



Aquionics
Technologies

**BIOREMEDIATION &
BIO-SECURITY
SOLUTIONS**
2020-2021

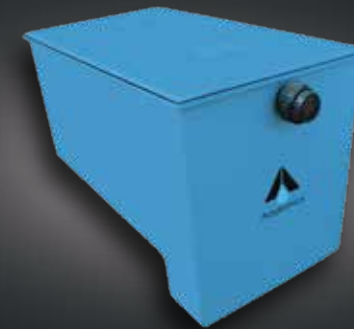


#1 In Sustainable Solutions For Bioremediation & Bio-Security

www.aquionics.net

Bioremediation Solutions

AMMONIA & NITRITE REMOVAL



BIOCLEAR TS SERIES

BIOCLEAR TS SERIES BIOFILTERS

Gravity flow bioremediation designed for maximum flow with minimal head loss and negligible scouring. Biofilters complete with proprietary extended plastic biological media with optimal surface area.

BIOCLEAR TS MODEL	MEDIA (litres)	TANK (m ³)	FLOW (lpm)	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	OP WT (kg)
TS2	30	0.06	35	590	330	300	12
TS4	45	0.09	70	590	330	450	16
TS8	90	0.18	140	915	450	450	40
TS18	350	0.6	300	1215	650	750	110
TS30	750	1.23	500	1590	860	900	160

BIOREMEDIATION SOLUTIONS

2020-2021

BIOCLEAR TC SERIES BIOFILTERS

Gravity flow bioremediation towers designed for maximum flow with minimal head loss and negligible scouring. Integrated air injection for carbon dioxide scrubbing & improved performance. Biofilters complete with proprietary extended plastic biological media with optimal surface area.

BIOCLEAR TC MODEL	MEDIA (litres)	TANK (m ³)	FLOW (m ³ /hr)	DIAMETER (mm)	HEIGHT (mm)	INLET (mm)	OUTLET (mm)
TC25	1200	1.3	25	900	2200	80	100
TC50	1800	2.0	50	1000	2800	100	100
TC100	3000	3.4	100	1200	3200	100	150
TC200	4500	5.2	200	1400	3600	150	200
TC300	6600	7.6	300	1600	4000	200	250
TC350	11100	12.6	350	2000	4200	250	250
TC400	15000	17.5	400	2300	4500	250	250



BIOCLEAR TC SERIES



BIOCLEAR FB SERIES

BIOCLEAR FB SERIES BIOFILTERS

A pressure up-lift bioremediation filter designed for maximum flow with minimal head loss. Integrated air injection for media bed mobilisation & improved performance. Specifically designed for ammonia & nitrite removal, the FB Series utilises a fine zeolite as the bio-media.

BIOCLEAR FB MODEL	MEDIA (litres)	MEDIA (kg)	FLOW (m ³ /hr)	DIAMETER (mm)	HEIGHT (mm)	INLET (mm)	OUTLET (mm)
FB5	120	80	5	650	1150	40	40
FB10	240	160	10	750	1400	50	50
FB20	400	260	20	900	1750	80	80
FB30	600	390	30	1000	1850	80	80
FB40	900	585	40	1200	1950	100	100
FB50	1750	1150	50	1400	2950	100	100
FB75	3000	1950	75	1600	3200	150	150
FB100	4750	3100	100	2000	3600	150	150

Bioremediation Solutions

NITRATE REMOVAL



BIOCLEAR DN SERIES BIOFILTERS

A pressure downflow anaerobic bioremediation filter specifically designed for nitrate removal. The DN Series utilises a sulphur complex as the bio-media.

BIOCLEAR DN MODEL	MEDIA (litres)	MEDIA (kg)	FLOW (m ³ /hr)	DIAMETER (mm)	HEIGHT (mm)	INLET (mm)	OUTLET (mm)
DN5	400	280	5	900	1750	80	80
DN10	600	420	10	1000	1850	80	80
DN20	900	630	20	1200	1950	100	100
DN30	1750	1225	30	1400	2950	100	100
DN40	3000	2100	40	1600	3200	150	150
DN50	4750	3300	50	2000	3600	150	150

BIOCLEAR DN SERIES

AQUI-P SERIES FILTERS

An uplift pH adjustment filter specifically designed to neutralise the acidic by-product from the DN filter nitrate removal process. The Aquí-P Series utilises high-purity marble chips as the neutralisation media.

AQUI-P PH MODEL	MEDIA (litres)	MEDIA (kg)	FLOW (m ³ /hr)	DIAMETER (mm)	HEIGHT (mm)	INLET (mm)	OUTLET (mm)
PH5	480	625	5	900	1750	80	80
PH10	720	935	10	1000	1850	80	80
PH20	1080	1400	20	1200	1950	100	100
PH30	2050	2859	30	1400	2950	100	100
PH40	3600	4700	40	1600	3200	150	150
PH50	5700	7400	50	2000	3600	150	150



AQUI-P SERIES

Bioremediation Solutions

PROTEIN SKIMMING



BIOFOAM BF SERIES

BIOFOAM BF SERIES FOAM FRACTIONATORS

Foam fractionation (also referred to as protein skimming) is a critical component in marine water processing for removal of proteinaceous matter, colloids, organic & inorganic matter, attaining a rapid reduction of BOD, COD & DOC. Biofoam high-performance foam fractionators are essential for marine aquaculture and public aquarium life support systems.

BIOFOAM BF MODEL	MAX FLOW (m ³ /hr)	MAX AIR (m ³ /hr)	OZONE (gph)	DIAMETER (mm)	HEIGHT (mm)	INLET (mm)	OUTLET (mm)
BF5	5	2	0.2	500	1800	50	50
BF10	10	5	0.4	650	2400	50	50
BF15	15	10	0.6	750	2700	80	80
BF25	25	15	1.0	900	2500	80	80
BF50	50	25	2.0	1200	2500	100	100
BF75	75	40	3.0	1200	3000	150	150
BF100	100	60	4.0	1400	3200	200	200
BF150	150	80	6.0	1600	3500	200	200
BF200	200	100	8.0	1600	3750	250	250
BF300	300	120	10.0	2000	3750	250	250
BF400	400	180	15.0	2000	4000	300	300
TC500	500	200	20.0	2300	4250	300	300

Maximum flow is based on minimum 2-minute retention. Air injection is generated by the biofoam foam fractionation. Ozone requirement is to be provided by an external source. Ozone plays an important role in promoting micro flocculation within the foam fractionation process.

BIOFOAM DIL SERIES FOAM FRACTIONATORS

Foam fractionation (also referred to as protein skimming) is a critical component in marine water processing for removal of proteinaceous matter, colloids, organic & inorganic matter, attaining a rapid reduction of BOD, COD & DOC. Biofoam DIL foam fractionators utilise the process water flow for the venturi air injector operation.

BIOFOAM DIL MODEL	MAX FLOW (m ³ /hr)	MAX AIR (m ³ /hr)	OZONE (gph)	DIAMETER (mm)	HEIGHT (mm)	INLET (mm)	OUTLET (mm)
DIL5	5	2	0.2	500	1800	50	50
DIL10	10	5	0.4	650	2400	50	50
DIL15	15	10	0.6	750	2700	80	80
DIL20	20	15	1.0	900	2500	80	80

Maximum flow is based on minimum 2-minute retention. Air injection is generated by the incoming process water through the venturi injectors. Ozone requirement is to be provided by an external source. Ozone plays an important role in promoting micro flocculation within the foam fractionation process.



BIOFOAM DIL SERIES

UV Sterilisation Solutions



BIO-SECURITY SOLUTIONS 2020-2021



AQUIPURE UPP SERIES

AQUIPURE UPP SERIES UV STERILISERS

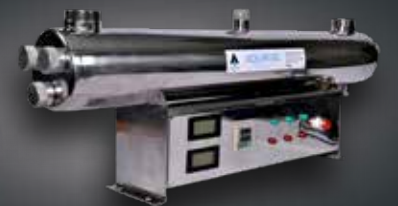
Seawater-resistant construction designed for UV sterilisation in the harshest conditions - aquaculture, process industries, cooling towers, secondary sewage and filtered effluent. AQUIPURE UPP units incorporate high-performance, long-life Phillips UV tubes for guaranteed performance.

AQUIPURE MODEL	UPP 40	UPP 75	UPP 145	UPP 225	UPP 325	UPP 580	UPP 975	UPP 1300	UPP 1625	UPP 1950	UPP 2600	UPP 3250
WATTS (w)	40	75	145	225	325	580	975	1300	1625	1750	2600	3250
UV LAMP (qty)	1	1	1	3	1	4	3	4	5	6	8	10
LAMP LIFE (hr)	11000	11000	11000	11000	11000	11000	11000	11000	11000	11000	11000	11000
MAX FLOW (lpm)	35	70	125	200	300	500	900	1150	1400	1650	1900	2150
HEIGHT (mm)	1000	1750	1750	1750	1900	1900	1900	1900	1900	1900	1900	1900
DIAM (mm)	40	50	50	100	100	150	150	150	200	200	250	250
INLET (mm)	25	40	40	50	50	80	100	150	150	150	200	200
OUTLET (mm)	25	40	40	50	50	80	100	150	150	150	200	200

AQUIPURE UPS SERIES UV STERILISERS

Stainless steel construction designed for UV sterilisation in sanitary conditions - food processing, water purification, beverage production, drinking water. AQUIPURE UPS units incorporate high-performance, long-life UV tubes for guaranteed performance.

AQUIPURE MODEL	UPS 16	UPS 30	UPS 55	UPS 75	UPS 255	UPS 450	UPS 675	UPS 900
WATTS (w)	16	30	55	75	255	450	675	900
UV LAMP (qty)	1	1	1	1	3	6	9	12
LAMP LIFE (hr)	8000	8000	8000	8000	8000	8000	8000	8000
MAX FLOW (lpm)	10	35	50	75	200	400	600	800
FAIL ALERT	Inbuilt	Inbuilt	Inbuilt	Inbuilt	Inbuilt	Inbuilt	Inbuilt	Inbuilt
CASING	SS304	SS304	SS304	SS304	SS304	SS304	SS304	SS304
INLET (mm)	15	25	25	25	40	50	80	80
OUTLET (mm)	15	25	25	25	40	80	100	100



AQUIPURE UPS SERIES



AQUIPURE UPPS SERIES

AQUIPURE UPPS SERIES UV STERILISERS

Seawater-resistant construction designed for high flow UV sterilisation in clean, low-load conditions - swimming pools, recirculating drinking water, water polishing. AQUIPURE UPPS units incorporate high-performance, long-life Phillips UV tubes for guaranteed performance.

AQUIPURE MODEL	UPPS 40	UPPS 75	UPPS 145	UPPS 225	UPPS 325	UPPS 580
WATTS (w)	40	75	145	225	325	580
UV LAMP (qty)	1	1	1	3	1	4
LAMP LIFE (hr)	11000	11000	11000	11000	11000	11000
MAX FLOW (lpm)	175	350	625	1000	1500	2500
HEIGHT (mm)	1000	1750	1750	1750	1900	1900
DIAM (mm)	40	50	50	100	150	200
INLET (mm)	40	50	50	100	150	200
OUTLET (mm)	40	50	50	100	150	200

Ozone & Oxygen Solutions



Gas Adsorption Solutions

OZONE & OXYGEN SATURATION & INJECTION



**AIR FEED
AIR COOLED**

AQUIZONE G SERIES OZONE GENERATORS

AquiZone G Series meet all the major criteria sought after by industrial & commercial clients - economic, robust, high output, low maintenance, minimal peripheral equipment, easy installation and guaranteed performance.

AQUIZONE G MODEL	OUTPUT (gph)	POWER (w)	HEIGHT (mm)	WIDTH (mm)	DEPTH (mm)	ORP CONTROL	FLOW SWITCH
5G/5GF/5GAF	5	140	485	300	215	5GAF	5GF/5GAF
10G/10GF/10GAF	10	240	485	300	215	10GAF	10GF/10GAF
20G/20GF/20GAF	20	480	635	400	350	20GAF	20GF/20GAF
30G/30GF/30GAF	30	645	635	400	350	30GAF	30GF/30GAF

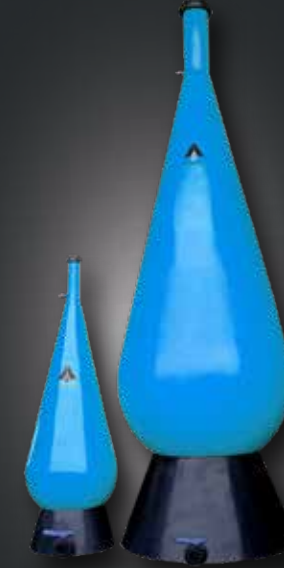
AQUIZONE OGX SERIES OZONE GENERATORS

Ozone sterilisation is the safe, natural way to ensure a guaranteed result in eradicating germs, pathogens, and other microorganisms in all processes requiring sanitary conditions. AquiZone OGX systems are the preferred choice for aquaculture, public aquariums, drinking water production and water treatment.

AQUIZONE OGX MODEL	OUTPUT (gph)	POWER (w)	O ₃ CONC (mg/l max)	O ₃ FLOW (lpm)	CW FLOW (lpm)	LENGTH (mm)	HEIGHT (mm)	WIDTH (mm)	WEIGHT (kg)
OGX60	60	2000	90	15	2	690	1360	590	120
OGX100	100	3200	115	25	2	690	1360	590	155
OGX150	150	4800	165	35	3	1380	1360	590	210
OGX200	200	6400	230	50	4	1380	1360	590	310
OGX300	300	9600	345	80	6	1380	1360	590	390
OGX500	500	16000	450	120	10	2070	1675	590	480



**OXYGEN FEED
WATER COOLED**



**TRIO SATURATORS
(5 YEARS WARRANTY)**

TRIO OXYGEN & OZONE SATURATORS

Trio saturators provide new adsorption technology for economically increasing the levels of dissolved oxygen & ozone in the process water. Trio maximises the dissolution capacity of the injected gas, regardless of whether it is oxygen or ozone, without any off-gas disposal issues.

TRIO MODEL	MAX FLOW (m ³ /hr)	MAX O ₂ CAP (gph@1.5bar)	MAX O ₃ CAP (gph@1.5bar)	I/O PORTS (mm)	DIAMETER (mm)	HEIGHT (mm)
OS10	10	500	35	50	500	1200
OS25	25	1000	80	80	650	1600
OS50	50	2000	160	100	750	1800
OS100	100	4250	340	150	900	2800
OS250	250	9850	790	200	1200	4000
OS500	500	19000	1500	250	1600	5500



OXYGEN GENERATORS

OXYMAX SERIES OXYGEN GENERATORS

Utilisation of pressure swing adsorption (PSA) technology produces high purity oxygen (up to 95%). Fully automated with inbuilt monitoring, The Oxymax is a cost-efficient source of oxygen used in many industries including waste water treatment, ozone production, healthcare, glass industry and fish breeding.

OXYMAX MODEL	O ₂ OUTPUT (lpm)	POWER (w)	OUTLET PRESSURE (kPa)	INLET PRESSURE (barg max)	WEIGHT (kg)
OXYMAX 5	5	600*	150	4	29
OXYMAX 8	8	60	200	4	21
OXYMAX 12	12	80	200	4	29
OXYMAX 25	25	100	200	4	54
OXYMAX 45	45	220	200	4	85
OXYMAX 70	70	300	200	4	100
OXYMAX 96	96	300	200	4	135
OXYMAX 120	120	300	200	4	180
OXYMAX 150	150	400	200	4	300

* Oxymax 5 with integrated compressor

AQUIJECT SERIES VENTURI INJECTORS

Designed & engineered for high-efficiency, the Aquiject injector design is based on differential pressure, incorporating internal mixing vanes. Aquiject injectors operate over wide range of pressures, requiring only a minimal pressure differential to initiate a vacuum at the suction port.

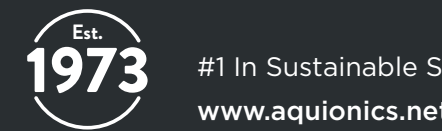
AQUIJECT MODEL	AIR SUCTION (lpm@5 bar)	WATER SUCTION (lpm@5 bar)	INLET/OUTLET (inch)	LENGTH (mm)
AQUIJECT 25	4	3	¼	60
AQUIJECT 50	10	5	½	95
AQUIJECT 75	30	25	¾	230
AQUIJECT 100	50	40	1	230
AQUIJECT 150	150	140	1½	270
AQUIJECT 200	440	380	2	290



**AQUIJECT VENTURI INJECTORS
(2 YEARS WARRANTY)**



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Salt Chlorination Solutions

ELECTROLYTIC CHLORINATION FOR SWIMMING POOLS



AQUICHLOR ELECTROLYTIC CHLORINATION

Designed & engineered for tropical & harsh operating conditions, Aquichlor is equipped with accurate output control, multi-functional digital readout and integrated flow switch. Aquichlor's electrolytic generation of chlorine from saline water is the safe and reliable way to achieve guaranteed sanitation for your pool.

AQUICHLOR MODEL	CHLORINE OUTPUT (as 100% gph)	SALT LEVEL (ppm)	INPUT POWER (V _{AC})	OUTPUT POWER (V _{DC})	POOL SIZE (max litres)
AC75	0 - 20	3300 ± 500	220 - 250	18 - 26	75,000
AC150	2 - 25	3300 ± 500	220 - 250	18 - 26	150,000
AC300C	4 - 50	3300 ± 500	220 - 250	18 - 26	300,000
AC600C	8 - 100	3300 ± 500	220 - 250	18 - 26	600,000
AC900C	12 - 150	3300 ± 500	220 - 250	18 - 26	900,000
AC1200C	16 - 200	3300 ± 500	220 - 250	18 - 26	1,200,000



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