oxytec air & water purification systems

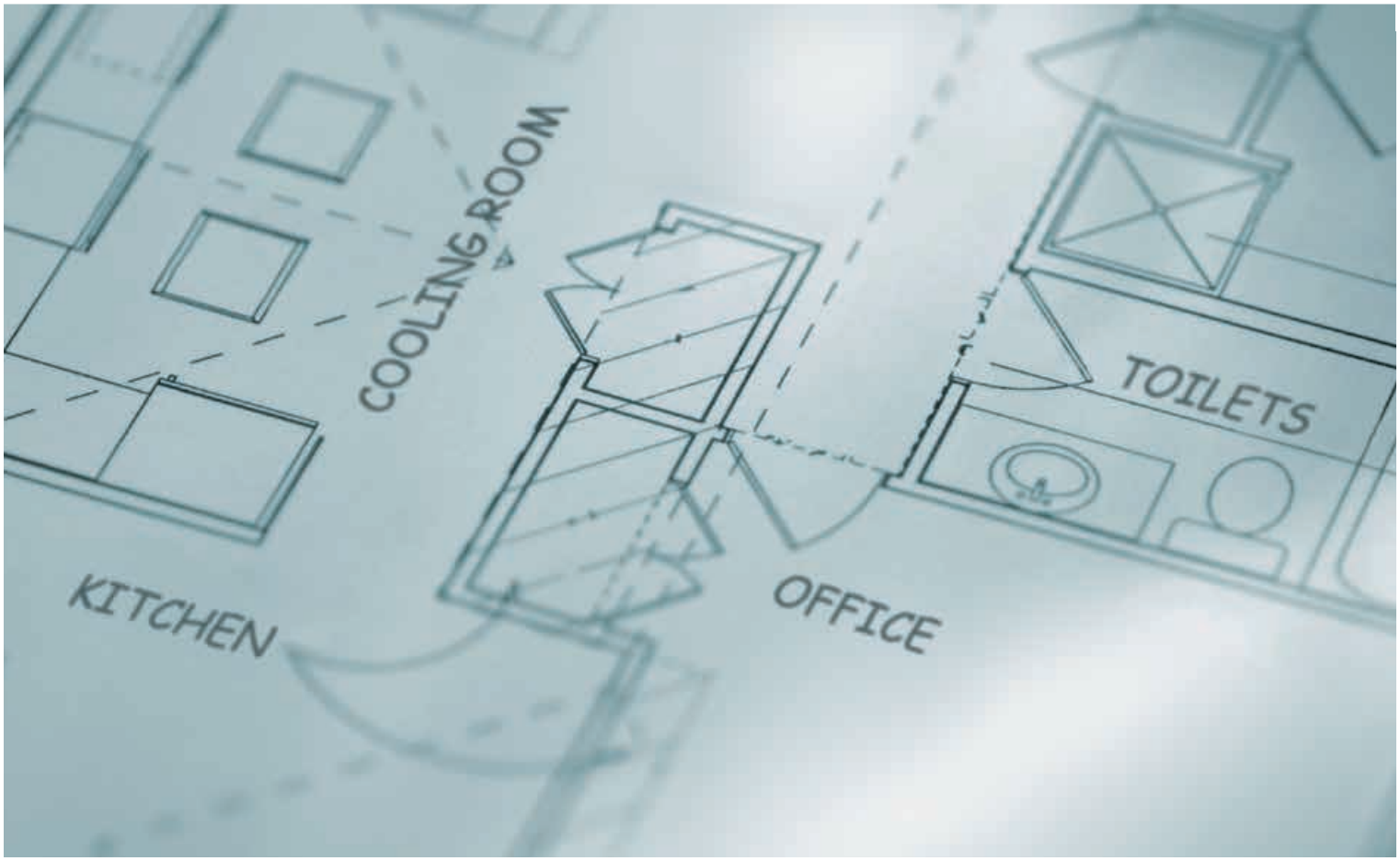
oxytec-News

Technology, Applications, Practical Experience Reports

Sterilization, disinfection, elimination of odour and fire prevention –

Air and surface treatment in buildings



oxytec supplies systems for purification, disinfection, elimination of odour and fire prevention. For all facility management areas.

Anywhere people stay and work, or where groceries are produced, processed or prepared and the respective disposal processes result, organic pollution of the air is a consequence, which can frequently lead to health-hazardous microbial stress and unpleasant smells.

Especially for building services engineering, oxytec offers highly effective, cost-efficient and environmentally friendly solutions for disinfection and odour neutralisation of inlet and outlet air as well as circulating air. UV-C/ Ozone Air Purification Systems by oxytec reliably ensure adherence to hygiene stipulations and immission protection laws.

oxytec AG develops and sells systems for air and water treatment as well as purification and disinfection in gastronomy and the hotel business, but also in the food and waste disposal industries. All systems are based on the UV-C and/or ozone technology. This - for example - includes the purification of air, surfaces and water, ambient air purifiers for private and commercial applications, exhaust air systems in gastronomy as well as industrial exhaust air systems.

Absence of germs and odour, fire prevention by means of UV-C, ionisation, partial ionisation

- **Public buildings**
- **Office buildings**
- **Hotel business**
- **Gastronomy**
- **Private**

Inlet air / circulating air

Circulating air / ambient air
- Presence possible
- Presence not possible

Exhaust air
- with ozone
- with UV-C / ozone

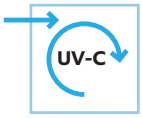
- Refrigerator rooms / storage rooms
- Offices / meeting rooms
- Living room
- Kitchens
- Fat separation rooms
- Toilets
- Garbage rooms

Thus, the UV-C / ozone technology works

Purification of ambient air with UV-C / ozone

When treating indoor air in an ozone-free manner (applied when there is a permanent presence of people/animals/uncovered products) UV-C-radiation of 253,7 nm by itself has a destructive effect on all microorganisms like bacteria, viruses, yeasts, fungi, mould and their spores.

- Improves the staff's health protection
- Reduces contamination by germs
- Improves shelf life, appearance and quality of food
- No formation of resistance of germs
- Prevention of cross-contaminations



Germs

Ionisation of indoor air

During the ionisation technology, plasma-generated free radicals, negatively charged ions and a small amount of ozone react with the airborne particles, e.g. germs and odour-bearing particle. The receiver of the cleaning device, being positively charged, activates the airborne particles and thus purifies the air.

- Consumption materials are not needed
- Low operating cost

Germs and odour

UV-C / ozone disinfection of surfaces

During the UV-C /ozone disinfection of surfaces the admission of ozone to the ambient air efficiently eliminates bacteria, viruses, yeasts, fungi, and spores on all surfaces.

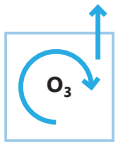
- Improves shelf life, appearance and quality of food
- Is effective at hardly accessible points as well
- Disinfected rooms can be re-entered quickly
- No use of chemicals

Germs and odour

Plasma purification of waste air

During the plasma purification process, ozone is drawn by the existing exhaust air fan directly into the ventilation duct where it reacts with the odour-causing substances present in the air: odour-bearing particles are oxidises. Remnants (CO_2, vapour) are discharged together with the exhaust air. The ozone itself is consumed during the process and is converted back into oxygen.

- Cleaner for strongly odouring waste air
- Easy wall mounting near the waste air duct
- Retrofitting in existing waste air systems possible without problems

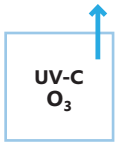


Germs and odour

UV-C / ozone waste air purification

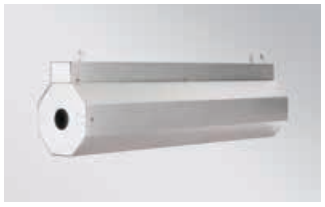
During the UV-C /ozone air purification process the waste air flows over UV radiation producing special tubes (photozone lamps). Their radiation converts natural oxygen (O_2) into reactive oxygen (O_3) which combines with the causers of the odour in the waste air: Organic, fat-containing and odour-bearing substances are oxidized. Residues can be biodegraded completely and are carried away in the exhaust air stream.

- Reduction of odour and grease, fire prevention



Odour and fat

Health for staff, shelf life for food



Confirmed by a testing institute: an examination carried out with 1000 staff members in a closed and air-conditioned office building in Montreal in 2003 impressively confirmed the efficiency of the UV-C technology. A so-called multiple double-blind test resulted in the following statement: The UV-C technology strongly improves the health and job performance of staff in an office building.

Inlet air purification

The inlet air germicidal module for air conditioning and ventilation systems provides for the routing of external air sucked in via UV-C high-performance emitters which have a reliable germicidal effect. Microorganisms penetrating from outside are eliminated and the entire ventilation system is kept stable. Bacteria, viruses, yeasts and mould spores are eliminated and staff members are protected against pathogenic germs.

Circulating air purification

The germicidal unit for circulating air is especially appropriate for refrigerator, sterilisation, laboratory and storage rooms. It is equipped with an axial fan sucking in the ambient air contaminated with germs and purifying the air inside the unit by means of UV-C rubes with spores being inactivated at the same time. Especially areas where food is stored and processed can be improved with respect to shelf life and quality of food.

Office inlet air

The circulation of central air conditioning and ventilation systems can distribute spores, bacteria and viruses in the building. Possible consequences include infections and problems with the respiratory systems. UV-C purification in the central air ducts inhibits this risk effectively. Hygiene requirements in compliance with VDI standard 6022 are met and the working atmosphere considerably gains quality.

Cleanroom

Thanks to the inlet air purification by oxytec the rate of germs is decreased distinctly; risks like cross-contamination and contaminated suspensions in microbiological and biotechnological laboratories can almost be excluded. Filters have a definitely longer life. Investment costs are low with application being almost maintenance-free. High downtime and consequential costs are prevented.

Refrigerator room hotel / supermarket

The purification of circulating air makes refrigerator rooms remain germ- and mould-free. Therefore, food has a considerably longer shelf life, looks fresher and can be stored for a longer time.

Ageing rooms

The risk is that unwanted cultures like mould germs exist in ageing rooms and settle in the air or on products. In the worst case this results in the spoilage or unsaleability of the product. Purification by UV-C provides for a permanently low germ or spore concentration in the ambient air.

Smoke-, dust- and germ-free rooms

Cleanair unit

The Cleanair unit has been designed for air purification and odour neutralisation. The sixtuple UV filtration system eliminates almost all fine dusts, allergenic bacteria, viruses, pollen, mould germs, suspended matters and pollutants from the air. Just the reduction of the respirable PM2,5 fine dust and cigarette smoke are of relevance with respect to diseases. It eliminates dusts (98%), pollens (98%) and germs like e.g. bacteria and viruses (98%) and neutralises odours (98%).

The high efficiency of the Cleanair unit was evidenced and confirmed by a scientific institute.

Meeting room BMW head office Salzburg
Continuous degradation of harmful substances by the photocatalytic system and neutralisation of bad organic odours. Conference attendees felt much better at the end of a demanding day.

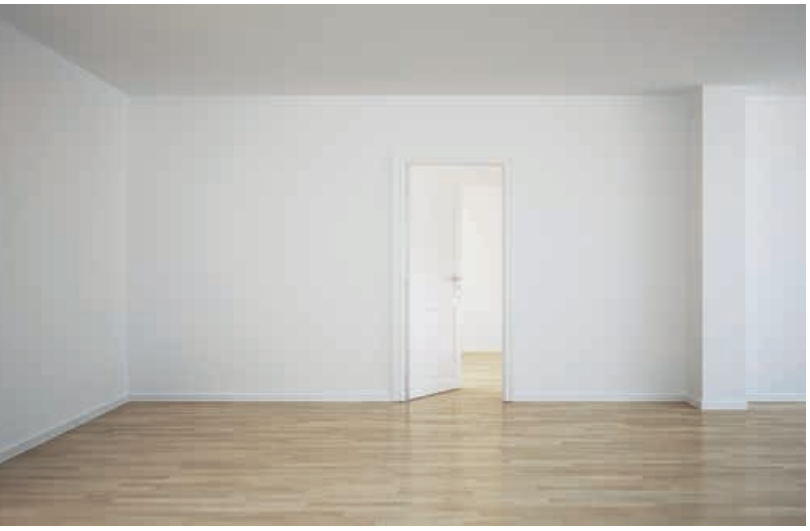
Allergy sufferers
The Cleaner unit also proved successful in the fight against pollenosis. Pollen reduction results in definitely higher wellbeing. Multiple filtration via preliminary and particle filters, HEPA filters for suspended matters, photocatalysis, UV system and activated charcoal filters bring about a very good result.

Smoker's lounges in hotels
The high degree of efficiency and easy application convinced various hotel owners to exploit the units not only in wellness areas, but also in meeting rooms. They are especially popular in smoker's lounges.

Waiting rooms in doctor's surgeries
The disinfection of air by UV light results in less frequent disease transmissions and better wellbeing. Staying in waiting rooms becomes uncritical.

Libraries, archives
Germ- and mould-free archives thanks to the disinfection of air by UV light. Better preservation, no musty odours.

Odour- and germ-free interiors



Freshair unit

The Freshair unit exploits UV light and a little portion of ozone. The ozone generated is below the threshold value of 17,5 mg/h, which means that it is below the natural ozone concentration. Therefore, it is without problems for human beings and animals.

Multiair 250

The Multiair 250 combines the qualities and advantages of the Saniair and the Freshair devices in one single unit: It may be used for quick sanitation of indoor air as well as for continuous operation (in case there is no permanent presence of persons in the room). The desired mode may be set using a safety key. Inside the device, the radiation emitted by the uv-c lamps converts natural oxygen to ozone, which amalgamates with germs and odour-causing substances in the air: Organic substances are oxidized.

Low-energy house
The little change of air of the low-energy house is kept germ- and odour-free. Ambient air has almost the same effect as fresh air.

Odour-free room for skis
In the Austrian Alpina Hotel in the Ötztal valley the Freshair unit was mounted in the room for skis in the cellar. There, the unit is in operation all day long and eliminates the odours of the ski shoes worn.

Toilet odours in the shopping centre
A shopping centre in Warsaw decided to have two Freshair units mounted in the toilet rooms for ladies and gentlemen, after strong odours had been developed by a dry urinal. Now, odours cannot be perceived in the corridors in front of the toilets any more.

Alternative to exhaust hood
If the installation of an exhaust hood is impossible or meals are cooked in an open kitchen, the Freshair unit can be applied. It is handy, small and can be mounted such that it is almost invisible. During the cooking of meals it removes bothering kitchen odours immediately - and cigarette smoke after the meal.

Cat and dog fanciers
If the Freshair unit is positioned near cat toilets, it prevents the odour from spreading over the house. The odours of tomcats or those originating from wet fur are fought effectively as well.

Allergy sufferers
The Freshair unit also proved to be effective in the fight against pollenosis. In the bedroom it fights pollens and thus soothes afflictions. The result is a reviving sleep.

Odour- and mould-free areas thanks to ozone

Saniair 125 / 250 / 400

Saniair - used for odour disinfection, purification and other fast applications (without persons' presence). The Saniair air purifier exploits UV-C light and a higher quantity of pure ozone. It removes microorganisms and odours in ambient air and on surfaces. Germs and spores are eliminated. All domestic pet and mite allergens are eliminated as well, and so are solvent, kitchen and cigarette odours.

Sanipro 800

For fast applications in rooms having a size of 800 m³. Especially suitable for the following applications: container, stowages, storage rooms, garbage rooms, sterile and laboratory rooms, in food processing and sewage plants.
Systems for bigger room volumes upon request.

Results for effectiveness/study DTU/study Laborius: The hygiene inspection of a Sanipro unit in a butchery (refrigerator rooms, saltery, salesroom) by the Centre for Safety at Work, Quality Management and Occupational Medicine Dr. Laborius (ZA QA) in Eckernförde confirms as follows: „The results of the UV-C / ozone treatment clearly show [...] that this kind of reduction is suitable best for the germs occurring in the shop."

Housekeeping
The East Hotel in Hamburg searched for a method applied to the elimination of all sticking nicotine odour modules in sofas, curtains and carpets. Already after one hour of operation of a Saniair unit all objects in the room were freed from nicotine and other odours.

Discotheque on board a cruise liner
To remove the smoke in the air developing in the evening in the discotheque of the cruise liner „Celebrity" again, a Saniair unit was integrated into the ventilation system which is in operation all night. Thus, smoke odours were removed reliably.

Garbage room of a shopping centre
The garbage room of the ECE Hamburger Straße is located directly at parking level. Visitors felt bothered by the odours emitted. An ozone unit fastened to the ceiling now solves the problem effectively. Organic odours are eliminated immediately.

Sanitation after mould attacks
After drying the rooms by means of a dehumidifier ozone eliminates the mould germ in the walls and the spores. Mould odours are neutralised. Various drying companies use those units for the final operation.

Refrigerator room
Ozone units in refrigerator rooms with fans guaranteeing good circulation provide for sterility and a longer shelf life of foods.

Cattery
The dermatophyte Microsporum canis was diagnosed in a cat breeder's home. After a five-week therapy of the cats and simultaneous disinfection with ozone all animals were examined. All cultures applied were germ-negative. The Saniair units is also effective with Giardien.

Odour-free exhaust air from waste disposal areas

Regular olfactory checks by TÜV and other testing institutions give evidence of the almost 95 % efficiency of the waste air purification method with UV-C and ozone.

UV-C/ozone exhaust air purification device

The UV-C/ozone exhaust air purification device was developed for strongly smelling and germ-loaded waste air. It effectively eliminates organic and odorous particles. Mounting can be implemented in the waste air duct. Installation is without problems. Application areas are grease separator rooms, lavatory facilities, waste-separating rooms, sewage works (H_2S-contamination) and sludge treatment plants.

Plasma odour control / Plasma odour control mini

Purification of strongly smelling industrial waste air on the basis of ozone and activated oxygen ions. Ozone and activated oxygen ions are generated in the plasma odour control and sucked by the fan of the waste air system directly into the waste air duct. Odorous substances are oxidised.

Investment Banking Center (IBC), Frankfurt
In the building of Deutsche Bank the duct for air coming from the toilets and a line ventilation from fat separation rooms end on the roof. When weather was unfavourable, the strongly smelling waste air was pressed towards the windows of the building. Especially, the floor of the general management in the 14th storey regularly suffered from the waste air. Ventilation lines were combined to one unit. A UV-C/ozone exhaust air purification device unit was used for the purification of the waste air. Now, fully odourless exhaust air is evacuated through the exhaust pipe on the roof.

Sewage plant Verden
For years, staff of the sewage plant intensively dealt with the elimination of the odours caused by H_2S. Food producers route waste water into the sewage plant, which results in waste air flows of up to 100 ppm H_2S. The content of H_2S of the waste air is now reduced by the UV-C/ozone exhaust air purification device to a value below the odour threshold; 99,9% of all germs in the air are eliminated. Problems caused by corrosion in the exhaust air duct have come to an end.

Waste air from smokers at Göl Polser in Randers
Waste air caused by smoking was the subject at Göl Polser in Randers. Traditional methods failed during the treatment of waste air from ten smoke ovens of 500 m^3/h each, since contents of tar damaged the biofilters for waste air and plants for thermal combustions. The use of the UV-C/ozone exhaust air purification device caused the efficient reduction of odour by 95%. Thanks to the automatic CIP plant tar and oxidised organic compounds were removed regularly.

Garbage rooms hotel facility
Waste air from garbage rooms and container presses could not only be freed from odours by plasma odour control, but was degerminated in addition. Now, hotel guests are no longer exposed to unpleasant odours.

Garbage rooms yacht
Waste air from garbage rooms on board a yacht could be freed from odours and germs by Drews Marine by means of a UV-C/ozone exhaust air purification device unit.

Odourless waste air from kitchens

Odour check Block House, Düsseldorf: The olfactory test performed in September 2007 by Müller- BBM, one of the leading consulting engineers for counselling services, testing and planning came to the following result after taking three olfactory marks: „The average rate of efficiency of the UV-C / ozone air purification plant made by oxytec is 95,6%."

CKA – Clean Kitchen Air

A frequently occurring problem with catering settlements is that of unwanted odours in the waste air from kitchens. They do not only develop due to deep-frying, cooking and roasting. An efficient and cost-saving solution is offered by the oxytec CKA system. The waste air developed by cooking is purified above the cooking station after the fat separator has been passed. Organic, fat-containing and odorous substances are „burnt cold". The content of fat in the exhaust air system and odour emission in the environment are reduced considerably.

ECE Shopping Centre „Hamburger Meile"
40,000 m³/h of waste air coming from the Foodcourt of the Hamburg shopping centre hit adjacent apartments and parking places, because the roof of the shopping centre is at a level below the adjacent buildings. Thanks to the installation of the CKA plant complaints by people from the neighbourhood concerning odour could be avoided.

QF - Quartier at the Frauenkirche
In the shopping mall at the Frauenkirche in Dresden the waste air of five restaurants resulted in bothering by odour of the other commercial tenants. The waste air outlet of a Chinese restaurant is positioned near the inlet air suction; so, strongly smelling waste air was sucked into the shops of the other tenants. The solution: all restaurant ventilation ceilings and hoods were retrofitted with CKA facilities. Ozone and odour analysis confirm the satisfactory result.

Gosch Frankfurt / Main Central Station
In the hall of Frankfurt Central Station Gosch deep-fries fish, scampi and French fried potatoes. Discharging the waste air of 2000 m³/h via the roof is impossible, since the building is governed by monument protection. Prespecification: Directly route the exhaust air into the hall of the station at a height of 3 m. The plant permitted the exploitation of the exhaust air for heat recovery. A subsequent catalyser polishes excessive ozone and residual odours from the exhaust air. Since 2004, the active charcoal has never been replaced.

Block House Düsseldorf, Burgplatz
The steak house of the Block House chain is found at one of the best central locations in a building protected by monument protection. Therefore, roof superstructures and high chimneys are impossible. The tenants in the adjacent office buildings do not accept bothering by odour. The active charcoal used in previous projects became ineffective after five weeks. In addition, the plant had to be purified frequently due to very high fire load. The installation of the CKA facility resulted in a reduction of odours by 96 %. Since then, hoods and ducts have been fat-free.

Olympic Hall Munich
In the Olympic Hall in Munich 9 kiosks offering different kinds of fast food (steak, pizza, doner, sausages)

UV-C
O_3

Increased fire prevention by avoiding fat deposits

CKA – for installation into the hood

In cooking and frying processes, grease-charged exhaust air flows into the exhaust air system. As a result grease builds up within ducts and ventilator, causing a significant fire risk. Moreover, the nutrient-rich fat deposits add to unpleasant odours within the kitchen exhaust air. This also leads to hygienic problems, e.g., fungus. Up to now, it had been necessary to regularly clean the exhaust ducts with chemical detergents.

This results in very high costs, as the problems are only solved for the short run and are frequently insufficient. Many places within the exhaust system are inaccessible and are therefore difficult to properly clean. Aggressive high power detergents can corrode old exhaust systems.

An efficient and cost-saving solution is offered by the oxytec CKA system; the fat loaded waste air is purified above the cooking station after passing the eddy current filters. Organic, fat-containing and odorous substances are „burnt cold". Fat deposits in the exhaust air system are reduced considerably; the risk of fires is minimised.

were to be integrated below the tent-like and monument-protected roof. Problems were little space and a high volume of waste air of approx. 3,5 to 5 T m³/h. The strongly odour- and fat-loaded waste air was to be discharged mainly below the tent roof. The kiosks were planned as flat design objects with superstructures being forbidden. The solution offered was a CKA facility within the exhaust hoods with an ozone reaction sector in the intermediate ceiling. As a result, the fat-free air is exhausted almost without odours below the tent roof - completely without fat deposits.

SailCity Bremerhaven

The ground floor of the sail-shaped 20-storey building accommodates the panorama restaurant „Strom". On the eight floors directly above there are 120 rooms and the following 12 floors accommodate offices. To prevent hotel guests and office tenants from being bothered by odours from meals and simultaneously meet the legal fire prevention requirements the waste air from the kitchen had to be discharged via the roof, which would have required the installation of an 80-metre high duct including ventilation conduit and continuous fire prevention lining. Thanks to the installation of CKA elements the duct remains unaffected by fats and odours; exhaust air is routed outside at the level of the restaurant.

Swiss Technical University, Zurich

In the catering area of the Swiss Technical University (ETH) food is cooked in several woks which - in the past - resulted in strong fat deposits in the waste air duct again and again. The university had to have the duct cleaned four times a year which resulted in high operating cost. To reduce the latter it was decided to instal a CKA facility.

Marriott Hotels

The restaurants of the Marriott Hotels offer their guests an ample choice of meals. Cooking with a waste air volume of 18.000 m³/h happens almost 24 hours a day. The consequences: extreme fat deposits in the ducts and very high fire load. Frequent purification cycles were needed which resulted in damage to wallpapers and carpets. Since CKA elements were installed in the exhaust hoods comprehensive purification has become unnecessary. The demanded amortisation period of 2,5 years was achieved.

Purification of waste air from the kitchen by CKA modules

CKA duct

Modular UV / ozone waste air purification plant for odour reduction and fat elimination to be installed in a waste air duct as a channel element. The installation of a channel element is always performed when the hood is only very small and there is only insufficient space or when several waste air flows have to be grouped. Even when the tenant and the person running a gastronomical unit are not identical, this solution volunteers. Usually, this is the case in shopping centres.

CKA ventilation ceiling

Modular UV-C and ozone system for odour reduction and fat elimination to be clipped on the ventilation ceiling. Its space-saving character and the problem-free replacement of photozone tubes are two important advantages of the ventilation ceiling system. Installation is implemented in one or two rows which depends on the design of beams and the fat load. Photozone emitters are arranged continuously along the inside of the beams.

Vienna Airport
At Vienna Airport a canteen kitchen makes meals for the entire airline catering. Numerous high-performance deep fat friers with high fat load cause strong fat sooting of the ducts being routed through the airport building. Increased fire risk in surroundings with a high number of passengers was the consequence. Now, fat deposits are avoided thanks to the integration of the CKA system: Safety at reduced operating cost has definitely increased.

AIDA/Celebrity Solstice line cruisers
Kitchens on board the cruise liners of the Meyer shipyard are in operation almost 24 hours a day for up to 2800 passengers. Extreme fat deposits in the ducts resulted to a very high fire load. Due to the special fire prevention requirements of the ship owning companies frequent purification cycles in the ducts were required. This resulted in increased corrosion, and nevertheless the purification result was not satisfactorily good. The integration of the CKA plant was possible despite very low hood construction heights.

Skiing Hall Wittenburg
To save cost the canteen kitchen of the skiing hall with a waste air volume of 45.000 m³/h did without fire prevention linings on the waste air ducts. This was approved thanks to the integration of the CKA facility. It avoids fat deposits in the ventilation duct and thus achieves the fire prevention required.

McDonalds, Harburg
To constantly remove fat above the grill and the deep fat friers, a duct element was installed above the hood, which does not only comprise a CKA facility, but also a washing facility for the automatic cleaning of the photozone tubes. Fat deposits in the ducts and the high fire risk are events of the past.

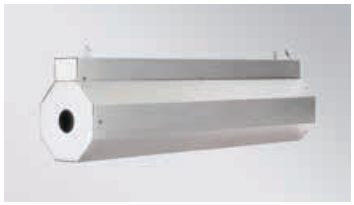
Overview of units

UV-C (no ozone formation) – can be applied in the presence of human beings

Inlet air disinfection module

Effective power : 1000 to 100000 m³/h
1000 – 2500 (L x W x H): 1220 x 610 x 610 mm
3500 - 4000 (L x W x H): 1525 x 915 x 610 mm
5500 (L x W x H): 1525 x 915 x 915 mm
8000 – 10.000 (L x W x H): 1830 x 1525 x 915 mm
Further modules upon request, stainless steel housing
Operating hrs. UV-C high-performance emitters: 16.000

power rating:
240-360 W
480 W
660 W
960-1200 W
duct elements for assembly into the inlet air duct



Circulating air disinfection device

Fan: 480 m³ air ventilation system performance
Housing (L x W x H): 1200 x 252 x 325 mm
V4A stainless steel
Operating hours UV-C high-performance emitters (4x 39 Watt): 16.000

power rating:
180-350 W
230 V, weight: 16,4 kg
connection cable: 1,5 m
unit with lugs for easy mounting to the ceiling

Cleanair – 100 / 250

Air volume in the room to be treated up to 40 m² / 100 m²
Automatic adaptation of the fan performance to air quality; Housing (H x W x D): 865 x 410 x 280 mm/ 1700 x 485 x 290 mm
noise level max. 49 dB (A)

power rating:
90 / 150 W; weight: 12 kg
floor-mounted appliance, ready for plugging-in ; wheels facilitate the flexible exploitation of the unit

Circulating air - partial ozone – can be applied in the presence of human beings

Freshair Ion

Air volume in the room to be treated up to approx. 50, 75 or 100 m²
Housing (H x W x L): 300 x 100 x 302 mm

power rating: up to 45 W
weight: 4 kg
wall mounting, ready for plugging-in

Freshair

Suitable for a room volume from 15 m³ to 60 m³
Housing (L x H x W): 329 x 92 x 92 mm, stainless steel
Operating hours (1x 8 Watt): 10.000

power rating: 25 W
floor-mounted appliance, ready for plugging-in

Multiair

(Combined unit of Freshair / Saniair 125, switchable)
Operating hours (1x 8 Watt / 1x16 Watt): 10.000

power rating: 30 W
floor-mounted appliance, ready for plugging-in

Circulating air with UV-C / ozone: for sanitation - designed for application without human beings being presence

Saniair 125 / 250

Recommended size of room: 125 m³/ 250 m³
Housing (L x H x W): 440 x 130 x 130 mm
stainless steel
Mains supply: 230 Volt (12 or 24 Volt upon request)
Operating hours (1 x 16 Watt/1 x 38 Watt): 10.000

power rating: 30 Watt / 50 Watt
floor-mounted appliance, ready
for plugging-in

Saniair 400

Recommended size of room: 500 m³
Housing (L x H x W): 460 x 250 x 200 mm
stainless steel
Mains supply: 230 Volt (12 or 24 Volt upon request)
Operating hours (2 x 38 Watt): 10.000

power rating: 100 Watt
floor-mounted appliance, ready
for plugging-in

Sanipro 800

Recommended size of room: 750 m³
Size (L x H x W): 570 x 250 x 255 mm
voltage: 230 V 50..60 Hz
ozone rating: 7500 mg/h
Operating hours (4 x 38 Watt): 10.000

power rating: 150 W
air volume: 360 m²/h
Weight: 3 kg
ready for plugging-in

Cleaning of exhaust air by means of ozone

Plasma Odour Control mini

Air volume up to 3.600 m³/h
Housing (L x H x W): 307 x 185 x 343 mm
Stainless steel

power rating: 250 W
weight: 10 kg
Connection: 100 mm approx.
Wall mounting (unit is mounted
directly to the waste air duct.
Ozone is sucked out of the unit by
negative pressure)

Plasma Odour Control pro

Air volume up to 26.000 m³/h
Housing (L x H x W): 850 x 650 x 610 mm
Stainless steel

power rating: 1500 W
weight: 85 kg
20 A circuit breaker required
Connection: 100 mm approx.
Wall mounting (unit is mounted
directly to the waste air duct.
Ozone is sucked out of the unit by
negative pressure)

Overview of unit

Purification of exhaust air by means of UV-C / ozone

UV-C
O_3

UV-C/ozone exhaust air purification device

Housing: 315 x 500 / 1000 mm
Steel drawn longitudinally galvanized or stainless steel
Operating hours photozone emitter (4x16 / 4x39 W): 10.000
Further sizes and air volumes upon request

power rating: 120 W / 200 W
tube module for easy installation in the waste air duct

Clean Kitchen Air

CKA IB for extractor hood

1.500 m³/h: CKA 200S IB (4 x 39 W), Module (L x W x H) 942 x 304 x 70 mm
2.000 m³/h: CKA 400L IB (4 x 79 W), Module (L x W x H) 1710 x 304 x 70 mm
2.000m³/h: CKA300S IB (6 x 39 W), Module (L x W x H) 942 x 304 x 70 mm
3.000 m³/h: CKA 600L IB (6 x 79 W), Module (L x W x H) 1710 x 304 x 70 mm
Further modules upon request
Operating hours photozone emitter: 10.000

power rating
200 W
400 W
300 W
600 W
Module for the fast installation in the hood, multi-purpose holding devices included in the scope of supply

CKA for ventilation ceiling

500-700 m³/h: 100LLD, (1 x 79 W)
Photozone emitter (L x D) 1638 x 30 mm
Electronic ballast boxes 100-800 Watt, (H x L x W) 150 x 430 x 185 mm, IP 22
Further modules upon request
operating hours photozone emitter: 10.000

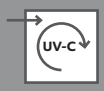
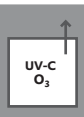
Photozone emitter with stainless steel holder to be clipped on the ceiling, electronic ballast boxes for mounting to the ceiling

CKA for duct installation

2.000 m³/h: (H x W x L) 300 x 1000 x 500mm
3.000 m³/h: (H x W x L) 300 x 1000 x 500mm
4.000 m³/h: (H x W x L) 600 x 1000 x 500mm
5.000 - 6.000 m³/h: (H x W x L) 600 x 1000 x 500 mm
6.000 - 8.000 m³/h: (H x W x L) 900 x 1000 x 500 mm
10.000 m³/h: (H x W x L) 1500 x 1000 x 1000 mm
Housing material galvanized steel / stainless steel
Further sizes and air volumes upon request
Operating hours photozone emitter: 10.000

power rating
300 W
600 W
600 - 800 W
1000 - 1200 W
1200 - 1800 W
2000 W
Duct element with SB frame premounted for installation in the waste air duct

At a glance: UV-V and/or ozone technology

					
Technology	**UV-C**	**UV-C + filter**	**UV-C / partial ozon**	**UV-C /ozone**	
Medium to be treated	inlet/ circulating air	circulating air	circulating air/ surfaces	circulating air/ surfaces	waste air
Process	purification of ambient air	purification of ambient air and filtering of ambient air	disinfection of ambient air and surfaces	disinfection of ambient air and surfaces	elimination of fats and odours
Presence of animals / human beings	+	+	+	-	
Applications	▪ Air condition-ers ▪ clean room ▪ refrigerator/ storage halls ▪ ageing rooms ▪ production halls ▪ hospitals	▪ smoker´s room ▪ meeting rooms ▪ waiting rooms	▪ meeting rooms ▪ Allergy suf-ferers ▪ smells from animals ▪ toilets ▪ sluices, pro-duction ▪ changing rooms	▪ storage rooms ▪ productions halls ▪ mould sanitation	▪ Waste air from kitchens ▪ smokers ▪ sewage plants ▪ garbage rooms ▪ fat separators ▪ toilets

Please contact us for individual advice.

We are here for you - on the phone or on site!

UV-C purification in air conditioning systems
Healthy rooms and workplaces

UV-C purification in kitchens and production
Extended shelf life, quality assurance

UV-C purification of living and meeting rooms
No odour (of smoke), no germs

Air and surface disinfection by means of ozone
Rooms free from odour and germs/mould

Purification of exhaust air by means of UV-C and ozone
Odour-free exhaust air from waste disposal

Purification of exhaust air by means of plasma
Odour-free exhaust air from snack areas

Purification of exhaust air by means of UV-C and ozone
Odour- and grease-free exhaust air from large-scale catering establish-ments, fire prevention

Supplied by:

For further information see the internet for:
www.oxytec -ag.com

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