AquaNomics

OPEN-BATH ULTRA VIOLET DISINFECTION SECONDARY EFFLUENT WASTEWATER

The Open Bath Unit was originally designed for the disinfection of the secondary effluent. The unique baffle system of the units create turbulance which ensures total irradiation of the fluid being disinfected.

The Open bath (non pressurized) units have no moving parts and are designed to run continuously at a very low electrical and maintenance cost. The installation of these units consists of no more than simply piping into the existing pip work and connecting to an electrical outlet.

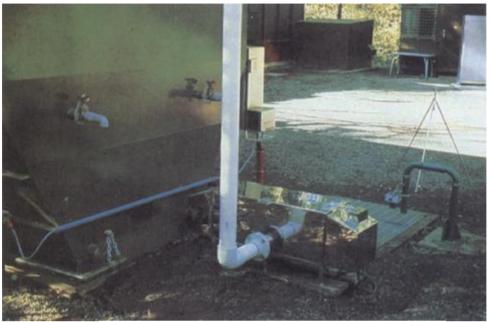
The Features:

- 99% kill of bacteria in most instance.
- Eliminates expensive chlorination. (i.e. Safety requirements)
- Easy installation & maintenance
- Low head pressures required for operation
- Free flow with little head loss
- Weather proof units for installation in the open air
- Multiple units for larger applications
- larger units can be multi staged and switched by flow sensing equipment for cost savings



The Open Bath Unit has been extensively tested and used by the Melbourne Metropolitan Board of Works and has produced kill rates in excess of 99%.

NO HARM TO THE ENVIRONMENT USING ULTRA VIOLET DISINFECTION



OPEN BATH UNIT MODEL: OB-8S (UNIT WITH 8 LAMPS)





SAFETY FEATURES

- Micro switch fitted to tank to extinguish UV lamps when lid of tank is lifted
- Key locks on both tank and electrical cabinet
- Double waterproof doors on electrical cabinet upon request

CONSTRUCTION

- Units are manufactured from 316 stainless steel
- Adjustable footing on tank for easy levelling
- Sample cocks on inlet and outlet
- drain cock is base of tank

CAPACITIES

Standard unit for treatment to 20,000lph. Large units available at clients' request

OPEN BATH UV/OZONE DISINFECTION SYSTEMS FOR SECONDARY EFFLUENT WASTE-WATER

The Open Bath UV/Ozone systems is a special unique system developed by AquaNomics, it injecting and combining UV and Ozone. These systems are mainly sued with secondary effluent where removal of foul smell and color is required. These systems will also reduce COD



Effluent treatment plant in Hong Kong Fairview Park



UV/Ozone system installed at Fairview Park, capacity 250,000LPH. Bottles indicating before and after passing the system



UV/Ozone system installed after the effluent treatment plant in a movie studio, for removal of color, bacteria and reduction of COD



Water sample in bottles shown before and after passing through the system

OPEN BATH/OZONE UNIT MODEL OB-8-3000



Open Bath UV/Ozone Split system (Electrical cabinet with zone system attached)

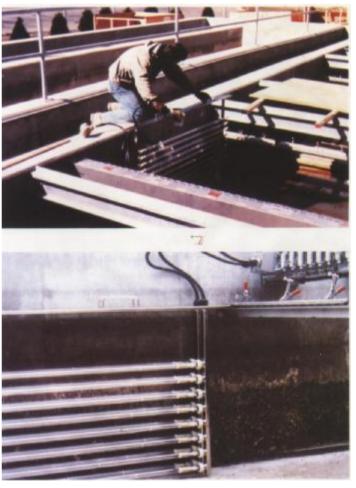


Open Bath sterilization section capacity 22,500LPH

OPEN CHANNEL SECONDARY EFFLUENT STERILIZING SYSTEM



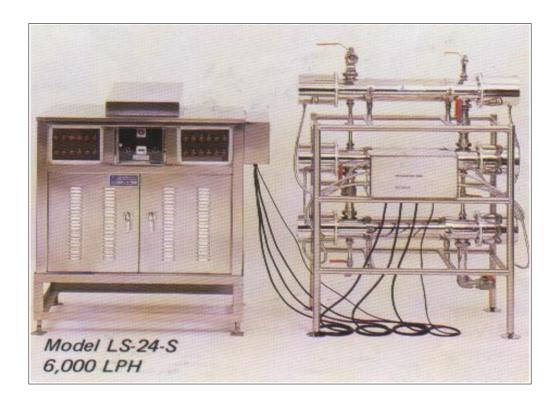
These UV rack systems fit into most existing channel sizes depending on peak flow of effluent. These are manufactured for outdoor use and are completely water proof and made of stainless steel. Kill efficiency up to 95% plus depending on requirement



Installation of UV rack system into effluent open channel

AquaNomics

Ultraviolet Liquid Sugar Sterilizer Split Control Series



The most efficient way to sterilize liquid sugar without heat or additive. UV does not change the physical or chemical properties of the liquid sugar

The **AquaNomics** Split Control series liquid sugar features a compact design that enables the treatment chamber and the electrical control cabinet in either separate type or combines as a single unit. This series is designed for proper ventilated indoor installation. The flow rate of standard model of this series ranges from $3m^3$ /hour to $16m^3$ /hour while larger flow rate models are available upon request

Typical Applications

- Soft drink
- Food and beverage processing plants

<u>AquaNomics – Liquid Sugar Sterilizer</u>

Split Control Series

Model	LS- 12S	LS24S	LS-40S	LS-64S
Product Specification				
Designed UV Dosage (µWsec/cm²)	>30,000	>30,000	>30,000	>30,000
Designed Flow Rate (liter per hour)	3,000	6,000	10,000	16,000
No. of UV Chamber	Two	Four	Five	Eight
No. of UV Lamp	20	12	16	20
In / Out connection (mm)	40	40	50	50
Dimension (L x D x H) mm UV sterilizer	1100x500x1400	1100 x500x1400	1100x600x2000	1100x800x1400
Control Panel (L x D x H) mm	1250 x550 x1300	1250x550x1600	1250x 600x1300	1250x800x1700
Power Consumption (Watt)	600	1200	2000	3200
Electrical Supply	220/1/50Hz or 380/3/50Hz	220/1/50Hz or 380/3/50Hz	220/1/50Hz or 380/3/50Hz	220/1/50Hz or 380/3/50Hz
Test Pressure (psi)	100	100	100	100
Operation Pressure (psi)	70	70	70	70
Construction Material				
UV Chamber	SS 316	SS 316	SS 316	SS 316
Power Supply Cabinet	SS 304	SS 304	SS 304	SS 304
Drain valve (1/2")	PVC	PVC	PVC	PVC
Standard Electrical Features :-				
	Main switch			
	Power on indication lamp			
	Individual pilot lamp for each UV lamp			
	Hour run meter			