

INDUSTRIAL ODOUR

If your business causes odour nuisance, this may result in complaints from people living in an area close to your factory. It often leads to negative publicity, media attention and in extreme situations can lead to the breakdown of company and community relations. It may also discourage capital investment and deter economic growth. Local or national authorities can limit or even stop your activities, and if you fail to address a nuisance problem you could also face legal action and a fine.

The widest ranges of odours consist of organic compounds although some inorganic substances, such as hydrogen sulphide and ammonia, are also odorants. The general principle of odour nuisance policy is aimed at reducing odour emissions as much as possible, using Best Available Technique (BAT) for odour control.

WE CAN HELP YOU

- Avoiding odour nuisance and using BAT technology for odour control
- Remove odour without any consequences for your process airflows
- Creating a modular odour control system flexible to “grow” with your production
- Service and monitor your odour control system as a part of our service

MONITORING & PURE PROCESS CONTROL

Maintaining optimum environment and physical-chemical conditions is the major operational requirement for a biofilter. It is imperative that temperature of the air is 20 °C - 35°C, humidity is near 100 % RH and pH between 6.5 -8. Temperature is important for bacterial growth and activity, phase transfer (solubility) and sorption. Moisture is essential for the survival and metabolism of the resident micro-organisms and contributes to the filter’s buffer capacity. Non-optimum moisture content can also result in compaction, breakthroughs of incompletely treated raw gas and the formation of anaerobic zones which emit odorous compounds. Also the micro-organisms function best between pH 6.5 and pH 8 and high concentration of toxic substances can inactivate the biomass.

Our systems are standard implemented with instrumentation and process control to monitor and control the system. Our Pure process control can be extended with scada or telemetric support. To ensure uninterrupted service and support, we offer optional a Service and Support Contract. This way our fast, responsive service and support keeps the critical processes and parameters in the biofilter system up and running. When there’s a problem, we will notify you in a flash and advice you to take necessary actions. Also we will check your biofilter every quarter for visual inspection, speedy repair and instrument calibration.

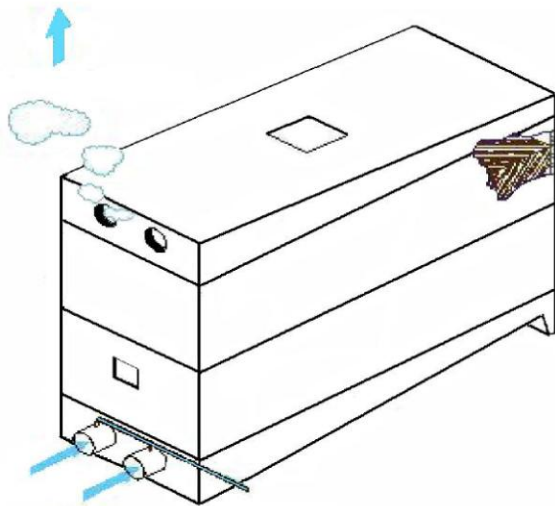


INDUSTRIES EMPLOYING OUR BIOFILTRATION TECHNOLOGY INCLUDE (E.G.):

- food processing
- pet food and fish feed plants
- vegetable oil refineries
- poultry and meat processing
- rendering plants
- off-gas from wastewater treatment facilities
- fragrance & flavouring
- pharmaceuticals
- waste treatment and composting plants

UNIQUE FEATURES

- Owing to its construction and its height, our systems have reduced the footprint to 30% - 50% compared with conventional biofilters;
- Pure Air Solutions developed a durable biomass medium which offers excellent performance. The medium consists of (a balanced mixture of) organic materials blended with additives to create optimum conditions;
- As a standard our systems are implemented with process control, which can be extended with scada and telemetric support;
- The design of our modular biofilters makes it easy to install. And enables customers to add additional capacity simply by connecting another module to their system.



SPECIFICATIONS AND BOUNDARY CONDITIONS

Size the biofilters are available with different sizes and lengths

Carrier material different fractions of durable biomass, wood bark or coconut fibre

Efficiency between 90% and 95% depending on the requirements, the composition, and the air conditions

Volumetric flow between 1.000 and 500.000 m³/h air may be processed by one or more units

Temperature between 15 and 40 °C. Air is being conditioned at different temperatures

Concentration higher concentrations of ammonia and H₂S can be harmful for the biomass, preconditioning may be necessary

Energy our biofilter is characterised by its low energy consumption (< 1 kWh / 1.000 Nm³)

A SPECIALIST IN ODOUR CONTROL TECHNOLOGY

A solution to an odour nuisance problem is always a combination of dedicated measures within the boundary limits of a plant, based on the particular location of the plant. Pure Air Solutions is specialised in odour control technology and is a first class supplier of air pollution control systems. Our experience is based on over 30 years of practise in odour abatement at various industries. Our odour abatement systems are unique in terms of costs, size, reliability, ease of operation and performance, with odour removal efficiency of 85 to 98% in terms of Odour Units.

ADVANTAGES OF OUR BIOFILTERS

- High removal efficiency
- Low operating cost
- Environmental friendly
- Minimum space requirements
- Light weight construction
- Easy to expand
- Low pressure drop
- Exchangeable modules
- Easy and fast installation
- Remote monitoring
- No chemicals or gas needed



OUR PRODUCTS AND SERVICES

- Modulair biofilter
- Custom made biofilter
- Vocus
- Sulphur
- MP-X gas scrubber
- MP-V gas scrubber
- OCC solution
- Venturi scrubber
- Heat exchanger
- Precon
- Refillings
- Dispersion and process modelling
- Monitoring and service

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