Black Forest Ham PDO
SCHÖTER, TWO SMES, AND A MUSEUM

CUSTOMER REPORT
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Black Forest ham, a raw ham with a characteristic smoky flavor, is becoming increasingly popular around the globe. In this context, manufacturers place significant value on a traditional production process with natural smoke generated using wood from local conifers. And for this production process, the Gustav Winterhalter meat products company and Das Schwarzwaldhaus, a joint venture by the Klümper and Spinner companies, rely on state-of-the-art systems technology from Schröter.

The Gustav Winterhalter GmbH meat products company was planning an expansion at their company headquarters in Elzach. In contrast, the Spinner and Klümper companies were planning to build a new production facility in the town of Gengenbach, on the western edge of the Black Forest, for the jointly owned Schwarzwaldhaus Schinken und Wurstdelikatessen GmbH. “At both companies, craftsmanship is the top priority,” reports Klaus Schröter. “The classic natural smoking process with coniferous wood and sawdust gives the ham its characteristic taste.” It was important to both manufacturers that they could carry out all production processes influenced by climatic conditions continuously and regardless of the season. This is now guaranteed thanks to the systems from the East Westphalians town of Borgholzhausen.

State-of-the-Art Systems for the Black Forest Delicacy

Back in 1856, Nikolaus Winterhalter opened a small butcher shop at the site of the current headquarters and over time it developed into a company that now has 150 employees and sells its high-quality products at a total of eleven different locations. Since 1995, Winterhalter has produced these products in a combined slaughterhouse and production facility approximately 2,000 square meters in size. For its current expansion, Schröter installed two CLiMAjet BR 16 cold drying systems for ham as well as two CLiMAjet NR 36 post-maturing systems for ham. These systems not only guarantee that products are uniformly matured with the necessary weight loss, but also that all Black Forest ham products offer a consistent taste experience. Consumers can see the variety of Black Forest products for themselves at the factory store.

From Hand-Crafted to Industrial Production

Customers at Schwarzwaldhaus GmbH’s factory store will also find more than just Black Forest ham – they can choose from other smoked Black Forest products such as Vesperpeck (snack bacon), smoked farmer’s sausage, Pfefferbeißer (spicy raw sausage), and Landjäger sausage. The company was founded in 2015 by General Manager Frank Spinner and his Westphalian partner H. Klümper GmbH & Co. KG. Its origins lie in a meat products company that is over 100 years old. Since the business continued to grow, the company had no choice but to move into a new facility. Today, a total of 45 employees produce 15 to 20 tons of Black Forest ham, which is also exported to England, France, Austria, and Poland. When it comes to its products, the company’s philosophy is “premium quality from handcrafted tradition.” And this tradition is exactly what posed a challenge to Schröter: “We needed to convert a production department that previously had a more artisanal focus into an industrial one. Yet at the same time, the ham product needed to remain unchanged,” describes Frank Mack, Sales Director and Holder of Prokura at Schröter. And Frank Spinner highlights the advantages of the innovative production systems: “We now also benefit from outstanding quality and uniform results with larger batch sizes as well. In addition, Schröter managed to retain our traditional method of handling products despite the use of automated program sequences. As a result, we continue to smoke our Black Forest ham with brushwood from fir trees, for example.” After completing the project, all those involved at the two Black Forest companies agreed that the collaboration with Schröter was exemplary on all levels, regardless of whether in business-related, operational, or service-related activities – meaning perfect conditions for future projects together.
Expertise and Service

General Managers Thomas Winterhalter from Metzgerei Gustav Winterhalter GmbH and Frank Spinner, Schwarzwaldhaus Schinken und Wurstdelikatessen GmbH, talk about their experiences with Schröter Technologie GmbH & Co. KG.

MEETING POINT: Had the companies completed any projects together prior to the current project?

THOMAS WINTERHALTER: Yes, 20 years ago. Back then, Schröter upgraded existing systems and adapted them to our needs at the time with regard to maturing and drying. We ordered the first two CLIMAjet post-maturing systems for Black Forest ham in 2003.

FRANK SPINNER: This was our first project together but our partner company, Klümper from Schüttorf, has had a successful business relationship with Schröter for ten years.

MP: What was the focus of the current projects?

WINTERHALTER: For the expansion of our production facility, Schröter installed two ham cold-drying systems as well as two ham post-maturing systems.

SPINNER: At our new production facility, we now produce using two CLIMAjet BR 30 ham cold-drying systems, four CLIMAjet KR 30 ham smoking systems, a CLIMAjet KR 2 ham smoking system, a CLIMAjet NR 21 ham post-maturing system, two THERMICjet HRKR 1 hot smoking/cold smoking systems, and a THERMICjet KK 400 kettle-based system. We control the production systems using the InTouch process control software. In addition, we also have an automated cleaning system.

MP: Why did you select Schröter?

WINTERHALTER: Because the employees have impressed us with their expertise, outstanding advice, and professional service for over 20 years.

SPINNER: Our partner’s long-term collaboration with Schröter was the best recommendation.

MP: What do you particularly appreciate about Schröter?

WINTERHALTER: Schröter’s employees are professional partners that always have an eye on our needs.

SPINNER: To me, it’s the knowledgeable and professional way Schröter fulfilled our project requirements and the fact that their systems are extremely reliable.

MP: Mr. Winterhalter, Mr. Spinner, thank you very much for your time.
NOT A TANK, BUT A PUMP – NOW WE’RE SMOKING!
New SMOKjet RL Liquid-Smoke System

Schröter introduces an impressive new generation of liquid-smoke systems with an easy-to-operate spraying process and excellent smoking results.

In the previous system, a stainless steel tank was filled with liquid smoke and then pressure was applied to the tank during the smoking process to channel the liquid smoke within the system to a two-fluid nozzle. This nozzle was connected to both the liquid smoke and compressed air, which, under the right amount of pressure, created the perfect amount of spray. The liquid smoke’s flow rate was displayed via a small flow tube and adjusted manually via the pressure applied to the tank. The system’s operator needed to clean the system himself, fill the tank with liquid smoke by hand, and continuously monitor the liquid smoke’s flow rate and the nozzle pressure – which meant this system was not very easy to operate.

New Liquid-Smoke System Much Easier to Use

The previous liquid-smoke system was not suited for use with large and automated production systems, such as the CONTjet. As a result, Schröter made advancements to the liquid-smoke system for a CONTjet it installed in 2015. The revolutionary thing about the new system is that a pump is used to supply liquid smoke to the two-fluid nozzle. The pump is controlled via a small variable-frequency drive and channels the ideal amount of liquid smoke to the nozzle. As a result, a stainless steel tank is no longer necessary. The pump siphons the liquid smoke from a large, unpressurized liquid-smoke tank to the system’s two-fluid nozzle. The adjustable speed of the pump and the pressure of the air entering the nozzle determine the liquid smoke’s flow rate. Both the liquid smoke’s flow rate and the pressure of the air entering the nozzle are measured with electronic sensors. These measurements are displayed visually, documenting the ideal level of liquid-smoke spray and the excellent smoking result. Issues with the supply of liquid smoke (e.g. if the tank is empty or the valve or pump is malfunctioning) or with the supply of compressed air at the nozzle (e.g. if compressed air is no longer being supplied or if the valve is malfunctioning) are immediately detected, displayed, and signaled.

The Schröter control unit’s display shows the level of pressure at the nozzle (6.0 bar in this case), the liquid smoke’s flow rate (8.0 liters per hour), and the pump speed (45%). Threshold values for the level of pressure at the nozzle (5.5–6.5 bar) and the flow rate (7.0–9.0 liters per hour) have been defined, and an alarm is activated in the event of deviation. This means the operator can quickly see if something is wrong. In addition, the status of the valves (“air” and “liq” for the compressed air and the liquid smoke) and of the pump (“on” or “rev”) are displayed.
Schröter and the State Vocational School for Meat and Food Processing Technology in Kulmbach have been working together closely since August 2011. Now the equipment manufacturer is expanding this partnership, which combines theoretical knowledge and practical application in an ideal manner, with additional state-of-the-art systems technology.

Until now, students at the school in Kulmbach were able to use a CLIMAjet-KR 2 climatic smoking system with multi-channel technology to gain valuable practical experience in the ideal method of smoking and maturing hanging and laying products, primarily small-diameter raw sausage. But it wasn’t just the students who benefited from Schröter’s system. An increasing number of inquiries were received from meat products manufacturers, who value the school’s expertise when carrying out a variety of projects. As a result, Schröter is once again showing its commitment to the school and equipping it with additional state-of-the-art systems. Right on time for the start of the 2016/2017 winter semester, a THERMIChet HR 1 hot-smoke cooking system and an ARCTiCjet iK 1 shock-cooling system will be added to the school’s portfolio.

Perfect Equipment for New Projects

The two systems are equipped with numerous special features, such as showering, cooling, and humidification solutions. Integrated process control with data visualization as well as in-process energy management are both added bonuses. “All of this forms the basis for many new projects,” says Klaus Schröter, pleased about this successful investment, which all parties will benefit from. On the one hand, the students and those involved in the projects will be able to utilize both innovative systems and Schröter’s years of expertise, and on the other hand, Schröter will be able to use the systems to conduct tests and customer trials during school breaks. All those involved at the school and at Schröter agree that the current investment increases the quality of education and, as a result, offers the students better prospects for the future. True to the school’s motto: “More Expertise – More Opportunities – More Future!”

“MORE EXPERTISE – MORE OPPORTUNITIES – MORE FUTURE!”

Schröter Installs State-of-the-Art Systems Technology at the State Vocational School in Kulmbach

AT A GLANCE

An Investment in Research

- **August 2011:** Schröter Technologie GmbH & Co. KG and the State Vocational School for Meat and Food Processing Technology in Kulmbach enter into a partnership agreement.
- **2011/12:** The school successfully completes initial tests and projects.
- With one project, the school wins the renowned DEVRo prize, which is valued at 4,000 euros and is awarded by the Devro-Stiftung Günter Fries.
- **Winter semester 2016/2017:** Schröter installs a THERMIChet HR 1 hot-smoke cooking system and an ARCTiCjet iK 1 shock-cooling system.
- **Special features** include showering, cooling, and humidification solutions.
MEET SCHRÖTER’S BOOKKEEPING AND ACCOUNTING DEPARTMENTS

For these Employees, it’s all about the Money!

The employees responsible for all of a company’s financial matters are always in the background, but nevertheless incredibly important. At Schröter, a seven-member team in two departments is responsible for ensuring that everything related to cash flows stays flowing smoothly.

A Well-Rehearsed team

Three female employees are responsible for accounting: in this department, Martina Höcker, Kerstin Uhlenhaut, and Jeanette Klopfer draw up invoices and credit memos, prepare statements of accounts, and handle warranty claims and service provided as a gesture of goodwill at the company’s expense.

The bookkeeping department is not only called upon when dealing with accounts payable, accounts receivable, and travel expenses. Ute Schütter, Christina Schewe, and Dietmar Kaiser are also responsible for wage and payroll accounting for all employees. Uwe Galen, who was promoted to General Manager in April 2016, is head of the company’s finance and human resources departments. In this position, he is a point of contact for customers, representatives, insurance companies, accountants, and last but not least, the company’s principal banks, among other duties.

MUSEUM OF BLACK FOREST HAM

Interactive, Multimedia Exhibition on the Feldberg

At the initiative of the Association of Black Forest Ham Manufacturers, a one-of-a-kind museum dedicated to the culinary embodiment of the entire region – the Black Forest ham – has been established on top of the highest mountain in the Black Forest. Across approximately 60 meters of floorspace on the first floor of the Feldberg tower, visitors can find out what a smoke kitchen looked like 100 years ago, what it means when the ham is “burned,” and why the ham has traditionally been smoked over local coniferous wood for 300 years. “We are extremely pleased about the opportunity to support this interesting project as one of the sponsors,” says Klaus Schröter. “Here, consumers can learn about every detail of Black Forest ham production.”

Numerous interactive, multimedia stations invite the guests to look, smell, touch, and listen. For example, there is a box where visitors can smell the spices used to make Black Forest ham: bay leaves, pepper, and coriander. In addition, visitors travel back in time when watching a video message from a contemporary witness who explains how ham was smoked in the Black Forest in the past.

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