FILTRATION TECHNOLOGIES

ADVANCED & SUSTAINABLE ALSS

ZOO & PUBLIC AQUARIUM FILTRATION SYSTEMS

COMPANY PROFILE &
FEATURED EQUIPMENT

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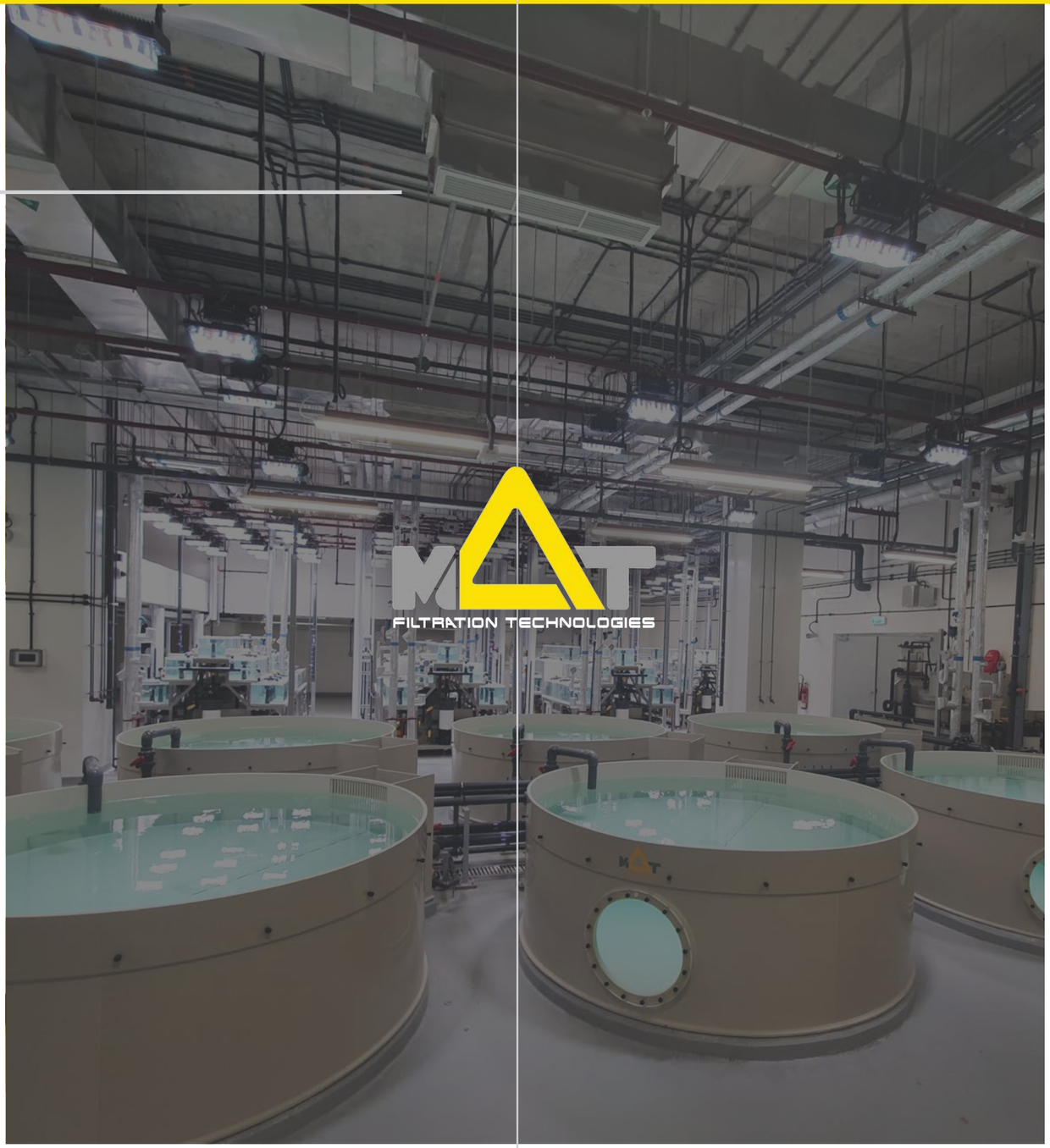
DOCUMENT INDEX

MAT COMPANY PROFILE

MAT FILTRATION TECHNOLOGIES, matglobal.tech focuses on design and fabrication of water filtration equipment and industrial filtration technology, providing innovative solutions

to public aquariums and zoological facilities. Working closely with industry leaders and universities, we design & fabricate the most updated filtration technology.

MAT Equipment Technology offers equipment, customized to each project, aiming to provide sustainable operationsto secure safe environment for the aquatic animals and simple to



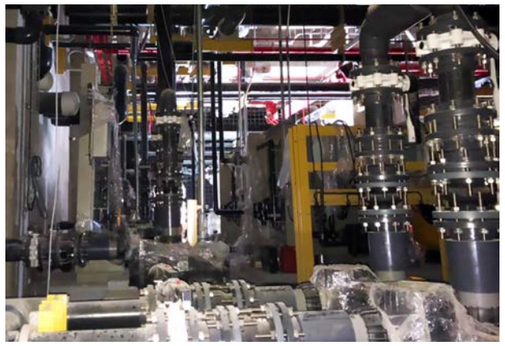
operators.

In MAT we thrive to design and supply ALSS equipment to meet the project's timeline, budget and exceed system's performance expectations.

We further develop the latest technology for closed circuit public aquariums & our experienced aftersales team provides onsite 24/365 support, physically and online.

Our RAS technology, comes with 5 years warranty using MEP components made in EU &

USA & we operate under ISO 14001 and 9001 protocols, carrying VIT, UL, SASO, EUOTA, and CE.



For more information about MAT FILTRATION TECHNOLOGIES please visit our website at matglobal.tech

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SeaWorld ABU DHABI

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Parques Reunidos PASSION FOR LEISURE

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THE LAND OF LEGENDS THEME PARK

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De Jong Marinelife

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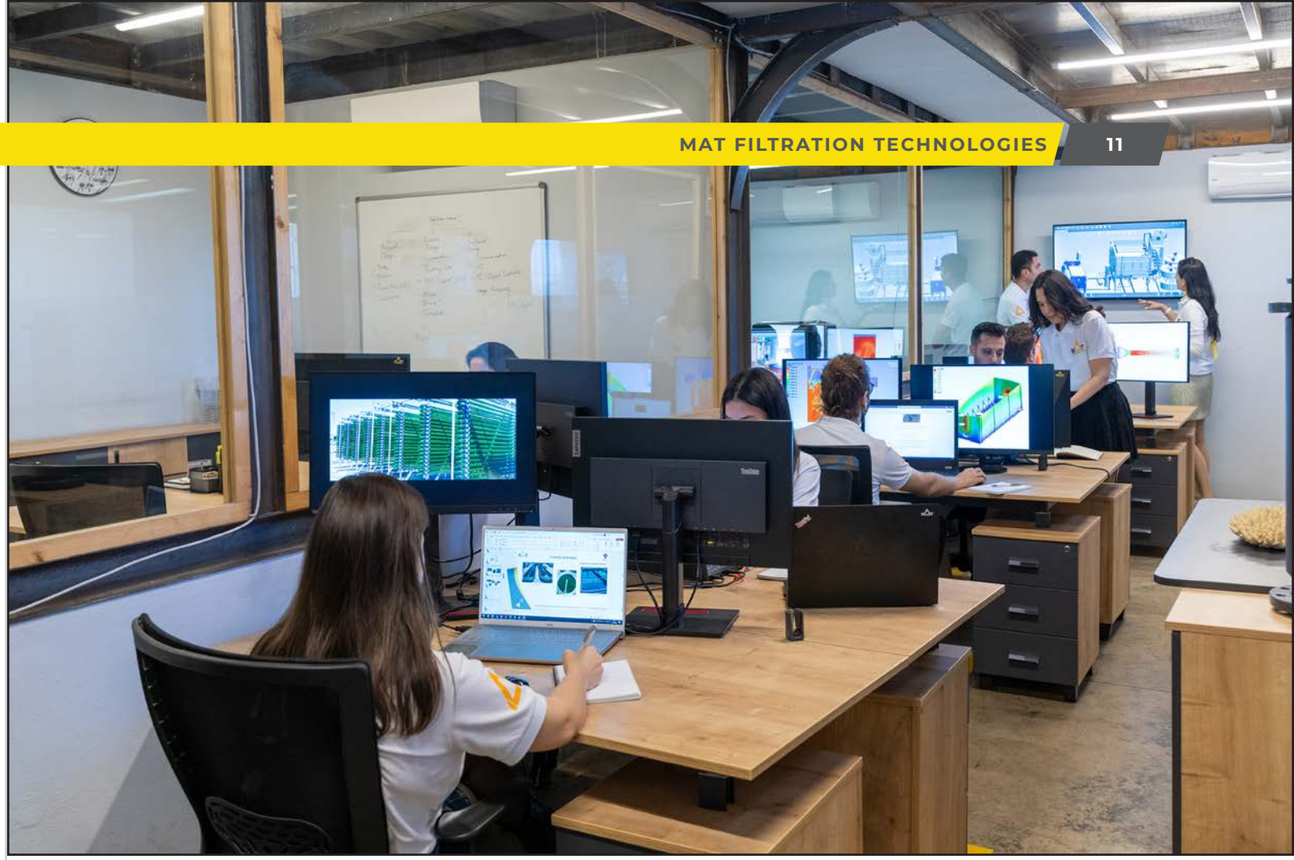
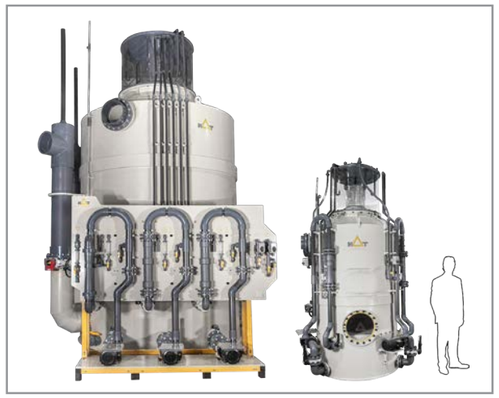
Contact MAT FILTRATION TECHNOLOGIES today to meet people that understand your concerns in the aquaculture industry. We welcome any request seeking for intensive aquaculture filtration solutions. We understand your needs and we will make the extra step to serve you in the best possible way. We aim for continuous long lasting business relation with all our clients and friends around the world.



MARINE & FRESHWATER PROTEIN SKIMMERS

The Protein Skimmers / Foam Fractionators are used to provide an efficient means of floatable and dissolved solids control, by removing mechanically, fine and dissolved organics from water. A combination of a Protein Skimmer and Ozone generator is a perfect choice to increase the production capacity of the current facilities by UVT & Turbidity & COD treatment simultaneously by killing free-swimming bacteria and oxidation of a dissolved substance.

Additionally, through the fractionation process, the FILTRATION TECHNOLOGIES Foam Fractionator infuses oxygen and ozone that minimize bacteria and micro-organisms and maximise O2 concentration in Recirculated Aquaculture Systems (RAS). User-friendly operation.

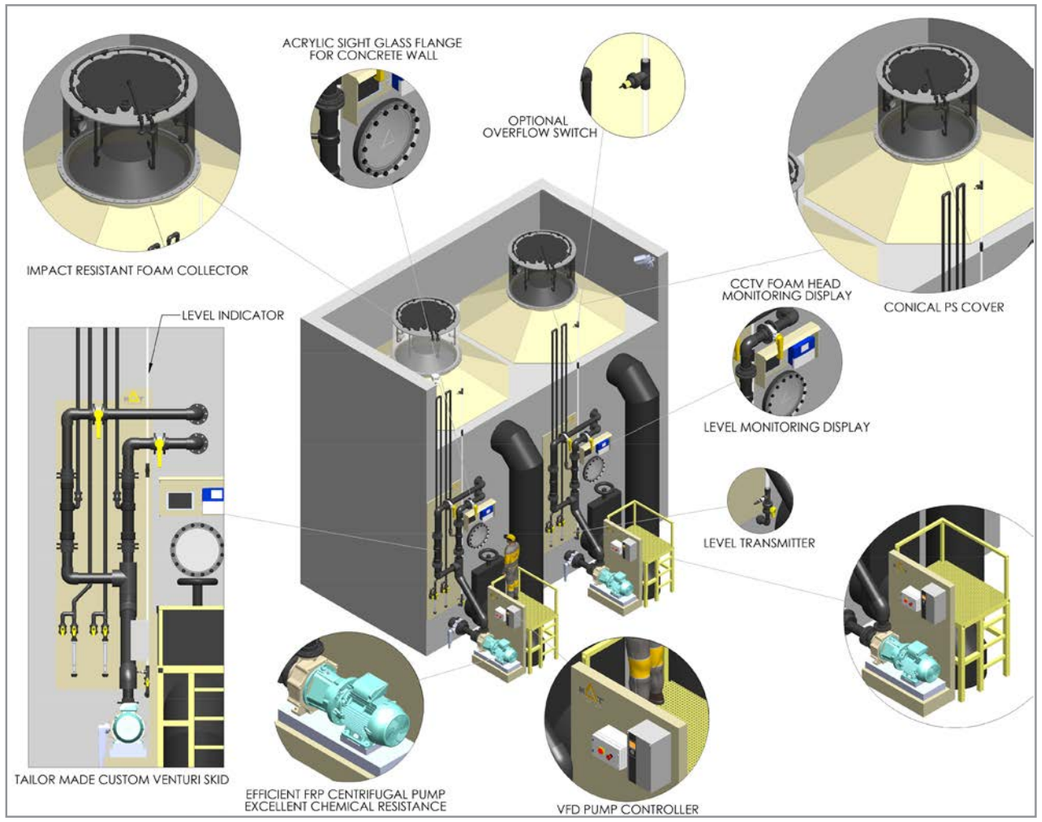


CONCRETE PROTEIN SKIMMERS

FILTRATION TECHNOLOGIES can provide Protein Skimmers set-ups for concrete chambers for larger RAS applications. Concrete Protein Skimmers can be more cost-effective solutions after 1000m³/h Protein Skimmer Flowrates compared to prefabricated units with their bodies.

It is not only the most CAPEX efficient but also the most OPEX efficient foam fractionation solution. Locating concrete protein skimmers chambers into the channel flow sequence by the designer eliminates the feed pump and main energy requirement of Protein Skimmer application.

Our Design Team supports RAS Designers/Contractors technically for the sizing of concrete chamber and channels.



PSM SPECIFICATIONS

PROTEIN SKIMMER-M	PSM-14	PSM-22	PSM-62	PSM-220	PSM-280	PSM-360	PSM-600	PSM-800	PSM-1300	PSM-1500
Footprint Depth [mm]	800	975	1190	1700	1900	2100	3275	2900	3755	4185
Footprint Width [mm]	955	1195	1505	2400	2570	2800	3350	3810	3850	5435
Diameter [mm]	315	500	750	955	1250	1500	2000	2350	3000	3400
Height [mm]	1825	1929	2320	2670	3080	3630	3705	4600	4680	4825
Installed Power [kW]	0.45	0.68	0.71	0.97	1.9	3.45	4.5	8	12	16
Basic Unit Total Electric Consumption [kWh]	0.32	0.48	0.5	0.68	1.3	2.52	3.33	5.5	8.8	12.35
Supply Voltage (50Hz) [V]	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400	3~400	3~400	3~400
Inlet Size [mm]	63	75	110	160	200	225	315	400	500	630
Inlet Qty [pcs]	1	1	1	1	1	1	1	1	1	1
Inlet Level [mm]	1196	1187	1500	1590	1838	2300	2185	2700	2723	2593
Outlet Size [mm]	75	90	140	225	250	280	315	400	500	630
Outlet Qty pcs	1	1	1	1	1	1	1	1	1	1
Outlet Level [mm]	1235	1227	1518	1585	1845	2259	2181	2560	2560	2560
Body Volume [m^3]	0.09	0.24	0.71	1.29	2.74	4.5	8.09	14.5	23	29
Minimum-Maximum operation water level [mm]	1275-1533	1353-1631	1705-2010	1949-2254	2230-2605	2806-3156	2922-3372	3095-3305	3665-4065	3810-4210
Foam Collector effluent connection size [mm]	50	50	50	63	63	63	90	90	90	90
Max Flow Rate [m^3/hr]	15	22	62	220	280	360	600	819	1300	1500
Max flow Dwell Time [second]	22	38	41	21	35	45	49	42	64	70
@1 min Dwell Time Flow Rate [m^3/hr]	5.4	14	43	77	164.4	270	485	870	1380	1740
@1.5 min Dwell Time Flow Rate [m^3/hr]	3.6	9.6	28.4	51.6	109.6	180	323.6	580	920	1160
@2 min Dwell Time Flow Rate [m^3/hr]	2.7	7	21	39	82	135	243	435	690	870
Dry weight [kg]	82	102	160	254	390	525	870	1100	1750	2070
Operational Weight [kg]	172	400	920	1650	3200	5300	9500	13500	25000	29000
Body Material	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Venturi Pump Qty [pcs]	1	1	1	1	1	1	1	2	3	4
Venturi Pump Model	44/8	44/12	21-40/54H G	21-40/58H G	21-50/43	21-81/33	21-81/34	21-81/34	21-81/34	21-81/34
Nominal Air Suction [Nm^3/hr]	2	2	4	6	18	23	32	72	90	120

PROTEIN SKIMMER-F	PSF-22	PSF-62	PSF-220	PSF-280	PSF-360	PSF-600	PSF-800	PSF-1300	PSF-1500
Footprint Depth [mm]	1195	1195	1400	1810	2100	2820	2900	3805	4185
Footprint Width [mm]	1043	1525	2220	2550	2810	3350	4000	4775	5435
Diameter [mm]	500	750	955	1250	1500	2000	2350	3000	3400
Height [mm]	1927	2320	2670	3085	3630	3705	4800	4825	4825
Installed Power [kW]	1.1	1.33	3.5	3.5	4.55	8	11	15	22
Basic Unit Total Electric Consumption [kWh]	0.75	1	3	3	4	7.4	8.8	11	19.5
Supply Voltage (50Hz) [V]	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230
Inlet Size [mm]	75	110	160	200	225	315	400	500	630
Inlet Qty [pcs]	1	1	1	1	1	1	1	1	1
Inlet Level [mm]	1185	1500	1590	1838	2300	2185	2700	2723	2593
Outlet Size [mm]	90	140	225	250	280	315	400	500	630
Outlet Qty [pcs]	1	1	1	1	1	1	1	1	1
Outlet Level [mm]	1252	1518	1585	1845	2259	2179	2560	2560	2560
Body Volume [m^3]	0.24	0.71	1.29	2.74	4.5	8.09	14.5	23	29
Minimum-Maximum Operation Water Level [mm]	1353-1631	1705-2010	1949-2254	2230-2605	2806-3156	2922-3372	3095-3305	3665-4065	3665-4065
Foam Collector Effluent Connection Size [mm]	50	50	63	63	63	90	90	90	90
Max Flow Rate [m^3/hr]	22	62	220	280	360	600	750	1300	1500
Max Flow Dwell Time [second]	38	41	21	35	45	49	42	64	70
@1 min Dwell Time Flow Rate [m^3/hr]	14	43	77	164.4	270	485	870	1380	1740
@1.5 min Dwell Time Flow Rate [m^3/hr]	9.6	28.4	51.6	109.6	180	323.6	580	920	1160
@2 min Dwell Time Flow Rate [m^3/hr]	7	21	39	82	135	243	435	690	870
Dry Weight [kg]	100	180	262	420	530	760	1185	1960	2070
Operational Weight [kgs]	435	970	1650	3265	5365	9800	13585	25000	29000
Body Material	PP	PP	PP	PP	PP	PP	PP	PP	PP
Venturi Pump Qty [pcs]	1	1	1	1	1	2	1	1	2
Venturi Pump Model	21-40/54H	21-40/58HG	21-81/33	21-81/33	21-81/34	21-81/34	Normblock Multi S 100/250	Normblock Multi S 125/250	Normblock Multi S 125/250
Nominal Air Suction [Nm^3/hr]	6.7	10	30	30	40	72	78	117	156

PSF SPECIFICATIONS

PSM + PSF OPTIONALS

PROTEIN SKIMMER OPTIONAL FEATURES	PSM-14	PSM/F-22	PSM/F-62	PSM/F-220	PSM/F-280	PSM/F-360	PSM/F-600	PSM/F-800	PSM/F-1300	PSM/F-1500
Electrical Control Panel	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional
Electrical Control Panel Footprint	185x550x770	185x550x770	185x550x770	included in unit	included in unit	included in unit	included in unit	included in unit	included in unit	included in unit
Foam Collector Autowash	Solenoid	Solenoid	Solenoid	Solenoid	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized
Overflow Switch	N/A	optional	optional	optional	optional	optional	optional	optional	optional	optional
ORP Control	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional
Foam Level Automation	N/A	N/A	N/A	optional	optional	optional	optional	optional	optional	optional
Operational Platform	N/A	N/A	N/A	N/A	N/A	optional	optional	optional	optional	optional
Passive Ozone destruct	optional	optional	optional	optional	N/A	N/A	N/A	N/A	N/A	N/A
Quick Retractable ORP/PH Probe Fitting	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional
PS Venturi Pump	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional
Ozone Gas Rotameter	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional
Outer Wash Port & Valve for Chemical Dosing	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional
Reuse of off gassed ozone	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional
Sight Glass	optional	optional	optional	optional	optional	N/A	N/A	N/A	N/A	N/A
Manhole (PP Cover)	N/A	N/A	N/A	N/A	N/A	optional	optional	optional	optional	optional
Manhole (Acrylic Cover)	N/A	N/A	N/A	N/A	N/A	optional	optional	optional	optional	optional
Ozone Inlet Solenoid Valve SS 316 Body	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional

PROTEIN SKIMMER OPTIONAL FEATURES	PSM-14	PSM/F-22	PSM/F-62	PSM/F-220	PSM/F-280	PSM/F-360	PSM/F-600	PSM/F-800	PSM/F-1300	PSM/F-1500
PS Camera	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional
PS PLC Controller	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional

PSM + PSF OPTIONALS

OZONE GENERATORS

Discover the unmatched power and reliability of FILTRATION TECHNOLOGIES expertly designed and built ozone generators, engineered to excel in the harshest conditions. Our state-of-the-art systems are not only robust and safe but also incredibly user-friendly and easy to maintain, guaranteeing smooth operation in any environment.

FILTRATION TECHNOLOGIESoffers a versatile range of reactor sizes, from 5 g/h to 15 kg/h. For large facilities with high ozone production demands, our units, capable of generating up to 15 kg/h of ozone even with a single unit, are designed to exceed expectations. Customize your system with optional features like ozone production analyzers, air preparation units, oxygen concentrators, water chillers, and ozone destructors—all seamlessly integrated for optimal performance.

Every MAT ozone generator comes equipped with advanced PLC control as standard, ensuring precision, reliability, and ease of use. When it comes to high-performance ozone generation, FILTRATION TECHNOLOGIES is your trusted partner.

OZC SPECIFICATIONS

CORONA DISCHARGE OZONE GENERATOR 1-100 [GR/HOUR]	OZC-1	OZC-2	OZC-5	OZC-10	OZC-20	OZC-50	OZC-100
Ozone Production Method	Corona Discharge			Corona Discharge			
Footprint Width [mm]	445	445	754	1650	1650	1670	1700
Footprint Depth [mm]	245	245	425	715	715	730	910
Max Height [mm]	550	550	754	1580	1580	1650	1800
Device Weight [kg]	15	16	78	250	250	250	270
Supply Voltage 50/60 Hz [V]	1~230	1~230	1~230	1~230	1~230	3~400	3~400
Nominal Energy Consumption [Wh]	100	130	1000	1400	1600	2000	3100
Installed Power [W]	115	147	1100	1500	1700	2100	3200
Total Heat Load [W]	5	7	187	205	278	597	1438
Feeding Type	Vacuum or Pressurized Air / Oxygen	Vacuum or Pressurized Air / Oxygen	Vacuum or Pressurized Air / Oxygen	Ambient Air	Ambient Air	Ambient Air	Ambient Air
Feeding/Vacuum, Air Flow Rate [L/min]	10	15	25	N/A	N/A	N/A	N/A
Feeding Oxygen Flow Rate [L/min]	1.5	2	N/A	6	6	12.5	25
Oxygen Concentration [%]	>90	>90	N/A	>90	>90	>90	>90
Feeding Oxygen Pressure [bar]	0.8-1.1	0.8-1.1	0.8-1.1	0.8-1.1	0.8-1.1	0.8-1.1	0.8-1.1
Ozone Output [g/h]	1	2	5	10	20	50	100
Ozone Flow Rate [L/min]	10	15	25	6	6	7.5	15
Ozone Concentration [% wt]	0.14	0.16	0.24	2	4	8	8
Ozone Concentration (Oxygen Feed) [% wt]	0.59	0.68	N/A	N/A	N/A	N/A	N/A
Cooling Type Media	Air	Air	Air	Water	Water	Water	Water
Cooling Water Flow [m3/h]	N/A	N/A	N/A	0.75	0.75	1.2	2.5
Cooling Water Parameter In/Out [C]	N/A	N/A	N/A	20	20	20	20
Ozone Outlet Size [mm] // inc	8	8	8	8	8	8	8

OZC SPECIFICATIONS

CORONA DISCHARGE OZONE GENERATOR 1-100 GR/HOUR OPTIONAL FEATURES	OZC-1	OZC-2	OZC-5	OZC-10	OZC-20	OZC-50	OZC-100
Ozone Analyzer [g/Nm3]	N/A	N/A	N/A	10-200	10-200	10-200	10-200
Backflow Prevention Device Model	BFP-8	BFP-8	BFP-8	BFP-8	BFP-8	BFP-8	BFP-8
Ozone Generator PLC Controller	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Recommended Ozone Destruct Unit Model	ODT-1	ODT-1	ODT-1	ODT-1	ODT-5	ODT-5	ODT-10
Touch Screen Control Board	N/A	N/A	N/A	Optional	Optional	Optional	Optional
Dew Point Sensor Range	N/A	N/A	Optional	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD
Oxygen Purity Sensor Range	0,1-99 %	0,1-99 %	N/A	0,1-99 %	0,1-99 %	0,1-99 %	0,1-99 %
Air Dryer Model	Desiccant Tube	Desiccant Tube	DAD-30	N/A	N/A	N/A	N/A
Ambient Ozone Detector [ppm]	0.1	0.1	0.1	0.1	0.1	0.1	0.1

CORONA DISCHARGE OZONE GENERATOR WITH EXTERNAL OXY-GEN SUPPLY	OZO-10	OZO-20	OZO-50	OZO-100	OZO-150
Ozone Production Method	Corona Discharge	Corona Discharge	Corona Discharge	Corona Discharge	Corona Discharge
Footprint Width [mm]	1055	1055	1045	1045	1092
Footprint Depth [mm]	625	625	620	620	781
Height [mm]	1555	1555	1837	1837	1670
Ozone Output [g/h]	10	20	50	100	150
Nominal Ozone Concentra-tion [% wt]	2.4	2.4	4.8	4.8	8
Oxygen Concentration [%]	Min 90%-Max. 99%	Min 90%-Max. 99%	Min 90%-Max. 99%	Min 90%-Max. 99%	Min 90%-Max. 99%
Feeding Oxygen Pressure [bar]	1	1	1	1	1
Feeding Oxygen Dew Point [°C]	< -30	< -30	< -30	< -30	< -30
Feeding Gas Minimum Nitro-gen [%]	≥1	≥1	≥1	≥1	≥2
Installed Power [W]	220	310	600	1350	1700
Supply Voltage 50/60 Hz [V]	1~220	1~220	3~400	3~400	3~400
Ozone Outlet Size [mm]	8	8	8	8	8
Ozone Flow Rate [L/min]	5	10	15	25	25
Total Heat Load [W]	54	63	211	284	426
Air Conditioner Filter+Dryer	1	1	1	1	1
Enclosure Material	Metalic	Metalic	Metalic	Metalic	Metalic
Enclosure Rate [IP]	44	44	44	44	44
Device Weight [kg]	150	170	200	250	400

OPTIONAL FEATURES	OZO-10	OZO-20	OZO-50	OZO-100	OZO-150
Ozone Analyzer g/Nm3	10-300	10-300	10-300	10-300	10-300
Backflow Prevention Device Model	BFP-8	BFP-8	BFP-8	BFP-8	BFP-8
Ambient Ozone Detector ppm	0,1	0,1	0,1	0,1	0,1

OZO SPECIFICATIONS

CORONA DISCHARGE OZONE GENERATOR & OPTIONAL FEATURES	OZO-250	OZO-500	OZO-1000	OZO-1500	OZO-2000	OZO-3000	OZO-4000
Ozone Production Method	Corona Discharge			Corona Discharge			
Footprint Width [mm]	1280	1150	1750	1750	2220	2200	2164
Footprint Depth [mm]	710	940	1010	1128	1300	1500	1555
Max Height [mm]	1950	1920	1897	2125	2196	2250	2300
Device Weight [kg]	695	736	630	900	1530	1300	3130
Supply Voltage 50/60 Hz [V]	3~400	3~400	3~400	3~400	3~400	3~400	3~400
Electrical Connection	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE
Nominal Energy Consumption [kWh]	2.5	5	8.9	13.4	17.8	26.7	35.6
Installed Power [kW]	3	6	10	15	23	30	40
Nominal Current [A]	15	25	40	60	75	89	111
Total Heat Load [kcal/h]	2500	5000	10000	15000	20000	30000	40000
Min-Max Ozone Varaible Ozone Production Range [g/h]	10-250	10.0-500	10.0-1000	10.0-1500	10.0-2000	10.0-3000	10.0-4000
Feeding Type	Oxygen	Oxygen	Oxygen	Oxygen	Oxygen	Oxygen	Oxygen
Feeding Oxygen Flow Rate [m3/h]	1.75	3.5	7.8	12	15.6	24	31.2
Oxygen Concentration [%]	>90	>90	>90	>90	>90	>90	>90
Feeding Oxygen pressure (nominal) [bar]	1	1	1	1	1	1	1
Min-Max Feeding Oxygen Pressure Range [bar]	0.5-3	0.5-3	0.5-3	0.5-3	0.5-3	0.5-3	0.5-3
Feeding Oxygen Dew Point [C]	< -70	< -70	< -70	< -70	< -70	< -70	< -70
Feeding Gas Minimum Nitrogen [%]	≥ 1	≥ 1	≥ 1	≥ 1	≥ 1	≥ 1	≥ 1
Ozone Output [g/h]	250	500	1000	1500	2000	3000	4000
Ozone Flow Rate [m3/h]	1.75	2.5	7.8	12	15.6	24	31.2
Ozone Concentration (nominal) [% wt]	10	10	9	9	9	9	9
Min-Max Ozone Concentration Working Rage [%wt]	5.0-16.0	5.0-16.0	5.0-16.0	5.0-16.0	5.0-16.0	5.0-16.0	5.0-16.0
Cooling Type	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled
Cooling Water Flow [m3/h]	1	2	3	5	6	8	9.5
Cooling Water Max Pressure [bar]	6	6	6	6	6	6	6
Cooling Water Parameter In/Out [C]	20--22	20--22	20--22	20--22	20--22	20--22	20--22
Ozone Generator PLC Controller	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Ozone Outlet Size [mm] // inc	1/4"	1/4"	1/2"	1/2"	1/2"	1"	1"
Control Panel Type / Comunication	PLC/HMI/TCP IP	PLC/HMI/TCP IP	PLC/HMI/TCP IP	PLC/HMI/TCP IP	PLC/HMI/TCP IP	PLC/HMI/TCP IP	PLC/HMI/TCP IP

OZO SPECIFICATIONS

CORONA DISCHARGE OZONE GENERATOR & OPTIONAL FEATURES	OZO-5000	OZO-6500	OZO-8000	OZO-10000	OZO-15000
Ozone Production Method	Corona Discharge			Corona Discharge	
Footprint Width [mm]	2380	3000	3000	4200	4200
Footprint Depth [mm]	1610	2000	2200	2200	2200
Max Height [mm]	2552	2250	2250	2250	2250
Device Weight [kg]	2500	3500	4500	5500	7000
Supply Voltage 50/60 Hz [V]	3~400	3~400	3~400	3~400	3~400
Electrical Connection	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE
Nominal Energy Consumption [kWh]	46.5	60.5	74.4	93	139.5
Installed Power [kW]	50	65	80	100	150
Nominal Current [A]	145	178	222	333	433
Total Heat Load [kcal/h]	50000	65000	80000	100000	150000
Min-Max Ozone Varaible Ozone Production Range [g/h]	10.0-5000	10.0-6500	10.0-8000	10.0-10000	10.0-15000
Feeding Type	Oxygen	Oxygen	Oxygen	Oxygen	Oxygen
Feeding Oxygen Flow Rate [m3/h]	39	51	63	78	117
Oxygen Concentration [%]	>90	>90	>90	>90	>90
Feeding Oxygen pressure (nominal) [bar]	1	1	1	1	1
Min-Max Feeding Oxygen Pressure Range [bar]	0.5-3	0.5-3	0.5-3	0.5-3	0.5-3
Feeding Oxygen Dew Point [C]	< -70	< -70	< -70	< -70	< -70
Feeding Gas Minimum Nitrogen [%]	≥ 1	≥ 1	≥ 1	≥ 1	≥ 1
Ozone Output [g/h]	5000	6500	8000	10000	15000
Ozone Flow Rate [m3/h]	39	51	63	78	117
Ozone Concentration (nominal) [% wt]	9	9	9	9	9
Min-Max Ozone Concentration Working Rage [%wt]	5.0-16.0	5.0-16.0	5.0-16.0	5.0-16.0	5.0-16.0
Cooling Type	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled
Cooling Water Flow [m3/h]	12	33	42	55	85
Cooling Water Max Pressure [bar]	6	6	6	6	6
Cooling Water Parameter In/Out [C]	20--22	20--22	20--22	20--22	20--22
Ozone Generator PLC Controller	Standard	Standard	Standard	Standard	Standard
Ozone Outlet Size [mm] // inc	1"	1"	1-1/4"	1-1/4"	1-1/2"
Control Panel Type / Comunication	PLC/HMI/TCP IP	PLC/HMI/TCP IP	PLC/HMI/TCP IP	PLC/HMI/TCP IP	PLC/HMI/TCP IP

APU SPECIFICATIONS

AIR PREPARATION UNITS 250-35000 LPM UNITS	APU-250	APU-500	APU-1000	APU-2000	APU-3000	APU-5000	APU-10000	APU-18000	APU-35000
Footprin Width [mm]	1400	1800	2210	2000	2200	2200	2500	3000	4000
Footprint Depth [mm]	800	1000	880	900	1000	1100	1750	1900	2300
Max Height [mm]	1000	1200	2028	2028	2200	2200	2200	2200	2350
Device Weight [kg]	140	250	775	900	1020	1140	2150	3250	5950
Supply Voltage 50/60 Hz [V]	3~400	3~400	3~400	3~400	3~400	3~400	3~400	3~400	3~400
Nominal Energy Consumption [kWh]	4.4	8	17	22	37	45	75	132	250
Installed Power [kW]	5	10	20	25	40	50	80	140	260
Operating Pressure [bar]	8	8	8	9	9	9	9	9	9
Max Pressure [bar]	10	10	10	13	13	13	13	13	13
FAD @8 Bar [L/min]	340	680	1320	2430	3670	5990	12820	22960	43080
Pressure Dew Point [°C]	4	4	4	4	4	4	4	4	4
Air Receiver Capacity [L]	90	260	500	1000	1500	2500	5000	2x5000	4x5000
Noise Level [db(A)]	75	86	86	86	86	86	86	90	90
Compressor Type Model	Oil Free	Oil Free	Oil Free	Screw Type	Screw Type	Screw Type	Screw Type	Screw Type	Screw Type
Duty Scale [%]	100%	100%	100%	100%	100%	100%	100%	100%	100%
Touch Screen Control Board	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Dew Point Sensor//Range	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD

OX SPECIFICATIONS

OXYGEN CONCENTRATOR UNITS 6-2500 [LPM]	OX-6	OX-15	OX-25	OX-40	OX-80	OX-160	OX-250	OX-400	OX-750	OX-1500	OX-2500
Footprint Width [mm]	250	350	780	450	900	930	1000	1200	1700	2005	2450
Footprint Depth [mm]	200	300	300	400	700	750	750	750	1000	1115	1600
Max Height [mm]	750	1350	1350	1250	1929	1850	2250	2300	2500	2900	3500
Device Weight [kg]	30	73	105	250	395	600	900	1300	2400	5200	7250
Supply Voltage 50/60 Hz [V]	24	24	24	1~230	1~230	1~230	1~230	1~230	1~230	1~230	1~230
Installed Power [W]	300	300	600	500	500	500	700	700	1000	1000	1500
Oxygen Flowrate @1 bar [L/min]	6	15	25	40	80	160	250	400	750	1500	2500
Pressure Dew Point [°C]	4	4	4	4	4	4	4	4	4	4	4
Oxygen Output Concentration Range	%90-94	%90-94	%90-94	%90-94	%90-94	%90-94	%90-94	%90-94	%90-94	%90-94	%90-94
Max. Output Pressure [bar]	3	3	3	4	4	4	4	4	4	4	4
Max. Operating Pressure [barg]	3	3	3	10	10	10	10	10	10	10	10
Optional Features Touch Screen Control Board	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Optional Features Oxygen Purity Sensor Range	%0-99	%0-99	%0-99	%0-99	%0-99	%0-99	%0-99	%0-99	%0-99	%0-99	%0-99
Optional Features Dew Point Sensor Range	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD	-50 ... +20 °C TD

BACKFLOW PREVENTION DEVICE

SMART BACKFLOW PREVENTION UNITS FOR OZONE GENERATORS

Preventing water from backflowing into your ozone system is one of the most effective ways to ensure reliable performance and minimize downtime. The MAT FILTRATION TECHNOLOGIES Back Flow Prevention units offers a simple and cost-efficient solution to protect your ozone equipment.

ELECTRONIC WATER DETECTION

Unexpected water ingress into an ozone generator can cause severe damage to ozone reactors and power supplies, resulting in costly repairs and system downtime. The BFP units uses an advanced electronic water detection system that reacts instantly—shutting off the flow immediately when water is detected.

SIMPLE MAINTENANCE & FAST RESTART

Engineered for safe, low-maintenance operation, the BFP units features a built-in drainage system that allows for rapid restart after activation, ensuring minimal disruption to your process.

AUTOMATIC SYSTEM SHUTDOWN

Designed for seamless integration, the unit can be connected to any ozone system. When used with a MAT FILTRATION TECHNOLOGIES ozone generator or control unit, it can automatically shut down the entire system—or individual generators—if water is detected.

BACKFLLOW PREVENTION DEVICE	BFP-8	BFP-15	BFP-22	BFP-35	BFP-42	BFP-50
Footprint Width [mm]	150	180	200	200	250	250
Footprint Depth [mm]	165	275	326	326	376	446
Max. Height [mm]	300	400	500	500	600	800
Total Electric Power [W]	25	20	20	25	50	80
Power Supply	230V 50Hz	230V 50Hz	230V 50Hz	230V 50Hz	230V 50Hz	230V 50Hz
Dry Weight [kg]	3	7	10	15	20	20
Protection Rate [IP]	66	66	66	66	66	66
Pipe Material	Teflon	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel
Piping Pressure Rate	PN10	PN10	PN10	PN10	PN10	PN10
BFP Vessel Material	Teflon	Teflon	Teflon	Teflon	Teflon	Borosilicate Glass
Connection Dimension to BFP [inch/mm]	8 mm	1/4"	1/2"	1"	1 1/2"	2"
Solenoid Valves Material	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel

BFP SPECIFICATIONS

DRUM FILTERS

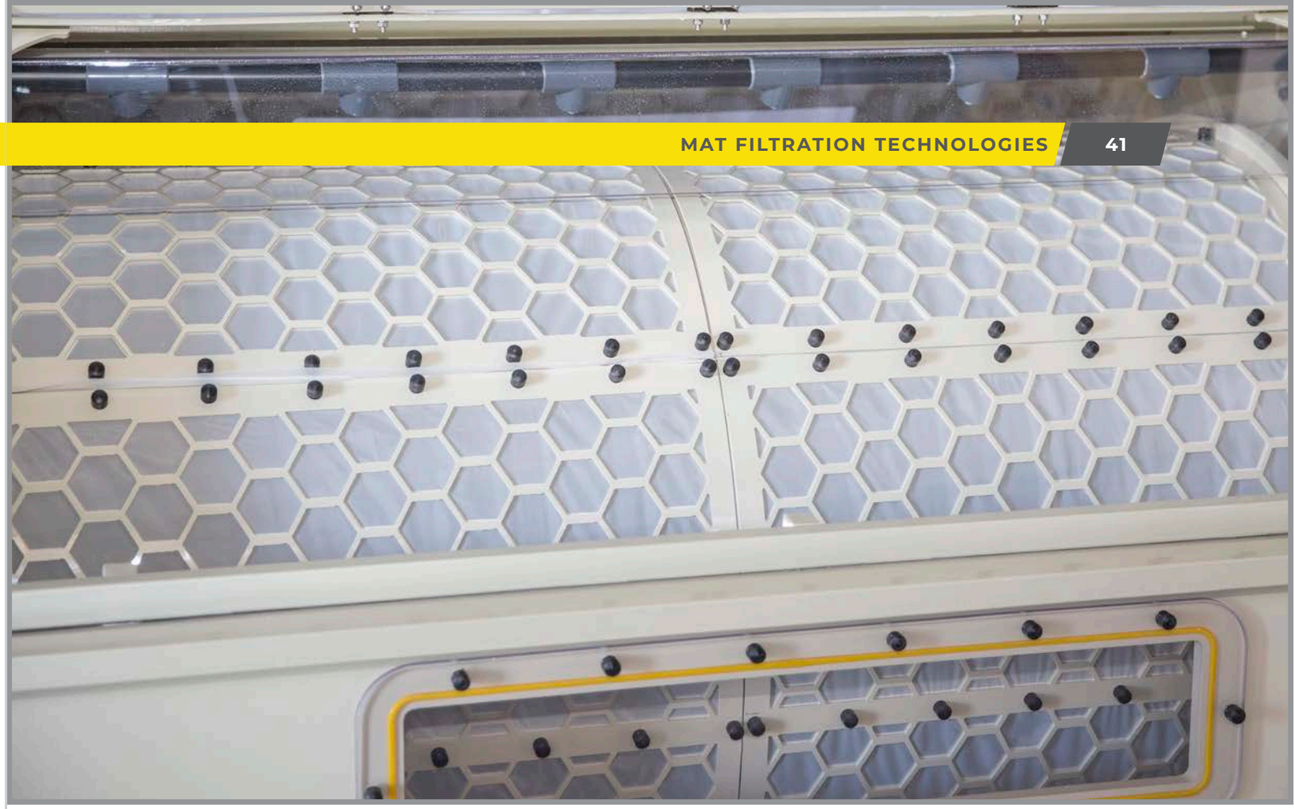
FILTRATION TECHNOLOGIES Drum Filters are mechanical units that provide an efficient, robust, and reliable solution for solid matter separation.

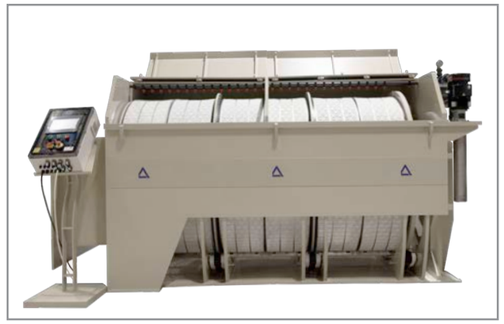
Our automatic self-cleaning micro-screen filters are capable of handling a wide range of flow rates, from 5 m³/h to 8,000 m³/h, and support backwashing using micron ratings ranging from 10 µm to 1,000 µm.

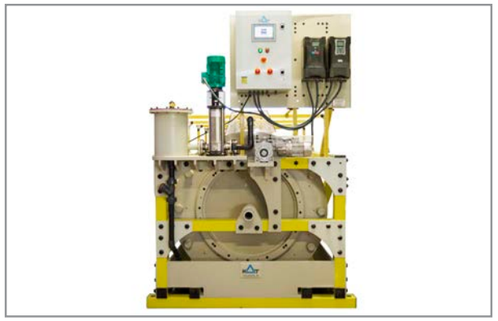
They are designed for high-performance filtration and extended reliability, making them ideal for mission-critical water treatment applications, especially in land-based aquaculture.

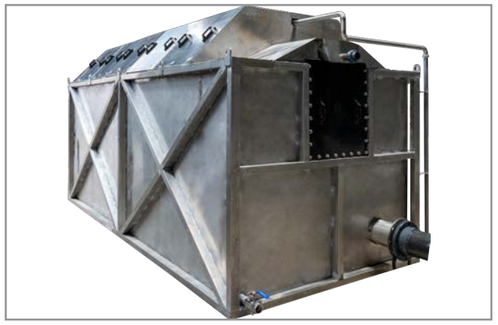
FILTRATION TECHNOLOGIES Drum Filters are available in Tank Type, Half Tank Type, and Channel Type configurations, with options for non-metallic engineered plastic or steel materials. Filter panels are modular and protected by a patent-pending support structure.

The filters are energy-efficient, featuring intermittent and continuous backwash modes to minimize water consumption. The Smart Wash Logic Control enables operational mode selection, rotational speed adjustment, and autonomous optimization for effective cleaning.

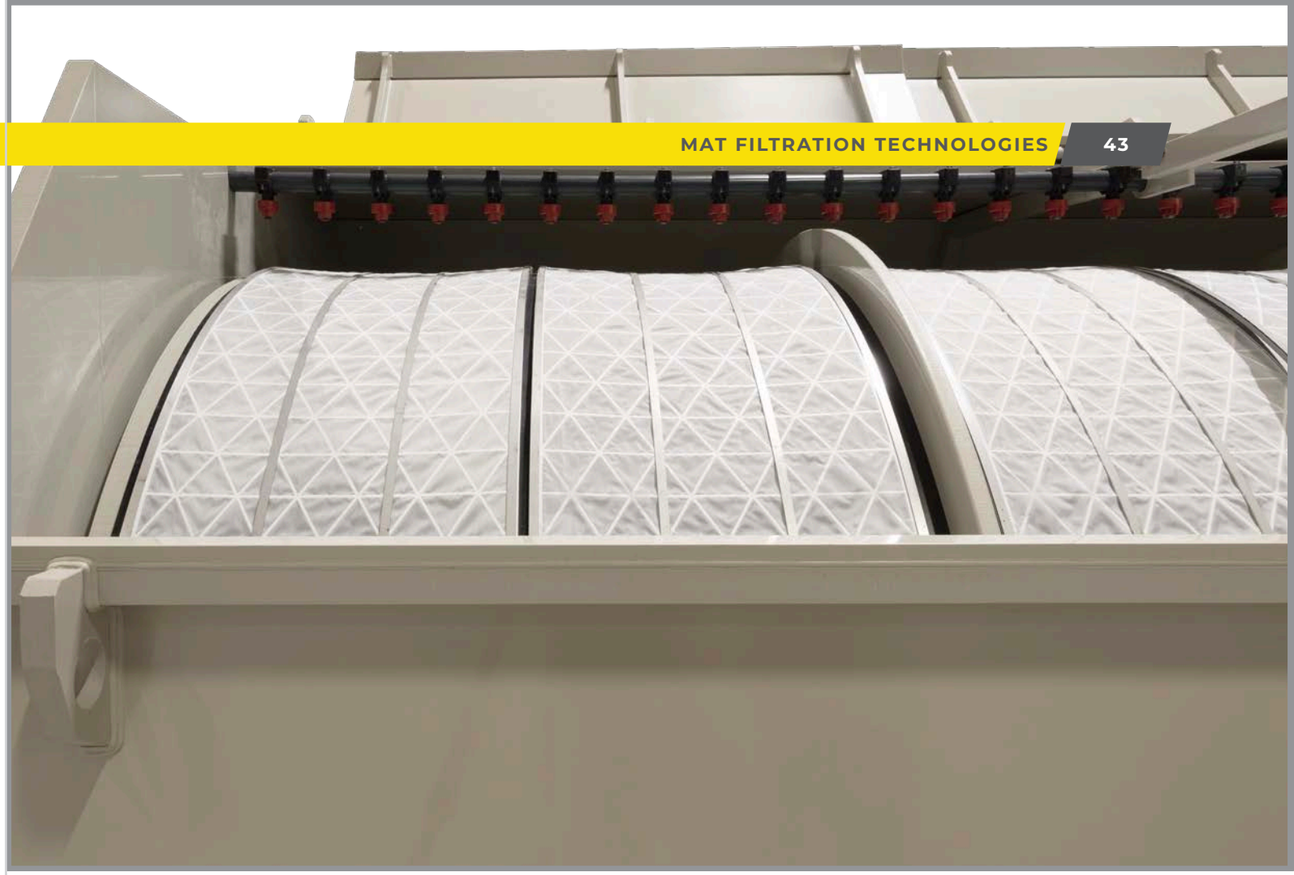


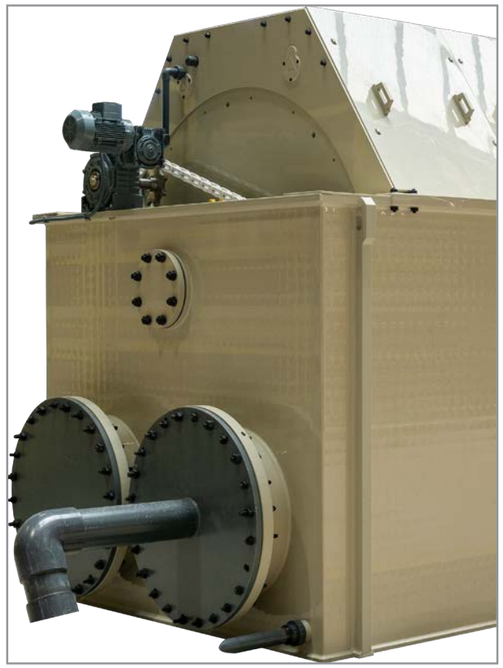


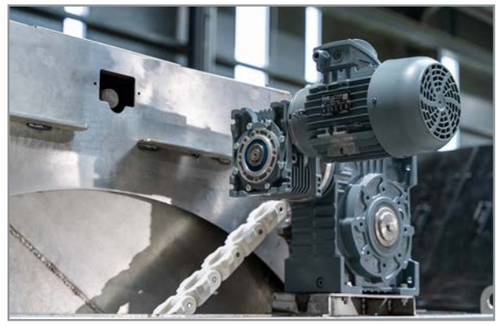




DRUM FILTERS OPTIONAL FEATURES	ALL MODELS
Drum Auto wash as per Water Level Fixed Drum Wash Rotation Speed	OPTIONAL
Drum Auto wash as per Water Level Error/Status/ Alarm Function via Digital Screen Drum Filter Rotation Modes PROFINET/MODBUST Connection Including Smart Relay/Power Supply/Driver Units	OPTIONAL
Error/Status/Alarm Function via Touch Screen Drum Filter Rotation Modes PROFINET/MODBUST Connection Including PLC/HMI/Power Supply/Driver Units	OPTIONAL







DRUM FILTER MODEL	DRF-400-1	DRF-400-2	DRF-800-1	DRF-800-2	DRF-800-3	DRF-1200-3	DRF-1200-4	DRF-1600-4	DRF-1600-6	DRF-1600-8
Drum diameter [mm]	400	400	800	800	800	1200	1200	1600	1600	1600
Drum length [mm]	385	770	385	770	1155	1155	1540	1540	2310	3080
Screen Panel Type	SP-2	SP-2	SP-2	SP-2	SP-2	SP-2	SP-2	SP-2	SP-2	SP-2
Per Panel Area [m2]	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Total Panel Area [m2]	0.46	0.92	0.92	1.84	2.76	4.14	5.52	7.36	11.04	14.72
Total Screen Panel Quantity [pcs]	1	2	2	4	6	9	12	16	24	32
Per Segment Panel Quantity [pcs]	1	1	2	2	2	3	3	4	4	4
Screen Panel Dimensions [mm]	385 x 1200	385 x 1200	385 x 1200	385 x 1200	385 x 1200	385 x 1200	385 x 1200	385 x 1200	385 x 1200	385 x 1200
Available Types: T(Tank), HT(Half Tank), C(Channel)	T/HT/C	T/HT/C	T/HT/C	T/HT/C	T/HT/C	T/HT/C	T/HT/C	T/HT/C	T/HT/C	T/HT/C
Available Tank/Housing Wall Material	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Poly-mer/304/316/ Duplex	Poly-mer/304/316/ Duplex	Poly-mer/304/316/ Duplex
Drum Structure Material	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Poly-mer/304/316/ Duplex	Poly-mer/304/316/ Duplex	Poly-mer/304/316/ Duplex
Frame Material	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Poly-mer/304/316/ Duplex	Poly-mer/304/316/ Duplex	Poly-mer/304/316/ Duplex
Lid/Cover Material	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer
Seal/Gasket Material	EPDM	EPDM	EPDM	EPDM	EPDM	EPDM	EPDM	EPDM	EPDM	EPDM
Bacwash Water Flow [m^3/hr]	0.9	0.9	0.9	1.8	2.7	2.7	3.6	3.6	5.4	7.2
Required Backwash Pressure [bar]	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Mesh Size Range [micron]	10-500	10-500	10-500	10-500	10-500	10-500	10-500	10-500	10-500	10-500
Available Screen Panel Mesh Material	PET Monofila-ment	PET Monofila-ment	PET Mono-filament / 304/316/Du-plex	PET Mono-filament /304/316/Du-plex	PET Mono-filament /304/316/Du-plex	PET Mono-filament /304/316/Du-plex	PET Mono-filament /304/316/Du-plex	PET Mono-filament /304/316/Du-plex	PET Mono-filament /304/316/Du-plex	PET Mono-filament /304/316/Du-plex

DRUM FILTER MODEL	DRF-400-1	DRF-400-2	DRF-800-1	DRF-800-2
Available Screen Panel Grid Support Material	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex
Drive Type	Direct Drive Gears	Direct Drive Gears	Direct Drive Gears	Direct Drive Gears
Drive Material	Polymer	Polymer	Polymer	Polymer
Support Wheel Material	Polymer	Polymer	Polymer	Polymer
Electrical Panel Supply (4-Wire)Ph~V @ 50 [Hz]	3Ph~400V	3Ph~400V	3Ph~400V	3Ph~400V
Tank Type Max Hydraulic Capacity [m3/h]	64.3	96.5	128.6	257.3
Half Type Max Hydraulic Capacity [m3/h]	80.4	160.8	160.8	321.6
Channel Type Max Hydraulic Capacity [m3/h]	96.5	192.9	192.9	386

DRF-800-3	DRF-1200-3	DRF-1200-4	DRF-1600-4	DRF-1600-6	DRF-1600-8
Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex
Direct Drive Gears	Direct Drive Gears	Direct Drive Gears	Direct Drive Gears	Direct Drive Gears	Direct Drive Gears
Polymer	Polymer	Polymer	Polymers	Polymers	Polymers
Polymer	Polymer	Polymer	Polymer	Polymer	Polymer
3Ph~400V	3Ph~400V	3Ph~400V	3Ph~400V	3Ph~400V	3Ph~400V
385.9	578.9	771.8	1029.1	1543.7	2058.3
482.4	723.6	964.8	1286.4	1929.6	2572.9
578.9	868.4	1157.7	1543.7	2315.6	3087.5

DRUM FILTER MODEL	DRF-2000-7	DRF-2000-8	DRF-2000-9	DRF-2000-10
Drum diameter [mm]	2000	2000	2000	2000
Drum length [mm]	2695	3080	3465	3850
Screen Panel Type	SP-2	SP-2	SP-2	SP-2
Per Panel Area [m2]	0.46	0.46	0.46	0.46
Total Panel Area [m2]	16.1	18.4	20.7	23
Total Screen Panel Quantity [pcs]	35	40	45	50
Per Segment Panel Quantity [pcs]	5	5	5	5
Screen Panel Dimensions [mm]	385 x 1200	385 x 1200	385 x 1200	385 x 1200
Available Types: T(Tank), HT(Half Tank), C(Channel)	T/HT/C	T/HT/C	T/HT/C	T/HT/C
Available Tank/Housing Wall Material	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex

DRF-2000-12	DRF-2000-16	DRF-2000-18
2000	2000	2000
4620	6160	6930
SP-2	SP-2	SP-2
0.46	0.46	0.46
27.6	36.8	41.4
60	80	90
5	5	5
385 x 1200	385 x 1200	385 x 1200
T/HT/C	C	C
Polymer/304/316/Duplex	304/316/Duplex	304/316/Duplex

DRF SPECIFICATIONS

DRUM FILTER MODEL	DRF-2000-7	DRF-2000-8	DRF-2000-9	DRF-2000-10	DRF-2000-12	DRF-2000-16	DRF-2000-18
Drum Structure Material	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	304/316/Duplex	304/316/Duplex
Frame Material	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	304/316/Duplex	304/316/Duplex
Lid/Cover Material	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer
Seal/Gasket Material	EPDM	EPDM	EPDM	EPDM	EPDM	EPDM	EPDM
Bacwash Water Flow [m^3/hr]	6.3	7.2	8.1	9	10.8	14.4	16.2
Required Backwash Pressure [bar]	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0	7.0-8.0
Mesh Size Range [micron]	10-500	10-500	10-500	10-500	10-500	10-500	10-500
Available Screen Panel Mesh Material	PET Monofilament /304/316/Duplex	PET Monofilament /304/316/Duplex	PET Monofilament /304/316/Duplex	PET Monofilament /304/316/Duplex	PET Monofilament /304/316/Duplex	PET Monofilament /304/316/Duplex	PET Monofilament /304/316/Duplex
Available Screen Panel Grid Support Material	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex	Polymer/304/316/Duplex
Drive Type	Direct Drive Gears	Direct Drive Gears	Direct Drive Gears	Direct Drive Gears	Direct Drive Gears	Direct Drive Gears	Direct Drive Gears
Drive Material	Polymer	Polymer	Polymers	Polymers	Polymers	Polymers	Polymers
Support Wheel Material	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer
Electrical Panel Supply (4-Wire)Ph~V @ 50 [Hz]	3Ph~400V	3Ph~400V	3Ph~400V	3Ph~400V	3Ph~400V	3Ph~400V	3Ph~400V
Tank Type Max Hydraulic Capacity [m3/h]	2251.2	2572.8	2894.4	3216	3859.2	5145.6	5788.8
Half Type Max Hydraulic Capacity [m3/h]	2814	3216	3618	4020	4824	6432	7236
Channel Type Max Hydraulic Capacity [m3/h]	3376.8	3859.2	4341.6	4824	5788.8	7718.4	8683.2

DRF SPECIFICATIONS

DRUM FILTER FLOW CAPACITIES [M³/H]

MESH SIZE (µ)	(Design TSS - mg/l)	DRF-400-1	DRF-400-2	DRF-800-1	DRF-800-2	DRF-800-3	DRF-1200-3	DRF-1200-4
20	10	14	28	28	56	84	127	169
	15	12	25	25	51	77	115	154
	30	11	23	23	46	70	105	140
	100	7	15	15	30	45	68	91
25	10	23	47	47	94	141	212	282
	15	21	42	42	85	128	192	257
	30	19	39	39	77	116	175	233
	100	12	25	25	50	76	113	151
30	10	33	67	67	134	202	303	404
	15	30	61	61	122	183	275	367
	30	27	55	55	111	166	250	333
	100	18	36	36	72	108	162	217
40	10	48	96	96	192	288	432	577
	15	43	87	87	174	262	393	524
	30	39	79	79	159	238	357	476
	100	25	51	51	103	155	232	310
50	10	60	120	120	240	360	541	721
	15	54	109	109	218	327	491	655
	30	49	99	99	198	298	447	596

DRF-1600-4	DRF-1600-6	DRF-1600-8	DRF-2000-7	DRF-2000-8	DRF-2000-9	DRF-2000-10	DRF-2000-12	DRF-2000-16	DRF-2000-18
226	339	452	494	565	636	706	848	1131	1272
205	308	411	449	514	578	642	771	1028	1156
187	280	373	409	467	525	584	701	934	1051
121	182	243	265	303	341	379	455	607	683
377	565	754	824	942	1060	1178	1413	1885	2120
342	514	685	749	856	964	1071	1285	1713	1928
311	467	623	681	779	876	973	1168	1558	1752
202	303	405	443	506	569	632	759	1012	1139
538	807	1077	1178	1346	1514	1683	2019	2693	3029
489	734	979	1071	1224	1377	1530	1836	2448	2754
445	667	890	973	1112	1251	1391	1669	2225	2503
289	434	578	632	723	813	904	1085	1446	1627
769	1154	1538	1683	1923	2164	2404	2885	3847	4328
699	1049	1399	1530	1748	1967	2185	2623	3497	3934
635	953	1271	1391	1589	1788	1987	2384	3179	3576
413	620	826	904	1033	1162	1291	1550	2066	2325
961	1442	1923	2104	2404	2705	3005	3606	4809	5410
874	1311	1748	1912	2185	2459	2732	3278	4371	4918
794	1192	1589	1738	1987	2235	2484	2980	3974	4471

DRF SPECIFICATIONS

MESH SIZE (µ)	(Design TSS - mg/l)	DRF-400-1	DRF-400-2	DRF-800-1	DRF-800-2	DRF-800-3	DRF-1200-3	DRF-1200-4
	100	32	64	64	129	193	290	387
60	10	64	128	128	257	385	578	771
	15	58	116	116	233	350	526	701
	30	53	106	106	212	318	478	637
	100	34	69	69	138	207	311	414
100	10	70	141	141	283	424	636	849
	15	64	128	128	257	385	578	771
	30	58	116	116	233	350	526	701
	100	38	76	76	152	228	342	456

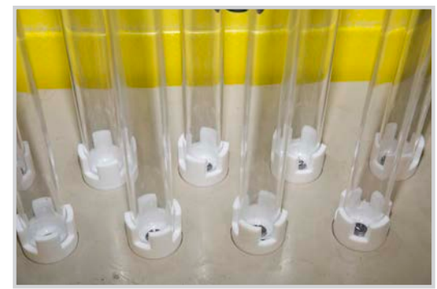
DRF-1600-4	DRF-1600-6	DRF-1600-8	DRF-2000-7	DRF-2000-8	DRF-2000-9	DRF-2000-10	DRF-2000-12	DRF-2000-16	DRF-2000-18
516	775	1033	1130	1291	1453	1614	1937	2583	2906
1029	1543	2058	2251	2572	2894	3216	3859	5145	5788
935	1403	1871	2046	2338	2631	2923	3508	4677	5262
850	1275	1701	1860	2126	2392	2657	3189	4252	4784
552	829	1105	1209	1382	1554	1727	2073	2764	3109
1132	1698	2264	2476	2830	3183	3537	4245	5660	6367
1029	1543	2058	2251	2572	2894	3216	3859	5145	5788
935	1403	1871	2046	2338	2631	2923	3508	4677	5262
608	912	1216	1330	1520	1710	1900	2280	3040	3420

UV DISINFECTION UNITS

The comparative advantage of the UV disinfection system over various chemical disinfection methods is the unaffected physical and chemical composition of water after the UV radiation activity. The UV is effective against any type of microorganism such as algae, bacteria, virus, fungi, yeasts to provide biosecurity.

MAT FILTRATION TECHNOLOGIES produces closed UV vessels/reactors with Food Grade Polypropylene material up to 1000m3/h.

The UV C units are equipped with temperature sensors as standard and UV intensity sensor and PLC controller optionally.



UV MODEL	UVC-1	UVC-5	UVC-10	UVC-20	UVC-50	UVC-100	UVC-150	UVC-250	UVC-350	UVC-500	UVC-700
Product Description	UV DIS-INFECTION UNIT-PP BODY					UV DIS-INFECTION UNIT-PP BODY					
Nominal Flow Rate [m³/h]	1	5	10	20	50	100	150	250	350	500	700
Max Flow Rate [m³/h]	2	8	12	30	55	115	165	300	370	500	700
UV Dose-Nominal Flow [mJ/cm2]	40	46.3	42.3	43.9	44.4	43.5	43	43	42.8	45.6	45.6
Lamp UV 254 nm efficiency [%]	30	30	30	30	38	38	38	38	38	38	38
Design Water UVT Ratio [%]	98	98	98	98	98	98	98	98	98	98	98
Quartz Sleeve Transmittence Value [%]	93	93	93	93	93	93	93	93	93	93	93
Inlet / Outlet Connection Type	Pipe Fitting Connection	Pipe Fitting Connection	Pipe Fitting Connection	Pipe Fitting Connection	Flange Adaptor with Gasket (RF)	Flange Adaptor with Gasket (RF)	Flange Adaptor with Gasket (RF)	Flange Adaptor with Gasket (RF)	Flange Adaptor with Gasket (RF)	Flange Adaptor with Gasket (RF)	Flange Adaptor with Gasket (RF)
Connection Orientation Standard	U	U	U	U	U	U	U	U	U	U	U
Connection Orientation Options	L/Z	L/Z	L/Z	L/Z	L/Z	L/Z	L/Z	L/Z	L/Z	L/Z	L/Z
Flange/ Pipe Connection Sizes	1 " BSP	1 1/2" BSP	3" BSP	3" BSP	DN100	DN150	DN200	DN200	DN300	DN400	DN400
Piping Norm Adopte	ISO1452-2 PN10	ISO1452-2 PN10	ISO1452-2 PN10	ISO1452-2 PN10	ISO1452-2 PN10	ISO1452-2 PN10	ISO1452-2 PN10	ISO1452-2 PN10	ISO1452-2 PN10	ISO1452-2 PN10	ISO1452-2 PN10
Flange Pattern Norm	N/A	N/A	N/A	N/A	ISO1452-3 PN10	ISO1452-3 PN10	ISO1452-3 PN10	ISO1452-3 PN10	ISO1452-3 PN10	ISO1452-3 PN10	ISO1452-3 PN10
Drain Connection Type	Threaded	Threaded	Threaded	Threaded	Threaded	Threaded	Threaded	Threaded	Threaded	Threaded	Threaded
Drain Size [in]	½	½	½	½	½	½	½”	½	½	½	½
UV Reactor Body Material	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
UV Reactor Diameter (Ø) [mm]	63	75	160	160	140	200	280	315	355	500	500
UV Reactor Length [mm]	650	745	820	765	1785	1785	1785	1785	1785	1795	1785
UV Reactor Width [mm]	135	160	220	190	255	300	345	345	500	600	600
UV Reactor Height [mm]	300	300	455	350	425	510	550	610	1015	780	795
Operation Temperature Range [°C]	2.0 - 45.0	2.0 - 45.0	2.0 - 45.0	2.0 - 45.0	2.0 - 45.0	2.0 - 45.0	2.0 - 45.0	2.0 - 45.0	2.0 - 45.0	2.0 - 45.0	2.0 - 45.0

UVC SPECIFICATIONS

UV MODEL	UVC-1	UVC-5	UVC-10	UVC-20	UVC-50	UVC-100	UVC-150	UVC-250	UVC-350	UVC-500	UVC-700
Max Operating Pressure [bar]	2	5	5	5	5	5	5	2	2	2	2
Test Pressure [bar]	3	7.5	7.5	7.5	7.5	7.5	7.5	3	3	3	3
UV Reactor Temperature Alarm	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Number of UV Lamps [pcs]	1	1	2	3	1	2	3	4	5	8	10
Lamp Category	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp
Lamp Lifespan [h]	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000
Power Per Lamp [W]	48	87	87	87	400	400	400	400	400	400	400
UV Lamp Standard Cable Lenght [m]	6	6	6	6	6	6	6	6	6	6	6
Electrical Panel Protection Class	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54
UV Body Operational Weight [kg]	4	7	10	12	35	65	95	155	181	434	434
UV Body Dry Weight (UV Chamber) [kg]	2	2	3	5	8	15	25	45	40	120	120
Control Bord Widht [mm]	400	400	500	500	500	600	800	800	800	800	1000
Control Bord Depth [mm]	210	210	210	210	210	210	400	400	400	400	400
Control Bord Length [mm]	300	300	400	400	400	400	450	450	450	450	600
Control Bord Dry Weight [kg]	4	6	6,8	7,5	6,8	13,2	35	65	65	75	85
Total Current [A]	0.3A	0.5A	1A	1.5A	2.5A	5A	7,5A	8.5A	3,7A	5.8A	7,5A
Total Installed Power [kW]	0.04	0.1	0.2	0.3	0.4	0.8	1.2	1.6	2.4	3.2	4 .0
Supply Voltage 50/60Hz* [V]	1~230V AC	1~230V AC	1~230V AC	1~230V AC	1~230V AC	1~230V AC	1~230V AC	1~230V AC	3~400V AC	3~400V AC	3~400V AC

UV MODEL	UVC-1000	UVC-2000	UVC-3000	UVC-6000
Product Description	UV DIS-INFECTION UNIT-PP BODY			
Nominal Flow Rate [m³/h]	1000	2000	3000	6000
Max Flow Rate [m³/h]	1000	2000	3000	6000
UV Dose-Nominal Flow [mJ/cm2]	31.4	TBD	TBD	TBD
Lamp UV 254 nm efficiency [%]	38	38	38	38
Design Water UVT Ratio [%]	98	98	98	98
Quartz Sleeve Transmittence Value [%]	93	93	93	93
Inlet / Outlet Connection Type	Flange Adaptor with Gasket (RF)	Flange Adaptor with Gasket (RF)	Flange Adaptor with Gasket (RF)	Flange Adaptor with Gasket (RF)
Connection Orientation Standard	U	-	-	-
Connection Orientation Options	L/Z	L	L	L
Flange/ Pipe Connection Sizes	DN400	DN600	DN700	DN800
Piping Norm Adopte	ISO1452-2 PN10	ISO1452-2 PN10	ISO1452-2 PN10	ISO1452-2 PN10
Flange Pattern Norm	ISO1452-3 PN10	ISO1452-3 PN10	ISO1452-3 PN10	ISO1452-3 PN10
Drain Connection Type	Threaded	Threaded	Threaded	Threaded
Drain Size [in]	½	½”	½”	½”
UV Reactor Body Material	PP	PE	PE	PE
UV Reactor Diameter (Ø) [mm]	500	710	800	1200
UV Reactor Length [mm]	1785	2685	2710	2975
UV Reactor Width [mm]	600	860	975	1405
UV Reactor Height [mm]	785	1200	1290	1690

UV MODEL	UVC-1000	UVC-2000	UVC-3000	UVC-6000
Operation Temperature Range [°C]	2.0 - 45.0	2.0 - 45.0	2.0 - 45.0	2.0 - 45.0
Max Operating Pressure [bar]	2	2	2	2
Test Pressure [bar]	3	3	3	3
UV Reactor Temperature Alarm	Standard	Standard	Standard	Standard
Number of UV Lamps [pcs]	12	20	30	60
Lamp Category	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp	Low Pressure Amalgam Lamp
Lamp Lifespan [h]	12000	12000	12000	12000
Power Per Lamp [W]	400	400	400	400
UV Lamp Standard Cable Lenght [m]	6	6	6	6
Electrical Panel Protection Class	IP54	IP54	IP54	IP54
UV Body Operational Weight [kg]	438	750	980	1690
UV Body Dry Weight (UV Chamber) [kg]	122	200	260	375
Control Bord Widht [mm]	1000	TBD	TBD	TBD
Control Bord Depth [mm]	400	TBD	TBD	TBD
Control Bord Length [mm]	600	TBD	TBD	TBD
Control Bord Dry Weight [kg]	90	TBD	TBD	TBD
Total Current [A]	9A	TBD	TBD	TBD
Total Installed Power [kW]	4.8	TBD	TBD	TBD
Supply Voltage 50/60Hz* [V]	3~400V AC	3~400V AC	3~400V AC	3~400V AC

UVC SPECIFICATIONS

UV MODEL OPTIONAL FEATURES	UVC-1	UVC-5	UVC-10	UVC-20	UVC-50
PLC Control Board	Optional	Optional	Optional	Optional	Optional
Digital Flow Meter	Optional	Optional	Optional	Optional	Optional
Control Board Width (with PLC) [mm]	600	600	600	700	600
Control Board Depth (with PLC) [mm]	210	210	210	300	210
Control Board Length (with PLC) [mm]	400	400	400	500	400
Control Board Dry Weigth (with PLC) [kg]	4.3	6.3	7.1	7.8	7.1
UV Irradiance Sensor	Optional	Optional	Optional	Optional	Optional

UV MODEL OPTIONAL FEATURES	UVC-100	UVC-150	UVC-250	UVC-350	UVC-500	UVC-700
PLC Control Board	Optional	Optional	Optional	Optional	Optional	Optional
Digital Flow Meter	Optional	Optional	Optional	Optional	Optional	Optional
Control Board Width (with PLC) [mm]	700	800	800	800	800	1000
Control Board Depth (with PLC) [mm]	300	400	400	400	400	400
Control Board Length (with PLC) [mm]	500	450	450	450	450	600
Control Board Dry Weigth (with PLC) [kg]	13.5	35	65	65	75	85
UV Irradiance Sensor	Optional	Optional	Optional	Optional	Optional	Optional

UV MODEL OPTIONAL FEATURES	UVC-1000	UVC-2000	UVC-3000	UVC-6000
PLC Control Board	Optional	Optional	Optional	Optional
Digital Flow Meter	Optional	Optional	Optional	Optional
Control Board Width (with PLC) [mm]	1000	TBD	TBD	TBD
Control Board Depth (with PLC) [mm]	400	TBD	TBD	TBD
Control Board Length (with PLC) [mm]	600	TBD	TBD	TBD
Control Board Dry Weigth (with PLC) [kg]	90	TBD	TBD	TBD
UV Irradiance Sensor	Optional	Optional	Optional	Optional

MBBRs
MOVING BED BIOFILTER REACTORS

MBBRs are biological filters, fabricated to provide nitrification and degradation of Total Ammonia Nitrogen (TAN) that is highly toxic. MBBR bio towers are made of PP, resistant to osmosis and ozone gas.

The Moving Bed Biofilter Reactor retains the organically loaded water by creating a vortex, to evenly move the bio media into the oxygen-rich, aerated contact chamber.

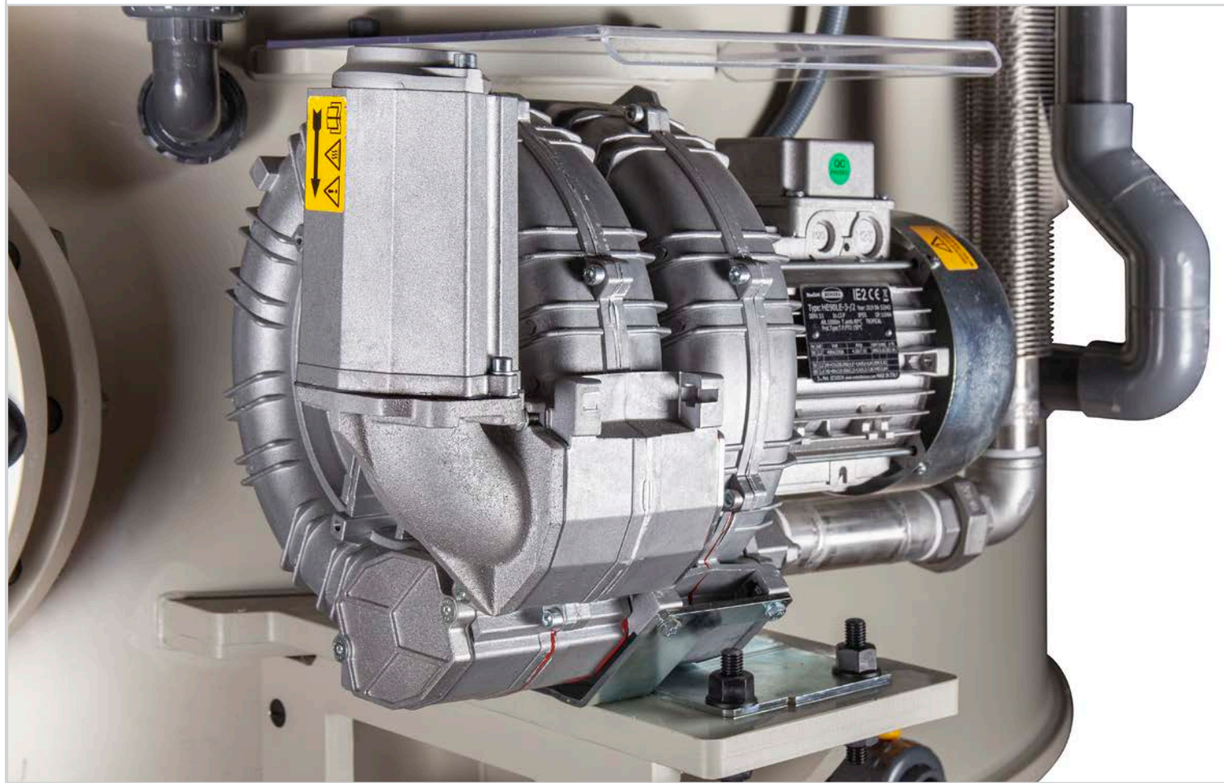
This retention allows the microorganisms to biologically absorb the nutrients off the water at a higher level than a traditional fixed biological filter. Due to the moving structure and high specific surface area of MBBR media that play host for nitrification bacteria, MBBR units also have very low footprints compared to fixed type biological filters.

MBB SPECIFICATIONS

MOVING BED BIOFILM REACTOR (MBB)	MAT MBB-22	MAT MBB-62	MAT MBB-220	MAT MBB-280	MAT MBB-360	MAT MBB-600	MAT MBB-800	MAT MBB-1300	MAT MBB-1500
Diameter [mm]	500	750	1000	1250	1500	2000	2350	3000	3400
Footprint Depth [mm]	950	1160	1415	1734	1786	2360	3170	3500	3900
Footprint Width [mm]	850	1480	1679	2248	2673	3140	3377	3750	4600
Height [mm]	1643	1865	2095	2353	3070	3000	4164	4164	4164
Installed Power [kW]	0,55	0.75	1.1	2	3	4	5.5	9.2	11
Basic Unit Total Electric Consumption 50 hZ [kWh]	0,55	0.75	1.1	1.5	2.2	3	5.5	9.2	11
Supply Voltage 50hZ/60hZ [V]	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230
Water Inlet Level [mm]	1252	1518	1585	1845	2259	2179	3350	3350	3350
Inlet Size [mm]	90	140	225	250	280	315	400	500	630
Water Outlet Level [mm]	1240	1370	1430	1545	1959	1879	3000	3000	3000
Outlet Size [mm]	90	140	225	250	280	315	400	500	630
Max Water Flow [m^3/h]	22	62	220	280	360	600	819	1300	1500
Max Flow Retention [second]	45	43	26	32	49	52	71	64	72
1 Min Retantion Time Flow Rate [m^3/h]	16,8	44,4	92	150	294	528	N/A	N/A	N/A
2 Min Retantion Time Flow Rate [m^3/h]	8,4	22,2	46	75	147	264	489	700	900

MOVING BED BIOFILM REACTOR (MBB)	MAT MBB-22	MAT MBB-62	MAT MBB-220	MAT MBB-280	MAT MBB-360	MAT MBB-600	MAT MBB-800	MAT MBB-1300	MAT MBB-1500
4 Min Retantion Time Flow Rate [m³/h]	4,2	11,1	23	37,5	73,5	132	245	350	450
Nominal Air Flow Rate 50hZ [m³/h]	20	18	35	54	121	172	150	241	275
Blower Model 50hZ	15DH MD	R20 MD	R30 MD	R40 MD	K07R MD	K08R MD	K08R MD	K10 MD	e11 MD
Blower Driver Model	EP66-0007 T3	EP66-0007 T3	EP66-0015 T3	EP66-0022 T3	EP66-0030 T3	EP66-0040 T3	EP66-0055 T3	EP66-0110 T3	EP66-0110 T3
Reactor Volume [m³]	0,28	0,74	1,54	2,5	5	9	16,3	23.3	30
Max BM-800 Media [m³]	0,18	0,49	1,02	1,72	3,23	5,81	10,76	15.4	20
Max BM-4500 Media [m³]	0,17	0,44	0,92	1,47	2,94	5,28	9,78	14	18
Dry Weight (wo/media) [kg]	120	130	200	280	410	650	1080	1800	2100
Operational Weight [kg]	280	740	1540	2700	4900	8801	16301	25100	32100
Body Material	PP food grade	PP food grade	PP food grade	PP food grade	PP food grade	PP food grade	PP food grade	PP food grade	PP food grade

MOVING BED BIOFILM REACTOR (MBB) OPTIONAL FEATURES	MBB-22 - MBB-1500
Biomedia BM-800	OPTIONAL
Biomedia BM-4500	OPTIONAL
Quick Retractable ORP/PH Probe Fitting	OPTIONAL
IP65 polycarbonate panel, Function/Fault Indicators, Manual Switches, Emergency stop, with visual and audible alarm.	OPTIONAL
Control board modification, PLC unit addition	OPTIONAL
MBB Blower unit with its suction filter and spare filter	OPTIONAL
Overflow Sensor	OPTIONAL
2x pH sensor and controller	OPTIONAL
Variable Frequancy Driver	OPTIONAL

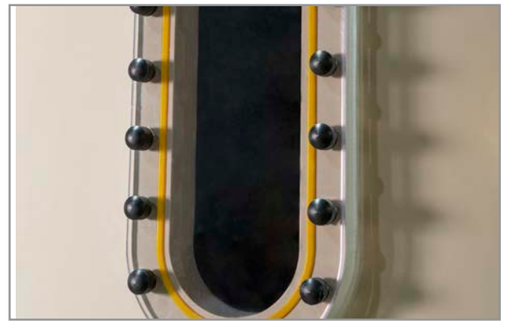


TRICKLE FILTERS

Trickle filters are fixed media filters with cross flow of air and water. Trickle filters can be used with fan to source air to the system in an energy efficient way. Trickle filters are produced from drinking/food grade thermoplastic.

Trickle filters can be applied as biological filters in Biological filter in to remove ammonia and at the same time they extract CO2 from the system. They are energy efficient; nitrification and CO2 removal solution provide degassing affect along with ni- tri-fication of ammonia.

If the pupose is only to remove CO2 from the system and aerate the water then, trickle filters are loaded with special degasification media to boost its CO2 removal performance.



TRICKLE FILTER	DGS-22	DGS-62	DGS-220	DGS-280	DGS-360	DGS-600	DGS-800	DGS-1300	DGS-1500
Diameter [mm]	500	750	950	1250	1500	2000	2350	3000	3400
Footprint Depth [mm]	650	915	1100	1335	1585	2085	TBD	TBD	TBD
Footprint Width [mm]	950	1315	1600	1900	2150	2740	TBD	TBD	TBD
Height [mm]	1561	1768	1835	2095	2509	2865	2910	2910	2910
Dry Weight [kg]	70	131	203	285	412	650	1080	2082	TBD
Operational Weight [kg]	291	560	980	1420	1950	3705	5650	9240	TBD
Inlet Size [mm]	90	140	225	250	280	315	355	500	630
Outlet Size [mm]	90	140	225	250	280	315	400	500	630
Trickle Standpipe Level [mm]	1331	1518	1585	1845	2420	2179	2250	2250	2250
Degas Fan Connection Size [mm]	75	125	160	160	160	200	200	225	250
Surface Area [m2]	0.2	0.43	0.67	1.18	1.71	3.06	4.21	6.87	8.8
Hydraulic Capacity [m^3/h]	22	62	220	280	360	600	800	1300	1500
Air Flow Rate [Nm^3/h]	118	265	425	736	1060	1884	2218	4239	5340
Max Media Capacity [m3]	0.2	0.5	0.9	1.7	2.6	4.6	6.3	10.3	13.2
Max Media Height [m]	0.9	1.2	1.3	1.5	1.5	1.5	1.5	1.5	1.5
Body Material	PP	PP	PP	PP	PP	PP	PP	PP	PP

TRICKLE FILTER (DEARATION TOWER/DE-GASS) OPTIONAL FEATURES	ALL MODELS
Overflow Switch	optional
Air Fan	optional
Air/Water Ratio On 2 Min Retantion Time	5//1
Degasser Media DGM-140	optional
Degasser Media BIO-500	optional

DEGASSING TOWERS

Degas Towers are tailor made solutions for high density land based aquaculture tanks to extract excessive CO2 from the water. MAT DGT provides an efficient means of carbon dioxide (CO2) and nitrogen (N2) gas removal, maintaining the suitable conditions of treated water to fish livestock.

The undesirable gases are diffused out of the water into the ambient with minimum energy consumption. The Unit offers three operation options:

» Static flow trough

» Two-phase atmospheric cross flow

» Two-phase cross flow with vacuum

MAT Vacuum Degasser Systems operation is based on the diffusional removal of undesirable gases and the enrichment of water in Oxygene by a fan and Titanium micron diffuser system. The gas exchange process is enhanced by the usage of a specifically dedicated blower that draws air into the water body. Air may flow atmospheric or under negative pressure -vacuum- depending on the operator's selection. On all options, air and water run in cross flow both through the media and the free-spaced columns for the maximum gas exchange efficiency.

MAT-KULING Degassers have unique auto clean wash and ozonated clean in place solution to avoid any kind of fouling.

DGT SPECIFICATIONS

DEGASS TOWER	DGT-25V	DGT-50V	DGT-100V	DGT-150V	DGT-300V	DGT-600V	DGT-900V	DGT-1200V
Max Water Flow Rate [m3/hr]	25	50	100	150	300	600	900	1200
Flow Rate @100 m/h HSL [m3/hr]	20	44	79	123	201	434	638	829
Flow Rate @75 m/h HSL [m3/hr]	15	33	59	92	151	325	478	622
Air Flow [Nm3/hr]	25 - 38	50 - 96	100 - 166	150 - 242	300 - 450	600 - 851	900 - 1336	1200 - 1785
Operational Vacuum Pressure [mbar]	100 - 150	100 - 150	100 - 150	100 - 150	100 - 150	100 - 150	100 - 150	100 - 150
Water inlet height [mm]	3250	3300	3400	3465	3690	3900	4150	4410
Water Outlet height [mm]	520	630	250	265	310	350	400	465
Tank Height [mm]	3570	3630	3750	3825	4095	4350	4650	5040
Overall Height [mm]	3870	4030	3750	3825	4095	5450	5750	6140
Water Inlet Diameter [mm]	140	160	200	225	315	400	500	630
Water Outlet Diameter [mm]	140	160	200	225	315	400	500	630
Cleaning Water Discharge Diamater (Gravity) [mm]	Ø75	Ø90	Ø110	Ø140	Ø160	Ø160	Ø200	Ø225
Cleaning Water Discharge Diamater (Pressure) [inch]	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Water Filling Diameter [mm]	Ø75	Ø90	Ø110	Ø140	Ø160	Ø160	Ø200	Ø225
Tank Diameter [mm]	500	750	1000	1250	1600	2350	2850	3250

DGT SPECIFICATIONS

DEGASS TOWER	DGT-25V	DGT-50V	DGT-100V	DGT-150V	DGT-300V	DGT-600V	DGT-900V	DGT-1200V
Degassing Surface Area [m2]	0.2	0.44	0.79	1.23	2.01	4.34	6.38	8.29
Manhole Diameter [mm]	Sight Glass	Sight Glass	Sight Glass	450	450	450	450	450
Media Specific Surface Area [m2/m3]	140	140	140	140	140	140	140	140
Media Column Height [cm]	130	130	130	130	130	130	130	130
Media Volume [m3]	0.26	0.57	1.02	1.6	2.61	5.64	8.29	10.78
Air Outlet Diameter [mm]	75	75	110	140	200	250	315	500
Air Inlet Diameter [mm]	75	75	110	140	200	250	315	500
Auto Clean Pump Model	21-40/55-56H	21-40/58H	21-40/58H	Normblock 65/250	Normblock 65/250	Normblock Multi 100/250	Normblock 125/250	Normblock 125/250
Blower Installed Power [kW]	0.37	0.75	1.1	2.2	3	7.5	11	18.5
Cleaning Pump Installed Power [kW]	1.33	1.77	1.77	5.5	7.5	11	18.5	22
Cleaning VFD Model	EP66-0022 T3	EP66-0022 T3	EP66-0022 T3	EP66-0075 T3	EP66-0110 T3	EP66-0150 T3	EP66-0220 T3	EP66-0300 T3
Blower VFD Model (IP-21)	E2100-0007 T3	E2100-0007 T3	E2100-0015 T3	E2100-0022 T3	E2100-0030 T3	E2100-0075 T3	E2100-0110 T3	E2100-0185 T3
Blower VFD Model (IP-66)	EP66-0007 T3	EP66-0007 T3	EP66-0015 T3	EP66-0022 T3	EP66-0030 T3	EP66-0075 T3	EP66-0110 T3	EP66-0185 T3
Blower Model	k03-ms	k04-ms	k05-ms	k06-ms	k08-ms	k08-ts	k10-ts	k12-ts

DGT SPECIFICATIONS

DEGASS TOWER	DGT-25	DGT-25H	DGT-50	DGT-50H	DGT-100	DGT-100H	DGT-150	DGT-150H	DGT-300	DGT-300H	DGT-600	DGT-600H	DGT-900	DGT-900H	DGT-1200	DGT-1200H
Max Water Flow Rate [m3/hr]	25	25	50	50	100	100	150	150	300	300	600	600	900	900	1200	1200
Flow Rate @100 m/h HSL [m3/hr]	20	20	44	44	79	79	123	123	201	201	434	434	638	638	829	829
Flow Rate @75 HSL [m/h]	15	15	33	33	59	59	92	92	151	151	325	325	478	478	622	622
Atmospheric Type Max Air Flow @5Mbar [Nm3/hr]	200	200	400	400	800	800	1200	1200	2400	2400	4800	4800	7200	7200	9600	9600
Water Inlet Height [mm]	2550	3100	2300	2850	2400	2950	2465	3015	2690	3240	2900	3450	3150	3700	3540	4090
Water Outlet Height [mm]	520	520	630	630	250	250	265	265	310	310	350	350	400	400	465	465
Tank Height [mm]	2570	3120	2630	3180	2750	3300	2825	3375	3095	3645	3350	3900	3650	4200	4040	4590
Overall Height [mm]	2870	3420	3030	3580	2750	3300	2825	3375	3095	3645	4450	5000	4750	5300	5140	5690
Water Inlet Diameter [mm]	140	140	160	160	200	200	225	225	315	315	400	400	500	500	630	630
Water Outlet Diameter [mm]	140	140	160	160	200	200	225	225	315	315	400	400	500	500	630	630
Cleaning Water Discharge Diamater (Gravity) [mm]	Ø75	Ø75	Ø90	Ø90	Ø110	Ø110	Ø140	Ø140	Ø160	Ø160	Ø160	Ø160	Ø160	Ø200	Ø200	Ø225
Cleaning Water Discharge Diamater (Pressure) [inch]	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "
Water Filling Diameter [mm]	Ø75	Ø75	Ø90	Ø90	Ø110	Ø110	Ø140	Ø140	Ø160	Ø160	Ø160	Ø160	Ø160	Ø200	Ø200	Ø225
Tank Diameter [mm]	500	500	750	750	1000	1000	1250	1250	1600	1600	2350	2350	2850	2850	3250	3250
Degassing Surface Area [m2]	0.2	0.2	0.44	0.44	0.79	0.79	1.23	1.23	2.01	2.01	4.34	4.34	6.38	6.38	8.29	8.29

DGT SPECIFICATIONS

DEGASS TOWER	DGT-25	DGT-25H	DGT-50	DGT-50H	DGT-100	DGT-100H	DGT-150	DGT-150H	DGT-300	DGT-300H	DGT-600	DGT-600H	DGT-900	DGT-900H	DGT-1200	DGT-1200H
Manhole Diameter [mm]	Sight Glass	Sight Glass	Sight Glass	Sight Glass	Sight Glass	Sight Glass	450	450	450	450	450	450	450	450	450	450
Media Specific Surface Area [m2/m3]	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140
Media Column Height [cm]	130	170	130	170	130	170	130	170	130	170	130	170	130	170	130	170
Media Volume [m3]	0.26	0.33	0.57	0.75	1.02	1.34	1.6	2.09	2.61	3.42	5.64	7.37	8.29	10.84	10.78	14.1
Air Outlet Diameter [mm]	110	110	140	140	160	200	200	200	200	280	355	400	400	450	450	500
Air Inlet Diameter [mm]	110	110	140	140	160	200	200	225	225	280	355	355	355	450	450	500
Auto Clean Pump Model	21-40/55-56H	21-40/55-56H	21-40/58H	21-40/58H	21-40/58H	21-40/58H	Norm-block 65/250	Norm-block 65/250	Norm-block 65/250	Norm-block 65/250	Norm-block Multi 100/250	Norm-block Multi 100/250	Norm-block Multi 125/250	Norm-block Multi 125/250	Norm-block Multi 125/250	Norm-block Multi 125/250
Air Fan Installed Power [kW]	0.25	0.25	0.25	0.25	0.25	0.25	0.37	0.37	0.37	0.37	1.1	1.1	2.2	2.2	4	4
Cleaning Pump Installed Power [kW]	1.33	1.33	1.77	1.77	1.77	1.77	5.5	5.5	7.5	7.5	11	11	18.5	18.5	22	22
Cleaning VFD Model	EP66-0007 T3	EP66-0007 T3	EP66-0007 T3	EP66-0007 T3	EP66-0007 T3	EP66-0007 T3	EP66-0007 T3	EP66-0007 T3	EP66-0007 T3	EP66-0007 T3	EP66-0015 T3	EP66-0015 T3	EP66-0022 T3	EP66-0022 T3	EP66-0040 T3	EP66-0040 T3
Air Fan Model	venplast PC202 T4	venplast PC202 T4	RSD 22B/2/50	RSD 22B/2/50	RSD 22B/2/50	RSD 22B/2/50	RSD 25B/2/50	RSD 25B/2/50	RSD 28B/2/50	RSD 28B/2/50	RSD 45B/4/50	RSD 45B/4/50	RSD 40B/2/39	RSD 40B/2/39	RSD 45B/2/39	RSD 45B/2/39

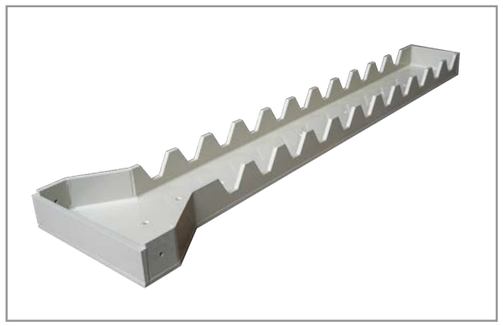
DGS OPTIONAL FEATURES	DGS-22 - DGS-1300
Overflow Switch	optional
Air Fan	optional
Air/Water Ratio On 2 Min Retantion Time	5//1
Biomedia BIO-100	optional
Biomedia BIO-500	optional

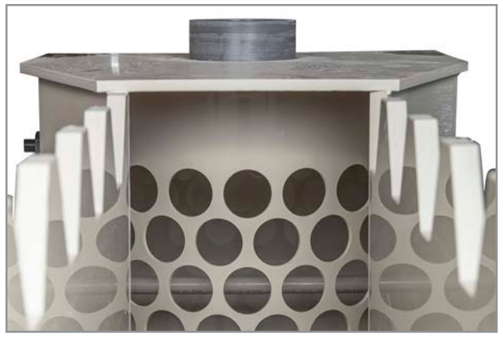
DEGASS TOWER OPTIONAL FEATURES	DGT-25 – DGT-1200H
Blower (Vacuum Unit)	optional
Air Fan (Atmosperic Unit)	optional
Blower VFD	optional
pH sensor	optional
CO2 probes	optional
O2 probes	optional
Turbidity Probe	optional
Water level sensor	optional
Overflow sensor	optional
Cleaning Pump	optional
Manual Face Piping Valve Manifold	optional
Auto Clean System Motorized Face Piping Valve Manifold	optional
Electrical Control Panel	optional
PLC Automated Control Panel	optional

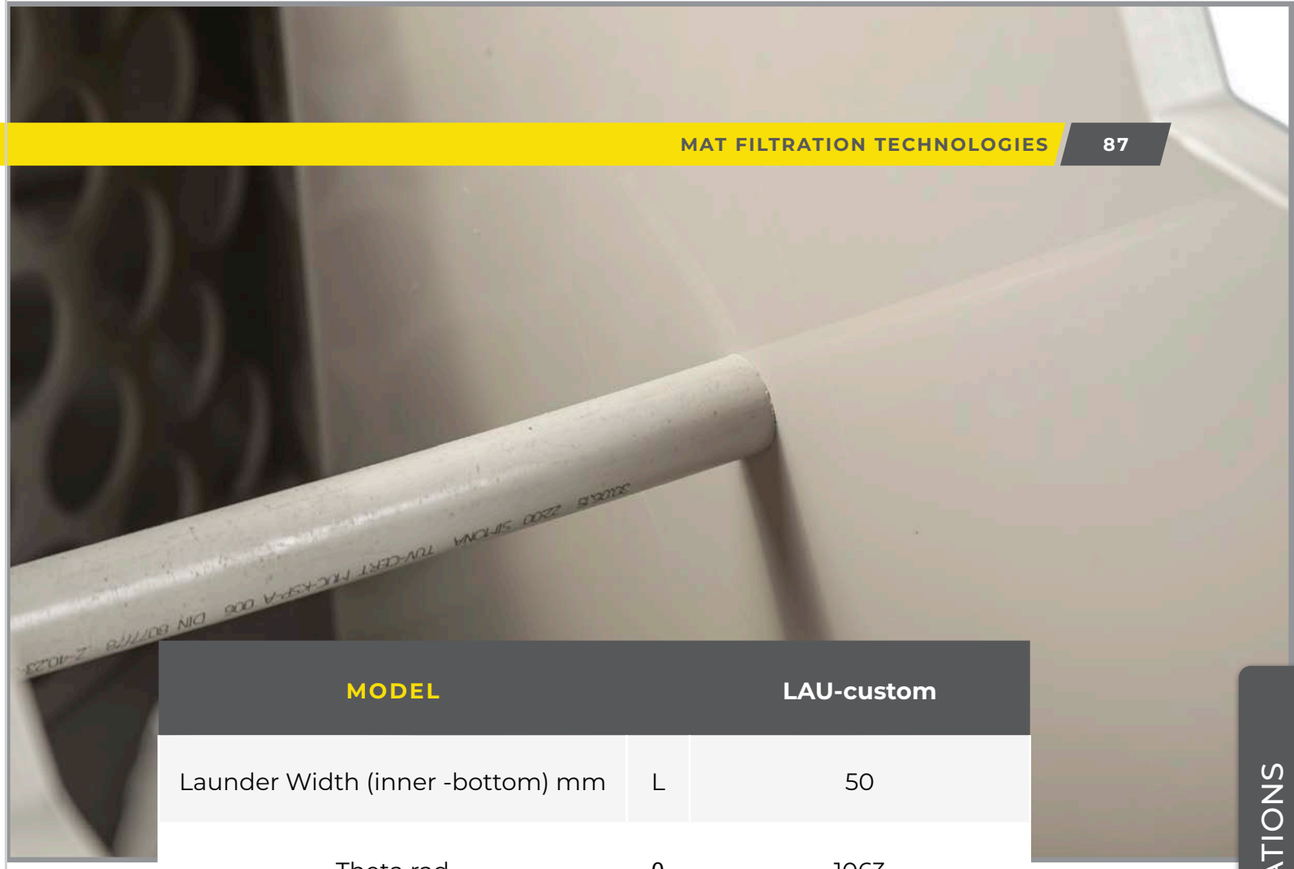
DEGASSING SOLUTIONS
OVERFLOW LAUNDERS

The Overflow Launder is a robust structural element built of PP (Polypropylene) and it allows the water to trickle and degas through its gradual flow design. It is used in industrial effluent wastewater treatment and in intensive land based fish farming applications as a degassing / aeration solution.

MAT FILTRATION TECHNOLOGIES manufactures custom overflow effluent launders according to each fish farm design specifications.







MODEL		LAU-custom
Launder Width (inner -bottom) mm	L	50
Theta rad	θ	1063
Launder Entry Width (inner) mm	W	600
Launder Height mm	h	50
Launder Height (max) mm	D	85
Launder Length (max) mm		11500
Length between Notches mm		200
Flowrate per Launder m3/hr		1300
Flowrate Through Notch m3/hr		4,13
Wet Weight (max) kg		3750
Dry Weight (max) kg		260

FOAM EXTRACTORS

MAT FILTRATION TECHNOLOGIES FE Unit is a Foam Extractor System used to extract the thick foam from Very Large Protein Skimmer Collector Heads via a special water lock where any possible remained ozone gas is separated from foam and is diverted to the ozone outlet.

The Foam Extractor consists of a tower and a waste gas blower that forms the subpressure to pull the waste gas out of the tower column.

The extractor inlet is secured against backflows and the water exit includes a siphon to ensure water is kept at the designed level.

FOAM EXTRACTOR	FEX-100	FEX-400	FEX-800	FEX-1200
Diameter [mm]	500	750	1000	1500
Height [mm]	2085	2270	2400	2590
Volume [m3]	0.35	0.75	1.57	4.59
Dry Weight [kg]	110	150	185	250
Operational Weight [kg]	245	350	586	1300
Water/Gas Inlet Diameter [mm]	63	90	110	160
Water Discharge Diameter [mm]	40	75	90	110
Max Water Flow Rate [m3/hr]	3	8	15	30
Max Gas Flow @-100Mbar [Nm3/hr]	100	300	600	1200
Blower Model	K04MS	K08 MS	e11 MS	K09 TS
Blower Max Power [kW]	0.75	3	7.5	11
VFD Model	EP66-0007-T3	EP66-0030 T3	EP66-0075 T3	EP66-0110 T3

FEX OPTIONAL FEATURES	FEX-100 - FEX 1200
Clear Observation Window	optional
Vacuum Blower	optional
Auto Foam Supression	optional
Variable Frequency Driver	optional
Anti-Foam Dosage Pump & Tank	optional
Foam Extractor Unit Control Board	optional

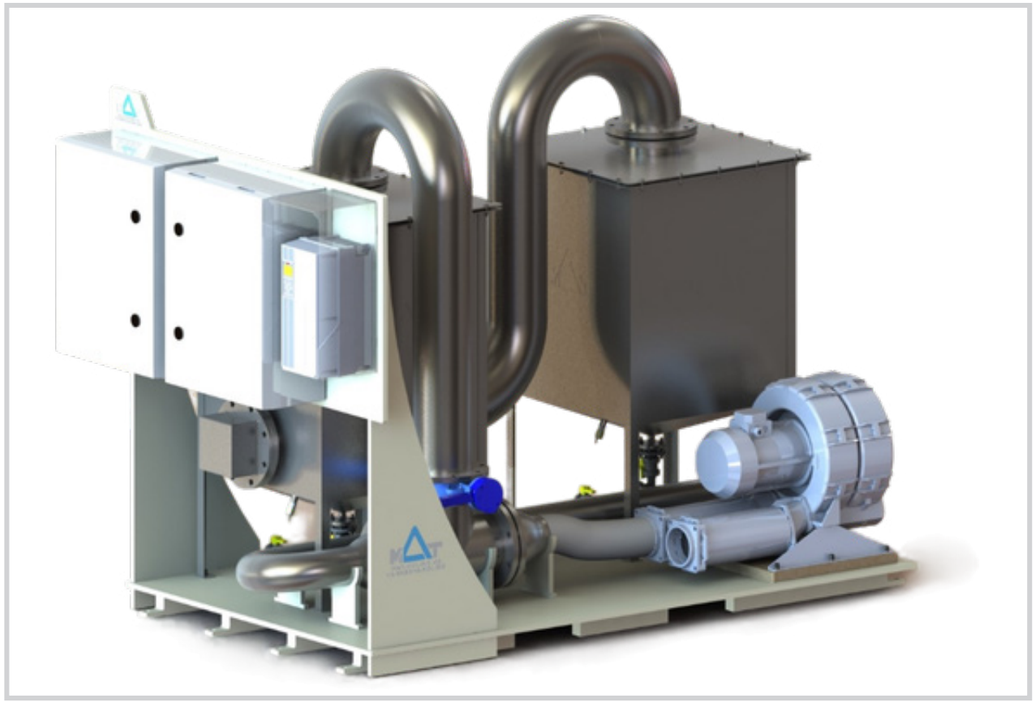
FEX OPTIONAL FEATURES	FEX-100 - FEX 1200
Photoelectrics Liquid Level Switch	optional
Foam Level Conductivity Sensor	optional
Control Board Modification, PLC Unit Addition	optional
Air Lock System	optional

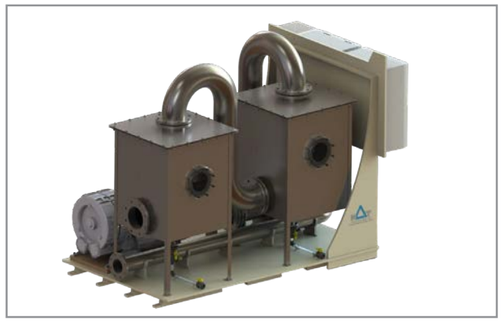
OZONE DESTRUCT SYSTEMS

MAT FILTRATION TECHNOLOGIES Ozone Destruct Units offer the solution for the safe and rapid destruction of ozone and should be a core element of a proper ozone generator installation in confined mechanical room.

We produce either activated carbon or thermal catalytic types of Ozone Destruct Units.

Thermal Catalytic Ozone Destruct Units are ideal for large ozone production plants for superior safety and less space requirement.





ODT SPECIFICATIONS

OZONE DE-STRUCT CATALY-SIS	ODT-1	ODT-5	ODT-10	ODT-25	ODT-50	ODT-100	ODT-200	ODT-400	ODT-800	ODT-1200	ODT-2000
Flow rate (Nm^3/h)	1	5	10	25	50	100	200	400	800	1200	2000
Footprint Width [mm]	450	500	775	950	950	1000	1050	1200	1900	1550	1750
Footprint Depth [mm]	180	220	1350	1200	1200	1160	1285	1435	1200	2840	1865
Max Height [mm]	1200	1460	82	1820	1820	1820	1820	1845	2000	2115	2480
Dry Weight (kg)	11	22	35	185	185	225	250	357	420	670	800
Demister/Destruc-tor Material	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS
Chasis Material	N/A	N/A	PP or GRP	PP or GRP	PP	PP	PP	PP	PP or GRP	PP or GRP	PP or GRP
Pipeline Material	U-PVC and 316 SS	U-PVC and 316 SS	U-PVC and 316 SS	U-PVC and 316 SS	U-PVC and 316 SS	U-PVC and 316 SS	U-PVC and 316 SS	U-PVC and 316 SS	U-PVC and 316 SS	U-PVC and 316 SS	U-PVC and 316 SS
Electrical Connec-tion	1Phase + Neutral + PE	1Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE	3Phase + Neutral + PE
Installed Power [kW]	0.1	0.15	0.8	1.15	2	3.5	5.5	10	21.5	26.5	45
Supply Voltage 50/60 Hz [V]	1~230	1~230	3~400	3~400	3~400	3~400	3~400	3~400	3~400	3~400	3~400
Nominal Current (A)	0.48	0.72	1.28	1.85	3.21	5.62	8.83	16.06	34.52	42.55	72.25
Heater Power (kW)	0.1	0.15	0.4	0.75	1.25	2	3	5.5	10	15	22
Residual Ozone Line Connection [mm]	DN15	DN25	DN25	DN32	DN50	DN80	DN100	DN125	DN110	DN150	DN200

ODT SPECIFICATIONS

OZONE DESTRUCT CATALYSIS	ODT-1	ODT-5	ODT-10	ODT-25	ODT-50	ODT-100	ODT-200	ODT-400	ODT-800	ODT-1200	ODT-2000
Off-Gass Outlet Connection [mm]	DN15	DN25	DN25	DN32	DN40	DN50	DN50	DN80	DN110	DN150	DN200
Destructor Inlet Max Ozone Concentration %wt	3	3	3	3	3	3	3	3	3	3	3
Destructor Outlet Max Ozone Concentration(ppm)	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1
Demister Drain Connection [mm]	DN15	DN15	DN20	DN20	DN20	DN20	DN20	DN20	DN32	DN32	DN32
Carulite Media Quantity [kg]	1	2	3	6	10	20	40	75	155	225	375
Blower Model (Recommended)	N/A	N/A	06R MS	06R MS	K03 MS	K04 MS	K06 MS	K08 MS	e11 MS	K09 TS	K09 TS x 2
Blower Power @-50mbar, 50/60Hz. kW	N/A	N/A	0.2	0.2	0.37	0.75	2.2	3	7.5	11	11 x 2
Blower Quantity pcs.	N/A	N/A	1	1	1	1	1	1	1	1	2
Max Suction Pressure @ Duty Point (mBAR)	N/A	N/A	-140	-140	-140	-140	-140	-140	-150	-140	-150
Variable Frequancy Driver Model vfd	N/A	N/A	EP66-0007 T3	EP66-0007 T3	EP66-0007 T3	EP66-0007 T3	EP66-0022 T3	EP66-0030 T3	EP66-0075 T3	EP66-0110 T3	2 X EP66-0110 T3
Max Temperature Increase caused by Heater °C	12	12	12	12	12	12	12	12	12	12	12

ODC SPECIFICATIONS

OZONE DESTRUCT CATALYSIS	ODT-1	ODT-5	ODT-10	ODT-25	ODT-50	ODT-100	ODT-200	ODT-400	ODT-800	ODT-1200	ODT-2000
Thermal Catalytic Ozone Destruct Control Board	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Thermal Catalytic ODT Blower	N/A	N/A	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Thermal Catalytic ODT Blower VFD	N/A	N/A	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Temperature Probe with standard probe cable	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Corrosion Resistant Sensor -1...9bar (4-20mA)	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Overflow Level Sensor	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Thermal Catalytic ODT PLC Controller	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional

ODC SPECIFICATIONS

OZONE DESTRUCT	ODC-6	ODC-25	ODC-50	ODC-100	ODC-200
Footprint Width [mm]	510	655	750	825	955
Footprint Depth [mm]	460	550	680	760	890
Max Height [mm]	1110	1390	1430	1490	1490
Body Diameter [mm]	250	315	400	500	630
Body Material	PP	PP	PP	PP	PP
Installed Power [kW]	0.25	0.25	0.25	0.25	0.25
Supply Voltage 50 Hz [V]	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230
Residual Ozone Line Connection [mm]	50	75	90	90	90
Off-Gass Outlet Connection [mm]	75	110	110	125	140
Water Drain Connection [mm]	40	50	63	75	75
Activated Carbon Media Quantity [L]	20	40	60	110	200
Max Gas Inlet Ozone concentration %wt	1	1	1	1	1
Max Gas Outlet Ozone Concentration ppm	0,1	0,1	0,1	0,1	0,1
Water Trap/Drain Column	Standart	Standart	Standart	Standart	Standart
Blower [model]	G2E120-AR77-01	G2E140-AE77-01	G2E160-AY47-01	G2E180-EH03-01	G2E180-EH03-01

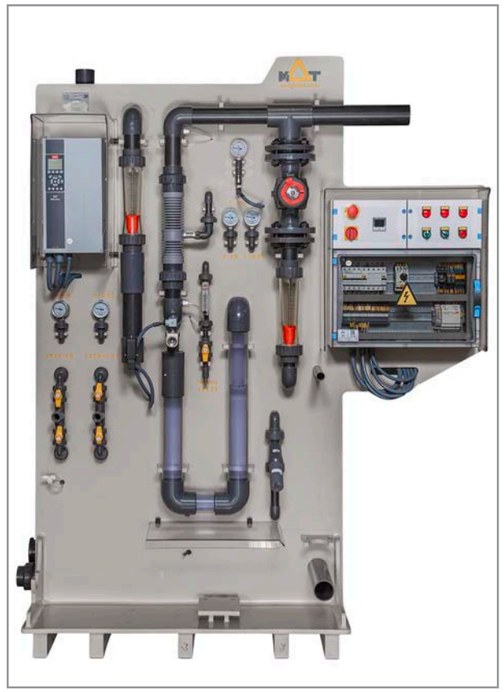
OZONE CONTACT & OZONE DOSING SKIDS

Ozone is a gas that needs to be infused into water under a compressed infusion process, in multiple points of a filtration system. In saline water, protein fractionators (skimmers) are traditionally used to achieve this through a venturi device, infusing ozone mixed with air into the water column.

Latest developments have shown us that the infusion of ozone is not best achieved only by using this venturi infusion. Thus, a mixing and contact tank is required and in some applications, a pressurized vessel needs to be implemented to infuse ozone into the water column under a pressurized mixture.

MAT FILTRATION TECHNOLOGIES has two types of injection units:

ODS series is for Low-Pressure Ozone Injection through pipes, header or atmospheric contact tanks. OCS series is for high-pressure ozone diffusing through a pressurized mixing and contact chamber.



OCS SPECIFICATIONS

OZONATION SKID FOR MARINE/ FRESH WATER	OCS-10	OCS-20	OCS-50	OCS-100	OCS-150	OCS-250
Footprint Depth [mm]	1150	1300	1430	1800	2020	2465
Footprint Width [mm]	1850	1860	3950	4745	5175	5925
Max. Height [mm]	2600	2600	2980	2900	3500	3385
Contact Tank Diameter [mm]	600	800	1200	1600	1800	2200
Installed Power [kW]	3	3	5.5	11	11	18.5
Basic Unit Total Electric Consumption [kWh]	1.95	2.21	4.22	8.5	9.48	16.08
Supply Voltage (50Hz) [V]	3~400/230	3~400/230	3~400/230	3~400	3~400	3~400
Inlet Size [mm]	50	63	110	140	160	200
Outlet Size [mm]	40	50	90	140	160	200
Contact Time [min]	5	5	5	5	5	5
Ozone Concentration [ppm]	0,5-2	0,5-2	0,5-2	0,5-2	0,5-2	0,5-2
Ozone Dosing [g/h]	10	20	50	100	150	250
Ozone Dosing [L/min]	4.5	5	10	39	49	40
CT Value	10	10	10	10	10	10
Booster Pump Material	PP	PP	PP	PP	PP	PP
Pressure Sensor TANK-IN	YES	YES	YES	YES	YES	YES
Pump Model	CMO-N 40-160	CMO-N 40-160	CMO-N 40-160	CMO-N 65-160	CMO-N 65-160	CDI-QL 100-80-160
Pump Variable Frequency Driver Model	EP66-0055 T3	EP66-0055 T3	EP66-0055 T3	EP66-0110 T3	EP66-0150 T3	EP66-0220 T3
Ozone Contact Tank Model/ Cylinder height	R60C/1700	R80C/1700	R120C/1700	R160C/1700	R180C/2000	R220C/2000
Ozone Contact Tank Total Height [mm]	2270	2350	2550	2750	3150	3350

OZONATION SKID FOR MARINE/ FRESH WATER	OCS-10	OCS-20
Dry Weight (kg)	180	250
Ozone Destruct	STANDARD	STANDARD
Max Line Pressure [bar]	1,7	1,9
Pump Flow Rate [m³/h]	5	10
Venturi Inlet Pressure [bar]	3	3
Tank Operating Pressure [bar]	1,9	2,1
Ozone GAS Suction Rate [L/min]	4,5	5

OCS OPTIONAL FEATURES	OCS-10 - OCS-250
Pressure Probe TANK-OUT	optional
PH/ORP Probe & Fittings	optional
DO3 PROBE & Fitting	optional
Control Board	optional
Control Board with PLC	optional
Ambient Ozone Monitor	optional

OCT TANKS	OC T-10	OC T-20	OC T-50
Material	FRP	FRP	FRP
Type	Vertical	Vertical	Vertical
Diameter/ Footprint Size [mm]	1700	1700	1700
Height [mm]	2270	2350	2550
Tank Volume [m3]	0,45	0,85	2,5
Nominal Operational Pressure [bar]	2,5	2,5	2,5
Maximum Permitted Pressure [bar]	6	6	6

OCS-50	OCS-100	OCS-150	OCS-250
460	1250	1420	1875
STANDARD	STANDARD	STANDARD	STANDARD
1,7	1,7	1,7	1,7
25	50	75	125
3	3	3	3
1,9	1,9	1,9	1,9
10	39	49	40

OCS OPTIONAL FEATURES	OCS-10 - OCS-250
FRP Body Ozone Contact Tank	optional
Ozone Contact Skid Pump	optional
Ozone Contact Skid Pump VFD	optional
Ozone Dosing Skid Digital Flowmeter	optional
Automatic Air Purge 1''	optional
Automatic Air Purge 2''	optional
Pressure Relief Valve	optional

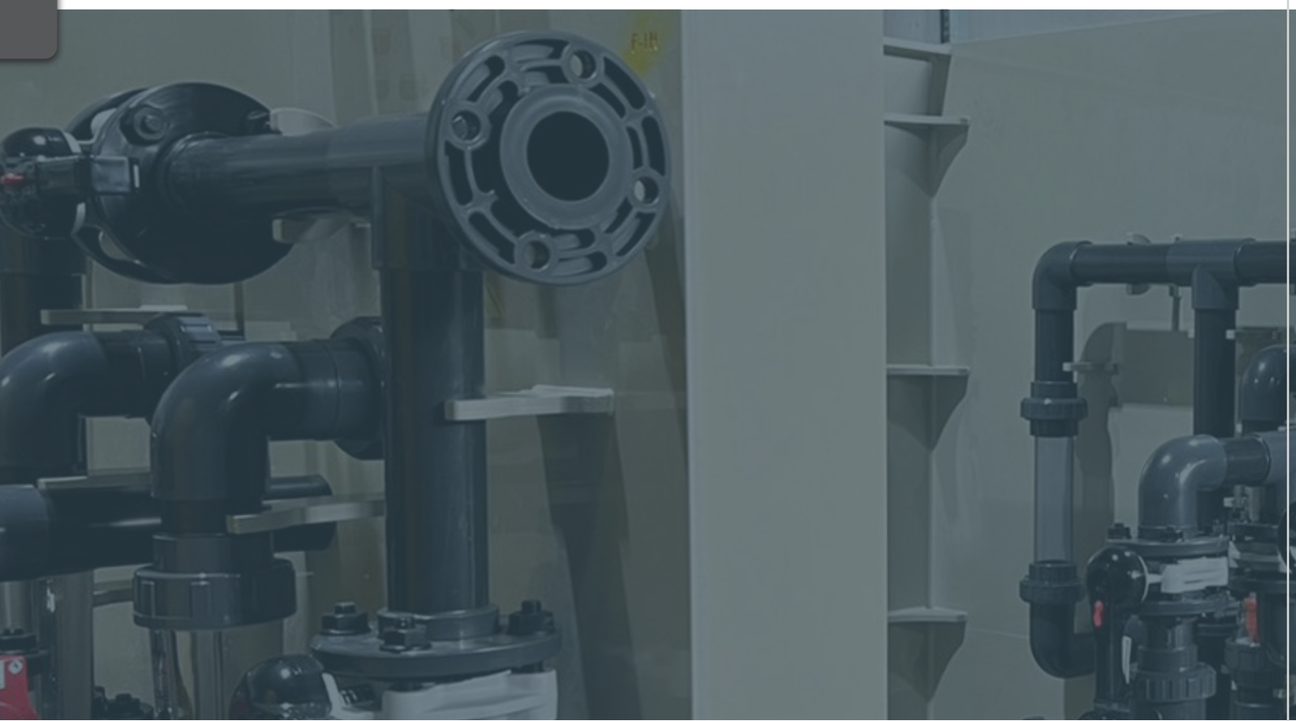
OCT-100	OCT-150	OCT-250	OCT-500	OCT-1000
FRP	FRP	FRP	FRP	FRP
Vertical	Vertical	Vertical	Vertical	Vertical
1700	2000	2000	TBD	TBD
2750	3150	3350	TBD	TBD
4,5	6,5	11	TBD	TBD
2,5	2,5	2,5	2,5	2,5
6	6	6	6	6

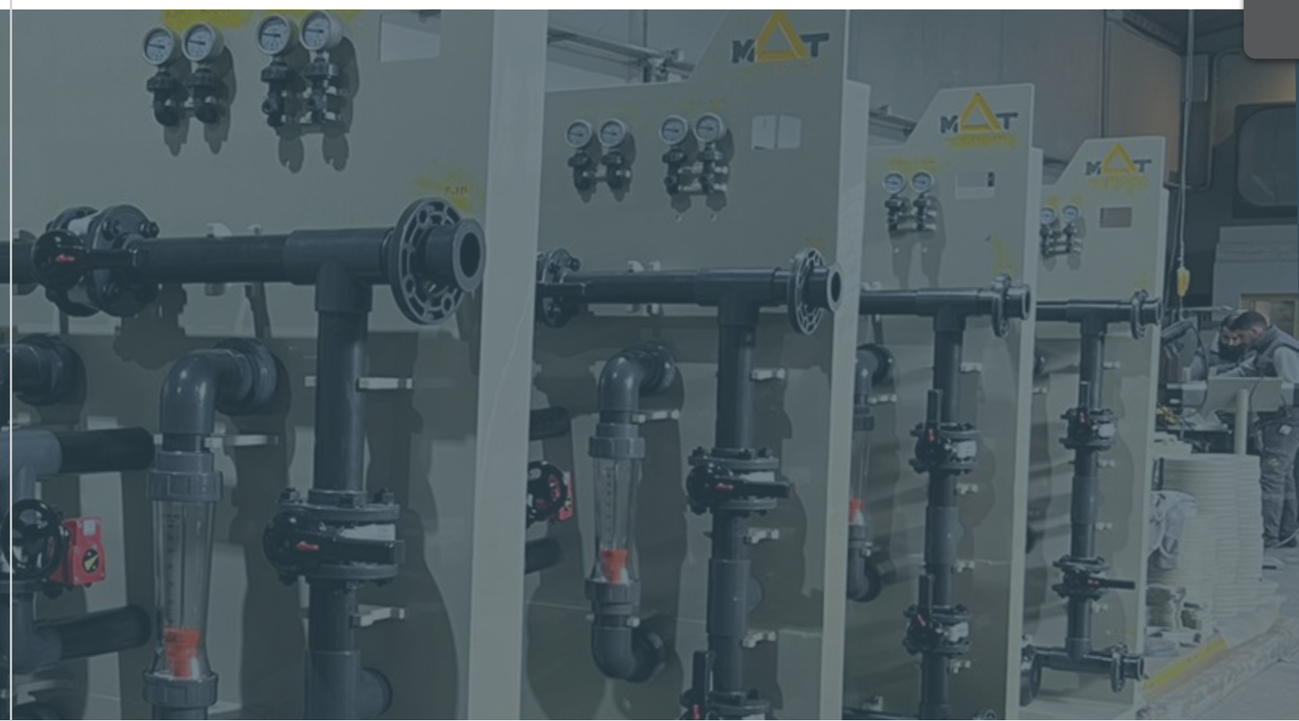
OCS & OCT SPECIFICATIONS

ODS SPECIFICATIONS

OZONE DOSING SKID FOR MARINE/ FRESH WATER	ODS-10	ODS-20	ODS-50	ODS-100	ODS-250	ODS-500	ODS-1000
Footprint Depth [mm]	700	700	700	700	700	700	800
Footprint Width [mm]	1135	1135	1140	1270	1270	1750	1900
Max. Height [mm]	2130	2130	2130	2180	2230	2500	2500
Installed Power [kW]	1,1	1,1	1,3	2,2	2,2	3,7	4,8
Supply Voltage (50Hz) [V]	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400
Inlet Size [mm]	50	50	50	63	63	90	110
Outlet Size [mm]	50	50	50	63	63	90	110
Ozone Dosing [g/h]	10	20	50	100	250	500	1000
Ozone Dosing [L/min]	4,5	6	10	39	40	80	160
Pump Model pump	21-40/53 H	21-40/53 H	21-40/54 H	21-40/58 G	21-40/58 G	21-60/46 G	21-80/34 G
Max Outlet Pressure (Higher pressures possible with custom design) [bar]	0,7	0,7	0,7	0,7	0,7	0,7	0,7
Inlet/outlet pressure monitors gauge/bar	1--4	1--4	1--4	1--4	1--4	1--4	1--4
Pump Flow Rate @ Max line pressure [m^3/h]	7,3	7,3	7,7	14	14	40	63
Ozone GAS Suction Rate @ Max line pressure [L/min]	5	6	10	39	40	80	160
Venturi Model vnt	250M	260M	260M	350M	350M	430M	600M

OZONE DOSING SKID FOR MARINE/ FRESH WATER OPTIONAL FEATURES	ODS-10	ODS-20	ODS-50	ODS-100	ODS-250	ODS-500	ODS-1000
Variable Frequancy Driver vfd	EP66-0015 T3	EP66-0015 T3	EP66-0015 T3	EP66-0022 T3	EP66-0022 T3	EP66-0040 T3	EP66-0055 T3
ORP/PH Probe & Probe Fitting	optional	optional	optional	optional	optional	optional	optional
DO3 Probe & Probe Fitting	optional	optional	optional	optional	optional	optional	optional
Control Board	optional	optional	optional	optional	optional	optional	optional
Digital pressure probes	optional	optional	optional	optional	optional	optional	optional
PLC Control	optional	optional	optional	optional	optional	optional	optional
Ozone Ambient Detector	optional	optional	optional	optional	optional	optional	optional
ODS Booster Pump	optional	optional	optional	optional	optional	optional	optional
Digital Flowmeter	optional	optional	optional	optional	optional	optional	optional





PRESSURIZED MEDIA FILTER SKIDS & FILTER TANKS

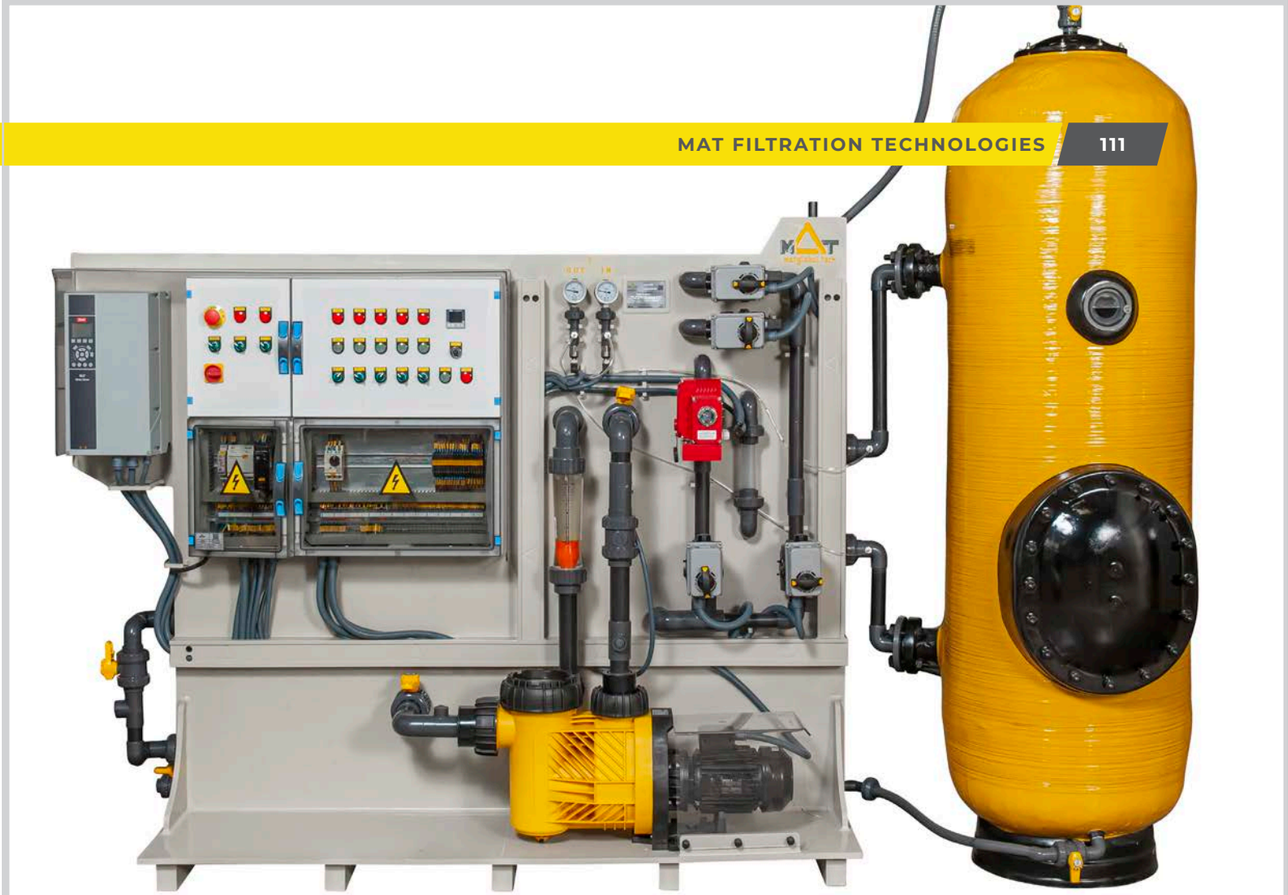
Filter Tanks are generally filled in with Glass Filter Media instead of silica sand, for multiple advantages and advanced performance.

The PMF Skid System is a complete plug-and-play water treatment solution. PMF Skid Systems are sold hydro-tested and fully assembled.

Complete ease of operation and low energy consumption. The unit includes top-notch mechanical filtration with powerful disinfection.

PMF SKID FEATURES:

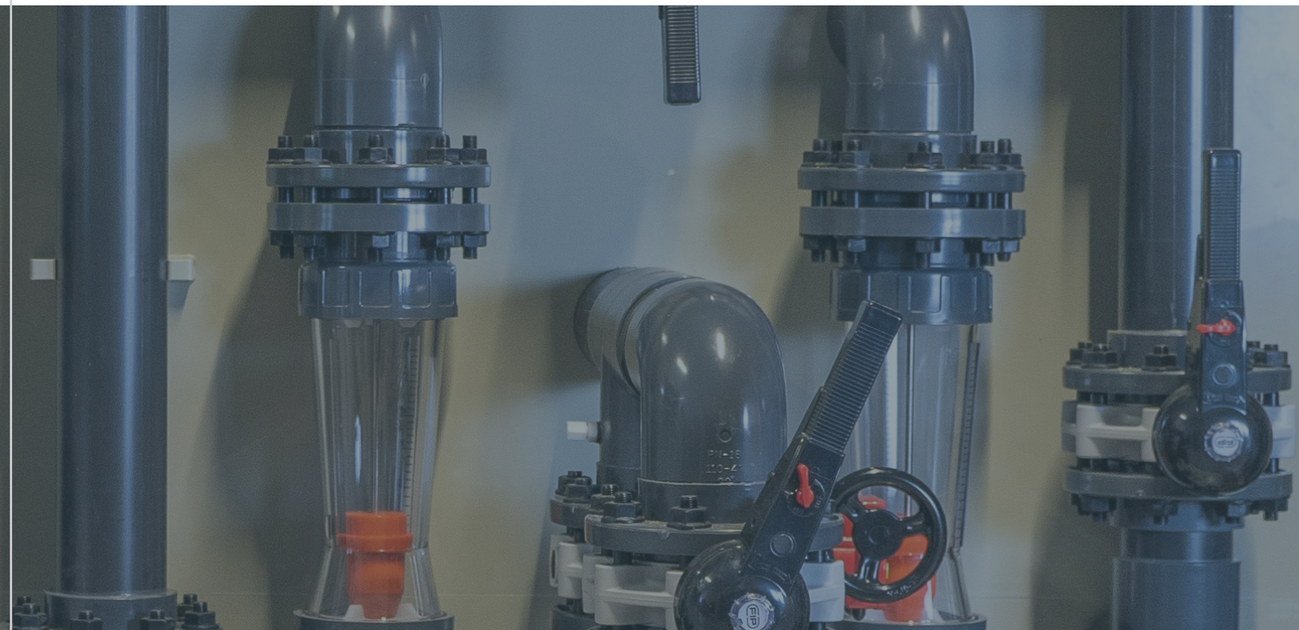
- Pressurised Mechanical Filter Tank
- Circulation Pump
- UV-C Sterilizer
- Piping & Valves
- Flow Meters
- Plate Heat Exchanger
- Chemical Dosage & Controller
- Variable Pump motor drivers
- Pressure sensors
- Temperature Monitoring



PMF SPECIFICATIONS

PMF SKID	PMF-4	PMF-12	PMF-22	PMF-38	PMF-50	PMF-64	PMF-80
Footprint Width [mm]	2200	3100	3500	4300	4830	5000	5300
Footprint Length [mm]	830	1400	1400	1620	1850	2100	2600
Unit Height [mm]	2060	2250	2200	2300	2400	2600	2700
Recommended Room Height [mm]	3000	3000	3000	4500	4500	5000	5000
PMF Tank Diameter & Area [mm]	500	830	1000	1400	1600	1800	2000
PMF Tank Diameter & Area [m^2]	0,19	0,5	0,79	1,54	2,01	2,54	3,14
Installed Power [kW]	0,75	1,77	2,55	3,8	4,8	6,4	6,4
Basic Unit Total Electric Consumption [kWh]	0,65	1,5	2,2	3,25	4	5,5	5,5
Supply Voltage (50Hz) [V]	3~400/230	3~400/230	3~400/230	3~400/230	3~400	3~400	3~400
Skid Inlet [mm]	50	75	90	140	160	160	200
Skid Outlet [mm]	50	63	75	110	140	140	160
Backwash Inlet Size [mm]	40	63	75	110	110	125	140
Nominal Flowrate [m^3/h]	5	11	21	38	50	63	78
Dry Weight [kg]	450	765	950	1250	1550	1850	2100
System Pump Model	Speck Prime 13 AK	Speck Prime 30 AK	Speck Prime 40 AK	Speck Resort 50 AK	Speck Resort 80 AK	Speck Resort 110 AK	Speck Resort 110 AK
System Pump Driver Model	EP66-0022 T3	EP66-0022 T3	EP66-0022 T3	EP66-0040 T3	EP66-0040 T3	EP66-0055 T3	EP66-0055 T3

PMF SKID OPTIONAL FEATURES	PMF-4	PMF-12	PMF-22	PMF-38	PMF-50	PMF-64	PMF-80
AUTOMATIC BACKWASH	PNEUMATIC/MOTORISED			PNEUMATIC/MOTORISED			
Temperature Sensor	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
TITANIUM HEAT EXCHANGER	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
Titanium Heat Exchanger Capacity [kWh]	3/5	5/10	15/20	20/40	25/50	30/75	50/100
ELECTRICAL TITANIUM HEATER	OCDV6	OCDV9	OCDV15	OCDV24	OCDV24	2 x OCDV24	2 x OCDV24
Electrical Heater Capacity [kWh]	6	9	15	24	24	48	48
PLC CONTROL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
UV DISINFECTION	UV 5	UV 10	UV 20	UV 50	UV 50	UV 100	UV 100
AUTOMATIC CHEMICAL CONTROL & DOSING SYSTEM	POOL GUARD Include Chemical Regulator Pumps & PH/ORP Propes			POOL GUARD Include Chemical Regulator Pumps & PH/ORP Propes			
Disinfection System Footprint Width [mm]	950	950	1100	1200	1200	1200	1200
Disinfection System Footprint Depth [mm]	500	500	500	600	600	600	600



FT SPECIFICATIONS

TANK MODEL NUMBER	FT-600	FT-800	FT-1000	FT-1200	FT-1400	FT-1600	FT-1800	FT-2000	FT-2200
Material	GRP	GRP	GRP	GRP	GRP	GRP	GRP	GRP	GRP
Diameter [mm]	600	800	1000	1200	1400	1600	1800	2000	2200
Height [mm]	1880	1950	1900	1950	1950	2000	2050	2100	2200
Media Depth [mm]	1000	1000	1000	1000	1000	1000	1000	1000	1000
Flowrate [m3/h]	7/8/10.0	10/12/15.0	17/21/25	22/27/33	30/38/46	40/50/60	50/63/76	62/78/94	76/95/114
Filtration Speed [m3/h/m2]	20/25/30	20/25/30	20/25/30	20/25/30	20/25/30	20/25/30	20/25/30	20/25/30	20/25/30
Filtration Area [m2]	0.33	0.5	0.86	1.13	1.54	2.01	2.54	3.14	3.8
Connection	UNION	FLANGED	FLANGED	FLANGED	FLANGED	FLANGED	FLANGED	FLANGED	FLANGED
Connection Size [mm]	50	63	75	90	110	140	140	160	160
Tank Type	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
Total Sand Media Capacity [kg]	495	750	1290	1695	2310	3015	3810	4710	5700
Total AFM Media Capacity	%83 Of Sand Media Capacity	%83 Of Sand Media Capacity	%83 Of Sand Media Capacity	%83 Of Sand Media Capacity	%83 Of Sand Media Capacity	%83 Of Sand Media Capacity	%83 Of Sand Media Capacity	%83 Of Sand Media Capacity	%83 Of Sand Media Capacity
Standard Max Operational Pressure [bar]	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Optional Max Operational Pressure [bar]	4	4	4	4	4	4	4	4	4

FT SPECIFICATIONS

TANK MODEL NUMBER	FT-2400	FTH-2500	FTH-3000	FTH-4000	FTH-5000	FTH-2500DS	FTH-3000DS	FTH-4000DS	FTH-5000DS
Material	GRP	GRP	GRP	GRP	GRP	GRP	GRP	GRP	GRP
Diameter [mm]	2400	2000x2500(L)	2000x3000(L)	2000x4000(L)	2000x5000(L)	2000x2500(L) X2	2000x3000(L) X2	2000x4000(L) X2	2000x5000(L) X2
Height [mm]	2250	2150	2150	2150	2150	4300	4300	4300	4300
Media Depth [mm]	1000	1200	1200	1200	1200	1200	1200	1200	1200
Flowrate [m3/h]	86/108/130	82/102/123	100/125/150	140/170/210	177/221/265	(82/102/123) X 2	(100/125/150) X 2	(140/170/210) X 2	(177/221/265) X 2
Filtration Speed [m3/h/m2]	20/25/30	20/25/30	20/25/30	20/25/30	20/25/30	20/25/30	20/25/30	20/25/30	20/25/30
Filtration Area [m2]	4.34	4.1	5	7	8.8	8.2	10	14	17.6
Connection	FLANGED	FLANGED	FLANGED	FLANGED	FLANGED	FLANGED	FLANGED	FLANGED	FLANGED
Connection Size [mm]	160	160	160	225	225	2 X 140	2 X 160	2 X 200	2 X 225
Tank Type	Vertical	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal Stacked Dual Design	Horizontal Stacked Dual Design	Horizontal Stacked Dual Design	Horizontal Stacked Dual Design
Total Sand Media Capacity [kg]	6510	7380	9000	12600	15840	15300	18000	25200	31680
Total AFM Media Capacity	%83 Of Sand Media Capac-ity	%83 Of Sand Media Capac-ity	%83 Of Sand Media Capacity	%83 Of Sand Media Capac-ity	%83 Of Sand Media Capac-ity	%83 Of Sand Media Capac-ity	%83 Of Sand Media Capac-ity	%83 Of Sand Media Capac-ity	%83 Of Sand Media Capac-ity
Standard Max Operational Pres-sure [bar]	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Optional Max Operational Pres-sure [bar]	4	4	4	4	4	4	4	4	4

THERMO-PLASTIC PUMP STRAINERS / PRE-FILTERS

MAT FILTRATION TECHNOLOGIES manufactures corrosion-resistant pump strainers/ pre-filters to not only protect pumps but also other downstream equipment in any part of the process.

The Thermo-Plastic Strainers are a specially designed and manufactured product to serve in harsh and corrosive conditions. They have the ideal fabrication material for acidic and corrosive liquids. They offer protection to pumps and the various elements of an installation, with minimized maintenance needs thanks to quick open cover for cleaning.

MAT FILTRATION TECHNOLOGIES Strainers are produced in Polypropylene but they can be also produced in Polyethylene. The standard aquaculture Strainer mesh size is 5mm but can be adjusted as per the request.

The complete visible acrylic cover and the quick open/close mechanism that allows open /close the strainer in seconds are the main advantages.

Standard Strainers are being manufactured up to 600m³/h but custom models can be produced up to 2000m³/h.

BSF SPECIFICATIONS

BASKET STRAINER	BSF-50	BSF-85	BSF-115	BSF-220	BSF-430	BSF-650
Flange Size A	DN 100	DN 125	DN 150	DN 200	DN 300	DN 350
Height B [mm]	800	850	900	1000	1254	1456
Inlet Level C [mm]	365	400	420	545	775	960
Outlet Level D [mm]	160	220	250	270	280	577
Body Diameter E [mm]	400	400	400	400	500	500
Max. Width F [mm]	620	630	640	650	760	780
Max Flow Rate [m^3/h]	50	85	115	220	430	650
Mesh Size [mm]	5	5	5	5	5	5
Vmin [m/s]	0,5	0,5	0,5	0,5	0,5	0,5
V nominal [m/s]	1,0	1,0	1,0	1,0	1,0	1,0
Vmax [m/s]	2,0	2,0	2,0	2,0	2,0	2,0
Pressure Loss (Vnom) [mbar]	50,0	52,9	55,9	50,0	50,0	70,6
Mesh / Pipe Opening ratio	1/ 4,3	1/ 4,3	1/ 4,3	1/ 4,3	1/ 4,3	1/ 4,3
Maximum Working pressure [bar]	2.5	2.5	2.5	2.5	2.5	2.5
Working temperature range [C°]	10--40	10--40	10--40	10--40	10--40	10--40
Dry Weight [kg]	40	44	48	53	113	122
Operational Weight [kg]	115	120	125	130	290	325
Material	PP	PP	PP	PP	PP	PP
Inlet and Outlet Manometers	Optional	Optional	Optional	Optional	Optional	Optional

STATIC SCREEN FILTERS

The Static Screen filter, known as the static sieve, separates solid and liquid substances within Waste Water Treatment applications. It serves two primary purposes:

» It serves as the initial treatment for wastewater, utilizing a mesh size ranging from 0.5mm to 10mm.
» It is a pre-treatment solution for the solid-liquid waste separation process.

The application is particularly effective in removing thick waste from industries such as paper, textiles, tanning, laundry, canning, milk processing, and slaughterhouses, aquaculture, and food processing facilities among others. The static screen offers a cost-effective solution for the continuous solid-liquid separation process, requiring minimal maintenance and consuming zero energy. Its composition primarily comprises a body and the mesh frame crafted from food and drinking grade non corrosive Polypropylene and Polyethylene.

MAT Static Screen Filters Options:

» Sieve Lid/Cover
» Mechanical Manual Sieve/Mesh Cleaning
» Mechanical Auto Sieve/Mesh Cleaning
» Auto wash Sieve/Mesh Cleaning
» Different body and mesh material
» Solid Collection Hooper

MAT Static Screen Filters usage offers various advantages such as:

» Corrosive free and robust product construction.
» Assembly built to withstand harsh operational conditions and ozone and chemical attacks, ensuring long-lasting operation.
» Combination of a front and back cleaned screen in a single unit (Optional).
» Adjustable Optimized Rinsing System with means of both Water Level Difference and Timer to conserve water (Optional).
» Low cost for maintenance and operation.
» Designed with the ability to provide tailor-made solutions that match each project-specific need.
» Eco-friendly solution with recycled material and low CO2 footprint.

SSF SPECIFICATIONS

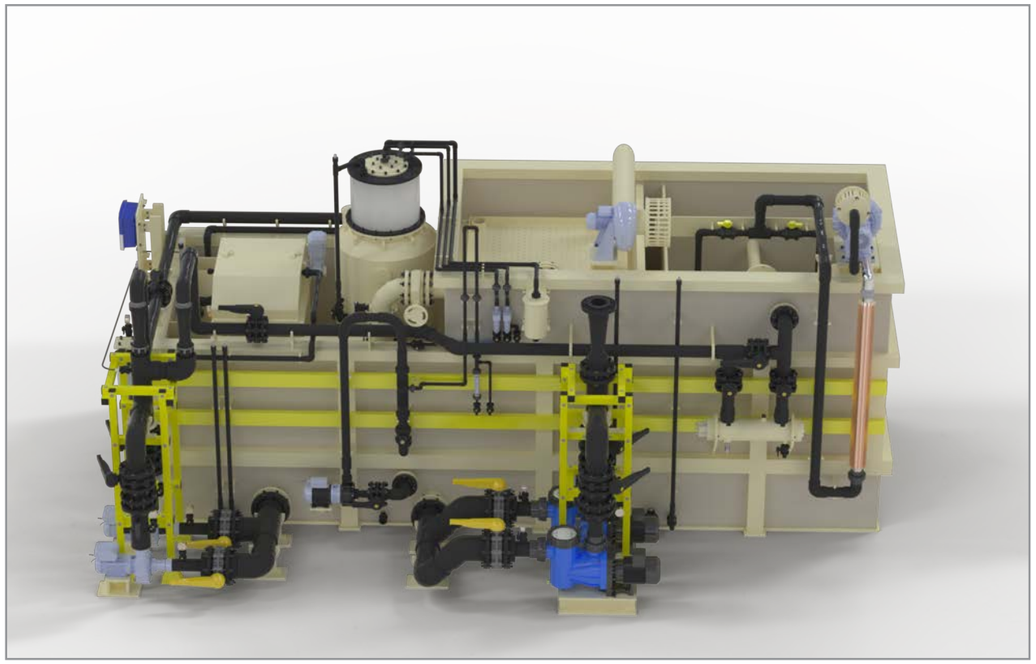
STATIC SCREEN MODEL	SSF-1	SSF-2	SSF-3	SSF-4	SSF-5
Piping Connections (DN) Inlet Dia	110	110	150	150	200
Piping Connections (DN) Outlet Dia	150	200	250	300	400
Piping Connections (DN)Drain Dia	110	110	150	150	200
Physical Dimensions (mm)A	500	1050	1680	2100	3150
Physical Dimensions (mm) L	1267	1267	1325	1325	1325
Physical Dimensions (mm)W	715	1265	1895	2350	3350
Physical Dimensions (mm) H	1486	1486	1635	1635	1635
Weight (Kg)	92	130	305	315	470
Max. Capacity (m3/h) Aperture = 1 mm	21	42	63	84	126
Max. Capacity (m3/h) Aperture = 2 mm	41	80	124	164	246
Max. Capacity (m3/h) Aperture = 3 mm	50	100	150	200	300

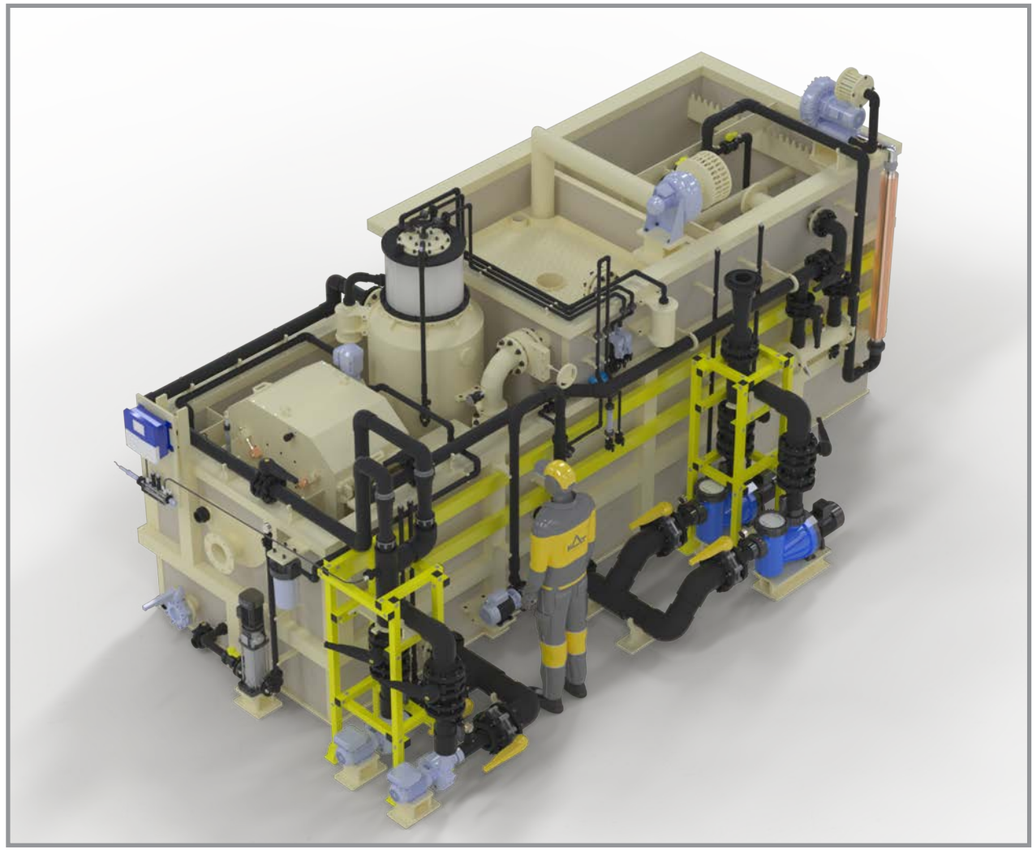
COMPACT RECIRCULATING AQUACULTURE SYSTEMS (CRAS)

These are tailor-made, fully integrated filtration units engineered for maximum reliability and operator-friendly RAS operation. They provide the smallest possible footprint with minimum energy consumption.

Each CRAS unit includes a complete treatment sequence — mechanical filtration, biological treatment, CO_2 removal, organic load reduction, disinfection, aeration, and oxygen enrichment, balance tank, circulations pumps, fans, blowers and many others..

All units are plug-and-play, fully assembled, and factory-tested before shipment, ensuring fast installation and dependable performance in intensive commercial land-based aquaculture.





CRAS-COMPACT RAS	CRAS-10	CRAS-20	CRAS-50	CRAS-100	CRAS-250	CRAS-400	CRAS-600	CRAS-1000
CRAS UNIT TOTAL								
Nominal flow rate [m3/h]	10	20	50	100	250	400	600	1000
CRAS Unit Width [mm]	1900	2100	3000	3200	3500	3500	4000	4300
CRAS Unit Length [mm]	2200	3200	5700	6500	9000	11000	18000	26000
CRAS Unit Height [mm]	2100	2200	2750	2650	3050	3850	3950	4100
CRAS Unit Max. Inlet Water Level [mm]	1100	1200	1400	1500	1500	1500	1700	1700
Max. Allowable TDH after CRAS Unit [m]	10	9	12	12	10	10	8.5	8.9
CRAS Unit Max. Total Power Consumption [kWh]	3.6	4.9	8.8	15.9	27.5	44.4	67.3	103
CRAS Unit Total Installed Power (400V 50Hz) [kW]	3.8	5	8.9	16.2	32	54.8	73.3	123
CRAS-MBBR								
Max Bio Media (65 % Filling) [m3]	0.7	1.3	2.8	5.2	10.9	19.3	28.7	42.1
MBBR Blower Model	R20 MD	R30 MD	R40 MD	K07 MD	K09 MD	K10 MD	K09 TD	K10 TD
MBBR Blower Installed Power [kW]	0.75	1.1	2.2	3	5.5	7.5	15	15
CRAS-DEGASSER								
DGS Area [m2]	0.39	0.75	1.95	2.4	3.325	4.75	6.65	11.4
DGS Media Depth [mm]	1000	1000	1000	1000	1000	1500	1500	1500
DGS Media Volume [m3]	0.39	0.75	1.95	2.4	3.325	7.125	9.975	17.1
DGS Fan Model	Venplast PC202	Venplast PC202	Venplast PC202	RSD 22B/2/50	RSD25B/2/50	RSD40B/4/50	RSD45B/2/50	RSD35B/2/50
DGS Fan Installed Power [kW]	0.25	0.25	0.25	0.25	0.37	0.55	1.1	2.2
DRUM FILTER								
Drum Filter Model (50 Micron)	DRF-PHT-400-1	DRF-PHT-400-1	DRF-PHT-800-1	DRF-PHT-800-2	DRF-PHT-800-3	DRF-PHT-1200-4	DRF-PHT-1600-4	DRF-PHT-1600-6
Backwash flowrate (@7 bar) [m3/h]	0.9	0.9	0.9	1.8	2.7	3.6	3.6	5.4
Drum filter Installed Power [kW]	1	1	1	1.35	2.45	2.57	2.75	3.55

CRAS-COMPACT RAS	CRAS-10	CRAS-20	CRAS-50	CRAS-100	CRAS-250	CRAS-400	CRAS-600	CRAS-1000
PROTEIN SKIMMER								
Protein Skimmer Model	PS-14	PS-22	PS-62	PS-220	PS-280	PS-360	PS-600	PS-800
Protein Skimmer Installed Power [kW]	0.68	1.1	1.33	3.5	3.5	4.55	8	11
Protein Skimmer Flow Rate [m3/h]	5	10	25	50	125	200	300	500
Contact Time [min]	1.1	1.4	1.7	1.5	1.3	1.4	1.6	1.7
UV UNIT								
UV Disinfection Model	UVC-5	UVC-10	UVC-20	UVC-50	UVC-150	UVC-250	UVC-350	UVC-500
UV Flowrate [m3/h]	5	10	25	50	125	200	300	500
UV Installed Power [kW]	0.1	0.2	0.3	0.4	1.2	1.6	2.4	3.2
LIFT PUMPS								
Pump Quantity [pcs]	1	1	1	2	2	4	2	4
Total Pump Power Consumption [kW]	0.373	0.55	0.8	1.6	6.04	11.76	18.2	31.2
Total Pump Installed Power	0.45	0.55	0.85	1.7	8	16	22	44
DISTRIBUTION PUMPS								
Pump Quantity [pcs]	1	1	1	2	2	2	2	4
Total Pump Power Consumption [kW]	0.495	0.7	2.89	5.78	8.46	15.82	19.86	36.8
Total Pump Installed Power [kW]	0.55	0.75	3	6	11	22	22	44

CRAS-COMPACT RAS OPTIONS	CRAS-10	CRAS-20	CRAS-50	CRAS-100	CRAS-250	CRAS-400	CRAS-600	CRAS-1000
Spare Lift Pump with Fittings & Piping	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Spare Distribution Pump with Fittings & Piping	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
ORP/PH Probe & Transmitter	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
CO2 Probe & Transmitter	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
DO2 Probe & Transmitter	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Turbidity Probe & Transmitter	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Temperature Sensor & Transmitter	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional

SSF SPECIFICATIONS

CRAS-COMPACT RAS OPTIONS	CRAS-10	CRAS-20	CRAS-50	CRAS-100	CRAS-250	CRAS-400	CRAS-600	CRAS-1000
Acrylic Probe Holder [4 Probe Ports]	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Acrylic Probe Holder [5 Probe Ports]	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
PS Quick Rectractable Probe Fittings [ORP/PH Probe]	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Sump Water Level Sensors	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Sump Water Level Regulation	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Lift Pumps VFD's	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Distribution Pump VFD's	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Digital Flowmeters of Lift Pump Lines	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Digital Flowmeters of Distribution Pump Line	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Drum Filter Basic Control (Drum Auto wash as per Water Level Fixed Drum Wash Rotation Speed)	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Drum Filter Smart Control (Drum Auto wash as per Water Level Error/Status/Alarm Function via Digital Screen)	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Drum Filter Advanced Control (Drum Filter Rotation Modes)	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Drum Filter Advanced Control (Error/Status/ Alarm Function via Touch Screen)	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Drum Filter Advanced Control (PROFINET/ MODBUST Connection)	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Drum Filter Advanced Control (Including PLC/ HMI/Power Supply/Driver Units)	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Protein Skimmer Foam Collector Auto Clean	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
MBBR Blower	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
MBBR Blower VFD	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
MBBR Media[BM-4500]	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
MBBR Media [BM-800]	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
DGS Air Fan	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
DGS Random Media [DGM-140]	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
UV Irradiance Sensor	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Electrical Control Panel	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
PLC Control with HMI Screen	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional

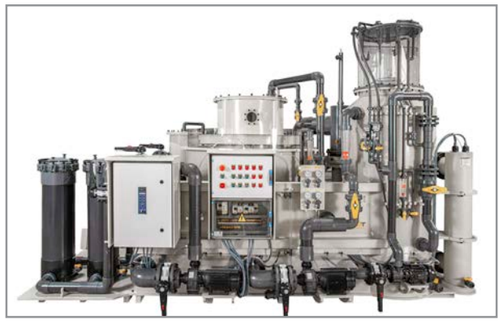
RAS & COMPACT SKID FILTRATION SYSTEMS

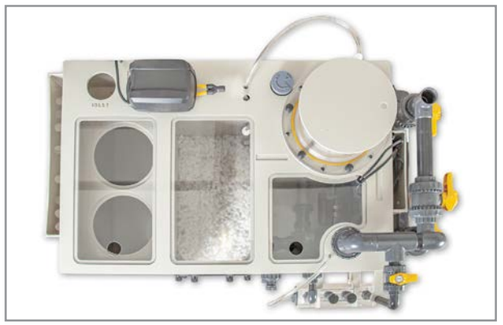
The MAT FILTRATION TECHNOLOGIES Recirculating aquaculture skid filtration systems are tailor-made complete filtration units designed for simple Recirculating Aquaculture operation, with the smallest footprint and minimum energy consumption.

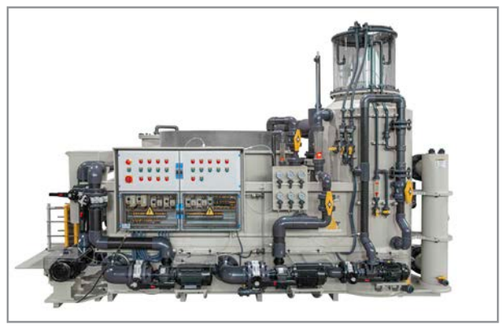
The units are equipped to provide complete mechanical, biological, organic removal treatments along with disinfection and aeration/oxygen enrichment based on the requirements of the applications.

Plug and Play Skid Units are fully tested in the factory before delivery.

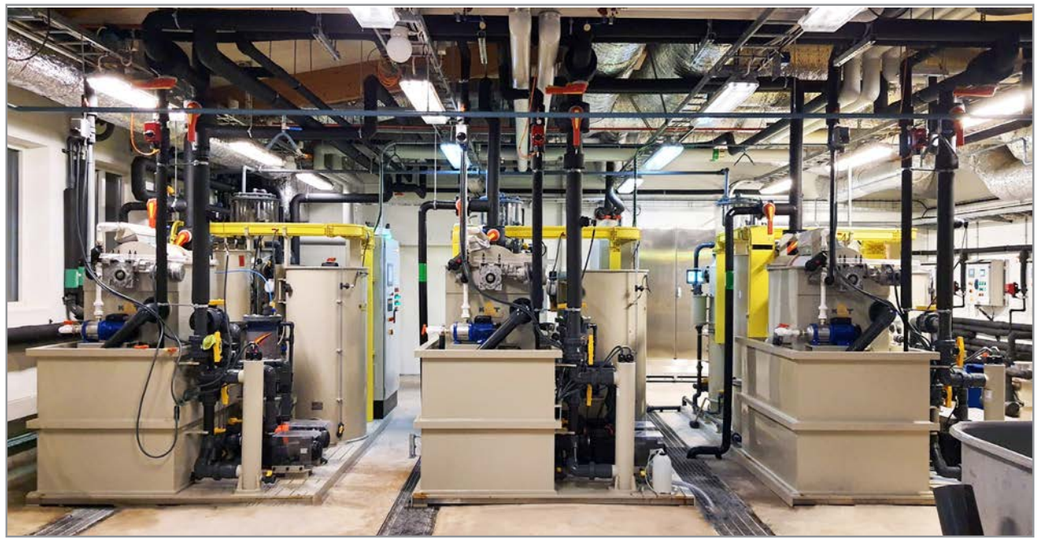
Compact units are standard products for low-bio load applications.

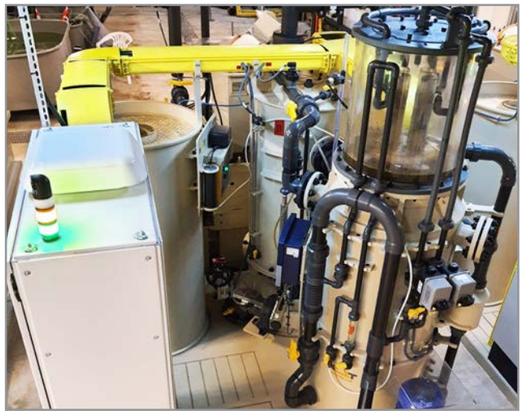






TAILOR MADE
RAS DESIGN & INSTALLATION





COMPACT FILTER	CPT-1	CPT-5	CPT-10	CPT-20	CPT-30	CPT-40	CPT-75
Footprint Depth C [mm]	700	975	1200	1300	1700	1900	2470
Footprint Width A [mm]	1020	1700	1900	2100	2700	3050	3580
Skimmer Diameter [mm]	200	315	400	482	630	750	950
Max Height B [mm]	750	1100	1950	2100	2400	2500	2810
Footprint with Sand/Glass Filter Depth [mm]	N/A	N/A	1235	1326	1685	approx. 2000	approx. 2600
Footprint with Sand/Glass Filter Width [mm]	N/A	N/A	2580	2985	3995	approx. 4785	approx. 5586
Installed Power [kW]	0.15	1.05	1.53	2.12	4.1	4.5	10
Basic Unit Total Electric Consumption [kWh]	0.15	0.74	1.07	1.48	2.87	3.15	7
Supply Voltage (50Hz) [V]	1~110-240	3~400/230	3~400/230	3~400/230	3~400/230	3~400/230	3~400
Max. Sump Level [mm]	370	525	865	930	985	1035	1190
Inlet Level [mm]	430	120	245	255	260	260	265
Inlet Size [mm]	50	63	110	125	140	160	225
Outlet Size [mm]	40	50	63	63	75	75	110
Overflow Connection Size [mm]	N/A	32	63	63	63	63	75
Compact Unit Nominal Flow [m^3/hr]	1	4	10	20	30	40	75
Max. Allowable TDH after compact [m]	4.5	5	10	9	10	9	12
Max. Allowable TDH after compact with Sand/Glass filter [m]	N/A	N/A	7	12	20	29	50
Balance Water Volume [L]	53	142	330	530	940	1360	2750
Water Operation Level [mm]	345	370	580	600	615	620	640
TAN Removal Rate [gr TAN/day]	10	21	53	76	162	263	540
Canister Cartridge Volume [L]	N/A	2.1	7.45	13.5	18.5	30	50
Uv Disinfection Unit	UVC 1	UVC 5	UVC 10	UVC 20	UVC 50	UVC 50	UVC 100
Recommended Ozone Dosage [gr/h]	0.2	0.5	1	2	3	5	10
Pump Quantity [pcs]	2	2	2	2	2	2	2

COMPACT FILTER	CPT-1	CPT-5	CPT-10	CPT-20	CPT-30	CPT-40	CPT-75
PS/MBBR Pump Model	DC Runner ECO 6.0 (400-015-032)	44/4	21-40/53H	21-40/54H	21-40/58	21-50/43	21-81/34
Circulation Pump Model	DC Runner 9.2	44/12	21-40/53G	21-40/54G	21-40/58	21-50/43	21-81/34
Circulation Pump Model with Sand Filter	N/A	N/A	21-40/53H	21-40/54H	21-40/58	21-50/43	21-81/34
Sand/Glass Filter Body Diameter [mm]	N/A	N/A	710	900	1000	1200	1400
Total Sand Media Capacity kg	N/A	N/A	250	450	700	1500	1950
Total Glass Media Capacity GRADE-1 (kg)	N/A	N/A	125	225	350	750	975
Total Glass Media Capacity GRADE-2 (kg)	N/A	N/A	42	75	117	250	325
Total Glass Media Capacity GRADE-3 (kg)	N/A	N/A	42	75	117	250	325
Media Filter Valve Type	N/A	N/A	5-Way multiport valve	5-Way multiport valve	5-Way multiport valve	5-Way multiport valve	5-Way multiport valve
Dry Load [kg]	50	130	280	330	560	630	1150
Operational Load [kg]	225	500	1250	1725	3070	4265	7755

CPT SPECIFICATIONS

COMPACT FILTER OPTIONAL FEATURES	CPT-1	CPT-5	CPT-10	CPT-20	CPT-30	CPT-40	CPT-75
Carbon Media	N/A	Optional	Optional	Optional	Optional	Optional	Optional
Bag Filters	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Bag filter Number [pcs]	2	3	4	4	7	8	11
Sand filter	N/A	N/A	Optional	Optional	Optional	Optional	Optional
Trickling media	N/A	Optional	Optional	Optional	Optional	Optional	Optional
MBBR Media	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Sump Level Control	Optional	Optional	Optional	Optional	Optional	Optional	Optional
PS Overflow Switches	N/A	N/A	Optional	Optional	Optional	Optional	Optional
pH Probe	Optional	Optional	Optional	Optional	Optional	Optional	Optional
ORP Probe	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Temperature Probe	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Touch Screen Smart Transmitter For Probes	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Foam Collector Autowash	N/A	Solenoid	Solenoid	Solenoid	Solenoid	Solenoid	Solenoid
External Fresh Water Line Valve For Autowash option	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized	Motorized
Control Board	N/A	Optional	Optional	Optional	Optional	Optional	Optional
Control Board with PLC	N/A	Optional	Optional	Optional	Optional	Optional	Optional
Passive Ozon Destruct	N/A	Optional	Optional	Optional	Optional	Optional	Optional
PS Circulation and Distribution pump for Fresh water CPT	N/A	Optional	Optional	Optional	Optional	Optional	Optional
Makeup Water Automation	Optional	Optional	Optional	Optional	Optional	Optional	Optional

AQUACULTURE TANKS

MAT FILTRATION TECHNOLOGIES produces aquaculture tanks from food grade Polypropylene with mulitple customised features like sight windows, covers, net holders, bottom and overflow drains and pipe connection from 0.1m³ to 200m³.

MAT FILTRATION TECHNOLOGIES designs and manufactures PP tanks in-house with 3D Models and CNC Automated cutting, bending and welding machines.

Aquaculture Fish Tank

Aquaculture Fish Tank

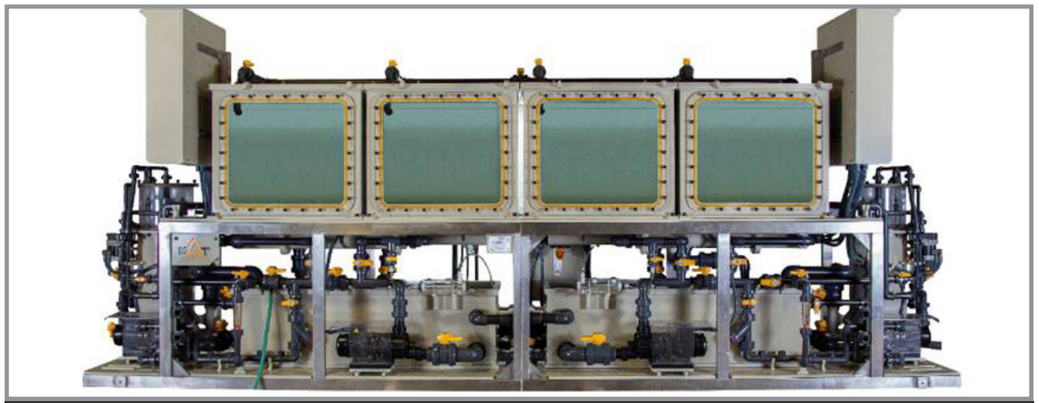
Aquaculture Fish Tank

Aquaculture Fish Tank

AQUACULTURE TANKS

Square Quarantine Skid System

Pyramid Skid System



Square Skid System

QUARANTINE SKID	PYR-1	SQR-1	QRT-1
Footprint [mm]	2298	4500	1922
	1932	932	1295
Max. Height [mm]	1773	1930	1750
Skimmer Diameter [mm]	315	315	200
Total Electric Power [kW]	1,06	1,3	0,18
Power Supply	3~400/230V 50Hz	3~400/230V 50Hz	1~230V 50/60 Hz
Max Sump Level [mm]	525	375	1610
Skid Unit Nominal Flow [m3/hr]	4	4	1
TAN Removal Rate [gr/d]	21	21	10
Pump qty [pcs]	2	4	2
PS-MBBR Pump Type	Badu 44/4	Badu 44/4	DC Runner ECO 6.0 (400-015-032)
Main Pump Model type	Badu 44/12	Badu 44/4	DC Runner 9.2
Dry-Weight [kg]	1180	700	245
Operational Weight [kg]	2100	2600	1360
UV Model	MAT UVC-5 L shaped	MAT UVC-5 L shaped	UVC 1
UV Radiation Rate [J/m2]	400	400	400
UV Lamp Power [kW]	87	87	40
Recommended Ozone Dosage [g/h]	0,5	1	0,2
Bag Filters [pcs]	4	8	2

ARTEMIA
HATCHING SYSTEMS

The Artemia Salina Hatching and Enrichment Module Tanks are an efficient hatching environment of Artemia salina cysts as well as a proper enrichment environment for Artemia salina Nauplii I and II.

The units provide accuracy and control of the hatching and enrichment conditions and offer excellent performance, bio secure hatching environment, stable hatching media physicochemical parameters, ease of operation and robust fabrication in a superior quality.

Artemia salina nauplii is used in aquariums, institutes, universities, laboratories, aquaculture and ornamental sector and is considered as a beneficial and nutritional food source at the critical larvae stages, providing better survival rates and larvae quality.

The natural DHA and EPA resources of Artemia salina Nauplii, in addition with the Enrichment process in an absolute controled environment guarantee the culture process.

The Artemia LFP Skid Systems include four pieces of single vessels mounted upon one table, where each vessel is 18,5lt.

Only one valve with a camlock is used for each vessel to collect the livestock and for drainage.

ROTIFERS
CULTURE SYSTEMS

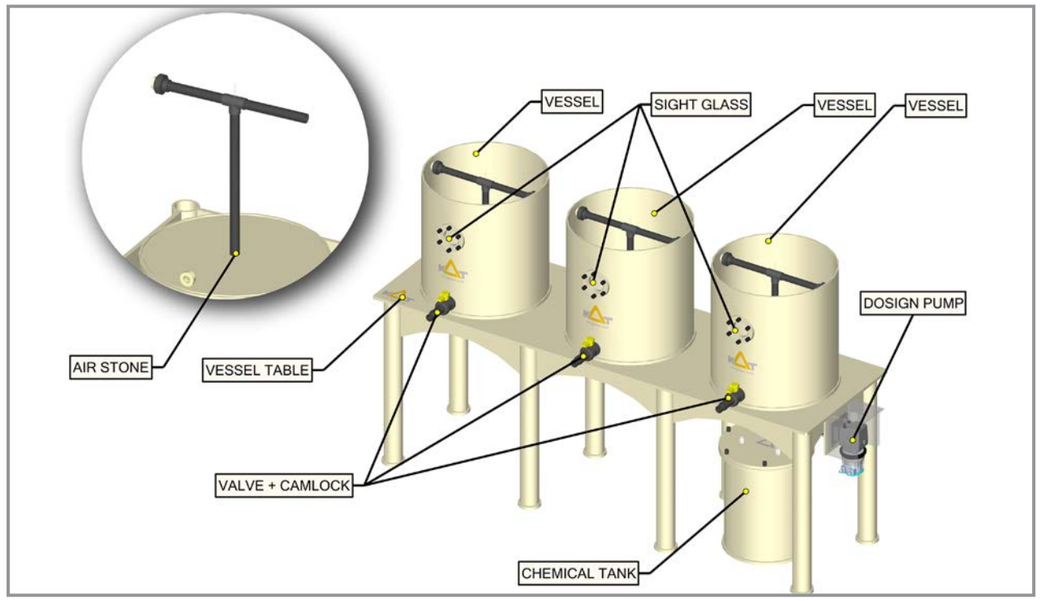
The Rotifers Live Feed Production Unit is designed to provide an efficient means of Rotifers culture and enrichment conditions, providing excellent performance, ease of operation and robust fabrication in a higher quality.

Live rotifers are used in aquariums and aquaculture and are generally considered nutritionally critical and necessary as a food source for marine organisms and more specific for their larvae stages.

The Rotifer Skid System consists of the vessel, the nutrition tank, the dosage pump, and the air stone. Three pieces of single vessels are mounted upon one table, where each vessel is of 17lt. The air stone is utilized to provide the necessary oxygenation by diffusing air into the vessel. The air supply blower is an external part (not included) of the skid. Only one valve with a camlock is used for each vessel to collect the livestock and for drainage.

The MAT FILTRATION TECHNOLOGIES Rotifer Skid System offer excellent performance in Rotifer culture conditions distributing the Rotifer feed equally in every single point of the Unit, assisting the Rotifers to obtain their nutritional value.

The Rotifer Skid System procides a controlled physicochemical environment, culture and enrichment conditions of the Rotifer, which is vitally critical for the EPA and DHA nutritional value and better survival and quality of the larvae.



COPEPODS
CULTURE SYSTEMS

MAT FILTRATION TECHNOLOGIES Copepod Live Feed Production units are designed to provide an efficient means of Copepod reproduction, providing excellent performance, ease of operation and robust fabrication in a higher quality.

Live copepods are used in aquariums and aquaculture and are generally considered beneficial as a food source.

MAT FILTRATION TECHNOLOGIES Copepod

LFP Skid includes one vessel of 420lt and the sump of 450lt. Only two valves with camlock are used. The first one is used for livestock collection and drainage and is located on the sump.

The second one is used to transfer from the vessel to the sump.

SKID UNIT:	Artemia Reproduction Skid
Footprint Width [mm]	1800
Footprint Depth [mm]	600
Max. Height [mm]	1495
Table Height [mm]	640
Vessel Volume [Lt]	18,5
Camlock Valves [qty]	1
Valve [mm]	32
Camlock Size [in]	1

SKID UNIT:	Rotifer Reproduction Skid
Footprint Width mm	2400
Footprint Depth mm	710
Max. Height mm	1510
Table Height mm	900
Vessel Volume Lt	158
Camlock Valves qty/vessel pcs	1
Valve mm	32
Camlock Size in	1
Chemical Tank	Standard

SKID UNIT:	Copepod Reproduction Skid
Footprint Width mm	900
Footprint Depth mm	900
Max. Height mm	2295
Table Height mm	1395
Copepod Vessel Diameter mm	800
Copepod Vessel Volume Lt	420
Sump Volume Lt	450
Camlock Valves qty pcs	2
Valve mm	32
Camlock Size in	1

OXYGEN CONES

MAT OXC Oxygen Cone is a conical vessel designed to reinforce the process of oxygen gas mixing and saturation into the water.

The OXC is always paired with an oxygen supply device which provides the necessary oxygen gas quantity to be delivered to the mixing chamber.

The vessel is specially designed to achieve through a simple operation the best possible oxygen gas-water mixing.

The aquatic system's water along with infused oxygen are delivered on the top inlet of the cone flowing downwards to the base with gradually reduced velocity as the vessel diameter increases.

Along this path the transferred stream of oxygen bubbles stream is continuously dissolving into the water until the complete saturation.

OXC SPECIFICATIONS

OPTIONAL FEATURES	OXC-10 - OXC-680
Oxygen Gas Pressure Gauge	Optional
Max Operational Pressure 4 Bar/Design Pressure 6 bar	Optional
Manuel Oxygen Gas Valve	Optional
Solenoid Oxygen Gas Valve	Optional
Oxygen Gas Pressure Sensor (-1 to 10 bar)	Optional
Oxygen Gas Flowmeter	Optional
Oxygen Gas Digital Flow Meter (Inline)	Optional

OPTIONAL FEATURES	OXC-10 - OXC-680
Oxygen Cone Pressure Gauge	Optional
Oxygen Cone Pressure Sensor (-1 to 9 bar)	Optional
Oxygen Cone Dissolved O2 Probe, DO2 Probe Fitting & Transmitter, Colourful Touchscreen panel	Optional
Oxygen Gas Inlet Automatic Solenoid Valve	Optional
Pressure Relief Valve	Optional

OXYGEN CONE MODEL	OXC-10	OXC-45	OXC-100	OXC-170	OXC-380	OXC-510	OXC-580	OXC-680
Diameter [mm]	300	600	900	1200	1800	2000	2100	2200
Max. Height [mm]	970	1740	2250	3100	4550	5300	5800	6250
Inlet Size [DN]	40	100	150	200	250	300	350	400
Outlet Size [DN]	40	100	150	200	250	300	350	400
Max Water Flow [m^3/h]	10	45	100	170	380	510	580	680
Max Water Flow [lt/m]	170	702	1670	2840	6330	8500	9667	11333
Standard Max. Operational/Design Pressure [bar]	2 / 3	2 / 3	2 / 3	2 / 3	2 / 3	2 / 3	2 / 3	2 / 3
High-Pressure Version Operational/Design Pressure [bar]	4 / 6	4 / 6	4 / 6	4 / 6	4 / 6	4 / 6	4 / 6	4 / 6
Oxygen Absorption 100% Sat 10°C @0,5bar Freshwater [kg/h]	0.17	0.66	1.49	2.64	5.5	7.43	8.17	8.98
Oxygen Absorption 100% Sat 10°C @1bar Freshwater [kg/h]	0.33	1.32	2.97	5.28	11	14.85	16.63	18.46
Oxygen Absorption 100% Sat 10°C @2bar Freshwater [kg/h]	0.66	2.64	5.94	10.56	22	29.7	33.26	36.92
Oxygen Absorption 100% Sat 10°C @3bar Freshwater [kg/h]	0.99	3.96	8.91	15.84	33	44.55	49.9	55.38
Oxygen Absorption 100% Sat 10°C @4bar Freshwater [kg/h]	1.32	5.28	11.88	21.12	44	59.4	66.53	73.85
Oxygen Absorption 100% Sat 15°C @0,5bar Freshwater [kg/h]	0.15	0.6	1.35	2.4	5	6.75	7.43	8.17
Oxygen Absorption 100% Sat 15°C @1bar Freshwater [kg/h]	0.3	1.2	2.7	4.8	10	13.5	15.12	16.78
Oxygen Absorption 100% Sat 15°C @2bar Freshwater [kg/h]	0.6	2.4	5.4	9.6	20	27	30.24	33.57
Oxygen Absorption 100% Sat 15°C @3bar Freshwater [kg/h]	0.9	3.6	8.1	14.4	30	40.5	45.36	50.35
Oxygen Absorption 100% Sat 15°C @4bar Freshwater [kg/h]	1.2	4.8	10.8	19.2	40	54	60.48	67.13
Oxygen Absorption 100% Sat 20°C @0,5bar Freshwater [kg/h]	0.14	0.54	1.22	2.16	4.5	6.08	6.68	7.35
Oxygen Absorption 100% Sat 20°C @1bar Freshwater [kg/h]	0.27	1.08	2.43	4.32	9	12.15	13.61	15.1
Oxygen Absorption 100% Sat 20°C @2bar Freshwater [kg/h]	0.54	2.16	4.86	8.64	18	24.3	27.22	30.21
Oxygen Absorption 100% Sat 20°C @3bar Freshwater [kg/h]	0.81	3.24	7.29	12.96	27	36.45	40.82	45.31
Oxygen Absorption 100% Sat 20°C @4bar Freshwater [kg/h]	1.08	4.32	9.72	17.28	36	48.6	54.43	60.42
Oxygen Absorption 100% Sat 25°C @0,5bar Freshwater [kg/h]	0.12	0.49	1.09	1.94	4.05	5.47	6.01	6.62
Oxygen Absorption 100% Sat 25°C @1bar Freshwater [kg/h]	0.24	0.97	2.19	3.89	8.1	10.94	12.25	13.59
Oxygen Absorption 100% Sat 25°C @2bar Freshwater [kg/h]	0.49	1.94	4.37	7.78	16.2	21.87	24.49	27.19
Oxygen Absorption 100% Sat 25°C @3bar Freshwater [kg/h]	0.73	2.92	6.56	11.66	24.3	32.81	36.74	40.78
Oxygen Absorption 100% Sat 25°C @4bar Freshwater [kg/h]	0.97	3.89	8.75	15.55	32.4	43.74	48.99	54.38
Maximum Oxygen Dosage Capacity [kg/h]	1.5	6	13.5	24	50	67.5	75.6	83.92
Oxygen Gas Connection Size [inch]	1 / 4 "	1 / 2 "	1 / 2 "	3 / 4 "	3 / 4 "	1 "	1 "	1 "
Cone Body Material	FRP	FRP	FRP	FRP	FRP	FRP	FRP	FRP

**** O2 solubility in saline water = O2 solubility in freshwater × (1−0.005×salinity[ppt])**

DISSOLVED AIR FLOTATION (DAF)

Our DAF systems effectively remove total suspended solids (TSS), biochemical oxygen demand (BOD), and oils and greases (O&G) from wastewater by utilizing a dissolved air-in- water solution produced by injecting air under pressure into a recycle stream of clarified DAF effluent.

This solution is mixed with incoming wastewater, where the dissolved air forms micron-sized bubbles that attach to contaminants, facilitating their removal and achieving a reduction of total suspended solids by up to 90%, reducing the COD and obtaining a sludge dryness of around 6%.

MAT DAF system is an extensive surface flotation clarification unit with crossflow separation capabilities for sludge and water. Designed to handle wastewater streams heavily loaded with suspended solids and various impurities, this system provides a vast flotation area to effectively manage the separated sludge capable of processing up to 40 kg of dry matter per square meter.

STANDARD FEATURES FOR DAF

» DAF is made of a non-corrosive tank,
» Skimmer
» settling structure
» sludge/water connections,
» air supply, pneumatic panel, and air supply valve
» recirculation pump.
» Lamella Plate Pack (only DAF-L models)

OPTIONS FOR MAT DAF

» Pressure (White Water Contact) Tank
» Incorporated Skid-Mounted Flocculation Tubing: In-line flocculator —with Floculant,
» Coagulant, Costing dosing points, sampling and pH sensor taps.
» Coagulant dosing pump.
» Caustic soda dosing pump.
» Flocculant (polyelectrolyte) preparation and dosing system.
» pH sensor
» Dosing Line Flowmeters
» Sludge Pump
» Sludge Screw Extractor
» Flotation Tank Level Sensor

» Process Flow Monitoring Sensor
» Sludge Level Measurement
» TSS (Total Suspended Solids) Monitoring in Inlet and Outlet
» Smart Control Panel with Relay Logic and Microcontroller
» PLC/HMI for operational flexibility
» Access Platforms and Staircases
» Flotation Tank Cover/Lid.

BENEFITS OF MAT DAF

» Pre-Assembled, Skid-Mounted Configuration - Delivers a ready-to-install setup, minimizing the need for on-site assembly.
» Non-Corrosive Tank Construction from PP & PE: Engineered for durability - The tank is designed to resist flexing under operational stress. - Available in also 304, 316, and 316L Stainless Steel tank constructions.
» Space-Efficient Design with Integrated Plate Pack: - Ideal for space-constrained environments, offering compact and efficient use of space.
» Uniform High-Quality Production and Advanced Manufacturing: -Ensures consistent and superior product quality, leveraging cutting-edge production technology.
» Streamlined Flow for Enhanced Separation Efficiency: - Improves the effectiveness of the separation process, leading to better contaminant removal.
» Efficient Rectangular Design: - Maximizes space utilization with its compact rectangular shape.
» High-Quality Drive and Pump Components: -Ensures long-term dependability with premium quality components.
» Customization Options Available with Minimal Effect on Delivery Timelines or Costs

DAF SPECIFICATIONS

MODEL	DAF 5	DAF 10	DAF 20	DAF 35	DAF 50	DAF 100	DAF 150	DAF 200
Hydraulic Capacity [m3/h]	5	10	20	35	50	100	150	200
Free Flotation Area [m2]	1.25	2.5	5	8.8	12.5	25	38	50
Lamella Surface Area [m2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Footprint Length [mm]	2500	3150	5000	7000	8000	9500	14000	17000
Footprint Height [mm]	1400	1500	2300	2300	2300	2300	2300	2300
Footprint Width [mm]	1900	2000	2400	2300	2400	3400	3400	3400
Empty Flotation Tank Weight [kg]	520	1250	2200	2500	2800	4700	5400	6400
Full Flotation Tank Weight [kg]	1600	3300	11500	14000	17000	29500	42000	53800
Flotation Tank Material	PP	PP	PP	PP	PP	PP	PP	PP
Skimmer Motor Power [kW]	0.4	0.4	0.4	0.4	0.6	0.6	0.6	0.6
Inlet Connection [DN]	65	80	100	125	150	200	250	300
Effluent Connection [DN]	65	80	100	125	150	200	250	300
Float Discharge Connection [DN]	80	80	80	100	100	125	150	200
Settled Solid Discharge Connection [DN]	50	50	50	65	80	100	125	150
Sludge Screw Power [kW]	N/A	N/A	0.4	0.4	0.4	0.6	0.6	0.6
Sludge Pump Power [kW]	0.5	0.5	N/A	N/A	N/A	N/A	N/A	N/A
Whitewater System Type	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold
Recirculation Pump Annual Flow [m3/h]	1.25	2.5	5	8.75	12.5	25	37.5	50
Recirculation Water Annual Pressure [bar]	6	6	6	6	6	6	6	6
Recirculation Pump Motor Power [kW]	5.5	5.5	7.5	7.5	11	15	15	15
Required Compressed Air Pressure [bar]	7	7	7	7	7	7	7	7
Required Normal Air Flow [Nl/m]	42.5	85	170	297.5	425	850	1275	1700
Pressurized Air Connection [inch]	1/2"	1/2"	3/4"	3/4"	1"	1"	1 1/2"	1 1/2"

MODEL	DAF 5	DAF 10	DAF 20
Recom. Air Injection Range [Nl/m]	0,55-2,21	1,11-4,42	2,21-8,84

**without Lamella Plate (used for medium and heavy duty waste water applications)

DAF 35	DAF 50	DAF 100	DAF 150	DAF 200
3,87-15,47	5,53-22,10	11,05-44,20	16,58-66,30	22,10-88,40

DAF SPECIFICATIONS

MODEL	DAF 5-L	DAF 10-L	DAF 20-L	DAF 35-L	DAF 50-L	DAF 100-L	DAF 150-L	DAF 200-L
Hydraulic Capacity [m3/h]	5	10	20	35	50	100	150	200
Free Flotation Area [m2]	0.45	0.9	1.6	2.8	4	7.3	11.6	15.2
Lamella Surface Area [m2]	0.3	0.6	1.2	2.1	3	6.6	9.5	12.7
Footprint Length [mm]	1200	2200	3000	3000	3750	5000	5500	6500
Footprint Height [mm]	2100	2100	2100	2700	2700	4000	4000	4000
Footprint Width [mm]	1400	1400	1400	1900	2400	2400	3400	3400
Empty Flotation Tank Weight [kg]	450	700	950	1200	1550	2300	3300	4300
Full Flotation Tank Weight [kg]	1600	2800	5200	6500	9200	15000	19250	25500
Standard Flotation Tank Material	PP	PP	PP	PP	PP	PP	PP	PP
Skimmer Motor Power [kW]	0.4	0.4	0.4	0.4	0.6	0.6	0.6	0.6
Inlet Connection [DN]	65	80	100	125	150	200	250	300
Effluent Connection [DN]	65	80	100	125	150	200	250	300
Float Discharge Connection [DN]	80	80	80	100	100	125	150	200
Settled Solid Discharge Connection [DN]	65	80	80	80	80	100	125	150
Sludge Screw Power [kW]	N/A	N/A	N/A	0.4	0.4	0.4	0.4	0.6
Sludge Pump Power [kW]	0.5	0.5	0.5	N/A	N/A	N/A	N/A	N/A
Whitewater System Type	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold	Suction Injection & Inclined Manifold
Recirculation Pump Annual Flow [m3/h]	0.75	1.5	3	5.25	7.5	15	22.5	30
Recirculation Water Annual Pressure [bar]	6	6	6	6	6	6	6	6
Recirculation Pump Motor Power [kW]	5.5	5.5	5.5	7.5	7.5	11	11	15
Required Compressed Air Pressure [bar]	7	7	7	7	7	7	7	7
Required External Normal Air Flow [Nl/m]	25	50	100	175	250	500	750	1000
Pressurized Air Connection [inch]	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	1"	1 1/2"

MODEL	DAF 5-L	DAF 10-L	DAF 20-L
Recom. Air Injection Range [Nl/m]	0,33-1,3	0,65-2,60	1,30-5,20

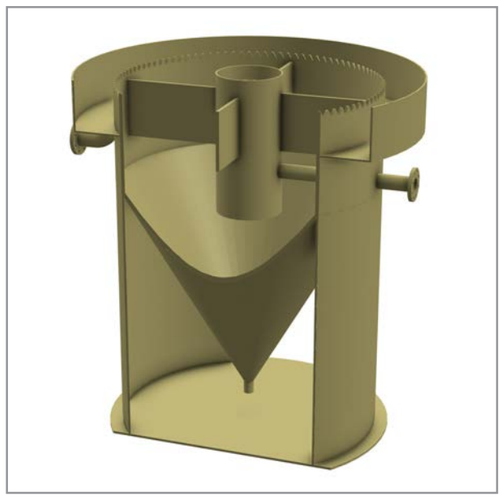
**with Lamella Plate used for low duty waste water applications and secondary treatment applications

DAF 35-L	DAF 50-L	DAF 100-L	DAF 150-L	DAF 200-L
2,28-9,10	3,25-13,0	6,5-26,0	9,75-39,0	13,0-52-0

RADIAL FLOW SETTLER (RFS)

The Radial Flow Settler (RFS) is highly cost effective in reducing solids loading in a system and operates passively, requiring no additional energy. This low-maintenance equipment is designed for routine cleaning only, with no need for extra servicing or repairs. Available in various sizes to accommodate different flow requirements, the RFS is also optimized for containerized shipping, making it accessible for worldwide use.

The MAT FILTRATION TECHNOLOGIES Radial Flow Settler (RFS) is an efficient solution for removing particulates from effluent water in various industrial applications. The system works by directing the water into the RFS Liquid Inlet, where it flows upward through the adjustable Standpipe Assembly and down through the Stilling Well. During this process, solid particulates naturally settle to the cone bottom and are easily removed via the Solids Outlet. The filtered water then rises over a V-Notch Weir into the Launder and exits through the Liquid Outlet, ensuring cleaner and safer water discharge.



MODEL	RFS-315-45	RFS-315-60	RFS-500-45	RFS-500-60	RFS-610-45	RFS-610-60	RFS-750-45	RFS-750-60
Diameter [mm]	315	315	500	500	610	610	750	750
Filter Length [mm]	205	205	245	245	430	430	490	490
Max. Flow (@0.003 m/s) [m3/h]	0.8	0.8	2	2	2.9	2.9	4.4	4.4
Average. Flow (@0.0015 m/s) [m3/h]	0.4	0.4	1	1	100	1.5	2.2	2.2
Stilling Well Diameter [mm]	90	90	140	140	160	160	200	200
Stilling Well Length [mm]	305	305	345	345	530	530	590	590
Launder Width [mm]	90	90	90	90	120	120	150	150
Launder Depth [mm]	120	120	130	130	140	140	160	160
Net Settling Area [m2]	0.07	0.07	0.18	0.18	0.27	0.27	0.41	0.41
Max. OD. [mm]	505	505	690	700	860	860	1060	1060
Inlet Connection Size [mm]	32	32	40	40	50	50	63	63
Outlet Connection Size [mm]	40	40	50	50	63	63	75	75
Sludge Connection Size [mm]	32	32	40	40	50	50	50	50
Cone Angle [°]	45°	60°	45°	60°	45°	60°	45°	60°
Max. Height [mm]	550	650	700	850	950	1150	1100	1350

RFS SPECIFICATIONS

MODEL	RFS-1100-45	RFS-1100-60	RFS-1600-45	RFS-1600-60	RFS-1900-45	RFS-1900-60	RFS-2200-45	RFS-2200-60	RFS-2500-45
Diameter [mm]	1100	1100	1600	1600	1900	1900	2200	2200	2500
Filter Length [mm]	590	590	750	750	960	960	960	960	960
Max. Flow (@0.003 m/s) [m3/h]	9.6	9.6	20.3	20.3	28.5	28.5	38.4	38.4	49.6
Average. Flow (@0.0015 m/s) [m3/h]	4.8	4.8	10.2	10.2	14.2	14.2	19.2	19.2	24.8
Stilling Well Diameter [mm]	280	280	400	400	500	500	560	560	630
Stilling Well Length [mm]	690	690	850	850	1060	1060	1060	1060	1060
Launder Width [mm]	150	150	230	230	300	300	340	340	360
Launder Depth [mm]	200	200	300	300	380	380	380	380	500
Net Settling Area [m2]	0.89	0.89	1.88	1.88	2.64	2.64	3.55	3.55	4.59
Max. OD. [mm]	1400	1400	2080	2080	2520	2520	2900	2900	3240
Inlet Connection Size [mm]	75	75	90	90	110	110	125	125	140
Outlet Connection Size [mm]	90	90	110	110	125	125	140	140	160
Sludge Connection Size [mm]	63	63	63	63	75	75	75	75	90
Cone Angle [°]	45°	60°	45°	60°	45°	60°	45°	60°	45°
Max. Height [mm]	1350	1700	1700	2250	2100	2750	2300	3050	2450

RFS-2500-60	RFS-2800-45	RFS-2800-60	RFS-3000-45	RFS-3000-60	RFS-3400-45	RFS-3400-60	RFS-4300-45	RFS-4300-60	RFS-5500-45	RFS-5500-60
2500	2800	2800	3000	3000	3400	3400	4300	4300	5500	5500
960	1160	1160	1160	1160	1360	1360	1560	1560	1560	1560
49.6	62.3	62.3	70.9	70.9	91.1	91.1	146.5	146.5	239.8	239.8
24.8	31.15	31.15	35.45	35.45	45.55	45.55	73.25	73.25	119.9	119.9
630	700	700	800	800	900	900	1100	1100	1400	1400
1060	1260	1260	1260	1260	1460	1460	1660	1660	1660	1660
360	400	400	450	450	450	450	500	500	600	600
500	600	600	600	600	600	600	650	650	700	700
4.59	5.77	5.77	6.56	6.56	8.44	8.44	13.56	13.56	22.21	22.21
3240	3620	3620	3920	3920	4320	4320	5320	5320	6720	6720
140	160	160	200	200	200	200	315	315	355	355
160	250	250	280	280	315	315	355	355	400	400
90	90	90	110	110	110	110	125	125	140	140
60°	45°	60°	45°	60°	45°	60°	45°	60°	45°	60°
3300	2800	3800	2900	4000	3300	4500	4000	5500	4500	6500

GATE VALVES

MAT FILTRATION TECHNOLOGIES produces Gate Valves from a thermo-plastic material to ensure a corrosion-free solution for facilities up to D700mm flange size up to 3 Bar Nominal operational pressure.

GTV SPECIFICATIONS

GATE VALVE	GTV-75	GTV-90	GTV-110	GTV-125	GTV-140	GTV-160	GTV-200	GTV-225	GTV-250	GTV-280	GTV-315	GTV-355	GTV-400	GTV-450	GTV-500	GTV-630	GTV-750	GTV-1000
Height [mm]	412	417	450	500	553	600	693	770	880	990	1100	900	1000	1150	1483	2150	2640	3465
Width [mm]	170	180	196	224	230	280	304	392	448	504	560	620	700	720	800	1100	1344	1764
Thickness [mm]	88	88	88	88	88	108	108	108	108	108	120	120	150	200	200	240	288	378
Diameter [mm]	75	90	110	125	140	160	200	225	250	280	315	355	400	450	500	630	750	1000
Body Material	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP
Shaft Material	Titanium								Titanium									
Operational Pressure [kg/cm2]	2	2	2	2	2	2	2	1,5	1,5	1,5	1,5	1	1	1	0,5	0.5	0,5	0,5
Corrosion Resistance (Salt Water/ Fresh Water)	Salt/fresh								Salt/fresh									
Flange Connection	EN1452-3								EN1452-3									
Weight [kg]	3,5	3,5	4	4,5	5	8	11	16	21	28	40	75	90	120	160	200	220	300
Test Pressure [kg/cm2]	3	3	3	3	3	3	3	2	2	2	2	2	2	2	1	1	1	1
Titanium/316Ti/ SuperDuplex Spindle	optional								optional									
316L Stem Length Extension=1m	optional								optional									
Titanium/316Ti/ SuperDuplex Stem Length Extension=1m	optional								optional									

MAT
FILTRATION TECHNOLOGIES

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