

# LEBENSMITTEL TECHNIK

Special Issue

Offizielles Organ der Gesellschaft Deutscher Lebensmitteltechnologe e.V. (GDL), des Vereins Österreichischer Lebensmittel- und Biotechnologen (VÖLB) sowie Partner im DLG-Netzwerk für Lebensmittelverarbeitung

9 06

September  
38. Jahrgang  
H 4007

Air management

Improvement  
of environmental  
hygiene

Presented by

**JUST IN AIR**

Europaallee 12  
28309 Bremen (Germany)

Phone: (+49) 0421/4585534  
Fax: (+49) 0421/4585533

Internet: [www.justinair.com](http://www.justinair.com)

just<sup>in</sup>air®



# "We sleep better"

A reliably high hygiene status ensures safe production

Cheese dairy Champignon claims for itself to be leading in its segment in terms of technology, quality, safety and efficiency. Well-known brands like Cambozola, Rougette, and Champignon Camembert are part of its product range. Hygiene is essential in the production of soft cheese specialties. The plant management is constantly concerned with improving the hygienic conditions.

In 1908, Julius Hirschle made his first Camembert which had an extraordinary taste and was well accepted by the consumers. The product name was derived from the special flavor: Champignon Camembert. This was the beginning of a successful story that started with the acquisition by the Hofmeister Family in 1961 and lasts until today. The company group located in Lauben/Allgäu has about 1,050 employees. The annual turnover is in the range of 300m euros. 43 per cent of the products are exported. The Champignon Hofmeister group comprises the cheese dairy Champignon in Heising, the Hofmeister cheese dairy in Moosburg, the cheese dairy Mang in Kammlach, the blue cheese dairy Pfennenhausen which is a cooperation with the Hainichen dairy as well as Alpavit, a producer of dried milk and whey products in Heising. Furthermore, the group holds a share of the State dairy Weihenstephan. In the Champignon factory in Heising, 215 employees produce 13,000 tons of soft cheese each year in three shifts. The quality requirements are demanding. All important certifications such as ISO, IFS

economical efficiency and prevention of possible contamination via room air." On the other hand, more pleasant working conditions should be created for the production staff. Main focus was placed on

the reduction of temperature and humidity which in vital areas were among the factors giving reason to concern. These goals were quickly achieved with the competent support by the experts from Just in Air.

The status analysis displayed the environmental prerequisites in terms of hygiene and air conditioning as well as process-optimization measures including potential savings. For that, air-borne and sur-

face counts were determined, air temperature and humidity recorded, and the air flow conditions visualized. Furthermore,



“Now we have a hygienically safe process at any time”

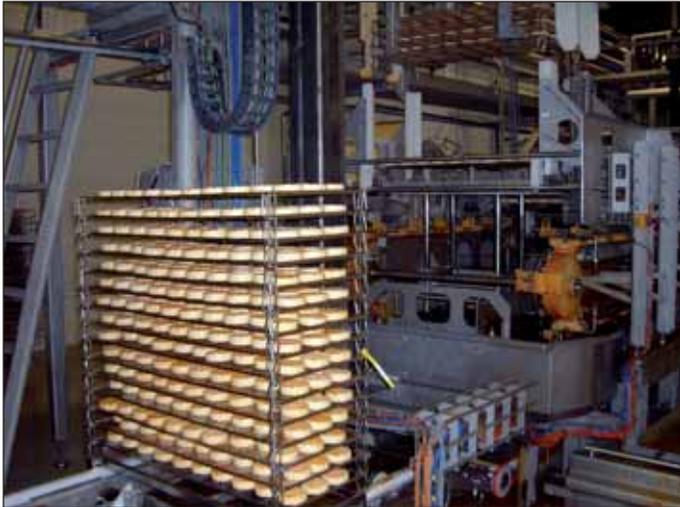
Plant manager August Etzlinger

and BCR are available, even at higher levels. Nevertheless, in a production facility of this size there is always something to improve. For example in the field of air hygiene as done recently. Based on an analysis of the room air conditions, conducted by the consulting and planning company Just in Air, Bremen, Germany, optimization measures were

implemented. Plant manager August Etzlinger says: "We wanted to have our already very good hygienic status as well as our operating procedures checked by an external expert for assessment of the



Some products from the company's product range



Coating unit in the cheese processing center

open now. To play it safe, a special mobile unit, a so-called streamer, distributes every ten minutes the degermination agent for one minute in the air inside the hall.

technology transfer for the benefit and the satisfaction of our clients." Interfacing solutions for optimization were introduced to Champignon and presented in an integrated concept. The internal implementation factor was very high. With compara-

the operating processes were examined and possible weak points in the field of process engineering determined. This examination at Champignon took two days and did not impede the production. Production manager Robert Kuhl, responsible for the cheese processing in the company, was always present: "I learned a lot about room air evaluation, for example how to determine air flows and the resulting identification of problem areas. The overall considerations by the expert and the following simple depiction of optimization measures were very impressive." This belongs to Just in Air's philosophy. General manager Ralf Ohlmann: "We have the responsible person participate in our work and are thus jointly able to keep the achieved status. We consider this as

bly simple modifications and lowest economical effort large effects could be achieved after only a few days. "For example a more powerful motor was integrated



This entire hall area is flooded by degerminated air



It is of utmost importance that no foreign microorganisms shall be carried over into the ripening room

into the air conditioning unit," explains Kuhl. "Now we can circulate 5,000 m<sup>2</sup> air per hour

in the hall area." Thanks to the consultation, Robert Kuhl now knows that constant circulation of fresh air is extremely important for a proper hygiene standard. Therefore, most of the doors in his production area which lead to the hall will be kept

Another measure for improved hygiene was the sealing of the gaps at the doors of the air conditioning unit with simple adhesive tape so that no undesired contamination can originate there. This is a good example to show how a large effect can be obtained with simple means. Kuhl seems to be satisfied with what has been done. "Due to the optimization measures



State-of-the-art arrangement of ventilation ducts

PICTURES: ST.



Humid and warm air from the hurdle washing area which previously migrated and partly condensed in other operating room (environment for microorganism growths) is no problem any longer due to the high fresh air infeed.

For Etzlinger, the improved hygiene has an important side-effect: "We sleep better" St./cs

www.champignon.de  
www.justinair.com

recommended by Just in Air we have improved the hygienic climatic conditions enormously. Etzlinger also emphasizes the aspect of time. "From the first contact to the implementation it took only four months despite the fact that we were not under pressure with the situation so that we well took our time. For Ohlmann quick reaction and action is a vital aspect: "Many companies expect quick help. We are able to offer our clients in extremely urgent cases a reliable problem solution concept within only a few days after the

first contact. This is possible because our food technologists and technical process engineers are highly experienced and have the necessary practical experience to recognize problem areas immediately and to offer respective solutions. At Champignon, the measures were implemented within a few days after the presentation of the analysis results. Kuhl: "The consultation immediately pays off." 80 per cent of the safeguarding measures were internal work; the rest is done by the degermination technology applied.



Robert Kuhl visualizes the air flow with a fogging unit

## Air degermination in salami production Successful against foreign mould

Just in Air was able to help quickly with a problem in the meat producing factory Wiltmann. Within one week, a suddenly appearing contamination with foreign mould could be completely managed. One aspect that had to be taken into consideration was that the "good germs" urgently required for the production of mould-ripened salami were not harmed. André Behrmann, company secretary and co-owner of Wiltmann and responsible for the production

explains: "We apply special mould on the sausages' surfaces to achieve a visual and sensory effect. The hygiene requirements are very high. No foreign mould is allowed." After the quickly multiplying foreign mould had been detected immediate action was required. The day after they were asked for help, the hygiene experts from Bremen conducted an environmental analysis and also set up degermination units in the affected areas as kind of troubleshooting measure. Behrmann: "The process was easy and immediately successful. First of all the contamination of the infeed fresh air with the undesired foreign mould was stopped. Thanks to the degermination agent it was possible to actively treat the air even during normal production hours. Significant air-borne count reduction could be recorded very soon. In the following days, the problem solution has been further optimized, so that the production manager now summarizes: "Even though the foreign mould is still present in the outside air, it is no longer detectable in the production areas. Thus the use of the agent has resulted in safer hygiene condition. The seasons with a higher air-borne load (autumn and winter) are still to come but we are confident that the measures taken will still successfully exclude a contamination with foreign mould."

Based on this experience, Behrmann can imagine securing the hygiene status in other departments of his company as well with the help of Just in Air. "We are currently running some intense tests in a new, sensitive area. If we see the economical sense, then we will also rely on the air degermination technology described here."

### Company portrait Wiltmann

Company: Franz Wiltmann GmbH & Co. KG Westfälische Fleischwarenfabrik

Location: Versmold-Peckeloh  
Founded in: 1887

Management: Jürgen Behrmann, Dr. Wolfgang Ingold

Employees: approximately 900

Annual sales volume: more than 150m euros

Production area: approximately 90,000 m<sup>2</sup>

Processing capacity: 160t meat per day

Product range: Premium dry sausages (70%), special raw and cooked sausages (25%), pie and ham delicatessen (5%)

Quality standard: IFS

Internet: www.wiltmann.de

