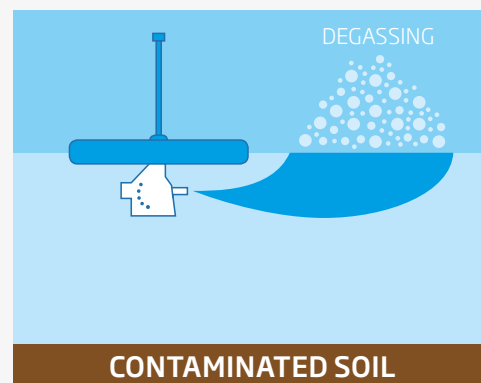
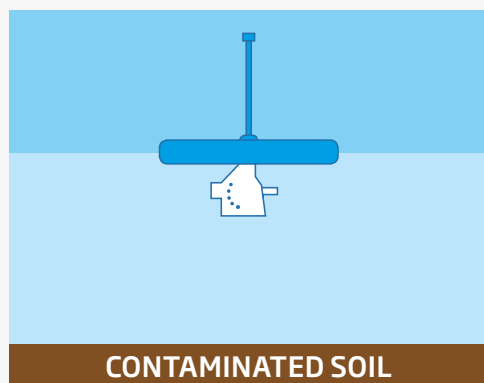
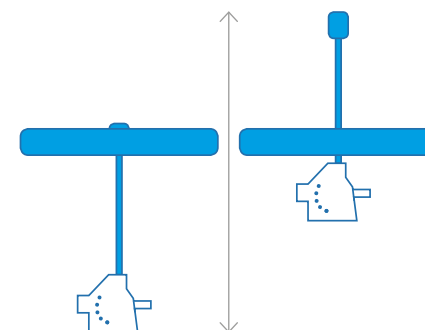


**YELLOW PROPELLER**  
Circulation and aeration.  
High water stream.  
Pure oxygen or air applications.

## ADJUSTABLE MOTOR ANGLE

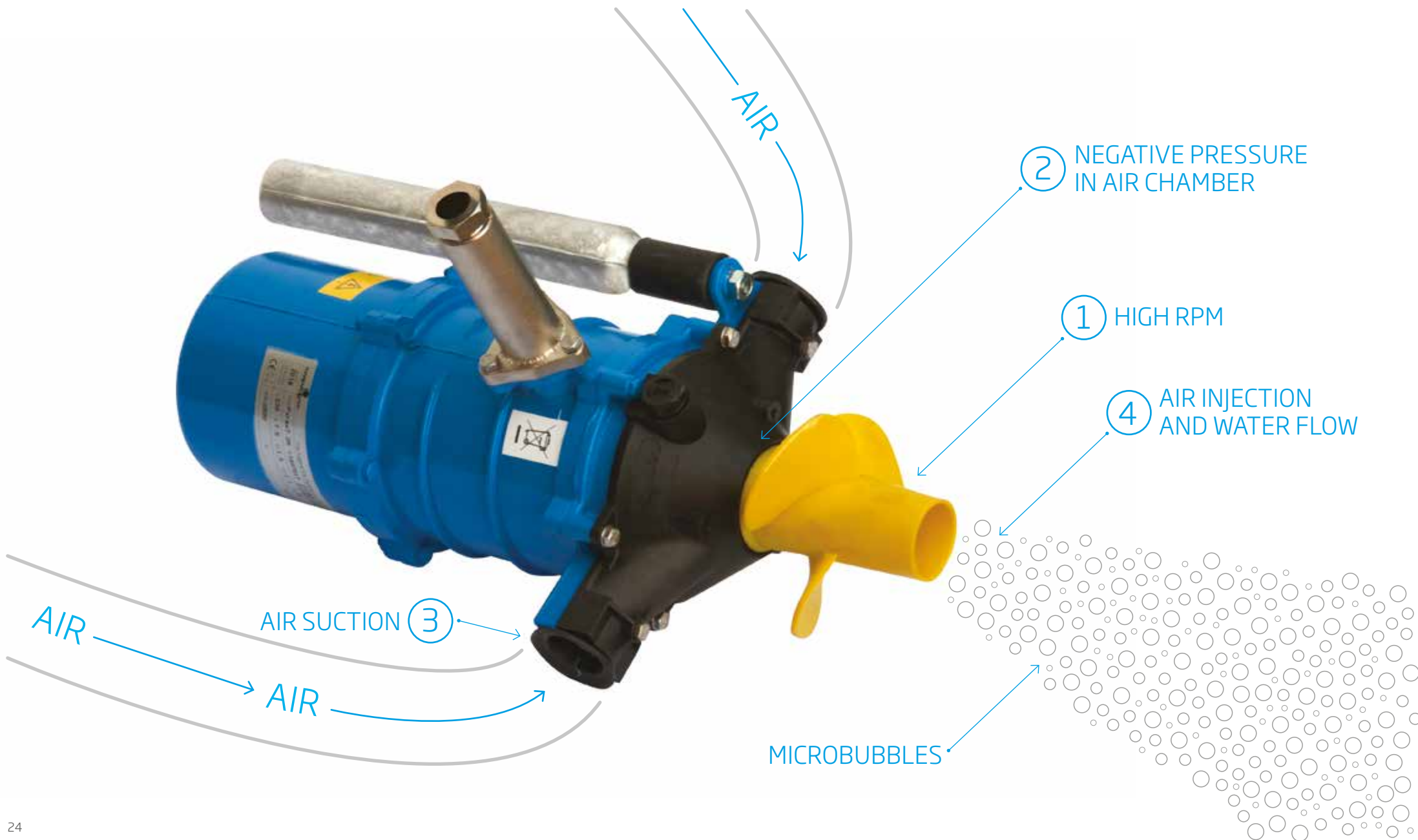


## ADJUSTABLE DEPTH



# FORCE7

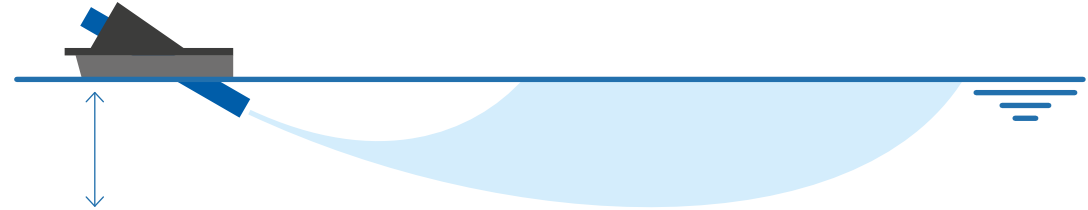
## HOW IT WORKS



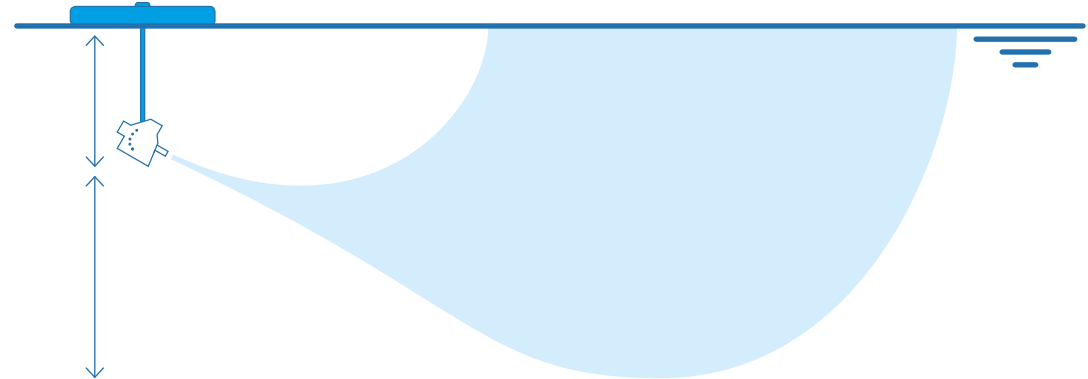
# TECHNOLOGY COMPARISON



Fixed depth and working angle  
Can cause soil erosion in earthen ponds  
Air-cooled motor likely to be exposed to higher corrosion when out of water.



Adjustable depth and angle to hit  
the target and to better aerate  
the whole water column  
Deep Horizontal flow in earthen pond to avoid soil erosion  
Lightweight submersible motor for better cooling and very easy maintenance.



The action of this aerator only affects the most superficial layer of water.  
No oxygen on the bottom helps the soil remain anoxic.  
Heavy duty maintenance.





FRESH WATER



FRESH WATER



SHRIMP FARMS



SALT WATER



SALT WATER



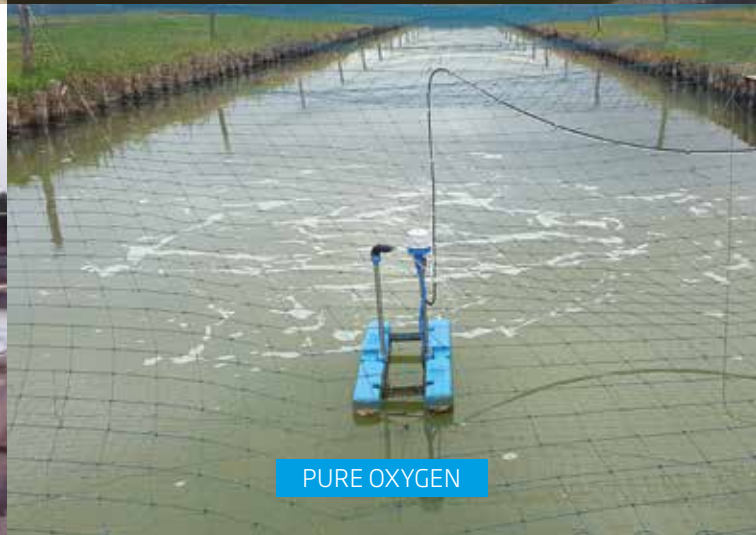
AIR



FISH FARMS



FISH FARMS



PURE OXYGEN



SHRIMP FARMS



HYDROPONICS



HYDROPONICS



AIR



ENVIRONMENT



ENVIRONMENT



PURE OXYGEN



FLOATING CAGES



FLOATING CAGES

# FORCE7 PRO



FORCE 7 PRO is our most powerful submersible and ultra-high efficiency aspirator aerator. Big brother to Force7, it has all its original features: aeration, oxygenation, degassing, stratification, skimming and purification of water and bottom soil. In addition to circulating a large volume of water, FORCE 7 PRO can also micronize the air bubbles to provide for an oxygen transfer rate that is far higher than in traditional aeration systems. Suitable for fishing industry applications as well as in all those areas where aerator durability and reliability are of primary concern in terms of production, environmental restoration and water treatment.

### PLUS

- › To quickly raise the oxygen level in emergency situations
- › The jet is vertically adjustable up to 45 degrees
- › Floating, static with guiding pole system and dock mount supports available
- › Depth and orientation adjustable
- › Duplex (2 motors) and Triplex (3 motors) configurations available
- › Protection cage for Biofilters available

### SUPPORTS



#### FLOATING INSTALLATION

Light weight and easy to install, for standard aquaculture applications.



#### STATIC INSTALLATION

Guiding pole system solution, easy to remove. Suitable for deep tank application.



#### MBBR INSTALLATION

Usefull for lake de-icing, weeds/algae removal and destratification.



THREE PHASE 400 V	NOM. POW. HP	NOM. POW. KW	AMPERAGE THREE PHASE	R.P.M./1"	WEIGHT KG
FORCE7 PRO3	3.0	2.2	5.3	2800	26
FORCE7 PRO4	4.0	3.0	7.1	2800	26

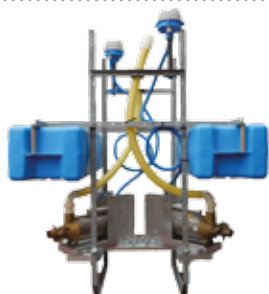
Anode in Al-Zn to avoid motor corrosion in the most demanding environment

Air, O2 and O3 dedicated inlet

Propeller in SS316, resistant to abrasion in the most demanding environment

Motor body in Stainless Steel suitable for seawater and resistant to galvanic current

## DUPLEX

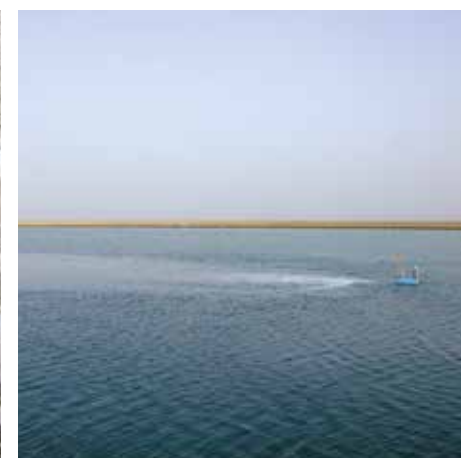


EMERGENCY AERATION

## TRIPLEX



EMERGENCY AERATION



# FLASH



**FLASH** is a high-performance submersible aerator used for oxygen dissolution.

The greatest point of strength of this aerator is its downward orientation which enables it to directly aerate at a standard depth of 3 meters. The vertical stream of oxygenated water produced is not turbulent at all, which makes this aerator the best choice for hatcheries and pre-growing applications where animals are more susceptible to external agents.

## PLUS

- › Lightweight and easy to install and move from tank to tank
- › Recommended in salt and brackish water
- › Best oxygen and ozone transfer rate
- › For continuous or emergency use
- › Standard floating support provided

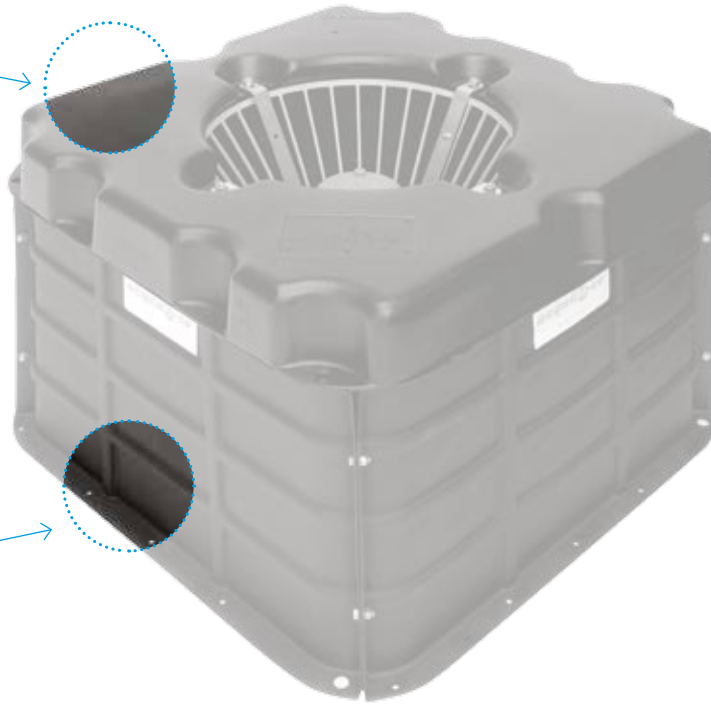
## DEEP WATER INSTALLATION



SINGLE PHASE 230 V	THREE PHASE 400 V	NOM. POW. HP	NOM. POW. KW	R.P.M. PROP.	REDUCTION RATIO	R.P.M./1"	WEIGHT KG
FLASH 0.5 M FLASH 1.0 M	FLASH 0.5 T FLASH 1.0 T	0.5 1.0	0.37 0.75	0.5 1.1	0.7 1.0	2800 2800	16 17

Black color UV resistant

Conveyor to better direct the flow downward. It create a vertical stream, to avoid fish kills.



Sacrificial Anode

Motor body in marine brass suitable for seawater and resistant to galvanic current

Pure oxygen inlet

High RPM for the best dissolution



# COMBINED SYSTEMS

## AERATION + CIRCULATION

COMBITO - COMBO - COMBO PRO and COMBIX PRO are classified as combined systems where the capability of circulators to move large water volumes is combined with the capability of aerators to inject large amounts of air or oxygen. This combined system creates exponential yields with a high percentage of oxygen transfer and water movement due to the considerable increase in the contact time between air/oxygen and water. Combined systems make it possible to transfer up to 10 times the amount of oxygen compared to a simple aerator, with very little additional energy, thanks to the greater volume of water managed by the system.

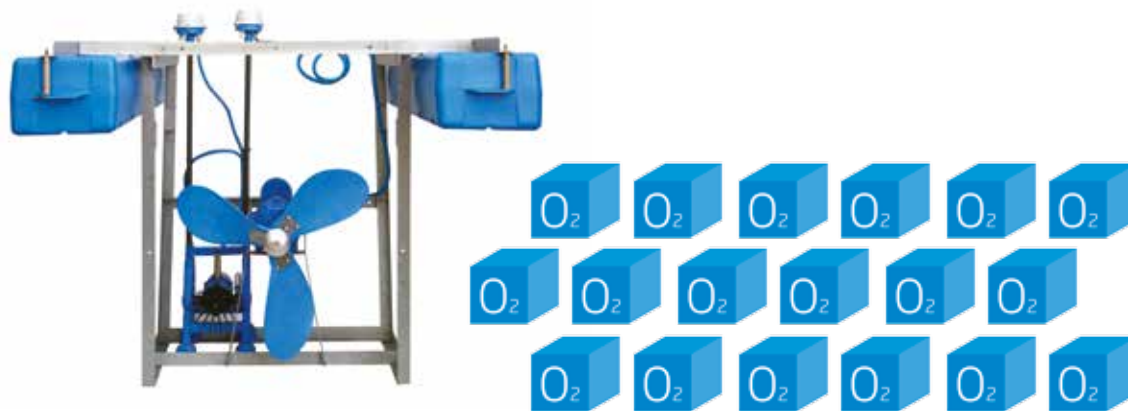
COMBITO - COMBO - COMBIX are ideal for large reservoirs and any type of highly professional application. Installations are available with various motor combinations (different power, number and type of motor), according to project-specific needs and requirements.

### APPLICATIONS WITH AERATOR ONLY



An aspirator aerator can oxygenate a limited volume of water, which leads to saturation and sometimes to the release of excess oxygen in the atmosphere.

### COMBINED SYSTEMS MULTIPLY THE EFFECT AND HELP SPREAD THE SAME AMOUNT OF OXYGEN IN LARGER VOLUMES



When a circulator is added, the same amount of oxygen injected by the aerator is made to contact a much larger water volume, which consequently increases the O<sub>2</sub>-water contact time and boosts efficiency up to 10 times more than a standard aerator.



# COMBITO



COMBITO is a combined system consisting of two motors, an aerator (Force7) and a circulator (Brio). This combination contributes to moving a great volume of water which is well oxygenated and saturated.

COMBITO is the ideal solution in any situation where a professional and high-performance motor is required, in addition to being versatile and having a lightweight structure. It is used to mix and homogenize nutrients and to have the same temperature and oxygen parameters in the whole water column, increasing the oxygen concentration in large volumes of water. It is also useful to avoid sedimentation on the bottom of the pond/tank and to thus reduce all fermentation problems in relation to anoxia and bad gases.

### PLUS

- › Low energy cost
- › Independent motors for better regulation and best versatility
- › Shallow water configuration available (two feet version)
- › Available to dissolve air and/or pure oxygen
- › Best oxygen transfer rate

### SUPPORTS



**FLOATING INSTALLATION**  
Light weight and easy to install, for standard aquaculture applications.



**2 FEET INSTALLATION**  
Guiding pole system solution, easy to remove. Suitable for deep tank application.

Customized solutions on request

### OPTIONAL CONVEYOR



MODELS	VOLTAGE	MOTOR	NOMINAL POWER MIXER			NOMINAL POWER AERATOR		
			MODEL	KW	HP	MODEL	KW	HP
COMBITO	230M-400T	2	BRIO	0.75	1	F7 2	1.1	1.5

Motor casing in marine brass  
suitable for seawater  
and resistant to galvanic currents

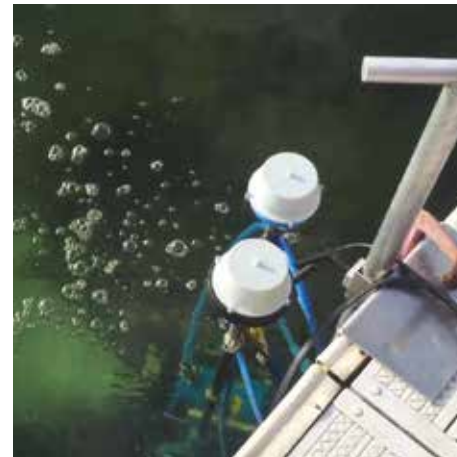
High capacity Circulator

Air/O<sub>2</sub>/O<sub>3</sub> inlet in SS304

High efficiency Aerator

Pedestal base in SS304

Anode in Al-Zn to avoid  
motor corrosion in the most  
demanding environment



# COMBO



COMBO is a combined system which combines the capability of circulators to move large water volumes with the capability of aerators to inject large volumes of air or oxygen. Combined systems create exponential yields with a high percentage of oxygen transfer and water movement due to the considerable increase in the contact time between air/oxygen and water. Combined systems make it possible to transfer up to 10 times the amount of oxygen compared to a traditional aerator, with very little additional energy, thanks to the greater volume of water managed by the system. COMBO (consisting of 1 RIO circulator and 1 Force7 aerator) is ideal for large reservoirs and any type of highly professional application as well as for heavy-duty and harsh conditions.

## PLUS

- › Combix configuration available (1 RIO circulator with 2 Force7 aerators) for stronger aeration
- › Suitable in fresh, brackish and sea water
- › Best performances with very low energy consumption
- › Air or pure oxygen applications
- › Independent motor operation, as needed, and energy saving



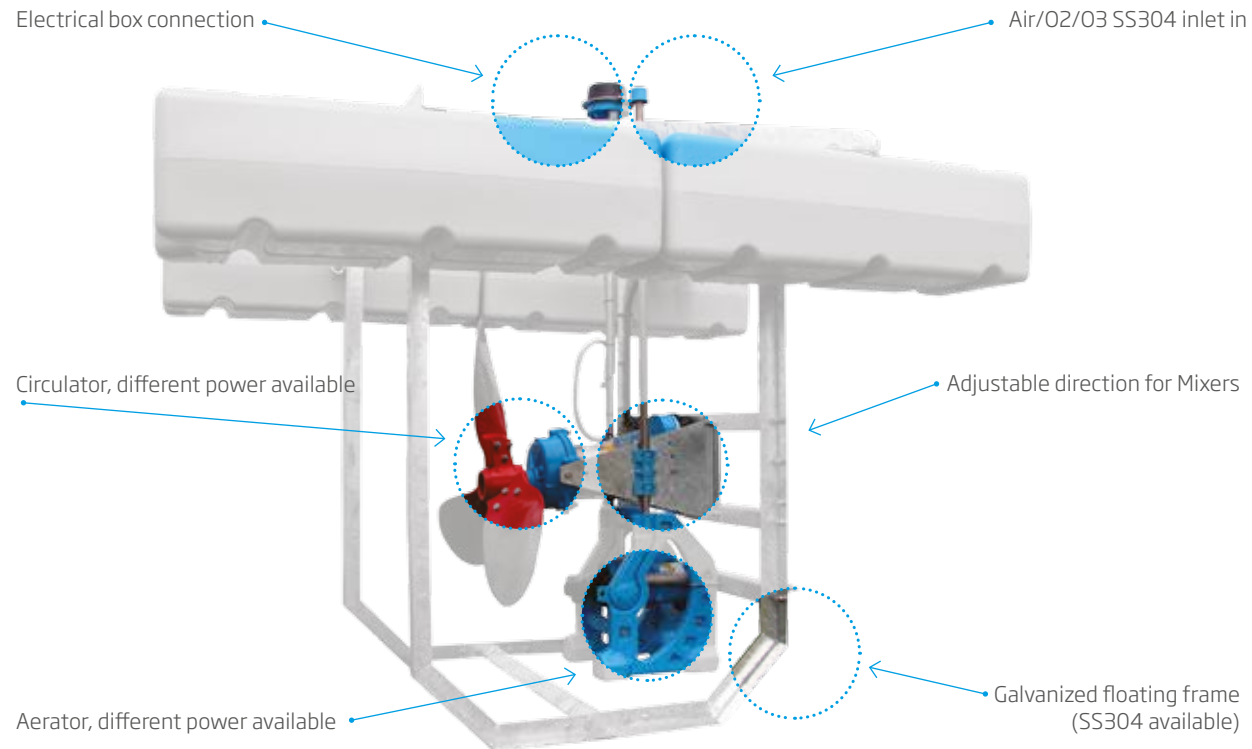
MODELS	VOLTAGE	MOTOR	NOMINAL POWER MIXER			NOMINAL POWER AERATOR		
			MODEL	KW	HP	MODEL	KW	HP
COMBO1	230M-400T	2	BRIO	0.75	1	F7 2	1.1	1.5
COMBO2	230M-400T	2	AG10	0.75	1	F7 2	1.1	1.5
COMBIX	230M-400T	3	AG20	1.5	2	F7 2 x 2	1.1+ 1.1	1.5+ 1.5
COMBO PRO	400T	2	AG20	1.5	2	F7 PRO 5	3.5	5
COMBIX PRO	400T	3	AG20	1.5	2	F7 PRO 5 x 2	3.5 + 3.5	5 + 5

COMBO2



COMBIX PRO





## STATIC TOWER INSTALLATION



# OXYGEN

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Applications with pure oxygen are increasingly required for various types of applications.

Many products by Acqua&Co are designed to inject pure oxygen instead of air or a mix of the two.

Pure oxygen is fundamental in intensive and super-intensive farms and in RAS applications.

Acqua&Co products are specifically designed to dissolve oxygen at the best efficiency, maximizing the transfer rate.



# OZONE

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Ozone is really useful for many applications ranging from skimming to disinfections and decoloring.  
All Acqua&Co solutions are designed to inject and dissolve ozone in standard configuration  
and many of them achieve the best results exploiting the properties of ozone.



# FISHERIES

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Acqua&co experience and know-how on the dynamics of limnic ecosystems are so consolidated that the company can choose the best solution for the health of lakes in light of the existing wildlife. They have helped us introduce technologies that meet the needs of sport fishing lakes, a sector where the audience is increasingly demanding and more technically prepared. Destratification, oxygenation, de-icing and a range of water treatments are crucial to maintain the required characteristics of a lake that hosts sport fishing.



# DE-ICING

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Ice covering water can produce a lack of oxygen in the water column, with heavy consequences for aquatic organisms. In this situation keeping a portion of the lake free from ice can contribute to the atmospheric gas exchange which is necessary to keep the concentration of oxygen in water at proper levels. The solutions designed by Acqua&Co are truly reliable and achieve the effect above with minimized power consumption.



# FISH & SHRIMPS

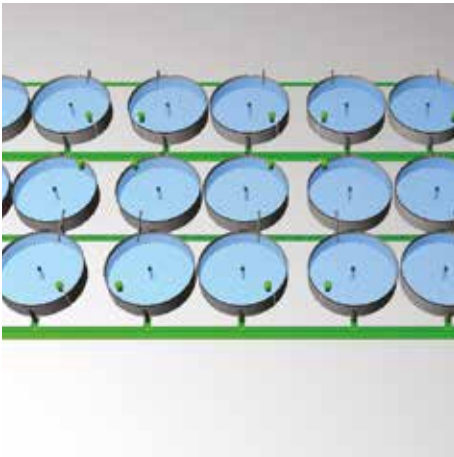
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Acqua&Co is a leader in shrimp and fish farm technologies, with a long experience and many international references. Circulators, aerators and combined systems are employed in all types of installations, from extensive to intensive and super intensive farming, from fresh water to salt water, from tropical areas to the coldest breeding environments. Every stage of the process (from larval, juveniles and pre-grow to on-grow and broodstock fish) is covered by a specific technology. Farm design and technology sizing on request to satisfy all clients' requirements.



# RAS

RAS is an innovative and sustainable way to farm aquatic animals. It raises the standards of biosecurity, water saving, production, monitoring and control of animals. Several Acqua&Co technologies can be successfully installed in a Recirculating Aquaculture System, including aerators, protein skimmers, feeders, biological filters, ozone systems, monitoring and control systems. Our main applications are in fish (hatcheries, pre-grow, on grow, broodstock), shrimp (larval, pre-grow, on-grow), shellfish (depuration), live holding systems (in tank, bin or container). Taylor-made projects on request to meet each and every producer's requirements.



# FLOATING AQUACULTURE CAGES

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Acqua&Co solutions can be applied in sea cage facilities to have optimum circulation through the nets and to obtain good water and oxygen exchange or directly in the cages to inject air or pure oxygen during critical breeding periods.



# SOLAR

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All Acqua&Co solutions can be powered by solar panels, using an inverter directly or a battery pack. Many possible solutions are available, depending on the needs and on the work to be done, no matter how far from an electrical line the site is located.



# LAGOONING

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Acqua&Co solutions such as mixers and circulators can be used for lagooning applications, with very low power consumption in order to increase circulation and improve tidal water exchange, thus avoiding stagnant water in bights. They can lift huge volumes of water from channels to estuarine lagoons or swampland.









MADE IN ITALY



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