AirSolution

Reliable Hygiene Management in the Food Production



New visions for food processing



As much as necessary, as little as possible

"I have been cooperating with many planners. But the approach to tackle food-technology matters, technically adept, from the product side and then to probe the possibilities together with air condition engineers and microbiologists, appeals to me."

> Uwe Grünemeyer, senior manager for "Technik und Betriebe", Goldsteig Creamery Bayerwald GmbH

Who knows better than you: foodstuffs are a special commodity. Processing them is a highly sensitive matter in which clean, germ-free air not only plays an indispensable role, but is also a prerequisite for food to have a longer shelf life.

We at AirSolution provide you with the appropriate ingredients: inclusive air and process management which, besides maximum hygiene, also focusses on the legal requirements, efficiency and reducing the costs of your production process. Many years of experience and continuous development have made us one of the leading specialists in the field of air and surface disinfection and operation analysis.

Take advantage of our expert know-how - as a capable partner, we are here to provide specialist support.

And where do we start? Of course - right on your premises. At your company, we analyse the status quo and based on this we develop both individual measures, as well as customized integral solutions - entirely in accordance with your wishes.





AirSolution: your partner for indoor air and surface disinfection

In the year 2000, the food technologist and process engineer Ralf Ohlmann laid the foundation for AirSolution. His vision: to create an environment in foodstuff production with as few germs as possible, thereby optimizing the individual work processes on a sustainable basis. To achieve this, he developed the active ingredient L.O.G. consisting of natural substances and a special fine-nebulization method for discharging into indoor air - a unique innovation worldwide that has established itself on the market by the name of "no-touch disinfection" and which occupies a leading role in the field of foodstuff manufacture. Thus, the term "air management" has been given a whole new dimension.

Meanwhile AirSolution, for a medium-sized company, has become something of an institution in the industry.

The technology has been given recognition all over the world and is now also being used in human medicine, for instance as a preventive measure against hospital germs. The division into the three business sectors of Engineering, Food and Healthcare makes it possible to react optimally to different customer requirements and wishes.

Scientists, including chemists, food technologists and engineers, today work hand in hand with mechanics and electricians at the modern production facility on the Hansalinie industrial estate in Bremen. This is where the innovative high-tech nebulizers are manufactured by an automated process, tailor-made for a variety of applications. The active ingredients are produced in the Greater Bremen area. In the meantime AirSolution is also active on behalf of a diverse customer base in Europe, Asia and North America.







AirSolution Engineering

"The team from JUST IN AIR performed the measurements in the shortest possible time and evaluated them specifically. The results were reliable and economical."

Michael Wolf, Manager of Merano Dairy Farm, South Tyrol (Source: LT 04/07)

Producing high-quality products at reasonable prices. And at the same time optimizing the expiry date and reducing waste ... are these your stated aims? This is where we, the people from AirSolution, get involved. With us you can expect expert advice specially tailored to your company - because the specific and often complex environmental conditions within a company require a process-oriented approach which integrates the various operating areas.

The AirSolution offer includes a current status analysis as part of data

acquisition about the environment, and its evaluation with respect to existing operational goals.

In the process we also take hygiene, occupational safety and environmental legal requirements into consideration and provide support to you when implementing the resulting measures.

It goes without saying that we always have our sights on an optimal cost-benefit ratio. This is guaranteed by a competent team of process engineers and application technologists.



We recognize the problem and fight it, before it can spread

Our main skills

- Microbiological and hygiene-climatic status analyses in the environment of the analysed process
- Technolgy Transfer
- Activities and recommendations for process optimization
- Highlight alternatives for action
- Develop integrated concepts for solutions
- Recommendations for ventilation- and climate planning
- Monitoring, consulting and success control during concept execution



Active ingredient and method: a joint-venture with nature

"The application of the AirSolution L.O.G. is unproblematic for users, consumers and food products and can be recommended without any reservation. A labelling of the food is not required."

Prof. Walther Heeschen, Veterinary specialist for Pharmacology, Toxicology and Food Hygiene

AirSolution's ingredient, which is unique all over the world, contains extracts from foodstuffs and is analytically similar to the ingredients of milk.

In use, the active ingredient is discharged as micro-fine mist into the air by a fine nebulization technology based on ultrasound, without causing condensation. The substance is distributed evenly throughout the room and reaches all surfaces.

Due to their small size, the particles discharged remain suspended for a long time and behave just like airborne germs.

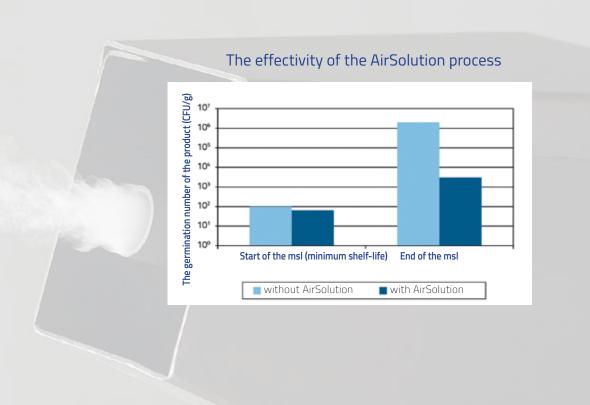
These are attacked from the inside out and rendered harmless before they can contaminate surfaces.

A safe, preventive reduction of disease and spoilage organisms, of bacteria, viruses, yeasts and moulds, which has nothing to do with costly, conventional disinfection - this gives your products more safety and a longer life.

Rely on a new dimension when it comes to hygiene!







Whether mobile or stationary: the right technology for every application



FIXED INSTALLATIONS

General specifications and fixed installations

Components	Description
Central control using	relay technology or microcontroller
Active ingredient application	Ultrasonic fogging, linked to the machine cycle
Number of possible nebulizer units	Up to 20 per control unit
Power supply	230 V/50 Hz
Compressed air	Minimum. 4 bar
Average consumption of active ingredient	80-130 ml/operation hour
Ingredient tank	60, 100, 1000 l

All parts exposed to the active ingredient are made of V2A. The system can be extended with additional nebulizer modules.



Dairy products: Filling systems (eg: rotary and linear filling machines)

Standard units are equipped with 2 nebulizers and an air lance to achieve optimum hygiene in the packaging material (container) and the headspace (lid).



Meat products: cutting lines (from slicer to packaging)

Plants are equipped with nebulizers so that in the insertion and cutting areas, at the conveyor belts, in the rocker and the packaging areas, optimal local hygiene conditions can be achieved.



In the cold store

In the cold store, the application rate for the ingredient is set so that optimum hygiene conditions are achieved while minimizing ingredient consumption.



In the ventilation system

The integration of compact nebulizer modules permits the incoming air to be treated. In addition, the formation of biological film in the ventilation system is prevented (requirement according to DIN EN 6022).



MOBILE SYSTEMS

Pick up

Pick up is a compact, portable device and enables the active ingredient to be flexibly applied in rooms or equipment.

Dimensions: 80 x 300 x 155 mm Discharge rate: up to 250 ml/hour Programmability: 5 power levels Room sizes: up to 100 m³



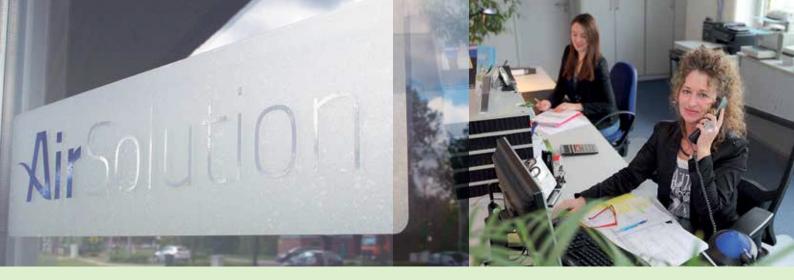
Streamer

The Streamer is suitable for treating air in larger spaces and can be easily moved on castors.

Dimensions: 1200 x 400 x 800 mm Fan performance: approx. 320 m³/h

Active ingredient supply: integrated 20-litre tank

Discharge rate: up to 250 ml/hour Programmability: 5 power levels Room size: up to 500 m³





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