■ Our innovative ventilation systems ensure healthy indoor air

Air - the foundation of life and creativity - especially in the sensitive area of indoor air.

A good air quality is crucial to the well-being and performance of people. Headaches, fatigue and difficulty concentrating are often caused by suboptimal designed air conditioning and ventilation systems.

This modern-day phenomenon has been researched in recent studies and is recognized as so-called "Sick-Building-Syndrome".

■ Air - we make the most out of it!

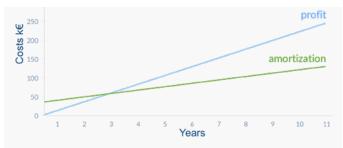
For *bioclimatic* this subject is not a new one.: Since 1978 we offer suitable solutions for air cleaning and air purification.

With the possibility of integrating appliances of the aerotron series as a supplement to new and existing air conditioning and ventilation systems, this solution to your air quality pro-

blems can be easily implemented. The appliances are precicely dimensioned according to the existing need.

Clean, fresh and healthy air is created by oxidation of pollutants with activated oxygen. In outdoor air activated oxygen exists mainly in form of positive and negative ions, as well as ozone. bioclimatic ionisation systems "copy" this natural process of air regeneration and transfer it to indoor conditions. Scientific evidence on this process of positive and negative ion production, as it happens every day in nature, are available.

Thanks to this technology indoor air quality (IAQ) is improved, germs are inactivated, odors neutralised and the air is enriched and balanced with ion concentrations found in nature – completely without chemicals or artificial fragrances.



The amortization for usage of bipolar ionisation in an air handling system compared to an activated carbon filter system already starts after 2 years (dependent on design).



■ Ionisation - Following nature



■ Fatigue or depression? Negative!







Your Benefits

In the course of environmental protection, the potential of energy savings in buildings is increasingly coming under the spotlight. In addition, as a result of further rising energy costs, the operating costs of buildings, especially in the HVAC sector, far exceed the original investment costs. This continually increases the need for energy saving measures to sustainably reduce energy consumption. In the ventilation and air conditioning sector, energy is needed primarily for air transport and heating or cooling of the air streams. Reducing the air flow volume as well as using higher circulating air rates instead of outside air rates are therefore essential goals. Possible theoretical improvements in the design and operation of HVAC systems are often not feasible in practice without the loss of IAQ. Polluted outside air taken inside as well as influencing factors occurring in buildings (e.g. emissions of fittings, furnishings and office communication equipment, contamination of air conditioning and ventilation ducts, human influences, etc.) contaminate indoor air further.

The air quality is no longer sufficient, especially after longer periods of use.

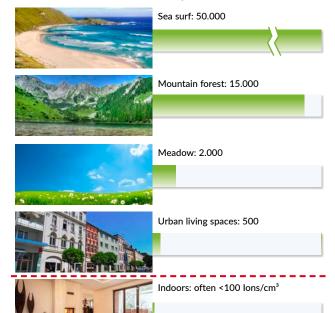
Necessary increase of fresh air rates negates the envisaged energy efficiency.



aerotron

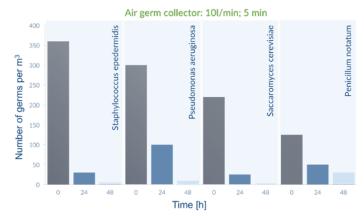
With the implementation of *bioclimatic* ionisation systems in HVAC units, airborne pollutants (such as odors, microorganisms and other VOCs) in both the duct systems and the ventilated rooms are removed by generation of the "activated oxygen". The modules are universally applicable in the central HVAC unit as well as selectively in the individual ventilation ducts.

■ Nature shows us how - lons per cm³



Starting at <100 lons/cm³ first signs of fatigue, headaches, lack of concentration, etc. start to show

■ Degradation Rate of certain airborne particles



bioclimatic – competence and experience in the field of high quality air treatment, air purification and degermification systems since 1978 for:

- Food Industry
- Hotels and restaurants
- Commercial kitchens
- Offices and administrations
- Hospitals and medical laboraties
- Nursing homes
- Animal breeding and husbandry
- Private areas
- High-odor contaminated operations

For further information on our full product range please do not hesitate to contact us. We will gladly send you additional information material including references upon request and are always available for questions.



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