



ODOR REMOVAL **BIOGAS** PLANTS

WELCOME TO A NEW ERA OF PRECISION AIR TREATMENT

- Eliminate harmful process gases and odors.
- Real-time monitoring and optimization.
- Electric Catalytic Methane Slip Remover.

centriair

Cleaner Air. Fewer Resources.



Odor treatment for Biogas

In the Biogas segment solutions need to be tailored to the application and the pollutants present. Anaerobic or Aerobic digestion, particles/dust, concentration and humidity – all these parameters need to be considered when engineering a solution.

Biogas Production

We have a long experience from biogas plants, which has several potential odor challenges, and a range of sources, feedstock types and outlets demands, where we have well-proven results.

Our main focus is codigestion plants, but also municipal sludge plants have for instance tanks with strong odor sources. The products that we apply depend on the source at hand and our process always begins with a thorough analysis of the project together with the customer.

Solid Waste feedstock

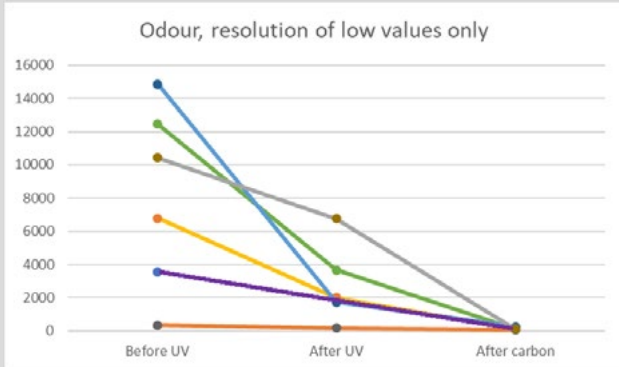
The processing of solid waste, municipal mainly, to feedstock usually involves grinding and pressing.

Other process steps also occur, aimed at reducing plastic and similar. Common denominator is that odor concentrations increase as the waste is handled. Airflows are medium to high to ensure air quality in the facility is good. Our well-proven product ColdOx[®] offers a compact and efficient solution with low energy consumption.

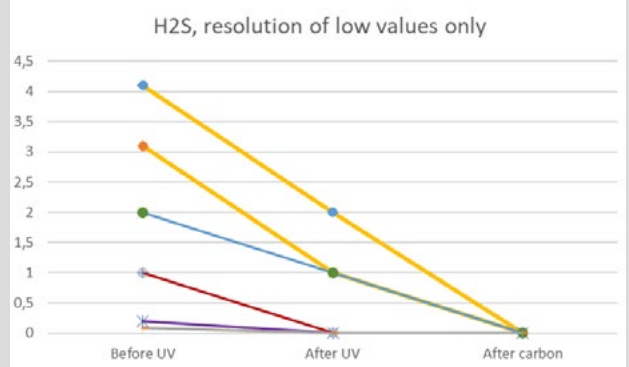
Liquid Waste Tank Handling

Liquid waste includes for instance slaughterhouse waste, recycled oil and other process liquids. This is an application that has varying process steps, all from storage to heat treatment. Odor concentrations greatly varying and aerosols may occur.

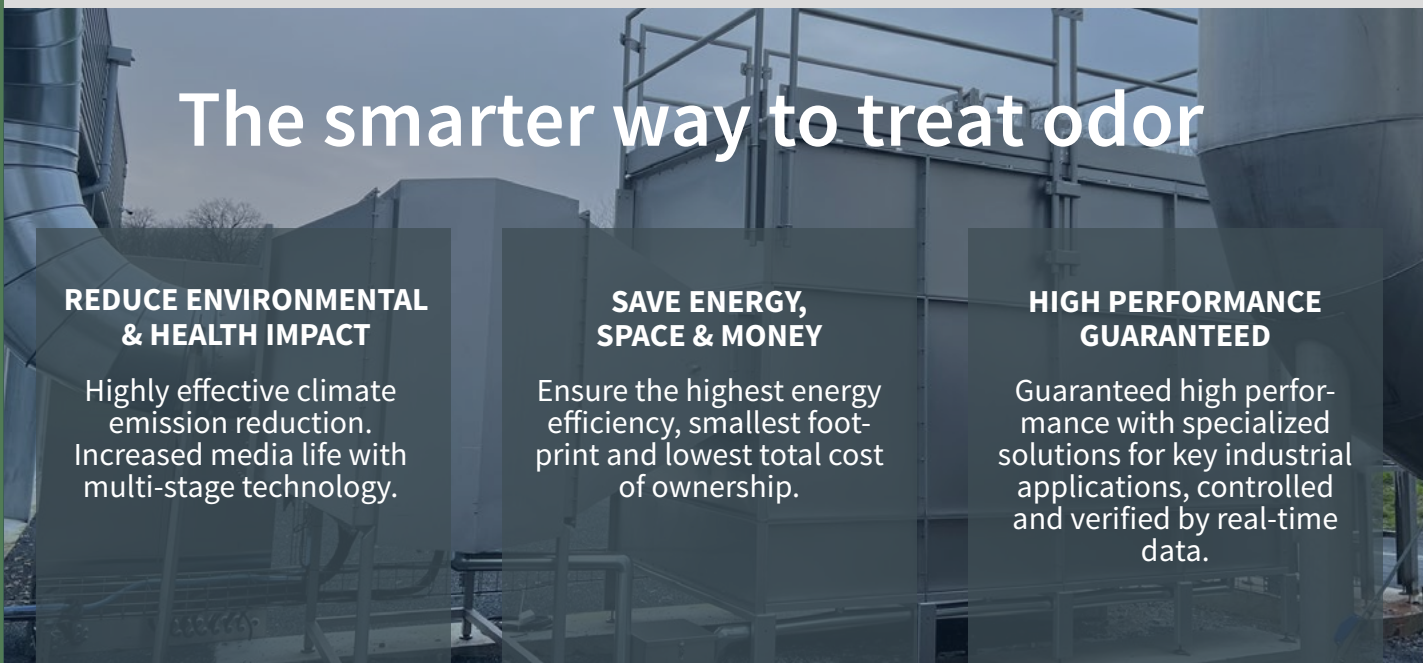
Performance



Field measurements of odor removal



Field measurements of H₂S removal



The smarter way to treat odor

REDUCE ENVIRONMENTAL & HEALTH IMPACT

Highly effective climate emission reduction. Increased media life with multi-stage technology.

SAVE ENERGY, SPACE & MONEY

Ensure the highest energy efficiency, smallest footprint and lowest total cost of ownership.

HIGH PERFORMANCE GUARANTEED

Guaranteed high performance with specialized solutions for key industrial applications, controlled and verified by real-time data.



Discover the next generation of precision air treatment



DEO™

Unique proprietary catalyst technology. H₂S, NH₃, DMS.

- High concentrations.
- Airflow < 2.000 m³/h



ColdOx®

UV-Oxidation supported by special purpose catalysts.

- Low and medium concentrations.
- Airflow < 2.000–500.000 m³/h



ColdOx® R-series

Fully integrated compact version of the ColdOx®.

- Low and medium concentrations.
- Airflow 2.500 m³/h

SulphaRed™

H₂S prefiltration.

- High concentrations of H₂S
- Airflow 150 - 20.000 m³/h



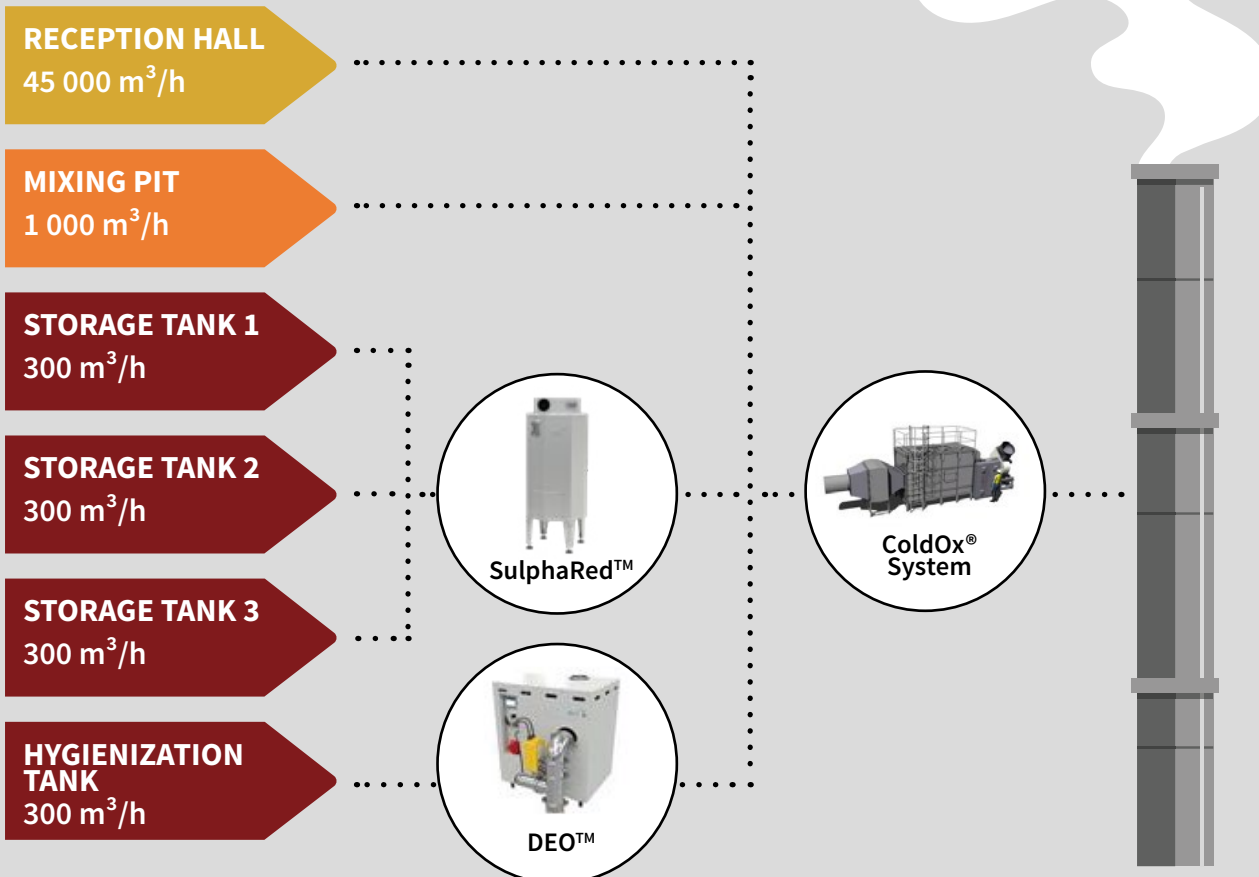
DualCat™

Dual-Catalyst two-step regenerative catalysis of VOCs including CH₄.

- Methane slip and high concentrations VOC.
- Airflow < 2.000 m³/h



Every gas has it's weakness – we target it with precision



Application expertise

A strong track record of expertise in applications ranging from biogas production to solid waste and wastewater management.



BIGADAN Horsens DK
Biogas plant - 30 000 m³/h
General sources
> 95% odor reduction ColdOx® system



BORÅS ENERGI & MILJÖ Borås SE
Biogas plant, reception & conversion organic waste 20 000 m³/h
> 95% odor reduction Filtration+ColdOx®



BIOCONSTRUCT Evercreech plant
Biogas - Waste 0 ppm H₂S in station building
Acceptance Building
> 98% odor reduction Odor panel by RET



HITACHI ZOSEN INOVA Jönköping SE
Biogas - 30 000 m³/h
Dry digestion plant
> 95% odor reduction ColdOx® system



GEMIDAN Frederikshavn DK
Receiving and pre-treatment of organic waste 58 000 m³/h
> 95% removal rate ColdOx® system



GASUM Lohja FI
Biogas plant - 34 000 m³/h
General sources
> 98% odor reduction ColdOx®, partial SulphaRed



RENA HAV Sotenäs SE
Biogas production & treatment plant 30 000 m³/h
> 95% odor reduction ColdOx® system, SulphaRed bi-flow



BIOCONSTRUCT Hartpool UK
Twin Biogas Plants 20 000 m³/h
> 97% odor reduction ColdOx® system



VALTALIA Cervo ES
Biogas 30 000 m³/h
> 97% odor reduction ColdOx® system



Scandinavian Centriair AB - info@centriair.com - www.centriair.com