



Product Line

Air Treatment & Odor Control



Air Treatment Equipment & Systems

Bisan offers a variety of air purification methods designed to address a variety of municipal and industrial emissions. We offer one of the best application engineering available to us to provide robust, high quality, and well tested equipment through our own testing combined with years of installations and field feedback of equipment installations.

Our line of systems include:

- Dry Carbon Systems
- Chemical Scrubber Systems
- Biotrickling Systems
- Biofiltration Systems
- Combined Systems
- Natural VORTEX – NEW
- Thermal Regeneration Systems



Multi stage OCU



Combined OCU system

Each system shall be engineered to meet project specific treatment performance and integrated with other project equipment and operation.

Systems shall be supplied complete with all accessories, chemical dosing (if required), power, and control panel according to specific site requirements.

Activated Carbon Filters Units



Activated Carbon Unit

The activated carbon filters for vapor phase and air treatment come with different types of carbons made from coal, wood, and coconut shell targeting odor emission rated from H₂S, mercaptans and VOC associated with sewage lift stations and wastewater treatment plants.

Carbon shall be either impregnated for special application or non-impregnated high capacity for H₂S removal.

These carbon filters are of cylindrical type and can be configured in single bed or dual bed for higher air flow rates and can reach removal efficiencies of 99% or higher.

The Caustic impregnated activated carbon filter is filled with chemically enhanced carbon pellets. It offers a high efficient absorption of H₂S and mercaptans.

Meanwhile the acidic impregnated carbons are designed towards the removal of ammonia gas and ammine compounds.

The water regenerable carbon filter is filled with non-impregnated and catalytically enhanced carbon pellets. It offers a high efficient adsorption of H₂S. This unique technology of carbon allows washing the carbon with water on-site restoring most of its removal capacity. The regeneration process can be either manual or automatic.

Carbon filter can also be installed as second/polishing stage downstream (in combination) of Bio-trickling filter or Chemical Scrubbing where high concentration of H₂S exists at the site or when higher removal efficiency is required.



Passive AC Units

Wet Scrubbers



AC Polishing



IWWTP Combined OCU

Bisan's range of wet chemical scrubbers provide the best and most comprehensive solution for air pollution and water treatment:

- Air Treatment, including:

- Removal of odorous compounds including H_2S , Mercaptans, and NH_3 from air streams.
- Emergency Chlorine Scrubbers

- Water Treatment

- Degasifier – Aeration Towers for removal of H_2S , NH_3 , and CO_2

Scrubbers can be single stage or multistage in vertical cylindrical or horizontal configurations.

Bisan has provided scrubber systems for more than 25 years for treating municipal and industrial pollution and odors in the Middle East. Which made our systems some of the best performance systems and highest quality systems in the region.



Dual Carbon Bed units

Biological Odor Treatment Systems



Carbon Unit



Small AC system

Bisan's range of Biological Odor Treatment systems have clear advantages:

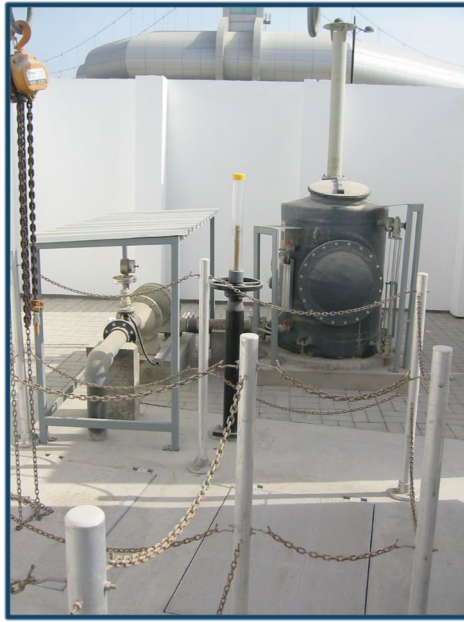
- Bacteria and other microorganisms are used in the breakdown of odor compounds instead of absorbing them.
- The bacteria and micro-organisms inside bio-trickling filters and bio-scrubbers do not need to be replaced, and do not require costly chemicals to work.

The range of systems includes:

- Bio-tricklers for the removal of odors due to H₂S and other sources in waste- water applications.
- Biofilters, for the removal of H₂S odors and reduction of VOC emissions.



Combined system



AC unit



PLC control panels



Instrumentation



VORTEX OCU



Emergency Scrubber



Vertical Scrubber