SCHRÖTER
LEADING QUALITY

The Schröter Collection

Every System. Every Technical Detail. Every Solution at a Glance.

OPENING STATEMENT BY MANAGEMENT

Dear Readers,

Our Schröter reference book invites you to discover a world of innovative technologies for the food industry. Over many years it has served as a valuable source of information and not only offers comprehensive insights but also provides inspiration for forward-looking technologies.

On the following pages you will find solutions that set standards worldwide. From the planning of individual production systems to their technical implementation in the company. Our systems cover a wide range of applications: they steam, smoke, cook, bake, boil, chill, defrost, ferment, dry, incubate and pasteurize meat and sausage products, fish products, cheese, pet food, and alternative proteins with the utmost precision – tailor-made for a wide range of requirements. However, our mission is always the same: your success is our top priority.

Whether long-standing customers or new prospects – this collection is for everyone who values partnership and innovation in food processing. Let us inspire you and convince you of the variety and quality that characterize Schröter Technologie. Leading Quality is our claim. A claim we are committed to and one that we put into practice every day.

KLAUS (LEFT) AND DIETRICH SCHRÖTER

Best regards
Klaus and Dietrich Schröter

Contents

Local roots, global leader

For over 75 years, Schröter Technologie has stood for precision, quality, and innovation – characteristics that are firmly rooted in our East Westphalian homeland. Our region is known for its reliability and pragmatic approach. Values that also shape our company and that we proudly display to the world.

From our location in Borgholzhausen, we supply custom systems for the food industry to over 80 countries. Whether for meat and sausage products, fish, cheese, vegetable proteins, or pet food: our solutions are individually tailored to our customers' production processes.

Not only are we a reliable partner in manufacturing, but also a pioneer of efficient technologies. Under our brand promise Leading Quality, we develop products that impress with their durability, flexibility, and innovative strength – valued worldwide, rooted in the region.

Innovation and durability

The world of food processing is as diverse as the requirements of our customers. This is precisely where Schröter's product portfolio excels, with a range of systems that leave nothing to be desired.

Our systems smoke, steam, boil, cook, bake, chill, defrost, ferment, dry, incubate and pasteurize – with the utmost precision. From classic artisanal businesses to large-scale industrial production, we plan, design, and implement solutions that are individually tailored to your needs.

Schröter production systems stand for technological excellence and innovation. We not only cover all the important steps in food processing, but also set new standards in the industry with our control, monitoring, and cleaning systems, a wide range of exhaust air cleaning systems, and energy-efficient operation.

On the next pages, discover how diversity, flexibility, and quality combine to form best practices. Schröter – your first choice for systems that set future-proof standards: Leading Quality!

SCHRÖTER PRODUCTION SYSTEMS

List of abbreviations

- **THERMICjet®**
  hot-smoking systems (HR), hot-smoke / cooking systems (HR), hot-air systems (HL), warm-smoke systems (WR), drying systems (TR), cooking systems (KA), kettles (KK), pasteurization systems (PA), JetSmoker (JS)
- **BAKEjet®**
  baking / roasting systems (BA), CrossBack horizontal airflow principle, CrossFlow rotary baking method
- **ARCTICjet®**
  intensive chilling systems (IK), shower systems (DA), chilling basins (KB)
- **SEMIjet®**
  hot-smoking / intensive chilling systems (HRIK), cooking /intensive chilling systems (KAIK), baking / intensive chilling systems (BAIK)
- **CONTIjet®**
  continuous production line
- **CLIMAjet®**
  climatic cold-smoking systems (KR), climatic raw-sausage systems (KR), climatic ham production systems (KR), climatic maturing systems (NR), climatic post-maturing systems (NR), defrosting systems (AT), multi-airflow system (MAS)
- **FISHjet®**
  fish hot-smoking systems (HR), fish warm-smoking systems (WR), fish cold-smoking systems (HR), fish drying systems (TR)
- **SMOKjet®**
  wood chip smoke generator (RH), saw chip smoke generator (RS), steam smoke generator (RD), friction smoke generator (RF), liquid smoke (RL)
- **CLEENjet®**
  thermal oxidizer (TNV), scrubber (RWK), waste heat recovery (WRG)

ICON OVERVIEW

Areas of application for Schröter systems

THE SCHRÖTER SERVICE CONCEPT

Global customer focus

At Schröter, our service begins long before construction. The customer's individual requirements and goals are analyzed and implemented as early as in the planning phase. Comprehensive advice, including regarding technical capabilities, guarantees perfectly tailored solutions. This product technology consulting not only helps to ensure feasibility, but also identifies optimization potential at an early stage. New products can also be thoroughly tested and optimized in our in-house technology center.

Worldwide installation and commissioning
Following on-site installation – performed in other countries by our international partners – the next step is technical commissioning. Both the functionality of the system and safety-relevant components, such as motors, are thoroughly tested to ensure safe and smooth operation.

Spare parts and on-site service
A network of international representatives and service partners ensures that customers get the support they need worldwide. Service and inspection contracts are just as much a part of the service offering as remote services and the availability of spare and wear parts. This minimizes downtime.

Thanks to this approach, Schröter ensures that the customer's interests always take center stage – from the initial idea to comprehensive support following commissioning. After all, Schröter's service is always Leading Quality, too.

–
TECHNOLOGICAL EXPERT ADVICE:
Competent support from Schröter technical consultants on site

THERMICjet®

The THERMICjet® system is the ideal solution for steaming, boiling, smoking, cooking, and drying food. Thanks to standardized processes and a uniform design, it ensures consistently high product quality and reliable production. Whether single-row or double-row system, for all sizes and shapes of transport wagons – the THERMICjet® meets the highest standards of efficiency and precision.

Application areas	› **HR:** Roasting, drying, hot smoking, cooking, steaming › **KA:** Steaming, cooking › **HL:** Roasting, drying, cooking, boiling › **WR:** Warm smoking, drying › **TR:** Drying › **KK:** Cooking, boiling, blanching › **PA:** Pasteurizing, cooking › **OPTIONAL:** Cold smoking, air cooling, shower cooling, baking
System concept	› Single-row or double-row systems › Transit (flow-through) version possible
Transport unit	› Rolling wagons › Transport racks › Stacking modules › Overhead conveyors/hanging racks
Temperature range	› Depending on the process up to 110 °C (baking up to 180 °C)
Automatic inspection display	✓
Remote maintenance	› Online access possible
Process data management	› Integration into central process control software

PRECISION MEETS VERSATILITY

High-performance hot smoking and cooking systems

Our THERMICjet® sets standards in food processing and combines all essential processes in one system: boiling, steaming, smoking, cooking, roasting, drying and shower cooling. Thanks to its design and optional add-ons, such as a baking system or cooling coil, the THERMICjet® adapts perfectly to individual production requirements. With a choice of door systems – from the standard swing door to the lifting door – the system is a versatile solution for both industrial and artisanal customers.

Outstanding process solutions

The THERMICjet® is available in two main versions: as a hot-smoke cooking system (HR) and as a pure steam cooking system (KA). Both variants impress with their precise control, high energy efficiency, and precisely repeatable processes. The system design and manufacturing quality guarantee the highest standards of hygiene.

Both industrial and artisanal customers benefit from our highly developed THERMICjet® systems. Whether large-scale industrial systems or compact single-wagon units – the versatile design and flexible combination options offer customized solutions to suit every requirement.

THERMICjet® cooking kettle systems impress with their steam and air-tight design, which ensures maximum efficiency and product safety. They can be heated using low / high-pressure saturated steam, which is blown into the heating jacket on several sides to ensure precise temperature distribution. The resulting condensate is returned to the steam generator via a steam trap and a collecting pipe. A cooking kettle can also be heated electrically or with gas, with a choice of direct or indirect heating with thermal oil.

–
KETTLE AND COOLING BASIN INSTALLATION
with 1,000 liter kettle volume

–
THERMICjet® HR-1 JS
Single-wagon system,
type: JetSmoker

–
HOT-SMOKE COOKING SYSTEMS
10 wagons, single-row

–
HOT AIR DRYING SYSTEMS
for pet food

Features for maximum efficiency

Thanks to vertical air circulation with alternating air flow and flexible loading systems, the THERMICjet® processes both large and small batches – depending on the size of the system – evenly and efficiently. Interval showers ensure initial cooling of the products and integrated cleaning systems provide for maximum operational safety and hygiene

In order to prolong the shelf life of products, Schröter offers pasteurization systems that are characterized by a particularly product-friendly pasteurization principle. They are ideal for specialties such as brown bread, salmon roe, or meat products. The products are ideally thermally treated in heat-resistant containers stacked on EUR pallets. The pasteurization process works with low-pressure steam, which heats the interior of the system to around 100 °C at a pressure of 140 mbar. During this phase, the pressure is carefully regulated to avoid damaging the product. The supply of compressed air or additional low-pressure steam ensures the integrity of the packaging, such as film packaging.

–
INFEED SIDE WITH SPACE-SAVING LIFTING DOORS
on three pasteurization systems

SCHRÖTER THERMICJet®
Hot smoking in operation

Leadership through quality and flexibility

Our THERMICJet® offers users impressive flexibility. The systems and services are tailored to different products and production sizes in order to guarantee the best possible results. In addition, energy-efficient process management not only delivers savings, but also ensures sustainable operation. Thanks to the integrated automatic cleaning system with optional interior cleaning, the highest hygiene standards are maintained and the cleaning effort for staff is significantly reduced. These properties ensure that the THERMICJet® represents a real competitive edge for your production processes.

BACON PRODUCTION
with hanging racks for high production output (e.g. batch size 42 tons)

AT A GLANCE

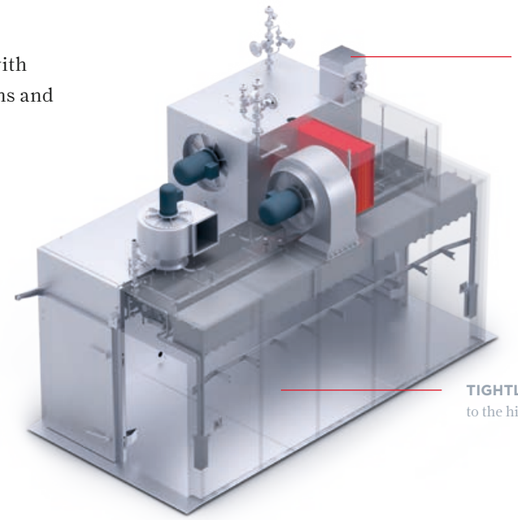
The most important features

- Customized loading systems for transport wagons, floor racks and overhead rail systems
- A high-temperature baking system can be included
- A cooling coil can be integrated for fermentation and cold-smoke processes
- Supports digital optimization through remote access and data analysis

SCAN THE QR CODE!
This code will take you to our product page with technical information.

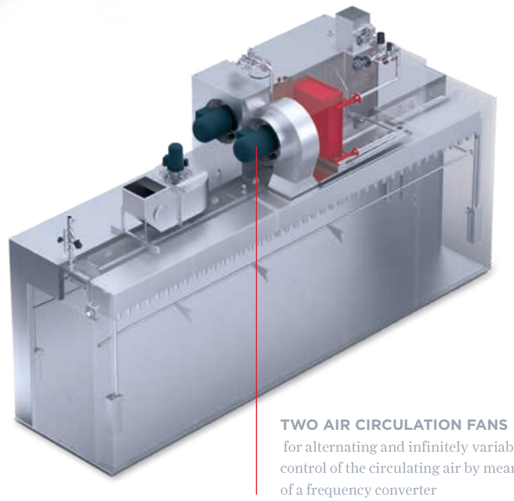
THERMICJet® HR

Double-row system with two air circulation fans and one exhaust air fan



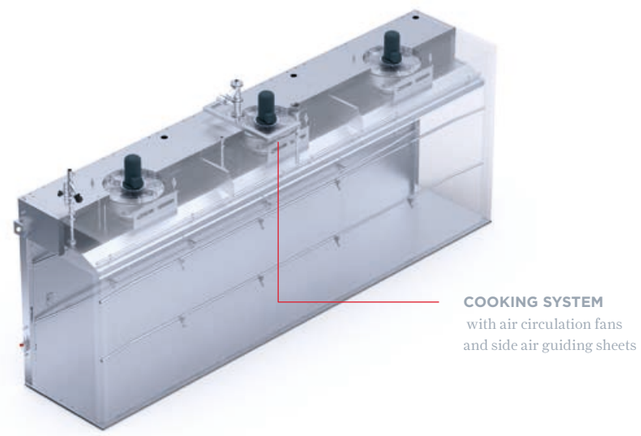
THERMICJet® HR

Single-row system with fully insulated machine housing and two fans



THERMICJet® KA

Energy-efficient fans ensure that products are heated in an ideal manner



BAKEjet®

The BAKEjet® system is the ideal solution for baking, roasting, browning, and cooking a wide variety of products. With its innovative air flow technology, it combines uniform product results with high efficiency. The BAKEjet® sets its own standards in uniform processing and fulfills the highest demands for quality and versatility.

Application areas	› **BA:** Baking, roasting, browning, cooking
Air flow concepts	› CrossFlow – rotary baking method (single wagon) › CrossBack – horizontal airflow principle (1 to 6 wagons) › Baking and cooking system with vertical air flow system (1 to 6 wagons)
System concept	› Single-row design › Transit (flow-through) version possible
Transport unit	› Rolling wagons and racks
Temperature range	› Up to 250 °C
Automatic inspection display	✓
Remote maintenance	› Online access possible
Process data management	› Integration into central process control software

PRECISION IN HARMONY

Perfection for baking, roasting, browning, and cooking

The BAKEjet® combines cutting-edge air flow technologies with precision and versatility for perfect processing of a wide range of products. Thanks to our innovative air flows, maximum uniformity is achieved with optimum use of energy.

BAKEjet® BAKING SYSTEM
CrossBack version with two door levers

The core strengths of CrossFlow
The horizontal air flow and modern control technology guarantee uniform product results, regardless of size or shape. The CrossFlow-specific rotating device with lifting mechanism ensures maximum product uniformity. The fully insulated chamber offers high energy efficiency.

Maximum benefit for your production
The BAKEjet® boasts a high loading capacity and density. Fast and effective process times minimize weight losses. On the CrossFlow system, precise temperature control ensures consistent product results at all times. The CrossFlow system is designed and built for daily industrial use.

PRODUCT EXAMPLE
Roast pork with crust

PRODUCT EXAMPLE
Roast pork

SPECIAL BAKING MOLD
with 3-point core temperature measurement

PRODUCT EXAMPLE
Liver pâté

THE BAKEjet®
is perfect for evenly baking products like meatloaf

Outstanding process solutions

With a maximum temperature of up to 250 °C and flexible adaptation to different loading systems, the BAKEjet® offers precise control of all baking, browning, and cooking processes. Depending on product height and loading density, customers can choose from three different air flow systems:

- The CrossFlow rotary baking method as a single-wagon system
- The CrossBack as a single-row system with reversible horizontal air flow system for 1 to 6 wagons
- In THERMICjet® systems with a vertical air flow system, the baking system can be integrated up to max. 180 °C, subject to an appropriately adjusted loading density

DEPENDING ON PRODUCT HEIGHT, baking or smoking wagons with more than 40 layers can be used

PRODUCT EXAMPLE
Caraway roast

CRISPY BACON SLICES
on 20 x 20 mm mesh trays

AT A GLANCE

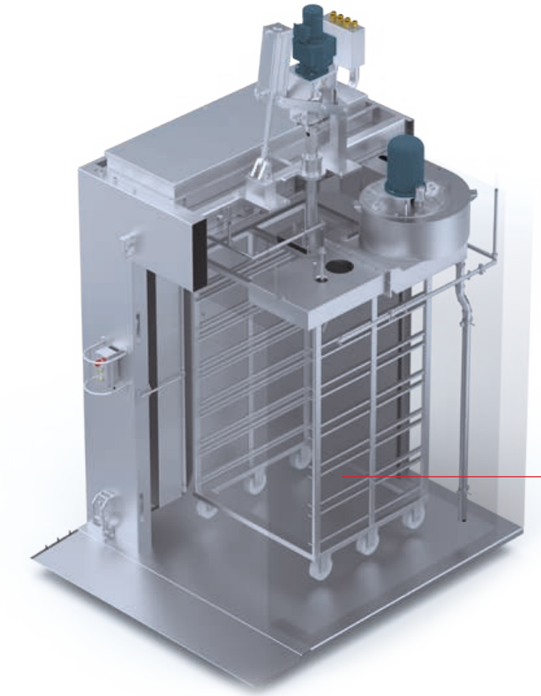
The most important features

- Available with various air flow systems
- Precise control for consistent product results
- Energy-efficient design and sustainable processes
- Automatic cleaning and digital monitoring functions

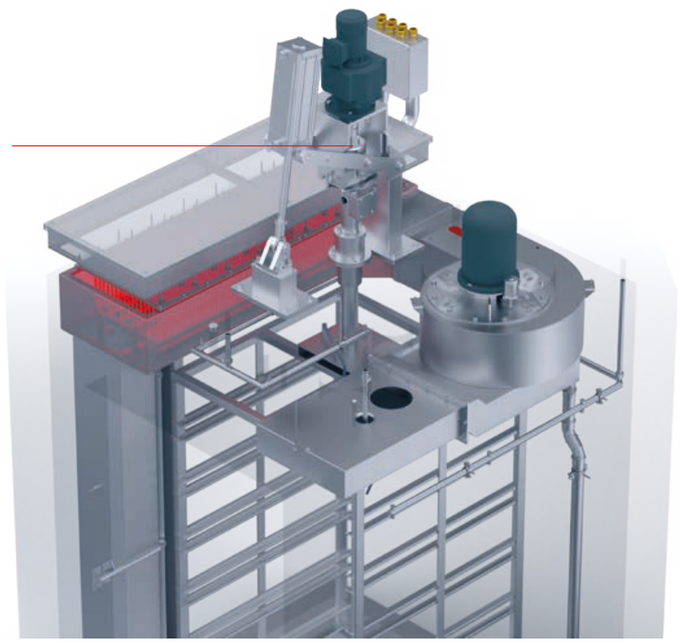
SCAN THE QR CODE!
This code will take you to our product page with technical information.

BAKEjet®

Rotary baking system for consistent baking results



BAKING WAGON
with mounting head for rotating device



PNEUMATIC LIFTING AND ROTATING DEVICE

ARCTICjet®

The ARCTICjet® system is an intensive chilling and shower cooling system and is the preferred choice for product applications that require short process times and repeatable results. It is particularly suitable for products that need to be cooled down quickly in order to maximize shelf life and maintain product quality. For additional flexibility, the system can be extended with a cooking function on request.

Application areas	› **IK:** Cold air chilling, alternatively shower cooling with ice water › **OPTIONAL:** Steam cooking function › **DA:** Shower cooling with potable water
System concept	› Single- and double-row design › Transit (flow-through) version possible
Transport unit	› Rolling wagons › Transport racks › Overhead rail hanging racks
Position of the cooler	› On both sides or centrally above the row of wagons
Automatic inspection display	⊘
Remote maintenance	› Possible
Process data management	› Integration into central process control software

EFFICIENCY MEETS PRECISION

Intensive chilling for effective processes

The ARCTICjet® system is characterized by fast chilling times and seamless integration into existing production processes. Different cooling media such as ice water, cold air, or brine ensure the best results when treating the products. Two system concepts are available with the ARCTICjet®. The cooling coil can be arranged on both sides or centrally above the transport unit.

Performance features of the ARCTICjet® intensive chilling system
The ARCTICjet® intensive chilling and shower cooling systems are ideal for fast and controlled chilling of heat-treated products. These systems enable efficient pre-chilling by means of shower cooling and help to achieve low core temperatures thanks to intensive cold air chilling.

The use of different cooling media such as cold air, potable water, ice water, or brine ensures precise adaptation to the respective products and operational requirements. This extends the shelf life of the packaged product.

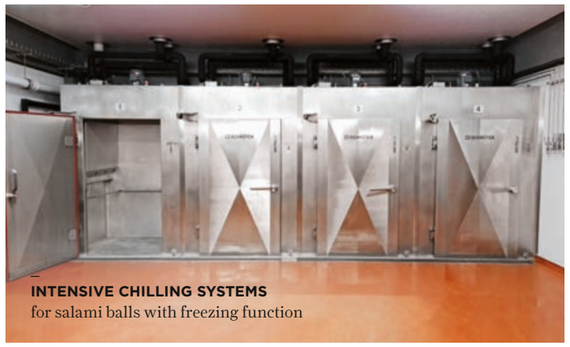
ARCTICjet® intensive chilling systems stand out thanks to their powerful air circulation, which enables an impressive cooling effect. This shortens process times and optimizes product shelf life. The rapid passage through the critical temperature range also reduces the risk of bacterial growth to a minimum.

Another option of ARCTICjet® systems is the integration of a steam sanitizing device which, in combination with an efficient cleaning system, ensures reliable operational and product safety. Schröter therefore not only offers effective chilling, but also the highest level of hygiene and process reliability.

– **INTENSIVE CHILLING SYSTEMS**
with one operator panel per system

– **INTENSIVE CHILLING SYSTEMS**
with cooking function for soups in artificial casing

– **INTENSIVE CHILLING ZONE**
of a SEMIjet® with lateral air inlet baffles, shower and transport system



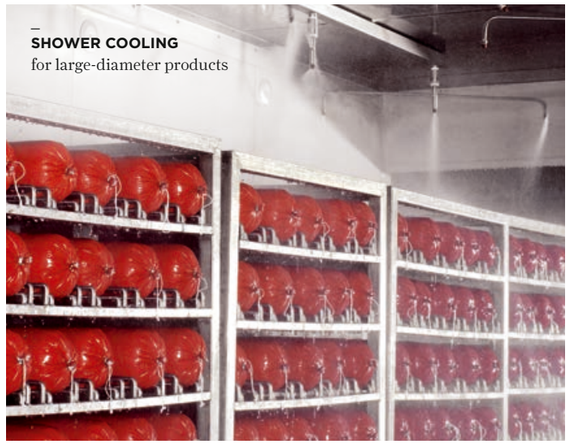
– **INTENSIVE CHILLING SYSTEMS**
for salami balls with freezing function

Additional function: integrated steam cooking process
The ARCTICjet® IK with integrated cooking option opens up new efficiency potential for long cooking and cooling times, such as those required for cooked ham in molds or modules as well as for slicing logs. In the ARCTICjet® IK, the ham is first cooked to core temperature or F-value and then chilled directly to the desired core temperature.

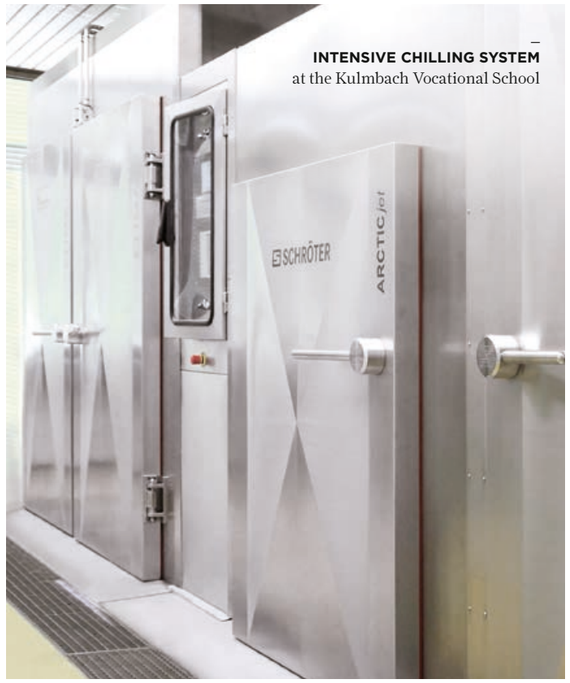
One major advantage is the savings on transportation costs, since the time-consuming manual transfer of the heavy wagons or racks from the cooking to the chilling zone is no longer necessary – saving time and labor and offering optimum product safety. Thanks to this concept, even long cooking and cooling programs can be run automatically overnight and the products are ready for further processing or packaging the next morning.

Throughout the day, the ARCTICjet® IK enables flexible utilization of production capacity with short process times. For example, small-diameter products such as cooked or boiled sausages can be produced during the day, while the system can be used for large-diameter products such as cooked ham at night. This ensures optimum utilization of the system and maximizes production efficiency.

COLD AIR COOLING
with cold and hot water shower



SHOWER COOLING
for large-diameter products



INTENSIVE CHILLING SYSTEM
at the Kulmbach Vocational School

AT A GLANCE

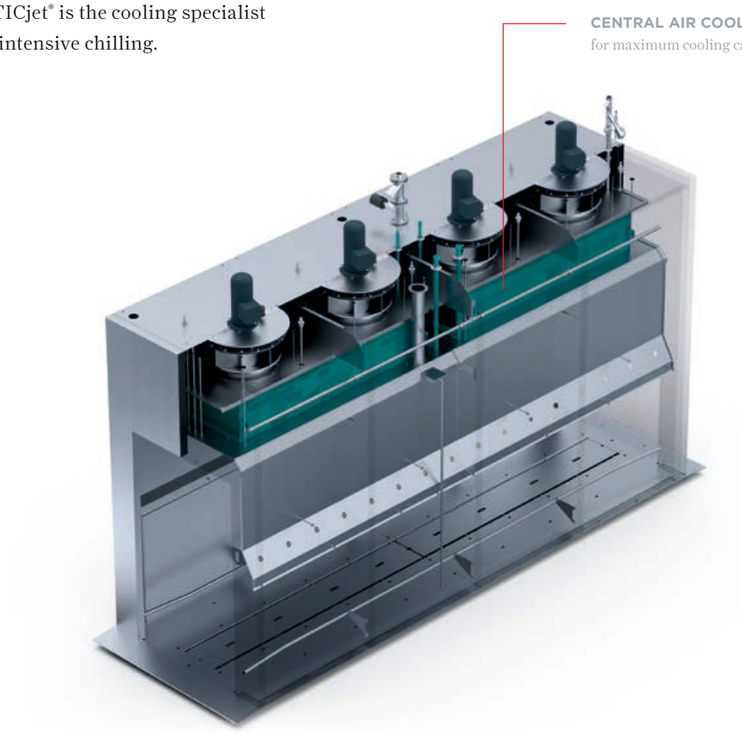
The most important features

- Fast and precise chilling for maximum product safety
- Compatible with various transport units
- Sustainable and resource-conserving processes
- Two-fold safety thanks to hygienization function and additional automatic cleaning

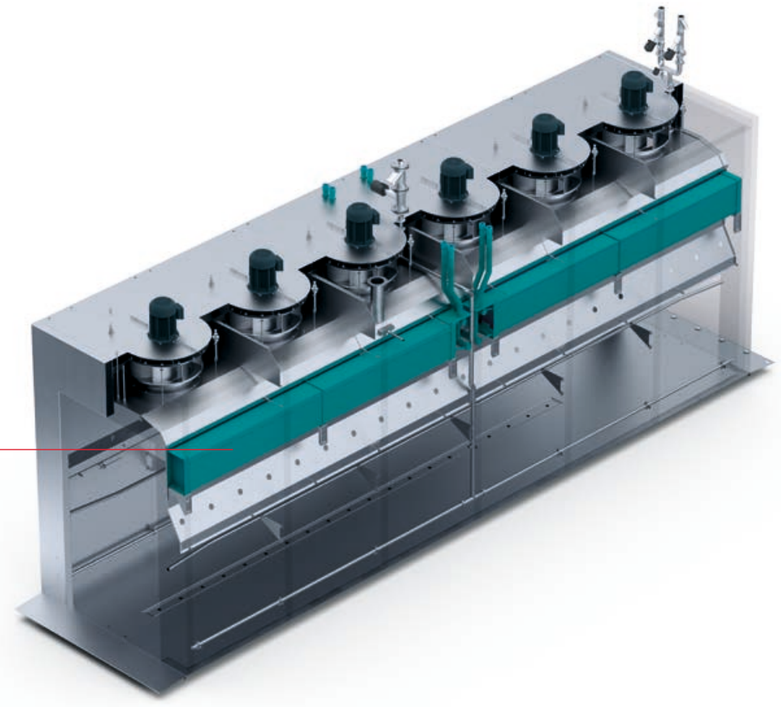
SCAN THE QR CODE!
This code will take you to our product page with technical information.

ARCTICjet® IK

The ARCTICjet® is the cooling specialist for rapid, intensive chilling.



CENTRAL AIR COOLER
for maximum cooling capacity



AIR COOLERS ARRANGED ON BOTH SIDES
guarantee optimum cooling of products sensitive to moisture

SEMIjet®

The SEMIjet® is a semi-continuous production line system, which combines individual process zones such as hot smoking (HR), cooking (KA), baking (BA), and intensive chilling (IK) in one system. It works automatically, in batches, and is characterized by an automatic product carrier transport system and an innovative control system. In this way, the SEMIjet® enables precisely repeatable processes with consistent product quality.

Application areas	› **HR:** Drying, hot smoking, pre-showering › **KA:** Steam cooking, pre-showering › **BA:** Roasting, drying, baking and cooking, pre-showering › **IK:** Cold air chilling, shower cooling (with cold water, brine, or ice water) › **OPTIONAL:** Steam cooking
System concept	› Single-row or double-row systems › Transit (flow-through) version possible
Transport unit	› Rolling wagons › Racks on roller-bed conveyors › Overhead rail systems
Remote maintenance	› Possible via VPN cloud › Integration into process control software
Automatic inspection display	✓
Ideal for multi-shift operation	✓

INTERACTION AT THE HIGHEST LEVEL

Separate zones, consistent quality standard

Our SEMIjet® systems are individually designed continuous production line systems for semi-continuous production processes. With variable process zones and a flexible design, they can be optimally adapted to individual customer requirements. The systems can be supplied in any length as a single-row or double-row design and with automatic floor or overhead rail systems.

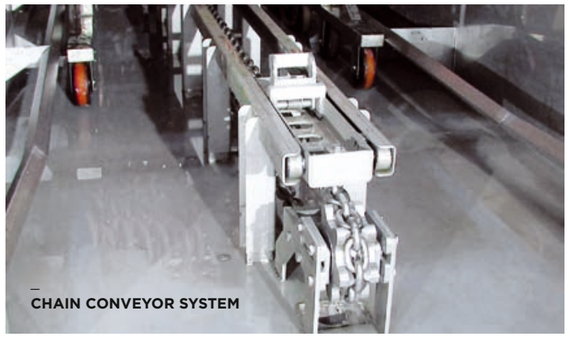
Performance features of SEMIjet® systems
The SEMIjet® is modular in design and consists of separate process zones such as a hot smoking zone and an intensive chilling zone, which are combined to form a SEMIjet® HRIK. Each zone offers precise and repeatable processes such as roasting, drying, hot smoking, cooking, as well as showering, cold air chilling and cold air freezing.

Fully automated hanging rack transport system: efficiency right down the line
Schröter provides the right conveyor technology for every application. From chain and walking-beam conveyors with electric or pneumatic drives to systems for overhead conveying – the variety of options guarantees optimum process integration. In combination with manual or automatic buffer zones on the infeed or outfeed side, a smooth process between the individual production steps is ensured. The automatic transport system, an essential component of the SEMIjet®, ensures a smooth material flow.

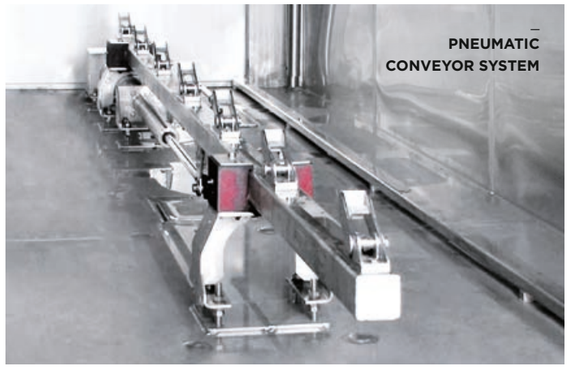
There is a choice of:
- Rolling wagons
- Overheading hanging racks or trees
- Stationary racks for floor conveyor systems and roller-bed conveyors

Depending on the size and configuration of the system, up to 28 wagons per zone can be processed.

Innovation and automation
The systems are controlled via individual operator panels and by a central industrial PC. The process control software ensures comprehensive monitoring and control of all Schröter systems, with integrated functions such as recipe management, historical data recording and analysis, as well as traceability of process data.



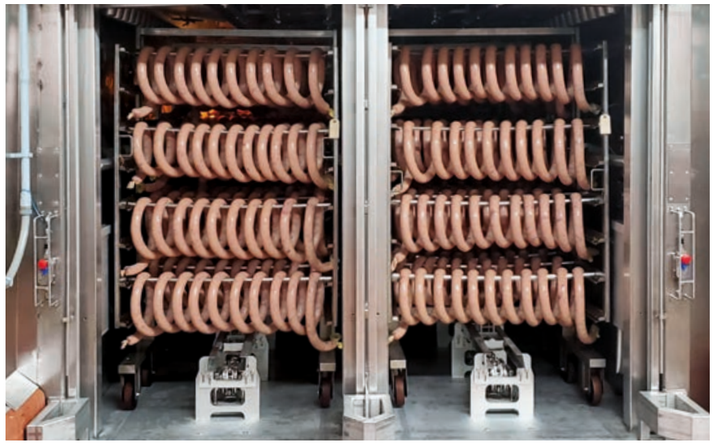
CHAIN CONVEYOR SYSTEM



PNEUMATIC CONVEYOR SYSTEM

WALKING-BEAM CONVEYOR SYSTEM
in a double-row system with roller-bed conveyor, for example, for racks.

RIGHT: 3-ZONE BACON PRODUCTION
in baskets for smoking, chilling, and freezing



SWING DOORS
with viewing window

INFEED SIDE WITH LIFTING DOORS
and view of the SEMIjet® with automatic transport system

Advantages for customers
With a SEMIjet®, efficiency and production reliability are maximized by clearly separating the zones and any intermediate zones. Labor costs are minimized thanks to an automated transport system that moves the products from one zone to the next. Energy costs remain low, as the processes take place in separate hot and cold zones, eliminating the need for costly temperature changes within a zone. The robust stainless steel design guarantees durability and the highest hygiene standards.

Flexibility and sustainability
The systems are future-proof and digitally integrated. Thanks to their modularity, they can be optimally designed and integrated according to the customer's requirements. Sustainability goals are achieved through energy-efficient process management and resource-saving design methods. We support our customers from planning to commissioning and offer comprehensive after-sales service, including training, inspection contracts, and specialist technological advice. SEMIjet® systems impress as a scalable solution that is tailored to current and future market requirements.

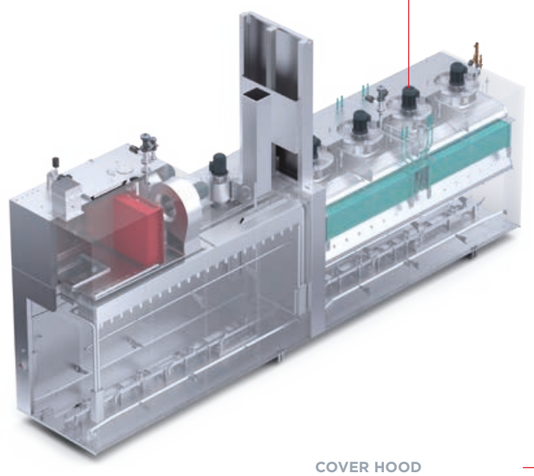
Automatic cleaning
Automatic cleaning ensures maximum efficiency and cleanliness in the system. The integrated cleaning processes are convenient and cost-saving.

AT A GLANCE

The most important features

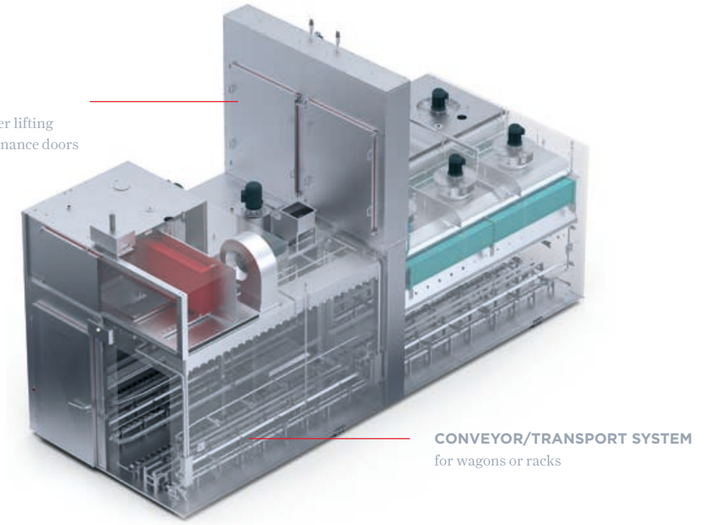
- Semi-continuous, automated production system
- Modular design with separate process zones
- Single-row or double-row systems
- Efficient transport system
- Modern control and process control software for central monitoring, recording, and storage of processes and process data
- Automatic cleaning
- Precisely repeatable processes and results

SCAN THE QR CODE!
This code will take you to our product page with technical information.



SEMIjet® HRIK

Single-row system with automatic walking-beam conveyor system for transporting extremely heavy product wagons

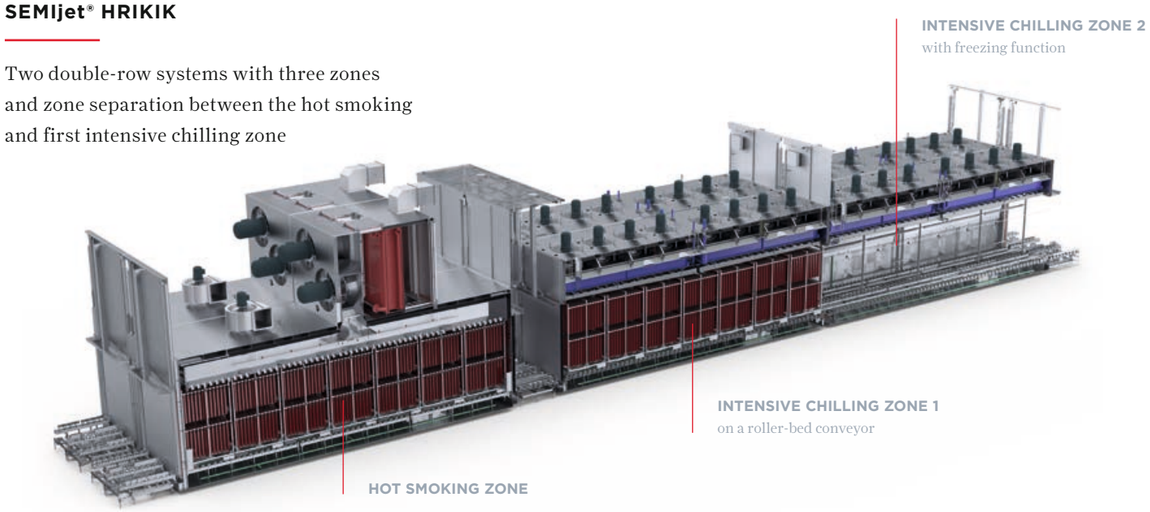


SEMIjet® HRIK

Double-row system with automatic walking-beam conveyor system

SEMIjet® HRIKIK

Two double-row systems with three zones and zone separation between the hot smoking and first intensive chilling zone



CONTIjet®

The CONTIjet® is the solution for fully continuous production processes in which the focus is on automation for maximum efficiency and consistent product quality. The system processes large quantities of identical products in the shortest possible process time, with minimal weight loss and absolute consistency. Whether sausages, bacon, duck, or similar products, the CONTIjet® dries, smokes, cooks, showers, or chills in a continuous workflow and thus meets the strict demands placed on industrial production processes.

Application areas	› Roasting, drying, smoking, cooking, showering, cold air and/or ice water cooling
System concept	› Fully continuous production process › **H-LINE:** horizontal product transport › **V-LINE:** vertical product transport
Conveyor system	› Chain conveyor with automatic transport system
Degree of automation	› Manual or automated loading and unloading systems
Optimum operating mode	› Three-shift operation
Remote maintenance	› Online access possible
Automatic inspection display	✓
Process data management	› Integration into central process control software

NON-STOP HIGH PERFORMANCE

Automated systems for production

The CONTIjet® was specifically developed for high production volumes. It offers continuous processing of identical products, quickly and efficiently. The automatic system concept with automated loading and unloading system minimizes the use of staff while maximizing throughput.

Intelligent control and integration
With the CONTIjet®, users benefit from consistently uniform product results. The automatic control system monitors the individual sections from input to output. Process control software documents the processes and ensures trouble-free operation. The remote maintenance option provides Schröter online support for operators whenever required.

Profitability and sustainability go hand-in-hand
Another advantage of our CONTIjet® system is its energy-efficient operation. Technologies such as the recirculation of process water and precise control of heating and cooling help to reduce energy consumption and conserve resources. This makes the system an economical and sustainable solution with a short payback period.

– **FULLY CONTINUOUS BACON PRODUCTION**

– **PRE-DELIVERY ASSEMBLY OF A CONTIjet®**
at the Borgholzhausen plant

– **AUTOMATED LOADING**
of the CONTIjet®

FULLY CONTINUOUS HOT DOG PRODUCTION
with recirculating ice water cooling and automatic loading and unloading via a robot unit

Hygiene thanks to automatic cleaning system

The integrated cleaning system guarantees the highest hygiene standards. A central clean-in-place system efficiently cleans all areas such as air ducts, air circulation fans, and sectional process areas. This significantly reduces the consumption of cleaning agents and rinsing water, also thanks to the process-controlled operation.

AT A GLANCE

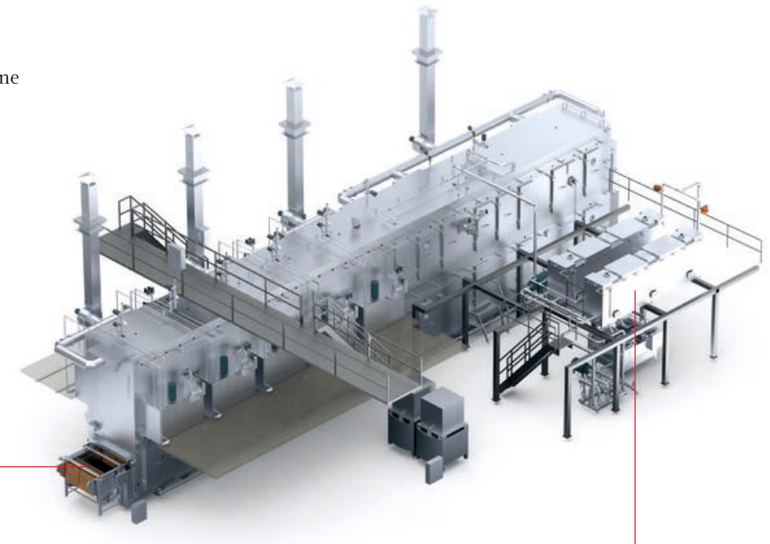
The most important features

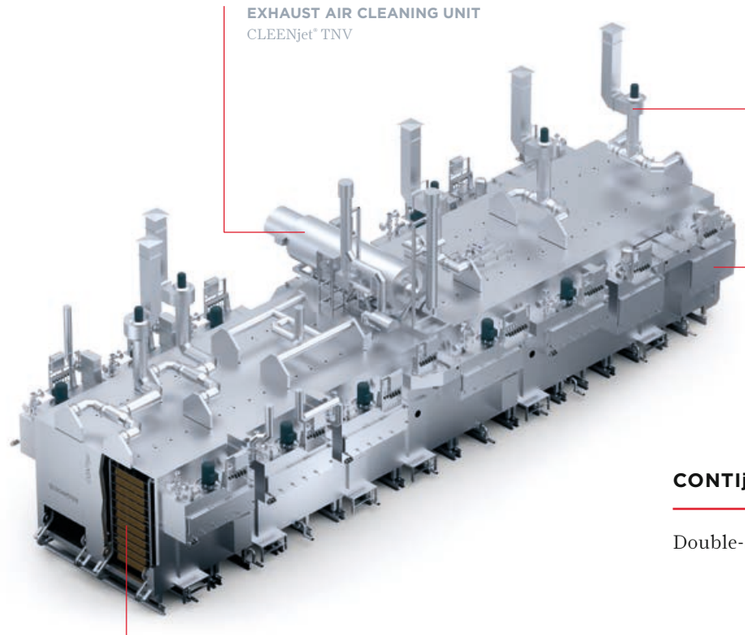
- Fully continuous production process for maximum output
- Option of automatic loading and unloading using robot units
- Precise control and monitoring of all sections and drives
- Program-controlled cleaning system for maximum hygiene

SCAN THE QR CODE!
This code will take you to our product page with technical information.

CONTIjet® V-LINE

Single-row fully continuous line





CONTIjet® V-LINE

Double-row fully continuous line

CLIMAjet®

The right climatic conditions are critical for the quality of raw sausage, ham, and dried meat products. Our CLIMAjet® system creates ideal conditions for processes ranging from defrosting and climatic smoking to maturing and post-maturing with its finely structured, individually adjustable duct system. Schröter offers individual design solutions for customer-specific requirements and processes, and for new and existing premises. A wide range of configurations, such as machine position and duct concepts, offer the option of effortlessly integrating the CLIMAjet® into all production environments.

Application areas	› **KR:** Maturing/fermenting, drying, cold smoking › **KR MAS:** Multi-airflow system (maximum uniformity with the fastest possible maturing processes) › **NR:** Post-maturing, drying, storage › **AT:** Defrosting, storage › **OPTIONAL:** Cold drying
System concept	› Single-row, double-row and multi-row systems
Transport unit	› Rolling wagons › Transport racks › Overhead rail systems › High transport units up to 5 m
Automatic inspection display	✓
Remote maintenance	› Online access possible
Operating mode	› 24/7
Process data management	› Integration into central process control software

OPTIMAL CLIMATE FOR THE HIGHEST PRODUCT QUALITY

Excellent climate control, individually adjustable

Our CLIMAjet® system creates optimum conditions for maturing and drying raw sausage, ham, and cheese products by precisely controlling the temperature, humidity, and fresh air supply. From the smallest to the largest processing room, we customize the duct systems according to the customer's requirements. Innovative enthalpy programming effectively uses the outside air to save energy. This sophisticated system technology is equally suitable for industrial and artisanal customers.

Maximum efficiency with high adaptability

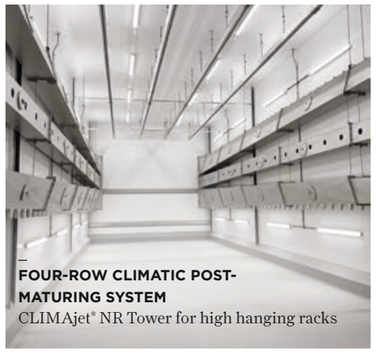
From a simple duct system with two inlet ducts and one return duct to the multi-airflow system (MAS), we demonstrate maximum flexibility and adaptability. The MAS guarantees uniform treatment of all products in the shortest possible time, especially for small-diameter products with dense loading such as mini salami.

The flexible arrangement of the machine housing – whether above, behind, or to the side of the process chamber – enables perfect adaptation to different spaces. The CLIMAjet® systems start with designs for the smallest spaces and extend to room sizes of 600 m² or larger. For industrial production capacities and to make optimal use of the operating space, racks of up to 5 m in height are possible. In terms of adapting to local conditions, it doesn't get better. Technical refinements are not only to be found in the ducts; the damper with controllable drive for the air flow and the machine housing, in particular, demonstrate a high level of engineering know-how.

Energy-efficient process control with LIMIT regulation

A central element of the CLIMAjet® is the innovative LIMIT process function, which works according to the principle of "alternating humidity control". Selectively controlling the temperature and humidity levels in a defined interval allows continuous alternation between running and paused operation. During the pause, moisture migrates from the product core to the surface, from where it is released into the circulating air. As soon as the maximum air humidity is reached, running mode starts. Increased circulating air, drying, and fresh air supply reduce the relative humidity to the preset target value before the next pause begins.

The LIMIT control system uses state-of-the-art enthalpy controls to precisely bring fresh air into the climatic process. To prevent the products from overdrying, a lower moisture limit can be defined. As soon as the moisture level falls below a certain level, the system automatically operates with targeted humidification so that the optimum maturing range is constantly maintained.



FOUR-ROW CLIMATIC POST-MATURING SYSTEM
CLIMAjet® NR Tower for high hanging racks

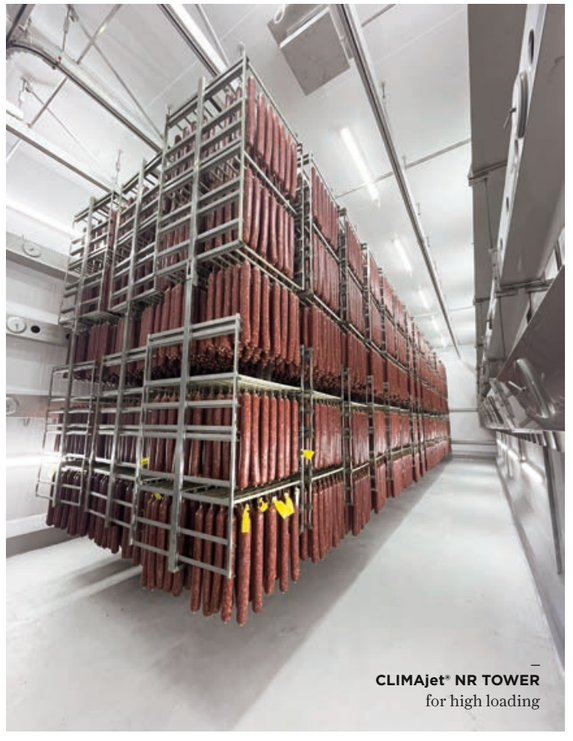
MULTI-AIRFLOW SYSTEM (MAS)

DRYING BEEF BILTONG
from loading to the finished product

This intelligent control leads to:

- Gentle maturing processes that optimize product quality and taste
- Lower energy consumption, as the system utilizes the moisture released by the product
- Longer service life of components, as motors and components operate with reduced running times

SALAMI SPECIALTY
in a Parmesan coating



CLIMAjet® NR TOWER
for high loading

CLIMATIC RAW-SAUSAGE SYSTEM
CLIMAjet® KR MAS for "Kaminwurzen" (smoked dry sausages)

–
COLD AIR DRYING SYSTEM
for dry-aged beef

Perfect conditions for dry-aged beef

The maturing of dry-aged beef requires precisely controlled climatic conditions in order to optimally develop taste, texture, and quality. Dry maturing meat creates special temperature and humidity requirements. Our CLIMAjet® systems ensure optimum maturing conditions with precise control: a constant operating temperature range of 0.5 to 1 °C and a relative humidity of 75 to 85 percent with uniform air circulation.

This keeps the meat in perfect condition throughout the entire maturing period of 14 to 35 days. The controlled loss of water intensifies the flavor and ensures the characteristic buttery, nutty taste of dry-aged beef, which makes the meat a real treat.

–
COMBINED COLD AIR DRYING AND SMOKING
in one system for South Tyrolean bacon

–
CLIMAjet® KR
Cheese smoke house

Fast and safe defrosting with CLIMAjet® AT

The CLIMAjet® AT is the perfect choice for gently defrosting frozen blocks of meat. Precise temperature and humidity control and variable air flow ensure that the product is defrosted evenly without any loss of quality or excessive weight loss.

- Innovative steam system: steam is fed in to gently heat the air to the defined target value, which accelerates defrosting.
- Minimal energy and water losses: the new process reduces energy consumption to a tenth of that of conventional water baths.
- Maximum product safety: product probes inserted in the product core prevent overheating and microbial growth, so that the product always remains within the optimum temperature range.
- Maintaining the quality of the meat: unlike defrosting in a water bath, the natural structure of the meat is retained, as no valuable ingredients are lost due to leaching and protein loss.

Integrated automatic cleaning

A clean-in-place system efficiently cleans all relevant components – ducts, air baffles, and air circulation fans. This not only guarantees the highest standards of hygiene, but also reduces maintenance requirements and ensures smooth operation in the long term.

DEFROSTING OF PRODUCTS
in vacuum packaging

CLIMATIC DEFROSTING SYSTEM CLIMAjet® AT
for whole tuna

AT A GLANCE

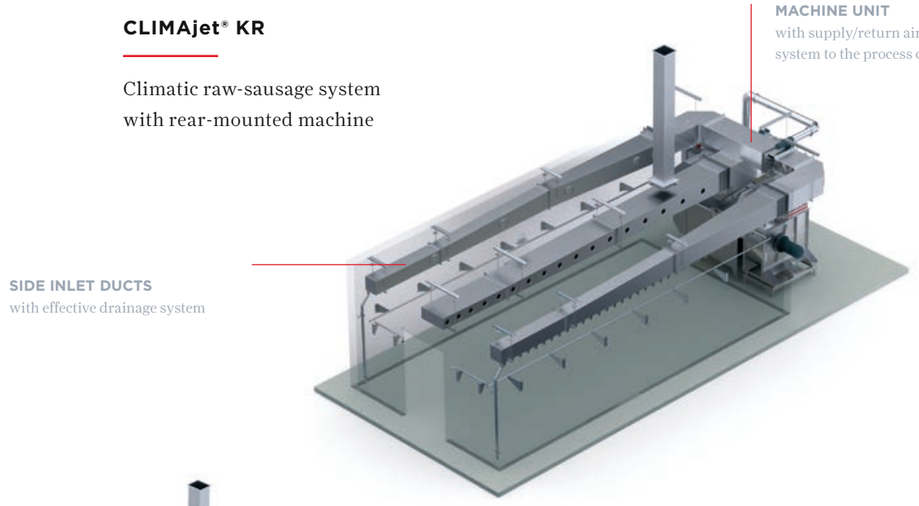
The most important features

- Flexible adaptation to individual production spaces
- Precise control of temperature, humidity, and air flow
- Energy efficiency with enthalpy programming
- LIMIT process control for energy-efficient maturing and drying

SCAN THE QR CODE!
This code will take you to our product page with technical information.

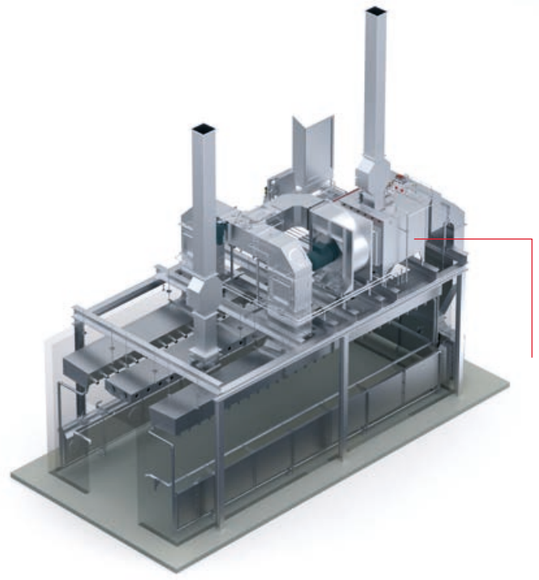
CLIMAjet® KR

Climatic raw-sausage system with rear-mounted machine



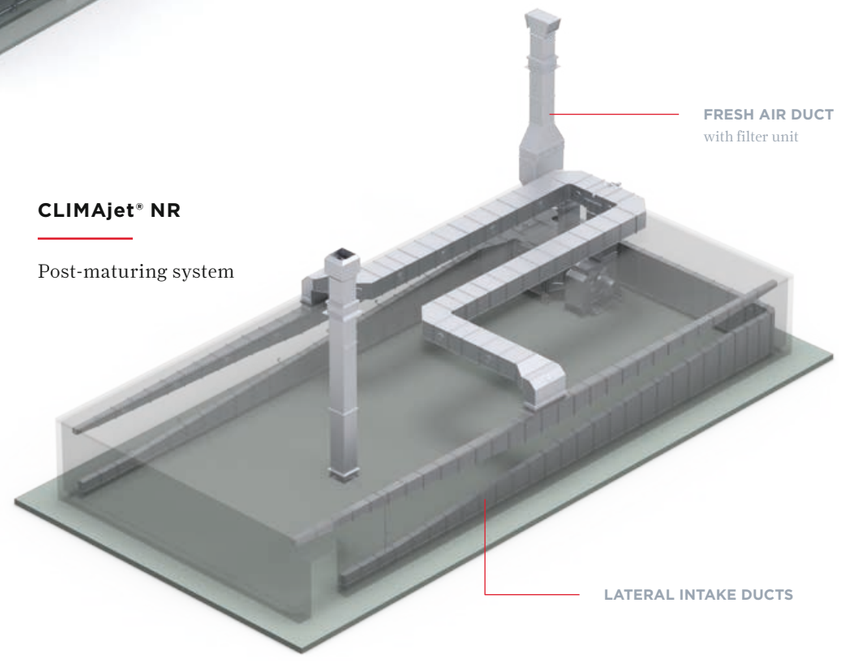
CLIMAjet® KR MAS

Multi-airflow system (MAS)



CLIMAjet® NR

Post-maturing system



FISHjet®

The FISHjet® system from Schröter stands for innovative technology and maximum precision in fish processing. Whether drying, cold smoking, or hot smoking – FISHjet® masters all processes with utmost efficiency. Thanks to state-of-the-art circulating air technology and individually adjustable control systems, it delivers perfect results for a wide variety of fish specialties such as salmon, eel, herring, mackerel, or dried stockfish.

Application areas	› **HR:** Drying and warm/hot smoking › **KR:** Air drying and cold smoking
System concept	› Single- and double-row version and transit (flow-through) design possible
Transport unit	› Rolling wagons for hanging and lying products › Racks
Air distribution	› Vertical air flow system › Alternatively: CrossBack – horizontal air flow principle
Automatic inspection display	✓
Remote maintenance	› Online access possible
Process data management	› Integration into central process control software

REDEFINING EFFICIENCY

Refinement for high-quality fish specialties

The FISHjet® system combines state-of-the-art technology with the traditional art of smoking and has been specially designed for the treatment of fish products. Different production requirements such as drying, cold smoking, and warm/hot smoking can thus be optimally performed in the FISHjet®.

Technology that inspires
FISHjet® offers precise control of temperature, humidity, and air circulation speed to perfectly meet the requirements of various fish specialties. Depending on the product requirements, the air is distributed by means of a vertical air flow or alternatively by means of the innovative CrossBack horizontal recirculating air principle. The CrossBack principle ensures particularly effective and even air distribution for flat products with a high wagon load, such as salmon or fish fillets.

– **WHOLE MACKEREL**
smoked

Efficiency meets safety
With the CLIMAjet® defrosting system for whole fish or blocks of fish, the FISHjet® system is the ideal add-on for an end-to-end production process. High-quality materials and a well thought-out hygienic design ensure durability and maximum product safety.

FISHjets®
in both single-row and double-row design

HIGH LOADING DENSITY
for flat fish fillets

PRODUCT EXAMPLE
Fish cakes

Convenient cleaning for the highest hygiene standards
An integrated clean-in-place system enables automatic cleaning of the machine, the air ducts, and the smoke supply. With optional interior cleaning, the automatic cleaning saves on the cost of labor and ensures hygienically perfect production conditions at all times.

AT A GLANCE

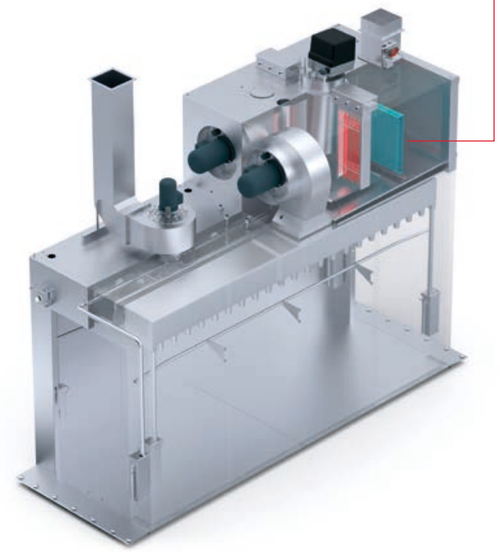
The most important features

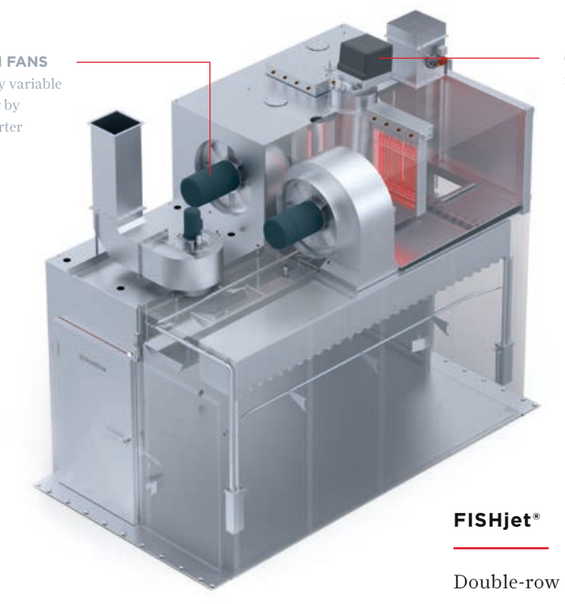
- Precise control of temperature, humidity, and air circulation speed.
- Two air flow concepts possible depending on product requirements.
- Suitable for drying, cold smoking, and warm/hot smoking.
- Industrial-scale system for the strictest production requirements.
- Automatic cleaning and digital monitoring functions

SCAN THE QR CODE!
This code will take you to our product page with technical information.

FISHjet®

Single-row system





FISHjet®

Double-row system

SMOKjet®

SMOKjet® smoke generators offer versatile solutions for all types of smoking. Whether mild, strong, and traditional natural smoke or atomized liquid smoke – Schröter offers a wide range of intensities and aromas using various methods. With the RH, RS, RF, RD, and RL systems, they cover all global smoking requirements and enable the most consistent quality and reliability.

Smoking process	› **RH:** Wood-chip smoke with wood chips › **RS:** Wood-chip smoke with saw chips › **RF:** Friction smoke with wood bars › **RD:** Steam smoke with fine wood chips › **RL:** Liquid smoke for a wide range of smoke flavors › **OPTIONAL:** Automatic chip washing, combustion chamber cleaning, larger chip container, extended friction wood magazine, chip removal
Installation	› Separate smoke generator position › Can be flexibly positioned adjacent to the smokehouse or in a separate smoke generator room › Multiple smokehouses can be connected (multiple connection possible)
Safety feature	› Chip/wood shortage alert › Extinguishing system and cleaning equipment
Automatic inspection display	✓
Ideal for multi-shift operation	✓
Remote maintenance	› Remote maintenance and remote monitoring

INNOVATION AND TRADITION IN WARM, HOT, AND COLD SMOKING

Flexibility for all smoking processes

SMOKjet® smoke generators combine tradition and innovation to meet all smoking requirements. With various smoke generation systems, they offer the best solution for a wide range of applications.

One system, many possibilities
Whether wood-chip smoke, friction smoke, steam smoke, or liquid smoke – the SMOKjet® covers a wide range of applications due to its diversity. The smokehouse and smoke generator are synchronized and ensure a perfect smoke supply and consistent results every day.

Safe, powerful, reliable
The high-performance smoke generators enable user-friendly integration into existing production environments. Safety devices such as temperature monitoring and automatic extinguishing systems ensure reliable operation.

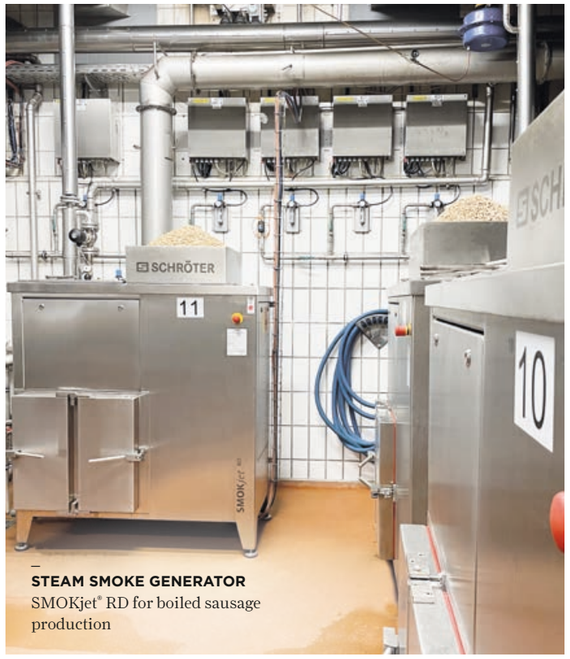
SMOKE GENERATOR ROOM

SMOKjet® RF
with optional extras

FRICTION WHEEL FOR SMOKE GENERATION
in the friction smoke generator

LIQUID SMOKE SYSTEM
SMOKjet® RL with precision metering pump

Customer benefits when using the SMOKjet®
SMOKjet® provides a reliable supply of smoke and thus ensures the desired repeatable smoking result. Various options, especially for industrial applications, enable continuous operation, simplify conditions, and reduce personnel costs.



STEAM SMOKE GENERATOR
SMOKjet® RD for boiled sausage production

TWO COMPONENT JET
for liquid smoke

LIQUID SMOKE SYSTEM
SMOKjet® RL for wall mounting

WOOD-CHIP SMOKE GENERATOR
SMOKjet® RH09

WOOD-CHIP SMOKE GENERATOR
SMOKjet® RH Compact for small systems

AT A GLANCE

The most important features

- Diverse smoke generation systems to suit all requirements
- High operational safety thanks to comprehensive protective devices
- Solid construction and flexible integration
- High-performance operation for consistently repeatable results

SCAN THE QR CODE!
This code will take you to our product page with technical information.

SMOKjet® RH09/RS09

Wood-chip smoke generator

DUAL SMOKE OUTLET
to connect two smoking systems (alternating smoke supply)

OPTIONAL CHIP WASHING
with chip collection container

SMOKjet® RH COMPACT

CONTROL CABINET
with PLC and4-inch touch panel

SMOKjet® RF

Friction smoke generator for smoking in a closed system

DUAL SMOKE OUTLET
to connect two smoking systems (alternating smoke supply)

SMOKjet® RD

Steam smoke generator with constant intensity

CLEENjet®

CLEENjet® systems from Schröter set standards in exhaust air treatment and ensure that heavily contaminated exhaust emissions are cleaned efficiently. With a capacity of 200 to several thousand cubic meters per hour, they can be used flexibly – as a stand-alone solution or as a central system for several emission sources. Heat recovery units can be integrated as an option to further boost energy efficiency.

Technologies for clean air
CLEENjet® systems offer a wide range of solutions for the most varied requirements:

- **RWK (EXHAUST AIR SCRUBBER):** Four-stage scrubbing process
- **TNV (THERMAL OXIDIZER):** Complies with the requirements of the Federal Immission Control Act (BImSchG) and the Technical Instructions on Air Quality Control (TA Luft)
- **BIOFILTER SYSTEM:** Exhaust air is passed through a surface filter with a multi-layered biomatrix and neutralized
- **OPTIONAL:** Heat recovery for TNV (uses the energy from the exhaust air to heat fresh air)

CLEAN AIR THANKS TO INNOVATIVE SOLUTIONS

Customized exhaust air cleaning

The CLEENjet® uses innovative technologies to reliably reduce emissions. Whether thermal oxidizer, water scrubber, or biological purification: the system offers custom solutions to suit every requirement. With an integrated raw gas preheater, our TNV system optimizes energy utilization and reduces the pollutant content of the exhaust air efficiently and sustainably.

Flexibility and environmental friendliness
A wide range of variants are available for the most diverse requirements: weatherproof container solutions for outdoor use, four-column water scrubbers for steam smoke generators, or biofilter systems for odorous exhaust air. These options make the CLEENjet® the ideal choice for companies looking for sustainable and future-proof solutions.

Simple integration and smart control
With a Siemens PLC and user-friendly touch panel, CLEENjet® systems enable precise control and monitoring of processes. The Ethernet interface also allows connection to process control systems for optimum data processing.

CLEENjet® RWK FOUR-COLUMN SCRUBBER
for slightly contaminated air flows

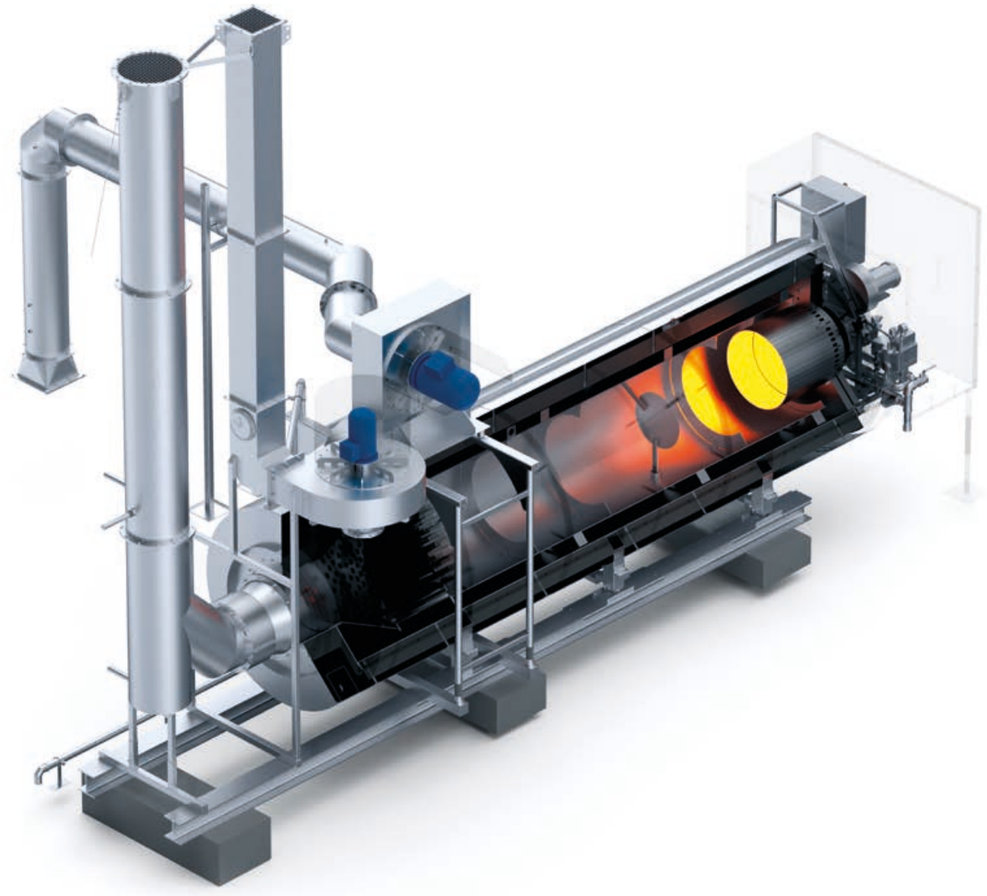
BIOLOGICAL EXHAUST AIR CLEANING
with an organic bed

CENTRALIZED THERMAL EXHAUST AIR CLEANING
CLEENjet® TNV factory-assembled in the container

–
CLEENjet® RWK FOUR-COLUMN SCRUBBER
cleans the exhaust air by spraying it with water

CLEENjet® TNV

Thermal exhaust air cleaning from
300 to 5,000 cubic meters per hour as a
stand-alone solution or centralized system



AT A GLANCE

The most important features

- Thermal, biological, and mechanical exhaust air cleaning to suit every requirement
- Integrated heat recovery for process water or thermal oil
- Flexible installation indoors, outdoors, or in weatherproof containers
- Energy-saving technologies such as exhaust preheating
- CLEENjet® TNV and biofilter system: compliance with the highest environmental standards set by TA Luft and BImSchG

–
SCAN THE QR CODE!
This code will take you to our product page with technical information.

Compact systems and designs

Compact systems and specialized designs demonstrate Schröter's versatility and innovative strength. They offer tailor-made solutions for small production volumes, test scenarios, or highly specialized processes. With their compact design and state-of-the-art technology, they enable maximum efficiency, flexibility, and optimum product quality – perfectly tailored to the requirements of a wide range of industries.

COMPACT SYSTEMS | DESIGNS

Small systems – big performance

Compact systems from Schröter are the ideal solution for companies with special requirements. Whether for niche products, regional specialties, or as test facilities: these systems, each designed for a wagon with standard dimensions of 1 x 1 x 2 meters, offer an ideal combination of efficiency and flexibility. They are equally suitable for smaller companies that produce different types of products in small quantities, as well as for schools or colleges. Industrial companies can apply laboratory experience and processes to large production systems.

From smoking to chilling: the all-rounders at a glance
The compact systems are available in various designs such as THERMICjet®, BAKEjet®, ARCTICjet®, and CLIMAjet®, covering a wide range of processes including smoking, cooking, baking, and chilling. Particularly noteworthy is the JetSmoker, which is a true all-rounder thanks to its heating and cooling coils and two frequency-controlled air circulation fans. This design enables a wide range of processes and can be used for both general and specialized applications.

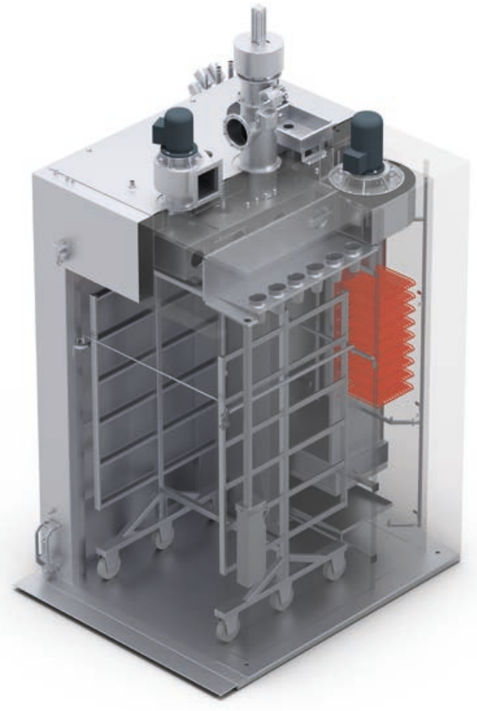
The Schröter principle: Leading Quality
As with the large-scale systems, our compact systems offer artisanal customers all the features of an industrial solution on a small scale – from control and smoke supply to cleaning and outstanding design.

Perfectly networked and flexibly equipped
Compact systems from Schröter are equipped with the latest technologies. They enable fully automatic cleaning and can be equipped with several smoke generators for different types of smoke. This ensures maximum adaptability to specific requirements. Digital networking and process optimization are also standard in these systems in order to further increase the efficiency and quality of production processes.

–
SWING DOOR
with optional viewing window

THERMICjet® HR-1 JETSMOKER

with rear-mounted machine housing and two air circulation fans



THERMICjet® HR-1/2000

Machine housing integrated at the top with an air circulation fan

–
SCAN THE QR CODE!
All information about our compact systems can also be found online.

One process, many possible applications

The CrossBack principle stands for innovative horizontal air circulation that can be integrated into various Schröter systems such as THERMICjet®, FISHjet®, SEMIjet®, and BAKEjet®. This system was specially developed to process flat products particularly gently and uniformly when the wagons are heavily loaded. Whether meat products, fish products, plant-based alternatives, or snack products – CrossBack ensures perfect results for a wide range of applications thanks to its reversible horizontal air flow.

Maximum uniformity of the end products
In contrast to conventional air flow systems, CrossBack uses a horizontal, alternating air flow. Using dampers with controllable drives and air ducting walls, the air is guided alternately from one side to the other over the products with 100% coverage. The products are gently processed at low air speeds and a high air flow. This makes the system particularly suitable for flat, light, and delicate products such as fish fillets, salmon sides, poultry pieces, bacon strips, beef jerky, meat chips, or vegan products.

Developed for specific product requirements
A key feature of the CrossBack principle is its flexibility in terms of layer density. The horizontal air flow is ideal for the respective product selection and process requirements. This means that drying, smoking, cooking, and baking processes can be carried out more efficiently and to a high standard of quality. In addition, the dense loading of the wagons enables maximum utilization of capacities, which not only increases productivity but also makes processes more energy efficient. In other words, the CrossBack principle stands for high performance in a small space.

Convenient cleaning is guaranteed
The integrated automatic cleaning system ensures the highest standards of hygiene. It efficiently cleans all relevant components such as air ducts, air circulation fans, and smoke supply. The entire process is automated, which reduces resource consumption and ensures cleaning quality and consistent product safety.

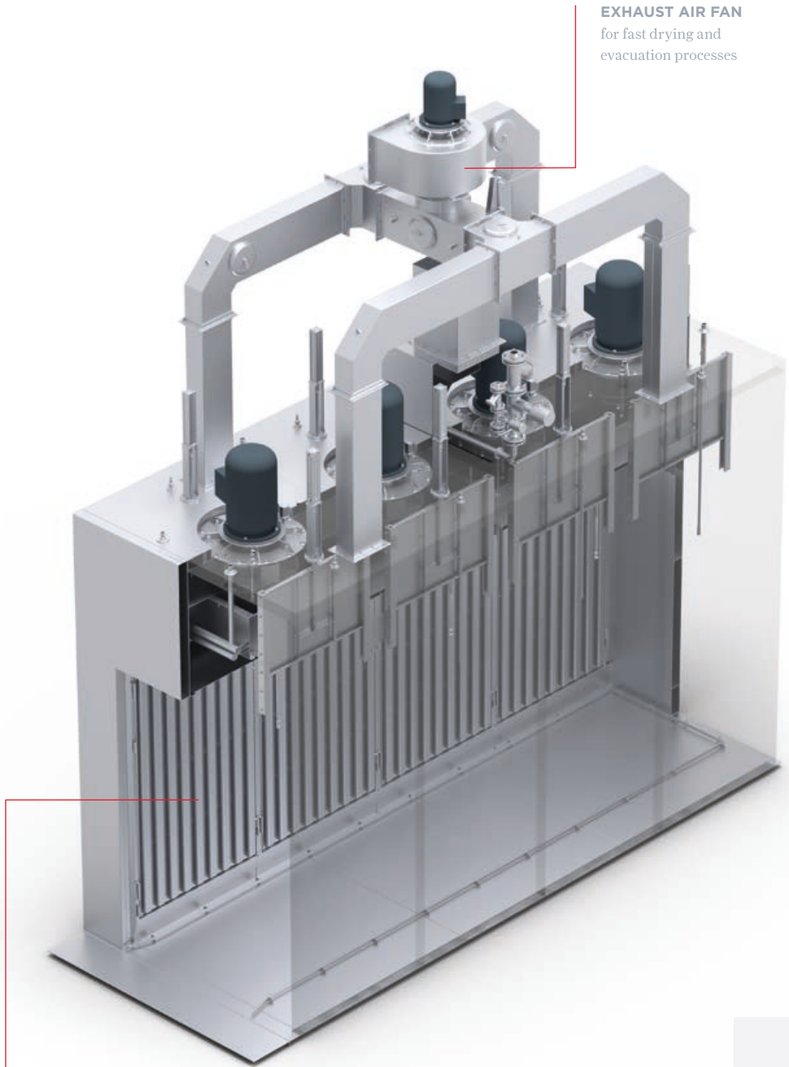
AT A GLANCE

Production systems available according to the CrossBack principle

- BAKEjet®
- THERMICjet®
- FISHjet®
- SEMIjet®

THERMICjet® HR-4 CROSSBACK

two lateral air distribution walls
for horizontal reversible air flow



SCAN THE QR CODE!
All information on the Crossback principle can also be found online.

Solutions and technical information

Modern production systems must work efficiently, hygienically, and reliably. This requires precisely coordinated technologies – from cleaning and control to functional door solutions. Standardized systems ensure smooth processes, high process reliability, and economical operation.

Schröter relies on proven technology and innovative solutions that meet the strict requirements for food processing and combine technical precision with practical application.

SOLUTIONS | TECHNICAL INFORMATION

User-driven solutions for Schröter systems

Schröter door systems combine solid functionality and attractive design. Schröter offers various solutions – each of which meets the requirements of modern production plants.

Single-wing standard swing door
The single-wing swing door is the robust basic solution for every Schröter system. Cam-rise hinges raise and lower the door and provide a reliable seal. This door system ensures easy access for loading and unloading.

Double-wing swing door
The double-wing swing door is the concept for tall and wide chambers. This door is characterized by the use of inflatable seals. It is easy to operate and close. Mechanical damage to the seal can be easily repaired. The smooth, easy-to-clean surface meets the highest hygiene standards.

Lifting door
The automatic lifting door impresses with its space-saving design and user-friendly operation. It is ideal for semi-continuous systems. The lifting door's pneumatic drive ensures additional safety and a tight seal. This door is also available as a wide lifting door across two wagon widths.

LIFTING DOORS
are space-saving and ideal for semi-continuous SEMIJet® systems

LIFTING DOOR SYSTEM

- Based on sanitary design principles
- Space-saving
- Meets the current safety standards
- Ideal for semi-continuous systems
- Electrical interlock possible

SINGLE-WING STANDARD SWING DOOR

- Cost-efficient solution
- Variety of applications
- Mechanical interlock possible
- Maintenance-friendly
- The hinge design guarantees compliance with sanitary design principles
- The modular hinge design means that replacement parts are readily available

DOUBLE-WING SWING DOORS

- Come with inflatable door seals
- Large, heavy doors are possible
- User-friendly operation
- Optimized for automatic transport systems
- Maintenance-friendly
- Mechanical interlock possible
- The hinge design guarantees compliance with sanitary design principles
- The modular hinge design means that replacement parts are readily available

CONTROL AND VISUALIZATION

Intelligent control for efficient processes

Intelligent control is essential for the efficiency and process reliability of industrial systems. Schröter uses tried-and-tested PLC control systems from Siemens on the European market and worldwide. For the Japanese market, automation solutions from Mitsubishi systems with Japanese typesetting are used, while Allen Bradley controllers are used in the USA. The control system is currently available in 29 languages and is easy to operate via a user-friendly touch panel.

Digital networking and remote maintenance
All control systems are designed for secure remote maintenance, which is carried out via an eWon security router from Wachendorff Prozesstechnik. This means that systems can be supported, analyzed, and optimized worldwide without having to be on site. This reduces maintenance costs, increases operational reliability, and minimizes downtimes.

Process visualization for maximum transparency
The optional process visualization offers a detailed display of all production processes in real time. Temperature curves, humidity values, and process steps can be monitored and documented directly. This allows users to react immediately to deviations and control their production processes efficiently. The visualization is intuitive to use and can be adapted to individual requirements.

PANEL-PC
from Schröter

OPERATOR PANEL
from Siemens

OPERATOR PANEL
from Allen Bradley

OPERATOR PANEL
from Mitsubishi

SCHRÖTER PANEL PC
for centralized control of up to 30 production systems

AT A GLANCE

Summary of advantages

- Maximum efficiency and operational reliability thanks to intelligent control systems
- Various PLC control systems available with technology adapted to the market
- 29 languages available for intuitive operation
- Secure remote maintenance via eWon router for worldwide monitoring
- Optional process visualization for detailed real-time control

SCHRÖTER CONTROL UNITS
with integrated Siemens touch panel

SCAN THE QR CODE!
All information on control can also be found online.

CLEANING

Efficiency and hygiene to meet all requirements

Efficient cleaning is essential for the hygiene and operational safety of industrial systems. Schröter offers a suitable cleaning solution for every system design. Automatic cleaning systems are available that work with liquid detergent or foam. A mobile cleaning device is the ideal choice for smaller installations. It combines flexibility with effective cleaning performance and can be easily connected to various systems.

Automation for optimum results
The automated cleaning systems from Schröter enable efficient cleaning performance. Interior cleaning with rotary cleaning arms or heads is available, which considerably reduces the cleaning effort for staff. The automatic valves of the cleaning circuits are controlled individually so that more heavily soiled areas can be treated more intensively. Detergent and water are dispensed in a way that conserves resources without impairing cleaning performance.

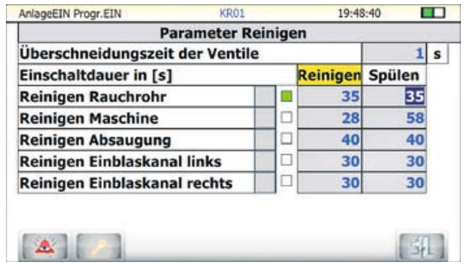
Flexible solutions and extensions
Several systems can be networked with a central cleaning station. This allows them to be cleaned one at a time. Specific cleaning stations offer parallel cleaning of two systems or process zones – even with two different cleaning agents. Cleaning stations can optionally be equipped with conductivity sensors or flow meters.

AT A GLANCE

Summary of advantages

- Automatic cleaning systems for maximum efficiency
- Resource-saving processes thanks to precise metering
- Extensive automation with documentation of all cleaning steps
- Manual and flexible with mobile cleaning device for smaller systems

–
ROTATING CLEANING HEAD
for automatic interior cleaning



–
CONTROL SYSTEM
for a cleaning program

–
SCAN THE QR CODE!
All information on cleaning can also be found online.

IMPRINT

Publisher Schröter Technologie GmbH & Co. KG, Bahnhofstrasse 86, 33826 Borgholzhausen, Germany
Phone +49-54-25-95-00 | info@schroeter-technologie.de 03 | 2025

WWW.SCHROETER-TECHNOLOGIE.DE