

# Fischmagazin

Trade journal for the entire fisheries industry



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With the misting application, the air throughout the room is evenly saturated with the natural active ingredient mist and all surfaces are evenly finely moistened.

**Food safety** and cost savings in fish processing

## Disinfection by fogging

New EU regulations will increase the pressure on producers from the start of July, as they impose stricter, permanent limits on *Listeria* levels in ready-to-eat fish products. Cold-smoked fish products and delicatessen items are particularly sensitive in terms of hygiene, which means manufacturers face higher standards.

**L**isteria are bacteria that are ubiquitous and can pose a hygiene problem, as they grow even at high salt concentrations and low temperatures. In the production of cold-smoked salmon, for example, there is no processing step in which bacteria such as *Listeria* are killed directly, due to their chemical and thermal resistance. The responsibility for demonstrating microbiological safety is shifting significantly to manufacturers, accompanied by considerably higher requirements for documentation and proof. This necessitates a rethink within companies and implies a new focus

in Quality assurance, for which various approaches are being discussed.

- 1) Assessment and optimisation of the process environment without directly handling the product.
- 2) Treatment of the product with foreign microorganisms/protective cultures.

Protective cultures are specific bacteria that are harmless to humans and are intended to suppress undesirable microbial flora through their growth.

The use of protective cultures results in direct treatment of the fish product, which may also affect its sensory properties and is subject to mandatory declaration.

### Analysis and optimisation of the process environment

Monitoring and optimising the process environment, on the other hand, does not require any declarations and ensures a high level of food safety without affecting the product. By examining the individual process areas and steps, the current status can be assessed through a targeted analysis. "The distribution of germs and thus the potential for infection in the process environment of facilities can be identified through a targeted process environment analysis, and the risk of contamination can be achieved through tailored measures, which ensure sustainability in reducing the risk," emphasises Ralf



**In addition to the systems and equipment, all uilt-in peripheral surfaces – such as cable trays, pipework, recirculation units and open floor drains – are also accessed and sanitised.**

Ohlmann, Managing Director of Just in Air, a company specialising in the disinfection of production facilities. Safe and cost-effective optimisation strategies can be derived from the results. To complement structural and process-related optimisations, new, sustainable hygiene technologies can also be used for hygienic process assurance; these are distributed throughout the entire room via the simple application of fogging. Sustainable hygiene technologies consist of naturally occurring ingredients with BIO/FIBL certification, which are atomised via dual-component nozzles.

With the fogging application, the air throughout the entire room is homogeneously saturated with the natural active ingredient mist within just a few minutes, and all surfaces are evenly and finely wetted. "Unlike traditional foam disinfection methods, which only have a local effect, fogging reaches all surfaces as well as the air in the room, which means



**Ralf Ohlmann, Managing Director of Just in Air:**  
**"Unlike traditional foam-based disinfection methods, fogging reaches all surfaces as well as the air in the room, ensuring complete hygiene coverage of all surfaces present in the room."**

complete hygiene assurance for all surfaces present in the room," emphasises Ohlmann. Disinfection using this sustainability-based hygiene technology can be carried out semi-automatically via the use of ceiling nozzles, or fully automatically integrated into or onto the ventilation system, for every application and room size.

### Savings in time and money

In addition to process surfaces that come into contact with the product, such as conveyor belts, transport containers, etc., all built-in peripheral surfaces—such as cable trays, pipework, recirculating air units, and open floor drains—are also reached and sanitised at the same time. As the room does not need to be rinsed after the natural disinfection process, production can resume in the room immediately after application without any further effort. In a cost comparison with foam disinfection, the costs for this technology with sustainability are around a quarter lower and the time saved is approximately 30 per cent. ■



**As the room does not need to be rinsed after disinfection, production can resume immediately after treatment.**

### Free online seminar

On Friday, 8 May, 'Just in Air' is hosting a free online seminar on the topic: 'Sustainability in food safety and effective protection against product recalls'. Experts from the Fish Association, the fish processing industry, academia, building services engineering and food safety authorities will outline current requirements and offer tips on cost-effective implementation. Speakers and topics at [www.justinair.com](http://www.justinair.com). Register for the free seminar at [anmeldung@justinair.de](mailto:anmeldung@justinair.de).