

## EWT - ODOR REMOVAL SYSTEM

**EWT odor abatement system can be used in :**

-municipal and industrial wastewater treatment systems, composting plants, biogas plants and odors generated by various industrial processes, etc.

**The three main principle of action:**

-EWT-B-Biological      -EWT-C chemical      -EWT-P physical

Biological processes **EWT-B** are applied to two types of devices:

**EWT-BW**-Bio scrubber      **EWT-BF**-Bio filters

## EXAMPLES OF CONSTRUCTED PLANTS



EWT-CB -10 T



EWT- C -2T



EWT-C- 3T



EWT- BW- 8T



EWT-PCB-30T

## EWT Scrubbing Systems

- Provide the benefits of scrubbing in a compact footprint
- Significantly reduce overall height (typically less than 3,5 meters for a traditional packed towers)
- Factory Assembled and Rested
- Ease of Installation
- Start-up Simplicity (C-Type)
- Possible adapting C Type Scrubber to B Type Scrubber and vice versa

Capacity and design of the air stripper and accessories are suitable for 24-hour full load service in an indoor and outdoor location.

Standard type of EWT –C scrubber is designed for odor removal using NaOH for adsorption and H<sub>2</sub>O<sub>2</sub> for oxidation. With the addition of other reactive chemicals these scrubbers function as absorption scrubbers to neutralize other chemicals such as hydrochloric acid gasses, ammonia and other water soluble pollutants. To ensure the proper functioning of the system is in any case a procedural computation of new gas cleaning process required to produce the desired washing out with minimal investment .

EWT-Bioscrubbers are an odor treatment technology that utilizes biological processes, as opposed to chemical processes as their treatment mechanisms The process is similar to that used in wet scrubbers, except it involves biological treatment instead of chemical treatment.

EWT-Bioscrubbers fall into two categories, based on their biological population. Autotrophic organisms remove hydrogen sulfide and other inorganic compounds. Heterotrophic organisms remove volatile organic compounds (VOC's). The autotrophic organisms oxidize sulfides to either sulfate or elemental sulfur. The heterotrophic organisms remove the organic odors, but have little effect on hydrogen sulfide. The two systems may be combined into a two-stage system, where treatment of hydrogen sulfide and VOC's is required.

EWT –C and EWT- Bioscrubber Standard Model are tower type filled with mass transfer packing designed for the removal of odor principally Hydrogen Sulfide (H<sub>2</sub>S) from wastewater treatment plant treating domestic wastewater

For the start-up and operation of the biological air stripper (EWT-BW 3T) skillful operator is needed. In case of difficulties EWT provides free of charge instructions to convert it to the chemical air stripper.

## **-STANDARD FEATURES EWT- C Scrubbers (See Schematics Diagram EWT- CW Wet Scrubbers)**

- |                            |                           |                         |
|----------------------------|---------------------------|-------------------------|
| -Reactors made of PP or PE | -Liquid Regulation Valves | -Flow Meter             |
| -Structured packing        | - Overflow and Drain      | -Spray Nozzles          |
| - Droplet collectors       | - Recirculation Pumps     | - Flanged Spray Headers |
| -Dosing Pumps              | -System level control     |                         |

## **OPTIONAL FEATURES EWT- C Scrubbers**

- |                     |                  |                         |
|---------------------|------------------|-------------------------|
| -Stand-by Pumps     | pH Meter         | ORP Meter               |
| -Conductivity Meter | -Pressure Gauges | Ventilator              |
|                     | - Control Panel* | - Flanged Spray Headers |

\*Control Panel with starters, controls, on/off switches, alarms and alternate mounting location for pH/ORP controller.

## **-STANDARD FEATURES EWT- B Scrubbers (See Schematics Diagram EWT- BW Wet Scrubbers)**

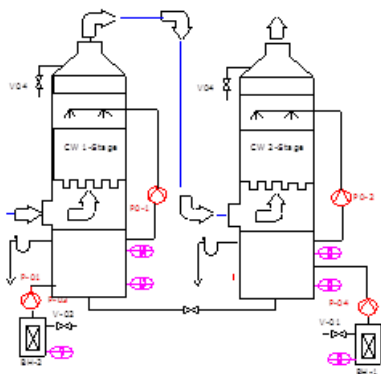
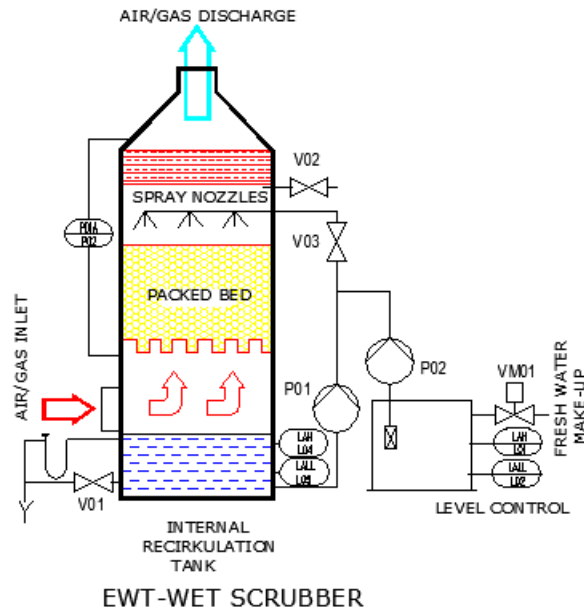
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|----------------------------|---------------------------|-------------------------|
| -Reactors made of PP or PE | -Liquid Regulation Valves | -Flow Meter             |
| -Structured packing        | - Overflow and Drain      | -Spray Nozzles          |
| - Droplet collectors       | - Recirculation Pumps     | - Flanged Spray Headers |
| -Dosing Pumps              | -System level control     | -Air Blower             |

## **OPTIONAL FEATURES EWT- B Scrubbers**

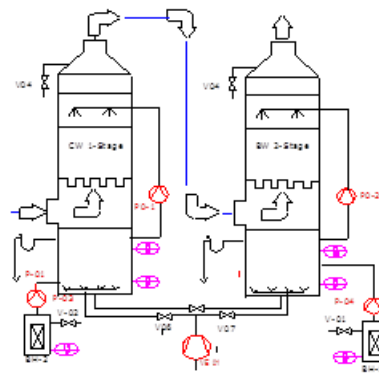
- |                         |                |                  |
|-------------------------|----------------|------------------|
| -Stand-by Pumps         | pH Meter       | -Pressure Gauges |
| - Flanged Spray Headers | Control Panel* | Ventilator       |
|                         | -              |                  |

\*Control Panel with starters, controls, on/off switches, alarms and alternate mounting location for pH controller.

## Schematic diagram of EWT Wet-Scrubber



Schematic diagram of EWT CW 2T&4T



Schematic diagram of EWT BW 3T

## PRICE<sup>1</sup> –EURO

Typ	Airflow m <sup>3</sup> /h	Price <sup>1</sup> - Euro	Typ	Airflow m <sup>3</sup> /h	Price <sup>1</sup> -Euro
EWT CW 2T	2000	18.900	EWT BW 2T	2000	21.900
EWI CW 3T	3000	23.900	EWI BW 3T	3000	25.900
EWT CW 4T	4000	28.500	EWT BW 4T	4000	29.500
EWT CW >	>4000	Price <sup>2</sup>	EWT BW >	>4000	Price <sup>2</sup>

Prices Basis Year 2015 ,Prices are for basic (standard) feature consisting of a :  
 - Droplet collector, -Pumps, -System level control.<sup>1</sup> All prices without transportation, installation and legal charges.

<sup>2</sup> Price - For larger systems we offer on the basis of the query For specific situations possible upgrade of the basic system with minimal investment.

Not Included: Chemicals used for injection