

## **Air disinfection with UV-radiation - the sure method -**

Air contaminated with free floating microorganisms can be treated with uv-radiation as traditional methods fail to disinfect air effectively or are not applicable a priori.

UV-disinfection of air leads to a lower level of germs because natural convection ensures that all air films are treated with UV-C. Generally, compartment air is treated with lower radiation dosage compared to other applications like water treatment.

Effectiveness of disinfection can be optimised if the radiation covers a long distance before absorbing from physical surfaces.

We therefore equip all lamps with reflectors consisting of ultra pure aluminium.

### **Air disinfection in hospitals and other medical applications**

With patients and visitors bringing in pathogens that cause diseases such as tuberculosis, wards, clinics, waiting and operation rooms and similar areas should be protected against the risk of infection of personnel and patient populations. It is estimated that up to 99% of airborne pathogens are destroyed with adequate air circulation and UV exposure.

Diseases often occur due mixed infection channels (physical contact and air). Hence UV- disinfection is to be recommended exceedingly if several infected persons stay close to each other for example in hospitals, children's clinics, baby stations, rooms for preterm birth, operating rooms and waiting rooms.

### **Air disinfection in nutrition industry**

This application is to protect foodstuff against unwanted germs.

In Baker's shops mould is to be prevented. In other areas like Dairies, Breweries or Butcher's shops mostly *saccharomyces albicans* (fungus) have to be eliminated.

### **Air disinfection in stock breeding**

Air disinfection via uv-radiation reduces characteristic diseases effectively .

Main application fields are farrows breeding stations, chick breeding stations and veterinary hospitals.

### **Effective operation of UV-lamps to reach air disinfection**

UV- plants can be used for disinfection of working stations or as uv-radiation barrier between rooms or air conditioning plants.

Natural convection of air leads to reduction of the germ level.

UV-units for indirect operation:

Those units can be used in occupied interiors without the need of protective clothing. Installation has to make sure that it is not possible for people to come in contact with the uv-radiation

UV-units for direct operation:

This method is used in cases where either the room is unoccupied or where it is possible for the occupants to take protective measures against radiation.

### **Attention!**

UV - radiation is dangerous for skin and eyes!

Protection of Skin and Eyes has to be ensured.

Note, the operator is responsible for the safety of persons staying in the room

Please note, materials not stable against UV-C could be affected by UV-C.