UV-C & OZONE

JIMCO FLO-K air-cleaning system for the reduction of odour from industrial exhausts

JIMCO A/S has over a number of years developed and manufactured air-cleaning systems specifically for industry. The JIMCO systems are based on UV-C & Ozone Technology. This method is based on Photolytic oxidation whereby a cold incineration of organic matter occurs. The process leaves no harmful residues.



FLO-K systems are manufactured and supplied for various tasks. The system shown is installed in a common exhaust duct from frying / smoking processes used in the production of pre-cooked dinners. It is designed to treat an airflow of $33,000~{\rm M}^3/h$.

The FLO-K system shown in this picture is specially designed for tasks where there is ammonia in the exhaust air. The system is a combination of scrubber and Photolytic Oxidation Unit. The scrubber is made with automatic pH-adjustment as ammonia is easily precipitated in water with a low pH-value.

This type of system is very suitable for the cleaning of exhaust air from compost plants, central sewage stations, biogas plants etc.





A newly developed product has made it possible to clean the air exhausting from smoking ovens very successfully. Experience and analyses have shown that a cleaning effect of approx. 95% can be achieved. The UV-C & Ozone technology shown here is used in conjunction with a catalyst containing activated carbon. Tests have shown that excess ozone produced by the FLO-K System regenerates the activated carbon elements.



JIMCO industrial systems are normally equipped with PLC-controllers incorporating modem links and alarm signals.



JIMCO FLO-K systems can be used in conjunction with automatic CIP-cleaning systems. The CIP system is controlled from the PLC-controller to programme the cleaning sequence to your requirements. JIMCO and CIP suppliers have jointly selected the best environmentally friendly detergents for the cleaning process.

JIMCO Air Cleaning System Type FLO-K

JIMCO Air Cleaning System type FLO-K is used for a large number of different applications where air temperatures are less than 45°C. The FLO-K system does not require secondary air to cool the primary air to be treated. The process is called Photolytic oxidation, which means the contaminated air is subjected to a combination of UV-C light and ozone.

The contaminants in the air are oxidised, or cold incinerated. Odours and organic particles contained in the air are reduced to an absolute minimum. The typical reduction in OU/m^3 is in the region of 90 - 98%.

The reaction chamber of a JIMCO FLO-K system is made of acid proof stainless steel (316) and contains a number of JIMCO Photozonelamps. These are dimensioned for the volume of air you wish to clean.

There are numerous applications for the JIMCO FLO-K system, e.g. in:

- Public sewage / waste water plants
- Pumping stations
- Food processing plants
- Grain and feedstuff factories
- Stables and zoological gardens
- Pharmaceutical and chemical production units
- · Biogas plants
- Destruction plants
- Etc

The Jimco FLO-K system can be combined with a water scrubber for applications with large ammonia content. Ammonia is easily washed out of the contaminated air. The air is washed before entering the UV-C reaction chamber.





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