

ZABOCS® BTF

Biological Odor Control System

Siemens Water Technologies offers a full range of biological odor control systems for municipal and industrial odor control.

ZABOCS Bio-trickling Filter

The ZABOCS® BTF is a bio-trickling filter designed to remove odors from large pump stations and wastewater treatment plant operations. Bio-trickling filters may be designed to treat up to 15,000 cfm (25,000 m³/h) of odorous air per tower.

Process Description

The ZABOCS® BTF uses random packed polyurethane foam cubes as the support for biomass growth. The media bed is continuously irrigated by circulating the sump liquid and nutrients over the media. Makeup water is added to maintain the pH of recirculating liquid. This provides an optimum environment for the preferential growth of sulfur-oxidizing bacteria. The ZABOCS® BTF may be designed to handle very high H₂S concentrations (> 500 ppm) with better than 99% removal.

The factory-assembled "NUCIRC Skid" houses the nutrient reservoir, pumps and controls to facilitate easy installation.

Bio-trickling filter towers are fabricated from premium vinyl ester FRP. Each unit is equipped with a Siemens custom biofilter process controller and optional variable speed drive for the fan. The optional two-stage system provides a neutral pH stage to promote better oxidation of VOC's and organic odors.

Standard Features

- High capacity PUF media
- Variable speed fan
- Biofilter process controller
- Factory assembled NUCIRC Skid
- FRP construction
- Two-stage option

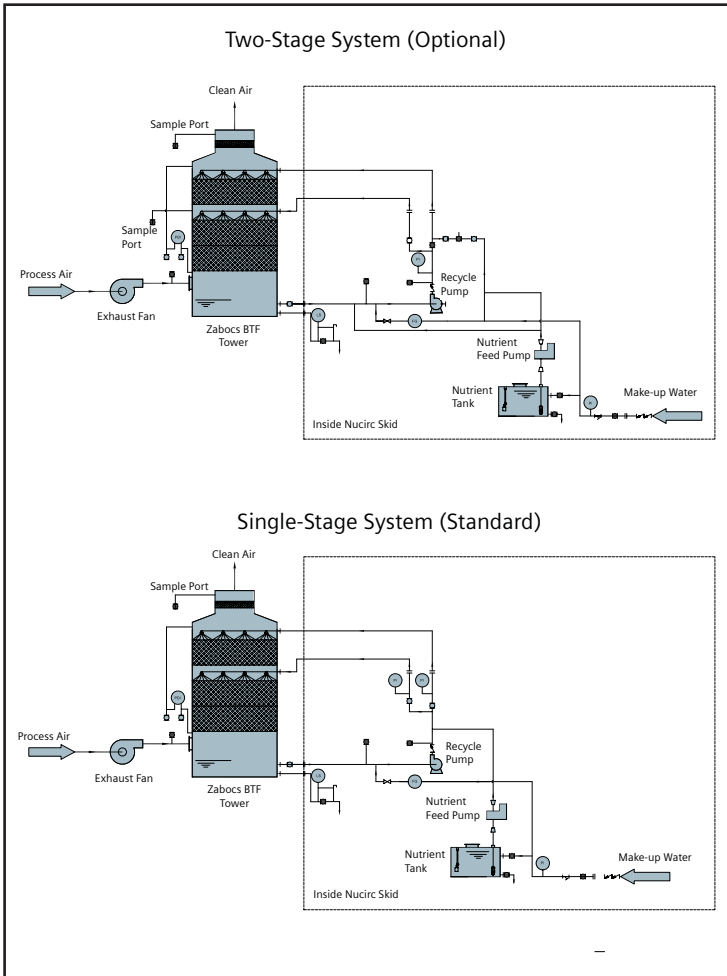


ZABOCS®BTF Design Information

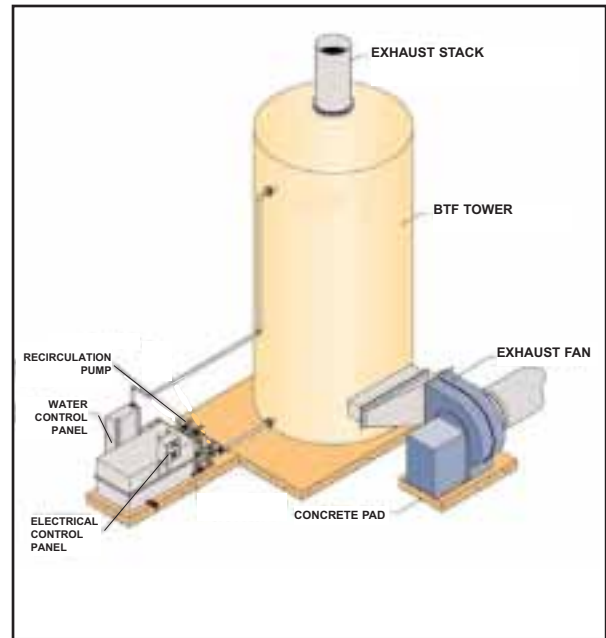
Model	Airflow Rate*	Footprint	Height	Shipping Wt	Operating Wt	Estimated System Power
Unit	cfm <i>m³/hr</i>	ft <i>mm</i>	ft <i>mm</i>	lbs <i>kg</i>	lbs <i>kg</i>	HP <i>kw</i>
825	3,500	11 x 8	23	4,500	5,500	9
	6000	3350 x 2440	7000	2000	2500	7
1035	8,000	13 x 10	27	6,500	8,000	20
	13500	3960 x 2440	8200	3000	3500	15
1235	12,000	15 x 12	27	7,500	9,500	27
	20000	4570 x 3660	8200	3500	4300	20
1245	15,000	15 x 12	31	8,000	10,000	32
	25000	4570 x 3660	9500	3500	4500	24

*Systems are sized based on airflow rate and H₂S loading. Airflow rates above are assume H₂S loading up to 100ppm. Current based on 480 VAC/3 Ph/60 Hz power supply and does not include options such as freeze protection etc. Additional models available.

Process Flow Diagram



Isometric Drawing



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The United States and Trademark office has recognized the novelty of the design and process of the ZABOCS BTF with the award of a patent (U.S. Patent No. 7,276,366).

The information provided in this literature contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of the contract.