

Aire-O₂® Halo® Surface Aerator An effective spray pattern for introducing oxygen into the liquid

The Aire-O₂® Halo® Surface Aerator has joined the family of products at Aeration Industries. This splasher aerator is designed to maximize the two most important functions of any aeration device: oxygen transfer and mixing. The all-new Aire-O₂® Halo® efficiently pumps basin water through the unit in a manner which creates a highly efficient spray pattern for introducing oxygen into the liquid. At the same time, this pumping action insures complete mixing and efficient oxygen dispersion. At Aeration Industries, our years of experience in design and application of surface mounted mechanical aeration equipment have been combined with the full capabilities of our extensive research testing at our facility in Chaska, MN. This enables us to provide a splasher aerator which not only maximizes oxygen transfer and mixing characteristics, but perform these function in the most economical and reliable manner.

APPLICATIONS

- Activated Sludge
- Aerated Lagoons
- Equalization Basins
- SBRs
- Post Aeration
- Cooling
- Industrial Treatment
- Pulp & Paper
- Retrofitting

Aire-O₂[®] Halo - Construction, Operation, Features, and Performance

The Aire- O_2 [®] Halo[©] consists of a weatherproof electric motor, drive shaft, impeller directly driven at constant speed, and an integral flotation to support the weight of the unit and available accessories. All wetted parts are made of corrosion resistant materials, and do not require painting.

Water is pulled up through the intake housing, through the volute and deflects off of the diffusion head to form a circular spray pattern. The spray droplets collect oxygen molecules in the air and transfer them into the water upon re-entry.

AERATOR COMPONENTS

Aerator Components										
No.	Component	Standard Material	Optional Material							
1	Rain Cover	SS304	SS316							
2	Motor	Cast Iron	_							
3	Bracket	Cast Iron	Cast Iron							
4	Mechanical "Labyrinth" Type Seal	-	_							
6	Oil Chamber	Cast Iron	Cast Iron							
6	Water Guide Panel	SS304	SS316							
0	Float	Fiber Reinforced Plastic	SS304							
8	Impeller	SS304	SS316							
9	Water Inlet Pipe	SS304	SS316							



Motor and Shaft: The electric motor 2 is the heart of the machine and is located above the high-density spray-diffusion zone to minimize its exposure to the nature and contents of the pumped I iquid. The motors are weatherproof to IP56 ingress protection (dust + powerful waterjet), are chemical service capable, 7 TEFC (Totally Enclosed Fan Cooled) 3 phase. These motors utilize a "labyrinth" type bearing seal for maximum protection against water spray.

Impeller: The Impeller **3** is constructed of stainless steel and is manufactured using the machine-pitch process which assures perfect accuracy and top performance. The impeller pitch is designed for maximum hydraulic delivery without overloading the motor.

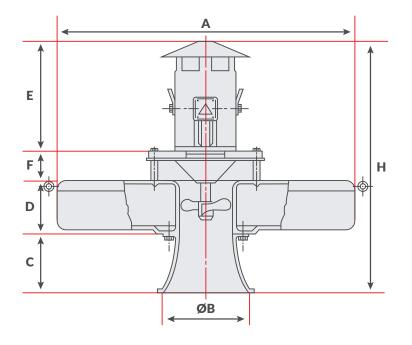
Flotation Assembly: The Floatation Hull ? is constructed of fiber reinforced plastic (FRP) with an optional stainless steel version available, and is completely filled with high-density closed cell polyurethane foam. Mooring eyes located on the outer surface of the float hull allow for easy access cable mooring.







Aire-O₂® Halo® – Dimensional Data



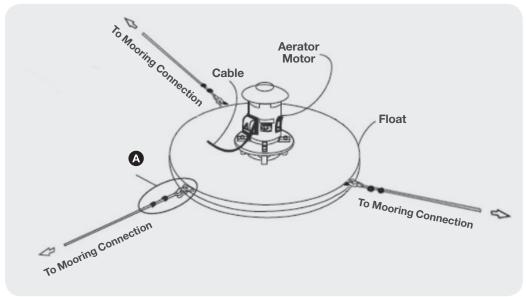
Every aerator can be fitted to your operational needs. We have a range of sizes available as shown in the table below.

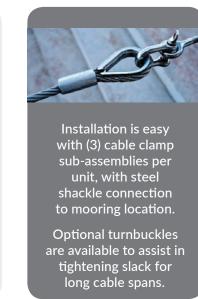


	Dimensions															
Model	Α		В		С		D		Е		F		н		Weight (kg)	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg
HALO02	47.2	1200	9.8	250	7.9	200	4.7	120	14.2	360	3.9	100	35.4	900	187	85
HALO03	47.2	1200	9.8	250	7.9	200	4.7	120	14.2	360	3.9	100	35.4	900	198	90
HALO05	59.1	1500	11.8	300	12.6	320	5.5	140	16.5	420	3.9	100	44.1	1120	287	130
HALOO7	59.1	1500	14.2	360	12.6	320	11.0	280	16.9	430	4.3	110	44.9	1140	353	160
HALO10	59.1	1500	14.2	360	12.6	320	11.0	280	18.9	480	4.3	110	46.9	1190	397	180
HALO15	70.9	1800	19.7	500	23.6	600	11.8	300	22.8	580	4.7	120	63.0	1600	551	250
HALO20	70.9	1800	19.7	500	23.6	600	11.8	300	24.8	630	4.7	120	65.0	1650	639	290
HALO25	70.9	1800	19.7	500	23.6	600	11.8	300	25.6	650	4.7	120	65.7	1670	771	350
HALO30	70.9	1800	19.7	500	23.6	600	11.8	300	27.6	700	4.7	120	67.7	1720	860	390
HALO40	70.9	1800	25.6	650	31.5	800	13.4	340	28.7	730	5.9	150	79.5	2020	948	430
HALO50	70.9	1800	25.6	650	31.5	800	13.4	340	29.5	750	5.9	150	80.3	2040	948	430
HALO60	86.6	2200	31.5	800	31.5	800	13.4	340	32.3	820	7.9	200	85.0	2160	1587	720
HALO75	86.6	2200	31.5	800	31.5	800	14.6	370	33.9	860	7.9	200	87.8	2230	1752	795

Aire-O₂[®] Halo[®] – Mooring Configuration

Contact us today for help with your unique installation.





ACCESSORY OPTIONS

Support Stand

<u>How it Works</u>: The support stand consists of a stainless steel "stilt" platform and circular base with rubber bottom, effectively allowing the aerator to rest at an elevated height during periods of low water fluctuation and/or complete drainage of pond or basin.



Mist Inhibitor

<u>How it Works:</u> The Mist Inhibitor consists of a circular stainless steel shield mounted above the float that effectively directs the splash pattern lower, reducing unwanted misting & reducing spray height.











About Aeration Industries, a Newterra Company

About Aeration Industries® International

Aeration Industries® International has the expertise and aeration equipment to provide a full range of wastewater treatment solutions to optimize municipal and industrial wastewater treatment applications; from process water supply to wastewater treatment, sludge management to produced water return. We also offer customized pond designs to support oxygen dispersion for aquaculture farms. Aeration Industries International combines patented technologies with engineering expertise to develop complete and customized water treatment solutions.

Our Solutions

- Municipal and industrial wastewater treatment solutions
- Aquaculture treatment system design
- Process modeling and evaluation
- Aeration and mixing technologies
- Retrofits for wastewater treatment plants
- Rental equipment for supplemental/emergency aeration
- Regulatory requirements/compliance planning

Our customers choose Aeration Industries International because we know water. We have partnered with our customers and offered engineering expertise and product innovation for more than 40 years.

Newterra - A Global Water Technology Leader

Newterra® is recognized as a global leader in developing modular treatment solutions for water, sewage, wastewater and groundwater remediation for industrial, municipal, land development, commercial & residential markets. Our heritage of innovation in providing clean water solutions dates back to 1863. Over that time, Newterra has grown to eight companies employing over 200+ people and installed thousands of treatment systems – some of which operate in the most extreme conditions on the planet.

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