





Biological Sewage Treatment

Sewage Treatment Plant for ships and offshore application

- with submerged fixed-film reactor giving process stability and excellent effluent results
- approved and certified according to IMO-Resolution MEPC. 2 (VI) by the German SBG and EC-conformity in accordance with MED European Marine Equipment Directive
- approved in accordance with HELCOM regulations for use in the Baltic Sea
- ocompact, small footprint design

- delivery as plug and play unit, ready for operation
- fully automatic operation, easy to maintain and with low running costs
- suitable to treat black and grey water or black water only
- suitable for both gravity and vacuum sewage drainage
- vacuum systems and grease traps are available



Treatment Solutions Description

The RWO WWT BIOPUR wastewater treatment system operates with an aerobic biological cleaning stage. The wastewater is fed into the aeration tank of the wastewater treatment system.

BELUGA PROJECTS Bio-degradable organic matter in the wastewater is converted by micro-organisms (biomass) into carbon dioxide and water. The air required for this process is generated by an integrated blower.

The aeration tank is equipped with a fixedfilm reactor for the stabilisation and optimisation of this process. The very low effluent values of BOD5 achieved during the type testing highlight the exceptional efficiency of the wastewater treatment system WWT BIOPUR.

The treated wastewater flows from the

aeration tank into the settling tank. Here sludge is separated from the treated wastewater by sedimentation and returns back into the aeration tank.

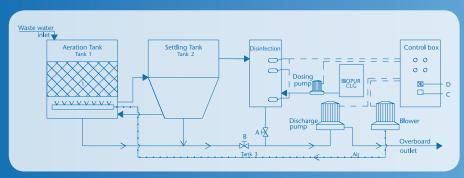
> The treated wastewater flows into the disinfection tank where a chlorine based disinfection chemical, BIOPUR CLG. is added.

The clean and hygienically safe water is pumped overboard with the discharge pump controlled by level sensors in the disinfection tank.

> Treated sludge, reduced in volume, is pumped overboard or ashore. After this process the wastewater treatment system WWT BIOPUR is immediately ready for operation again because of the adapted biomass on the fixed film reactor.







- system capacity (number of passengers) is higher when using a vacuum system
- special design and larger capacities available
- actual capacities dependent on organic and hydraulic load



TECHNICAL DATA

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Type WWT BIOPUR	Number of Persons	Hydraulic Load		Organic	Length	Width	Height	Dry Weight	Wet Weight
		[m³/d]	[gal/d]	Load	[mm]	[mm]	[mm]	[kg]	[kg]
WWT 1	10	1,76	0,46	0,83	1.495	835	1.290	850	1.850
WWT 2	14	2,59	0,68	1,22	1.620	1.285	1.290	900	2.700
WWT 3	26	4,63	1,22	2,17	1.760	1.330	1.590	900	3.750
WWT 4	36	6,48	1,71	3,04	1.960	1.530	1.590	1.200	4.550
WWT 5	55	9,81	2,59	4,61	1.985	1.835	1.690	1.300	5.800
WWT 6	70	12,56	3,32	5,03	2.200	1.835	1.850	1.500	7.000
WWT ₇	93	16,55	4,40	6,16	2.800	1.835	1.850	2.200	9.100
WWT 8	113	20,35	5,38	7,53	3.500	1.835	1.850	2.600	11.000
WWT 9	219	29,60	7,82	11,84	4.800	1.835	2.250	3.800	18.000
WWT 10	328	44,41	11,73	17,76	5.250	2.600	2.400	6.700	22.700
up to WWT 13	1.025	185,00	48,90	– On Request –					

- Data are subject to change without further notice -

Click into a red square to open a 3D-PDF with CAD-Models







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