

LANODOR®

Biological Odor Treatment Process

LANODOR[®] is a biological odor treatment process designed for wastewater and sludge treatment.



As a true alternative to conventional odor control methods such as physico-chemical scrubbing or activated carbon, LANODOR® can serve as a complementary solution for pretreating effluents with high concentrations of hydrogen sulfide, reducing chemical reagent consumption and operating costs.

LANODOR® utilizes biofiltration as a biological odor treatment process. Odorous molecules are degraded through contact with bacteria attached to a natural and inert granular material primarily composed of Biozzolane®. This selected material, derived from volcanic rock called pozzolana, possesses remarkable properties for rapid development under the implemented moisture conditions, thanks to its porosity and chemical composition.

APPLICATION AREAS

- Complete odor control in wastewater treatment plants
- Odor control in solar sludge drying greenhouses (Héliocycle , Hélioplus ...)
- Pretreatment of sources concentrated in hydrogen sulfide

PERFORMAN<u>CE</u>

The **LANODOR**® process is characterized by its operability, performance, and environmental friendliness, including a low carbon footprint.

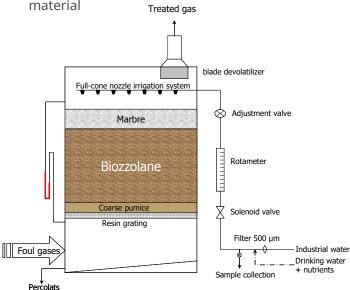
LANODOR®

A GENUINE ALTERNATIVE TO CONVENTIONAL DEODORIZATION

The LANODOR® process is environmentally friendly, offering:

- Reduced transportation and enhanced safety due to the absence of consumables and chemicals
- Lower maintenance and energy requirements without energy-intensive recirculation of wash solution or complex peripheral equipment
- Longevity of the natural and mineral support material (8 to 10 years): biozzolane® does not compact like organic supports
- Long-term performance stability in terms of efficiency and flow rate through precise air distribution and control of pressure losses across the material
- Compact design compared to other biological treatments enabled by the structure of the material

 Treated day



A process tailored to the needs of operators: simple, cost-effective, durable, and efficient.

Les matériaux supports du procédé LANODOR® permettent le développement de micro-organismes qui éliminent par oxydation les molécules malodorantes comme l'hydrogène sulfuré (H2S), l'ammoniaque (NH3), les mercaptans (R-SH) pour former des composés inorganiques inodores.

L'arrosage ponctuel et régulier du biofilm par de l'eau industrielle garantit le maintien de conditions de vie optimales pour les bactéries. Il assure aussi l'évacuation des sous-produits. Les percolats récupérés sont envoyés vers la filière de traitement des eaux où ils sont éliminés.

CARACTÉRISTIQUES

- Standard range with structures made of synthetic materials for installation on concrete slabs indoors or outdoors
- Customized GC structure for large capacities or integration into buildings
- Water supply from a wastewater treatment plant or nutrient-enhanced water (C, N, P)
- Natural materials with a long lifespan
- High passage velocity: 500 m/h under standard conditions



A sustainable carbon footprint and economic assessment

REFERENCE

Riom, Voreppe, Nort-sur-Erdre, Châteaudun, Souppes /Loing, Pont l'Abbé, Thaon les Vosges, Le Guilvinec, Crépy-en-Valois, Le Boulou, Cany-Barville, La Haye Fouassiere, Montrichard, Limoux, Espalion, Camaret /Mer, Propriano,...

