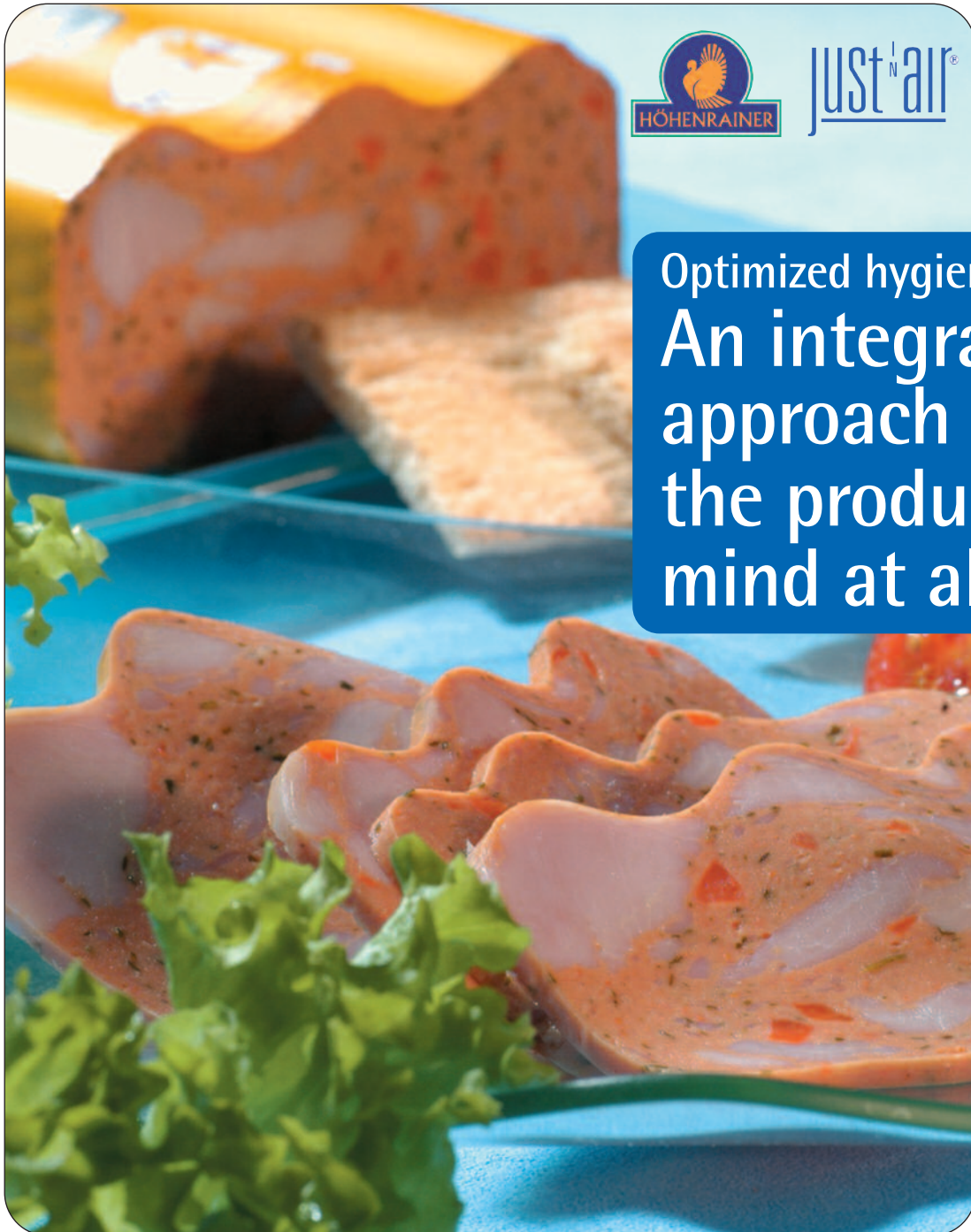


LEBENSMITTEL TECHNIK

Special Issue

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KOMPETENZ UND QUALITÄT

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Optimized hygiene:
An integrated
approach – keeping
the product in
mind at all times

ADVERT

A consultant with a concept

Control growth conditions for undesired microorganisms

For eight years now, Just in Air, a company from Bremen, Germany has been supporting the food industry in air and hygiene management issues.

"Serving the practice with practical experience" - this is the motto of Ralf Ohlmann, the managing director. The success to date proves that he is right with his philosophy.

Ohlmann's experience within the food industry is broad. He is a trained baker and chef and has continued his education further in food technology and industrial engineering. The next steps in his portfolio included working in industrial bakeries as plant manager and in the beverage industry, where he held the position of production manager. After that he turned to mechanical engineering, where he mainly focused on mixing, forming, filling and portioning. In this field, he had a close association with the meat, delicatessen and dairy industry. In 2000, he founded a company in Bremen, Germany. The company specializes in providing solutions for air and surface de-germination. Later, the Just in Air GmbH was added as a consultation and planning company for hygiene optimization. Ohlmann reports: "I am

using my 20+ years of experience for the benefit of our customers. I am familiar with the specifications a plant manager has to meet. We help to fulfill high quality requirements at low costs and we act as advisers on a colleague basis."

Just in Air approaches the problems from a different angle when compared to classical air conditioning companies. The main focus of attention is always the food product. Following a status analysis of hygiene and climate in the processing environment, optimization recommendations are compiled and implemented jointly with the client, if needed. Air conditioning

installations are also planned for the entire premises. "We consider ourselves to be experienced food technologists and we understand air conditioning issues," reports Ohlmann. "Our services include the compilation of specifications in which,



We are the interface between the food producer and the air conditioning technician.

Ralf Ohlmann

Emmi

Optimization of air conditioning technology

Emmi AG, Luzerne, Switzerland, is one of the European innovation leaders and trendsetters in the premium dairy product sector. This involves high standards in terms of production hygiene. In order to detect possible weak points in the plant in Ostermündingen, near Bern, Switzerland, Just in Air was recently asked to examine the hygiene and air conditioning conditions. Plant manager, Isidor Lauber reports: "It was our intention to optimize the filling areas for curdled milk products in terms

of room air ventilation, heating and air conditioning. The analysis of the operational condition was carried out by the specialists from Bremen." One from Lauber's staff attended an expert meeting on hygiene in plants organized by Fresenius last year where he met Ralf Ohlmann who lectured at that meeting.

The measurements and short tests at Emmi were conducted in the area of the cup filling line for curdled products over a period of three production days.

Lauber: "Our concerns regarding an insufficient ventilation of the production area were confirmed. The air conditioning needs to be optimized in terms of air flow quantity and design of air filters." Currently, a concept is being compiled to test the improvement recommendations provided by Just in Air. The critical data can then be compared on an objective basis (before/after). "We will use these evaluations as a basis for further steps," says Lauber. "I understand that we will enter the definite implementation phase in the plant, in June, 2008.

The main focus will be placed on our ventilation system." www.emmi.ch



Isidor Lauber

Höhenrainer

Master plan for the entire company

Höhenrainer Delikatessen GmbH, Großhöhenrain, Germany, produces an extensive range of turkey sausages. Optimum hygienic production conditions are at the top of the list of requirements. As a result, owner Florian Lechner is constantly concerned with respective improvements. The latest approach is the optimization of air management with the goal to secure its already high hygiene status.

LT: What was the reason for a weak-point analysis on hygiene and air conditioning in your company?

Lechner: In the past year, we have improved the room climate in our packaging areas with suitable measures. Due to the positive results, we will now compile a master plan which covers the entire facility. The basis for this is the survey done by Just in Air.

LT: Why did you decide to opt for this service company?

Lechner: Mr. Ohlmann has the necessary experience in our industry. He also has sufficient pragmatism to propose quick intermediate solutions without losing track of the long-term goal.



Products made by the Höhenrainer company

LT: Which departments were examined and what effort was used?

Lechner: All operating sectors were checked. The main focus was of course placed on critical operations such as slicing. Three employees from Just in Air were accompanied by our quality assurance personnel during three test days. The valuable exchange of experience during that time has already justified the effort.

LT: What were the most important results obtained from the collection of operational data?

Lechner: First of all, the confirmation of the already defined weak points as well as the "all-clear" for other areas. This makes a targeted handling of the problems

possible. The sum of all findings and the risk assessments are important and not just one individual case.

LT: How will you approach the improvements for the defined optimization potential and will these actions affect the hygiene status in the respective areas?



water without increasing the internal load. We take an integrated approach in developing a concept which is suitable for controlling the growth conditions for undesired microorganisms.

The managing director places much emphasis on the fact that Just in Air plans systems that suit the product and not products that suit the machines. This is the main difference when compared to traditional planning companies. "Another advantage is that we are food technologists," he stresses. "Furthermore, we consider the food law regulations and the certification requests from the trade. Other consultation and planning offices often find these issues too challenging." However, in order to achieve this, Ohlmann has had to train his staff himself. Therefore, a new employee is firstly always accompanied by an experienced worker



Florian Lechner

Lechner: We have conducted an information session for all employees concerned to sensitize them for the project. Asking an external consultation company adds authority to the

issue. The results have been discussed and solutions worked out - this includes immediate activities as well as long-term planning. The high hygiene status present under normal operating conditions can hardly be improved. But we would like to ensure that this normal condition is available at any stage of the production cycle.

LT: Are you planning any further projects with Just in Air?

Lechner: Now the implementation phase follows. The measures are frequently discussed with the hygiene experts in Bremen. For up and coming projects, for example, the renewal of our ventilation system, we will also seek the advice of these experts.

www.hoehenrainer.de

for example, the materials for the air conditioning units are also described. It is not always necessary to use expensive stainless steel. Sea water-proof aluminum will do the job equally as well. However, the weight is four to six times as much. Therefore, we have to take the structural calculations of the entire building into consideration, as we cannot plan something which is highly functional but that cannot be carried out without additional constructional stabilization."

Specifications provide uniform fundamental information and describe precisely the product's requirements. This way, offers from different air conditioning engineering companies can be better compared and technological planning faults can be prevented. Ohlmann explains: "We are the interface between the food producer and the air conditioning technician. We also know how to design ceilings in the most hygienic way and we know how floor drains have to be laid out for the proper and speedy discharge of

when visiting the clients. Ohlmann explains that: "It takes some time before new employees have gained sufficient experience so that they can work independently. Therefore, our company has grown organically. We must never forget that we are product oriented, with distinct quality."

Most of the projects that the engineering office handles come from the meat industry. Here, heat and moisture are produced during the cleaning processes for example. This industry also encounters uncontrolled air flows, in particular in chilled product areas. Such conditions are not really compatible. Formation of condensate is preprogrammed and with this the growth of microorganisms. Alternatively, the potential cost savings for the processes are very high. More than 80% of the activities of Just in

COVER STORY: AIR MANAGEMENT

Air are in Germany; here lies the highest growth potential. Other countries where projects have been realized include Italy, Greece, Switzerland, the Netherlands, Russia, Poland and Australia. "We often benefit from globally operating companies with business premises abroad," explains Ohlmann. The orders are handled following a proven schedule. "We have developed quite a successful routine over the past few years," reports Ohlmann. "This is really helpful. Without this, there would be the risk of getting muddled, in particular, in complex production plants." If there is an urgent problem, as for example, unexpected and spontaneous occurrence of mould in a plant, the hygiene specialists from Bremen can help with effective immediate measures within 24 hours. The remedying efforts might include supporting de-germination technology from the group's portfolio or a directed hygiene measure conducted by the client himself. An overall analysis of the situation including determination and elimination of causes will then follow later with the necessary calmness.<

When visiting a production location for the first time, the food technologists of Just in Air will often detect a number of problems. Experience brings this about.

Ohlmann: "We deliver our knowledge to the companies and we leave it with them so that it can be used for further developments.

We often show the QA manager the air conditioning system. This yields surprising effects as generally this is virgin territory for most people. In our opinion, the settings of the air conditioning system and its frequent maintenance must be checked by the quality assurance department, as this is a high risk area from where the microorganisms are distributed throughout the plant.

We deliver our knowledge to the companies and we leave it there so that it can be used for further developments.