CLEANER AIR. FEWER RESOURCES.

Pilot testing

Advance efficiency testing for odour and VOC reduction

In order to ensure that our exhaust air purification also produces optimum results in terms of odour and VOC reduction in under real process conditions, we offer to test it in advance with a pilot plant and with a partial volume flow.

Technology and implementation

For all Centriair´s solutions for air purification we have testing systems for testing a partial volume flow up to $1.000m^2/h$ at our customers locations. In case of significant concentrations of sulphur compounds, the testing application can be combined with a SulphaRedTM for pretreatment.

The test phase can be designed for a duration of a few days up to several weeks.

Raw air and clean air can be measured at special measuring points, air samples can be taken for odour measurements, VOC contents are recorded with a total carbon analyser (FID) over the entire test period. In order to determine the optimal system design of a subsequent exhaust air purification system in terms of energy efficiency and costs, the test phase includes various tests with different configurations.

A test phase is also used to detect possible deposits on lamps and activated carbon in advance and to adjust the subsequent design accordingly.

VOC and odour removal rates

Our customers receive a final test report in which degradation rates for VOCs and odours are presented over the test period,. Compliance with limit values in the clean air is either directly demonstrated or the indications for the subsequent system configuration are taken up and discussed.

Areas of application

Especially for exhaust air that does not fall into the range of our key industry applications in food and waste applications, pilot testing can prove the applicability of our technology, allows for efficiency and performance in the design of our exhaust air purification plant.

Benefits

- Proof of applicability
- Security for an investment in exhaust air purification
- Measurement of exhaust air concentrations
- Data basis for the optimal design
- Testing Report
- Small footprint, fast and uncomplicated installation





Compact ColdOx[®] in series with a SulphaRed[™] for pilot testing



Measurements in mm for a volume flow of $1000m^2/h$: A 360, B 1850, C 790, D Ø 160

We offer the provision of a compact UV system for a test run. This consists of a combined system of UV lamps, catalytic activated carbon and fan in a compact housing.

VOCs and odours are oxidised in the ColdOx reactor by photocatalysis and high-intensity UV radiation. The exhaust air is then treated in the activated carbon filter.



With the combination of a ColdOx reactor and a subsequent activated carbon filter, the highest possible odour reduction rates are achieved at competitive operating costs and a minimum of maintenance.



Compact ColdOx[®] in series with a SulphaRed[™] for pilot testing

Solutions that create cleaner air with fewer resources.



centria