



Airfree technik – the new millennium sanitary concept

The biological weapon indispensable for the modern Industrial Aviculture

Airfree Technik - Pure air → Healthy Flocks

One of the main concerns in modern Industrial Aviculture is breathing pathology.

The majority of airborne virus, bacteria and fungus find their way into the target cells through the airways to achieve the continuation of its life cycle.

The simultaneous conjunction of virus and bacteria associated to adverse environmental conditions, develop extremely complex clinical situations of difficult solutions with clear performance interference, risking in many cases the exploration economical survival.

For instance the presence or absence of certain pathogenic agents like for instance the Mycoplasm can determine the success or failure of the business.

It is up to the entrepreneur and poultry technicians to be aware of those facts and to establish needed strategies to reduce the risk of infection pressure

to a minimum as well as the pathology risks in their explorations via adequate prophylaxis, disinfections and correct sanitary vacancies.

Airfree technik electric devices provide a priceless contribution to the reduction of infection pressure and consequently of the effective general pathology.

Through this new air sterilization concept, based on a new patented revolutionary thermal process, a dramatic viral, microbial and fungal pollution reduction is achieved in the chicken house ambience with consequent reflex in the flocks sanitary status.

The Airfree technik action mechanism is a natural process characterised by: being innocuous, no Microbial Induction resistance and guaranteed efficiency provides a safe product to the final consumer.

Airfree Technik installed in a chicken house



Safety & Efficiency

Airfree Technik patented technology is absolutely safe, produces no emissions and delivers pure air continuously.

Patented Airfree Technology

U.S. Patent 5,874,050
EPO



Patent Application EP 0 815 877 A2 Emissions (VOC) and Particles

Airfree Technik uses just heat to sterilize the air. No emissions nor particles are created or increased with the use of Airfree Technik

SP Swedish National Institute tests show a small reduction and assure not additional emissions. Please see Tests.

REPORT

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Table 1. Concentrations of VOCs in the air

| Substance | Concentration Upstream (µg/m ³) | Concentration Downstream (µg/m ³) |
|--|---|---|
| Total concentration of VOCs ("TVOC") | 90 | 90 |
| toluene (an aromatic hydrocarbon) | 6 | 6 |
| 2-(2-ethoxyethoxy)ethanol (a glycol ether) | 13 | 14 |
| α-pinene (a terpene) | 2 | 3 |
| nonanal (an aldehyde) | 2 | 2 |

Summary

No significant changes in VOC concentrations were observed, either as single VOCs or as the total concentration. Neither could any new substance be found upstream the air cleaner.

The relative humidity of the air in the office was 23 %, the temperature was 22 °C and the atmospheric pressure was 986 mbar.

Measurement equipment

- SKC aircheck sampler, VVS2 (SP's inventory no. 200 951)
- SKC aircheck sampler, Pump 31
- Temperature and humidity meter TESTO 610 (SP's inventory no. 201 392)
- Barometer Druck DPI-260, (SP's inventory no. 201 637)

Estimated uncertainties of measurement

- VOC concentration ± 15 %
- Relative humidity ± 3 %-RH
- Dry temperature ± 1 °C

SP Swedish National Testing and Research Institute
Energy Technology

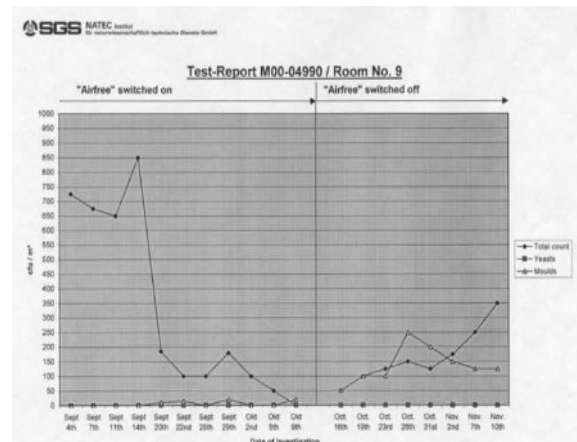
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Bacteria and Fungus Reduction

Airfree Technik was tested in several countries in Europe and in the U.S.A.. In all those tests a minimum 85% airborne micro-organism reduction was achieved.

Laboratories such as SGS Natec in Hamburg, INETI in Lisbon, Universidad Complutense de Madrid, Technical Micronics Control in the U.S., Universidade Nova de Lisboa and many independent institutions have proven above reduction.



Virus Reduction

There are no virus tests available but, since the patented ceramic core incinerates microorganisms at temperatures over 200° C, there is no doubt that viruses are also totally destroyed.

The advantages of Airfree

Airfree Technik provides flock reduced mortality and increased average chick weight.

Airfree Technik investment is quickly amortised in few flocks, providing at the same time a healthier product for the final consumer.

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