


 **SCHRÖTER**

THERMIC/et

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 **SCHRÖT**

 **SCHRÖTER**

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THE SCHRÖTER COLLECTION

Every System. Every Technical Detail. Everything Under Control.



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EXPERTS IN SYSTEMS TECHNOLOGY FOR GENERATIONS

Schröter is one of the leading international manufacturers of thermal treatment systems for the food industry. Whether meat or fish – with our systems, companies around the world process foodstuffs into high-quality delicacies. We design customized systems based on your specific needs and carry out your project in a professional manner.

We strive to deliver the highest quality, which is why we manufacture our products in Germany in a region which is considered extremely down-to-earth. And we are just as reliable, trustworthy, and honest. Our sound family business stands for well-engineered and innovative products that are extremely long-lasting – and has for many generations. This is why we also offer first-class service right along with them – across the globe.



A STRONG PRESENCE ON ALL THE WORLD'S MARKETS

Schröter offices can be found on every continent. Whether in Africa, Asia, Australia, Europe, India, or North and South America, we offer local service in more than 80 countries in close collaboration with our long-term partners. The employees at our strategically-located national affiliates speak your language and have comprehensive knowledge of the particular characteristics of the local markets. Thanks to the same time zone, we provide timely support in planning, assembly, service, and maintenance, and can be at your place of business with minimal delay.



■ Schröter's International
Representatives

Whenever you need assistance or production processes are not running smoothly, Schröter is there for you all over the world. You can also find us at every important international trade show. Come and check out our high-quality products for yourself at exhibitions across the globe. We look forward to speaking with you.

WWW.SCHROETER-TECHNOLOGIE.DE/WORLDWIDE





LEADING QUALITY SETS THE STANDARD

Our goal to offer “Leading Quality” means we are committed to quality, performance, and innovation. We have made these values a fixed part of our logo. With a focus on this promise of quality, we design and manufacture systems which our customers can rely on.

Schröter’s range of products is varied and leaves nothing to be desired – our systems boil, smoke, cook, bake, cool, and pasteurize meat and sausage products, fish products, cheese, and pet food. In addition to hot smoking and cooking systems, our semi-continuous and continuous systems include counter-pressure pasteurization systems, drying systems, as well as exhaust purification systems. Control systems and automatic cleaning devices round out our range of products. All of our systems are designed in close collaboration with our customers and are precisely tailored to their individual needs.





THERMICjet®

> THERMICjet® is the right choice for cooking, smoking, heating, and drying. We manufacture our hot smoking and cooking systems as well as our kettle systems to meet your specific requirements: whether for one wagon or fifty, as an in-line system or in the standard design, for rolling wagons or hanging racks, the system will definitely integrate perfectly into your production flow.

FLEXIBLE COMBINATIONS

THERMICjet® SYSTEMS SUCCESSFULLY COMBINE THREE TRADITIONAL APPLICATIONS: COOKING, DRYING, AND PASTEURIZING. WE CAN EVEN ADD COOLING UPON REQUEST.

This solution satisfies both industrial and artisan customers alike. Whether a large-scale facility or a small operation, we will design and build your THERMICjet® with complete flexibility in either the standard or transit design. In this process, we consider your intended use as well as the space available.

In addition, we can adapt every unit to your loading system – from rolling wagons to stacked modules and cassettes to hanging racks. Rapid maintenance, easy access to components, and straightforward cleaning are the hallmarks of this well-engineered series.

- 01 One-wagon compact “Jetsmoker” system
- 02 Large-scale bacon system







THE MULTITALENTED THERMICjet®

When it comes to versatility in traditional applications, the THERMICjet® HR can't be beat. The hot-smoke cooking system cooks, smokes, heats, dries, and reddens. A cooling coil is also available as an additional option. The THERMICjet® can also be ordered with baking system, allowing you to take

full advantage of the capabilities of the multitasking THERMICjet®. The system can be closed with either a standard swing door, a double-wing door, a vertical sliding door or a sectional door.

- 01 THERMICjet® with large vertical lifting door, double row
- 02 Access to the THERMICjet®'s mechanical systems
- 03 Multiple THERMICjet® systems with a central industrial PC control



ALWAYS THE RIGHT SIZE

Industrial and artisan customers alike cook, dry, and pasteurize using sophisticated THERMICjet® systems from Schröter. Both the large-scale industrial systems and the small single-wagon units stand out due to their flexible design and numerous possible combinations.

When it comes to the kettle systems and cooling basins, the vessel and all relevant components are steam- and airtight. They are heated, for example, using low/high-pressure saturated steam which is blown into the heating jacket. The condensate runs through a steam trap and a collecting pipe back into the steam generator.

In order to prolong the shelf life of products, Schröter offers counter-pressure pasteurization systems. The pasteurization method, which is product- and packaging-friendly, ensures that specialties such as brown bread, salmon roe, or meat

products stay fresh and flavorful for long periods of time. The semi-preserved food is loaded into the THERMICjet® PA in perforated, heat-resistant euro containers on EUR-pallets. For example, as soon as packaged bread has been loaded into the pasteurizing system, low-pressure steam is introduced from the outside through a valve. This causes the temperature inside the chamber to rise to around 100 degrees Celsius at a pressure of around 140 mbar. While this temperature is maintained, condensation causes the pressure to drop and a vacuum to be created. This is compensated for using compressed air, which is fed into the system through another valve. The air in the bread's packaging expands as a result of the increase in temperature and builds up pressure. Low-pressure steam or compressed air, which is supplied through yet another valve in the system, ensures that the package does not burst.

- 01 Sensitive natural casings in the cooling basin
- 02 Kettle installation with 1,200 liter kettle volume
- 03 Kettle and cooling basin installation with 1,000 litre kettle volume
- 04 Multiple THERMICjet® systems with a central industrial panel PC control
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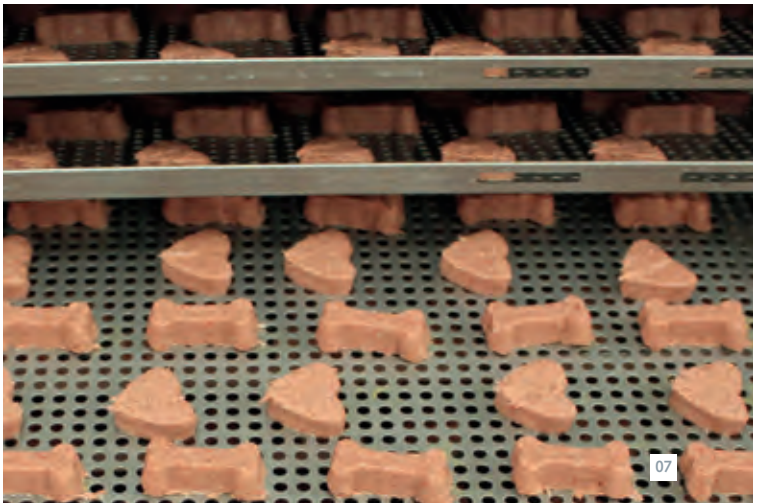
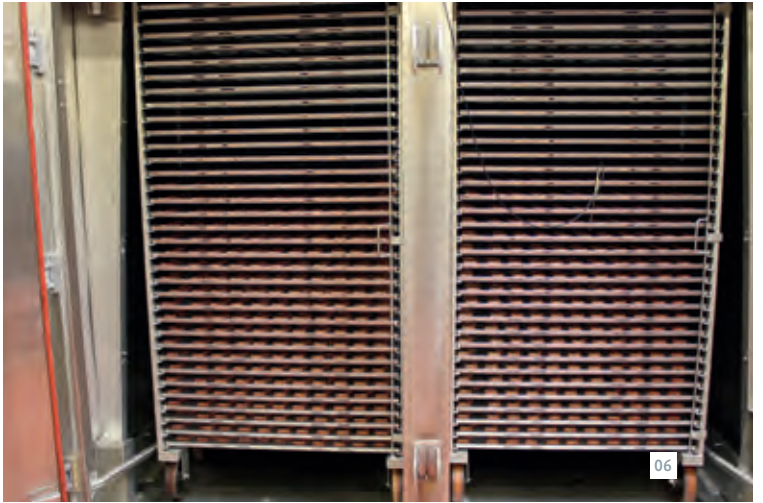
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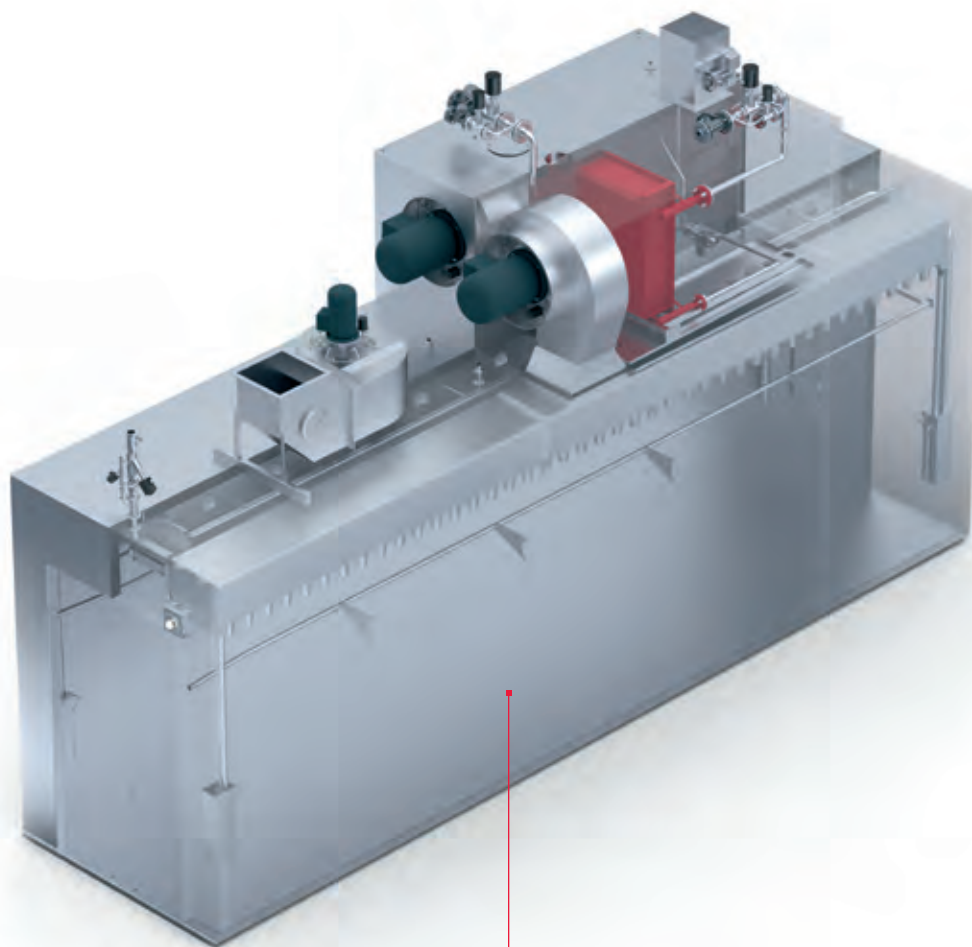


THE SCHRÖTER THERMICjet® AT A GLANCE

THERMICjet® is THE expert for traditional applications such as smoking, cooking, drying, and pasteurizing.

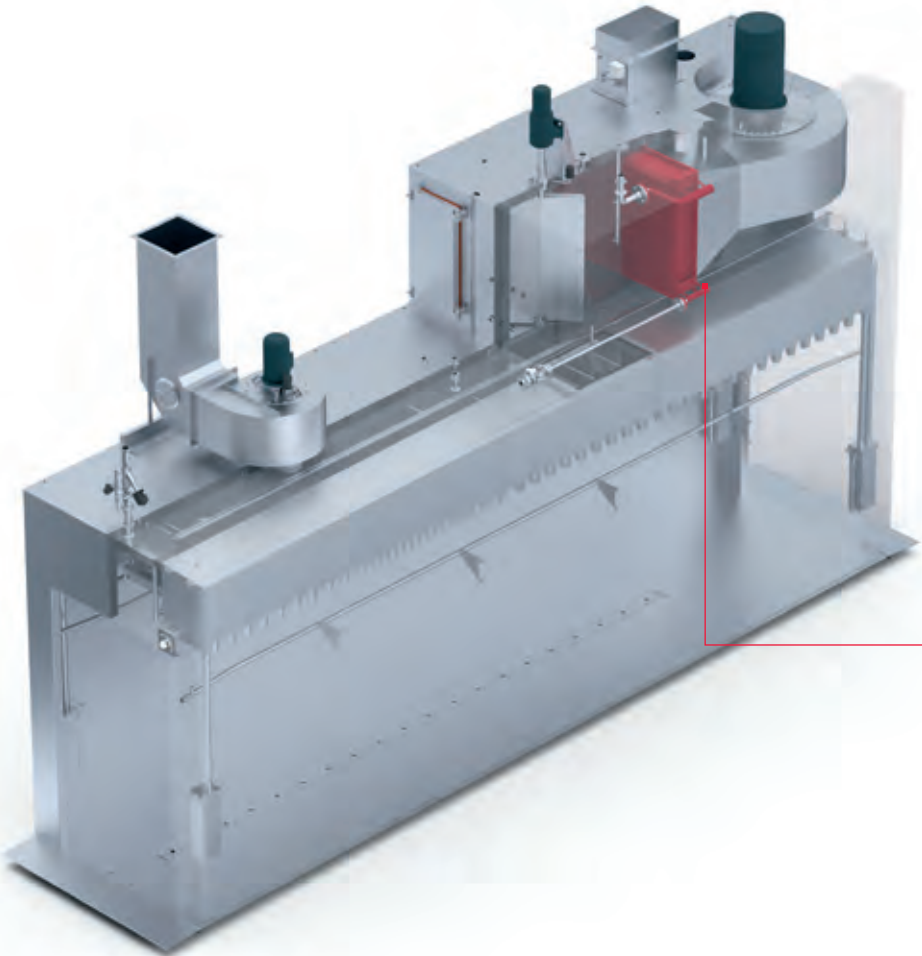
Key features at a glance:

- > Hot smoking and cooking systems
- > Available as a large-scale system or single unit
- > Flow-through version or standard system
- > For all loading systems
- > Can be upgraded to include cooling



THERMICjet® HR

with fully insulated machine housing and two fans

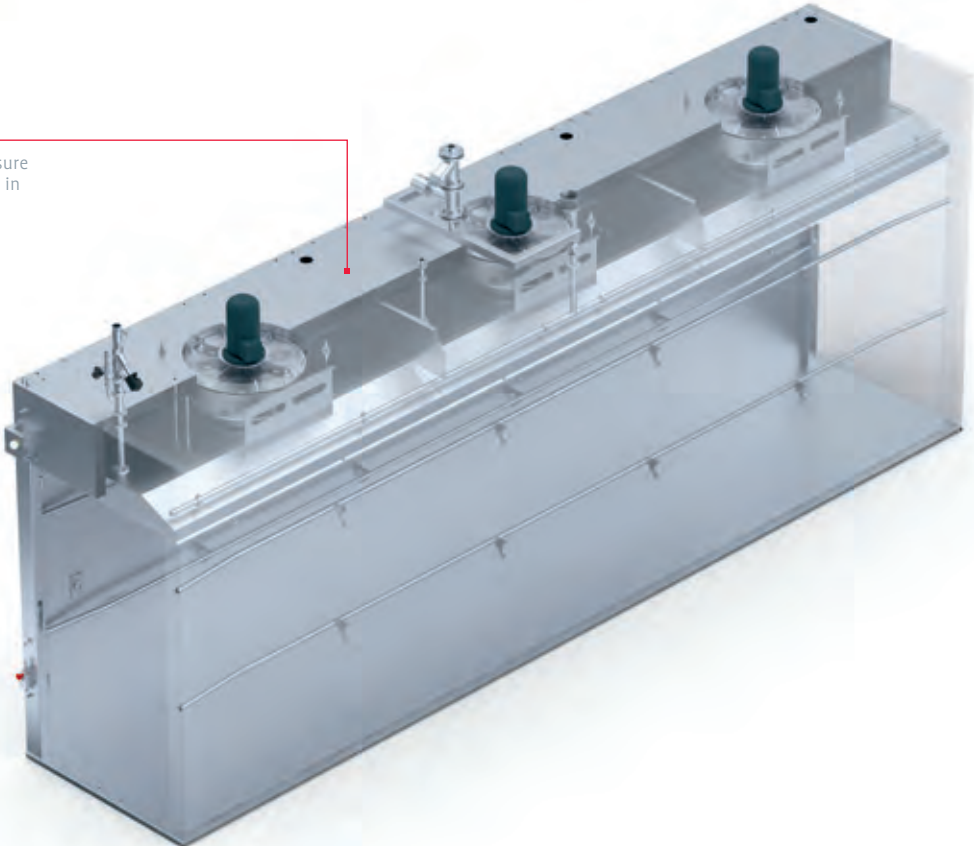


THERMICjet® HR

with fully insulated machine housing and central fan

THERMICjet® KA

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





 SCHRÖTER

BAKEjet

 SCHRÖTER



BAKEjet®

> We design and build Schröter baking systems in several different varieties, such as rotary baking systems, cross-flow systems with multiple air streams, or as combined hot-air cooking systems. As a result, we can offer the perfect combination of equipment to bake, brown, and cook your meat products.

CONSISTENTLY CRISPY

THE MEAT-PROCESSING INDUSTRY TODAY WANTS TO PRODUCE BAKED AND ROASTED PRODUCTS AS QUICKLY AND WITH AS LITTLE WEIGHT LOSS AS POSSIBLE. SCHRÖTER'S BAKEjet® IS THE BAKING SYSTEM FOR BAKING, ROASTING, AND BROWNING A WIDE VARIETY OF PRODUCTS.

The horizontal flow of air into the BAKEjet® system distributes the air completely evenly. A lifting mechanism lifts the product wagon prior to the start and slowly rotates it through the air flow during the entire roasting and baking process. As a result, all of the products are exposed to the incoming stream of air that is blown in at continuously changing speeds and directions. This gives products that are difficult to brown or grate, such as meat in molds or meat-filled pastries, an even surface. Other roasted and baked products can also easily be produced or gratinated with a corresponding increase in consistency.

As one of the most state-of-the-art companies in Europe, the sausage specialist Hans Kupfer und Sohn GmbH & Co. KG has selected the BAKEjet® for its products. The family business is committed to achieving the highest possible standards of production quality.

The transport container (in this example, for meat loaf) is weighed with the filled baking molds and then labeled before entering the BAKEjet®. This is where the various products are baked and are given their delicious crust.

The EDEKA Nordfrische Center in Valluhn has also decided to invest in new Schröter BAKEjet® systems.



01 + 03 Product example: Roast pork with crust

02 Product example: Caraway roast

04 BAKEjet® CrossFlow rotary baking system custom-designed for racks with a depth of 1,500 millimeters and high load capacity

05 The BAKEjet® is perfect for evenly baking products like meatloaf

06 BAKEjet® baking system, CrossBack design

07 Meatloaf – raw mass in the mold (1,500 mm length)

08 Meatloaf – after baking





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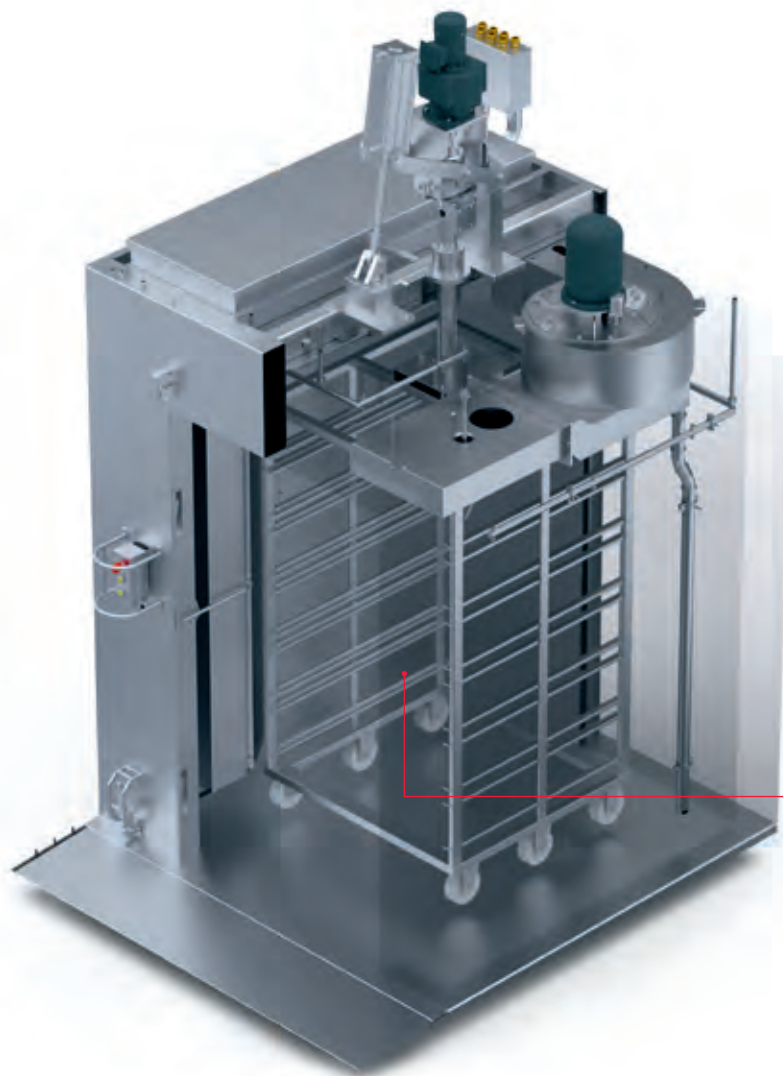
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DER SCHRÖTER BAKEjet® AT A GLANCE

The BAKEjet® is the baking system for baking, frying, roasting, browning, and cooking.

Key features at a glance:

- > CrossFlow rotary baking design
- > CrossBack cross-flow design
- > Available as combination hot-air cooking systems
- > For racks up to 1,500 mm deep

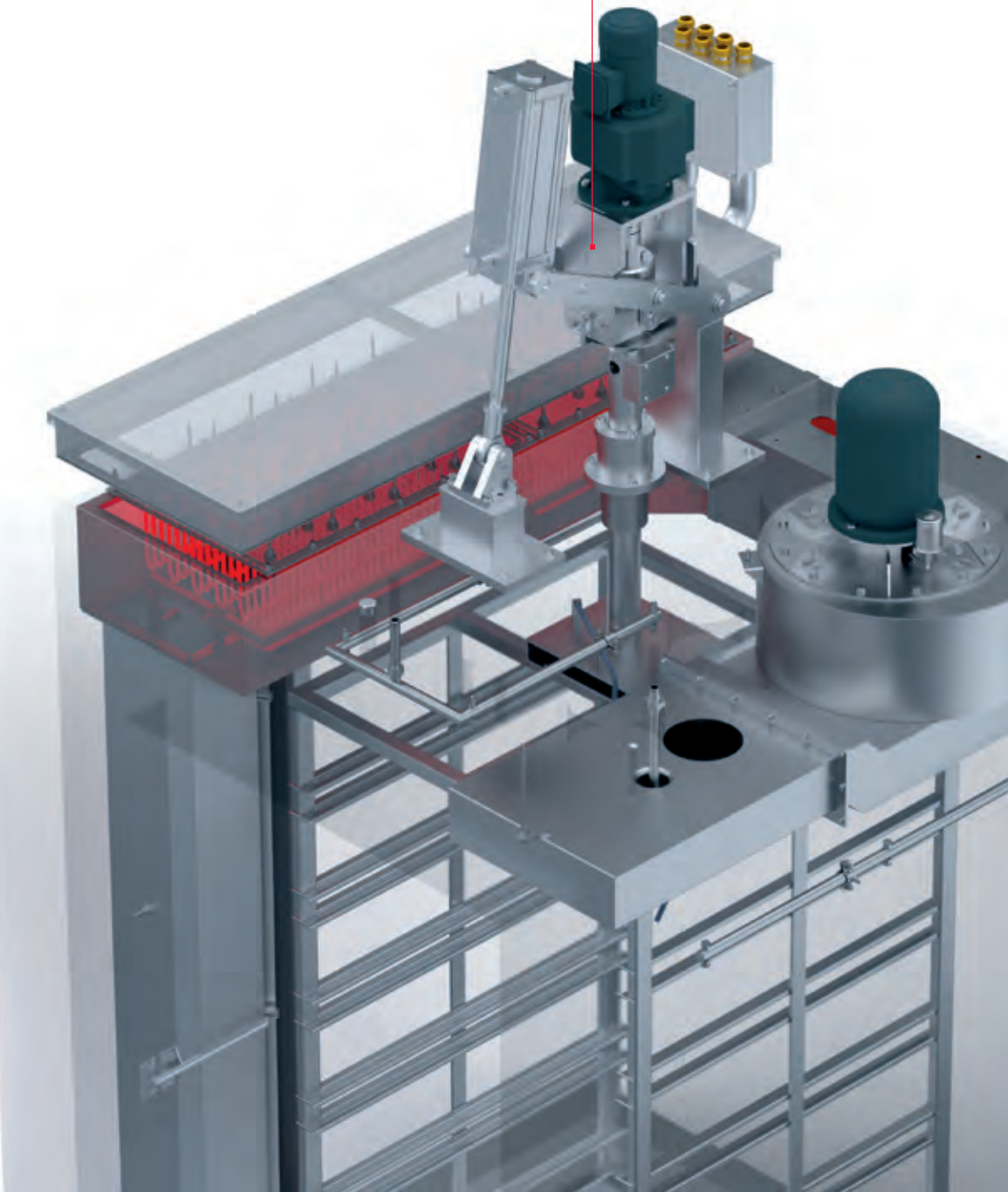


BAKEjet®

Rotary Baking System
for a Consistent Baking
Result

BAKEjet®

Rotary baking unit pneumatic lifting and rotating device







ARCTICjet®

> ARCTICjet® intensive chilling systems from Schröter allow you to cool your products quickly and package them directly afterward. Thanks to these advantages, our intensive chilling and shower cooling systems are the ideal addition to your production workflow and are now considered indispensable by many manufacturers in the meat processing industry. Different cooling media such as ice water, cold air, or brine guarantee the best possible treatment of your meat products. And the intensive chilling system can even be equipped with a full-fledged steam cooking mode on request.

RAPIDLY COOL TO THE PERFECT TEMPERATURE

SCHRÖTER OFFERS INTENSIVE CHILLING AND SHOWER COOLING SYSTEMS TO QUICKLY CHILL HEAT-TREATED PRODUCTS IN A CONTROLLED MANNER. THE ARCTICjet® SYSTEMS SUPPORT PRE-CHILLING BY SHOWER COOLING OR HELP TO ACHIEVE LOW CORE TEMPERATURES VIA INTENSIVE COOLING.

This avoids unnecessary weight loss and extends the shelf life of the products. It goes without saying that Schröter will design a system that meets your specific needs. Depending on the products and technical requirements, cold water, ice water, brine, or cold air can be selected as the cooling medium.

Products can often be packaged right afterwards, depending on the item. All cold air systems in the ARCTICjet® segment stand out thanks to their extremely high air-changes and the resulting impressive cooling effect.

As such, they not only reduce production times and improve product shelf life, but also guarantee absolute food safety. This is because intensive chilling ensures that the products pass through the critical temperature range in which bacteria grow as quickly as possible. In order to ensure that the process is safe, cleaning the cooling systems is an important factor – in Schröter cooling systems, this is carried out by means of steam hygienization in conjunction with a built-in CIP cleaning system. This means the cooling process is twice as safe.

01 Intensive chilling system with ice water cooling

02 Intensive chilling of whole ducks





ARCTICjet®

TIME-SAVING COOKING AND COOLING

The ARCTICjet® with built-in cooking function is a worthwhile option for long cooking and cooling times, such as for boiled ham in molds and modules as well as cold cuts. With this system, the ham is first cooked in molds to a defined core temperature or F-value, and then cooled down to the desired core temperature. A particular advantage of this system is that it eliminates the need to transport the extremely heavy cooking modules to a separate cooling system.

Thanks to this ingenious concept, even long cooking and cooling programs can be run automatically overnight and the products can be processed or packaged the next morning without any delay. Then the system can be used to produce small-diameter products such as cooked or boiled sausages during the day – a method that optimizes system utilization.

- 01 Shower cooling for large-diameter products
- 02 Cold air cooling with cold and hot water shower
- 03 Intensive chilling system at the Kulmbach Vocational School





DER SCHRÖTER ARCTICjet® AT A GLANCE

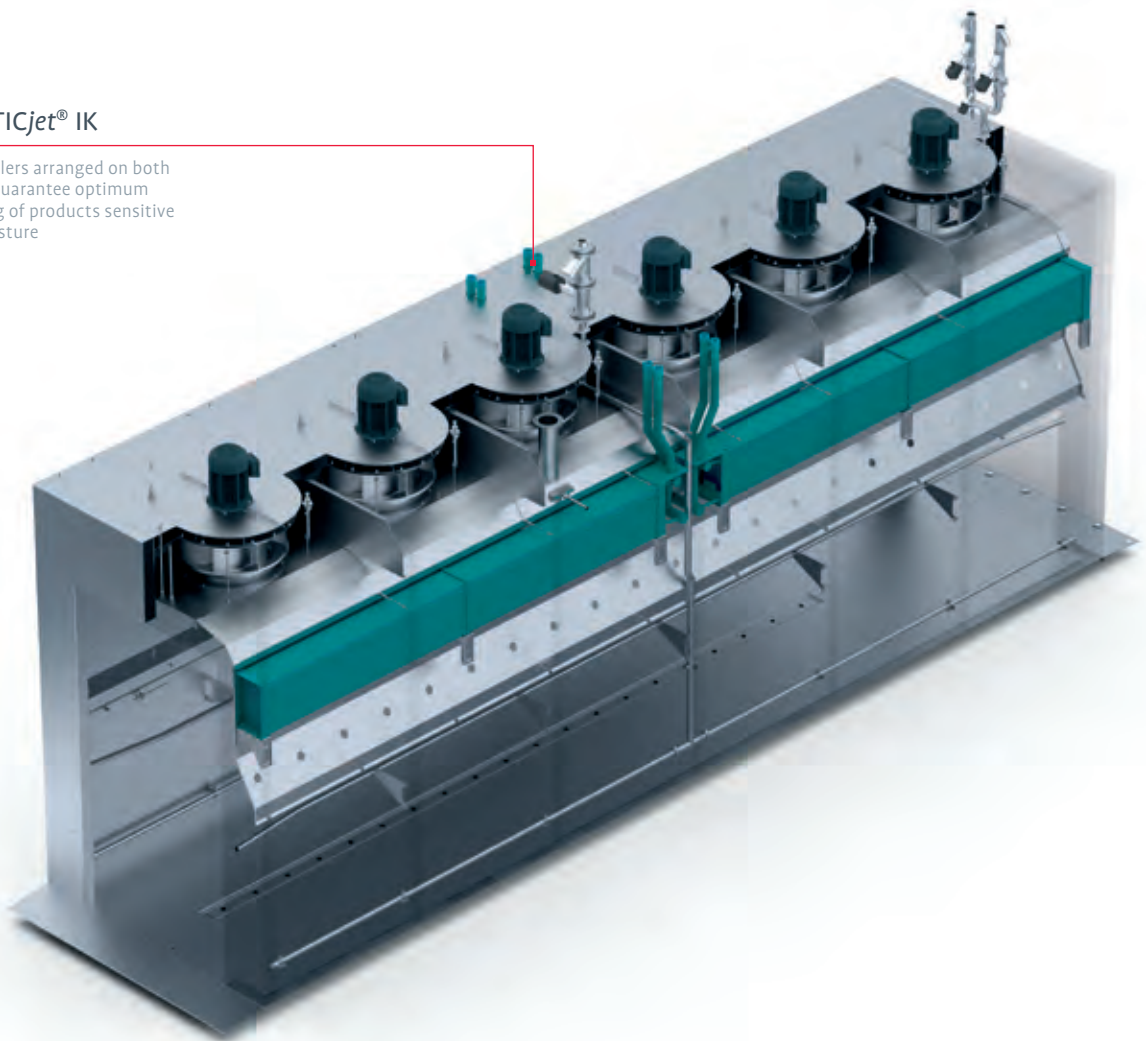
The ARCTICjet® is THE cooling specialist for rapid, intensive cooling.

Key features at a glance:

- > Intensive chilling systems
- > Shower-cooling systems
- > Available for different cooling media (cold air, ice water, brine)
- > Flow-through version or standard system

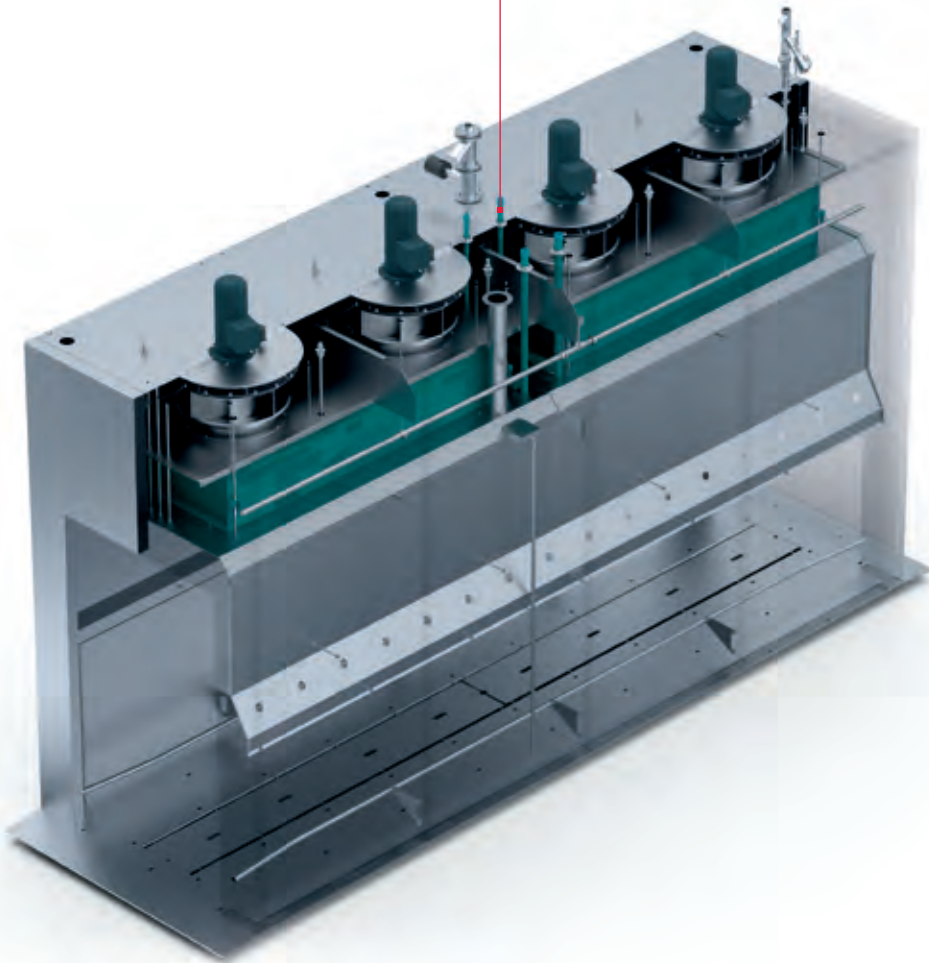
ARCTICjet® IK

Air coolers arranged on both sides guarantee optimum cooling of products sensitive to moisture



ARCTICjet® IK

Central air cooler for maximum cooling capacity





SEMIjet

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SEMIjet

SCHRÖTER



SCHRÖTER

SEMIjet

SEMIjet®

> The semi-continuous thermal processing systems produce in batches with a built-in automatic conveyor system and are equipped with an absolutely user-friendly control system. In this context, the SEMIjet® is synonymous with speed and energy savings as well as consistent meat products and repeatable results – for a perfect process, guaranteed.

A PERFECT COMBINATION

SEMI-CONTINUOUS SEMIjet® THERMAL PROCESSING SYSTEMS WITH AUTOMATIC TRANSPORT SYSTEMS OFFER A WIDE RANGE OF POSSIBLE COMBINATIONS. THE MOST COMMON DESIGN: FIRST, THE GOODS ARE SMOKED OR COOKED AND THEN INTENSIVELY CHILLED. ONE AFTER THE OTHER, BUT IN A FULLY AUTOMATED PROCESS.

Our SEMIjets® are carefully engineered and custom-designed. The combination of the processing zones is just as variable as the layout. Schröter supplies semi-continuous systems in any length as single or double-row models. Customers can even choose their door systems according to their individual requirements. The automatic transport system ensures that production runs smoothly by loading the products into the system in batches, transporting them further between the zones, and transporting them out again cooled. Depending on the load, a transport system is available for rolling wagons, stationary racks, modules, and overhead rail systems.

In addition, optional coding is also available, depending on the design of the transport system. This allows process data to be saved directly on, for example, a module for cooking ham. The code is then read automatically when the module is transported into the SEMIjet® system. Alternatively, a temperature-resistant barcode can be applied, and its process data can then be scanned into the control system before entering the SEMIjet® system.

01 + 02 Single-row SEMIjet® for heavy loads

03 Single-row SEMIjet® for different rack sizes (in this case with a depth of 1,500 millimeters)



01



02



SEMIjet®



01



02



03



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AUTOMATIC TRANSPORT SYSTEMS

With SEMIjet®, Schröter offers a wide variety of system configurations. We will install the system that fits: your project, the system size, your existing product racks, and the desired end product. As automatic transport systems, our range includes chain and walking-beam conveyors with

electric drives, both of which can also be combined with roller-bed conveyors. For lightweight loads, Schröter offers walking-beam conveyors with pneumatic drive. We also have various systems in our portfolio for automatic overhead conveying systems.

- 01 Walking beam transport system for double-row installation with roller-bed conveyor
- 02 Chain conveyor system
- 03 Pneumatic conveyor system
- 04 Walking beam transport system for rolling wagons
- 05 Overhead rail transport system

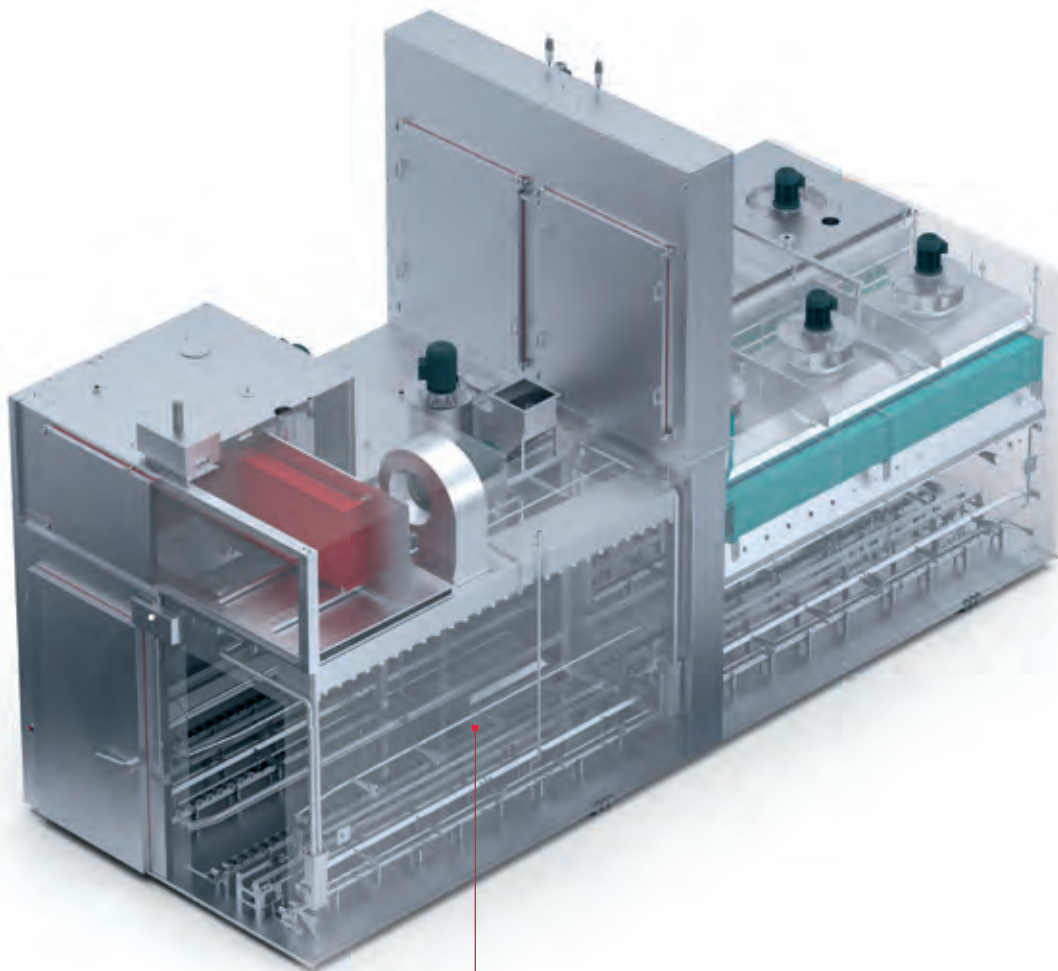


THE SCHRÖTER SEMIjet® AT A GLANCE

The SEMIjet® offers the perfect combination of semi-continuous systems for smoking or cooking and subsequent intensive chilling.

Key features at a glance:

- > Semi-continuous production system
- > Customized design
- > Fully automated conveyor system
- > Combination of different processing zones
- > For all loading systems

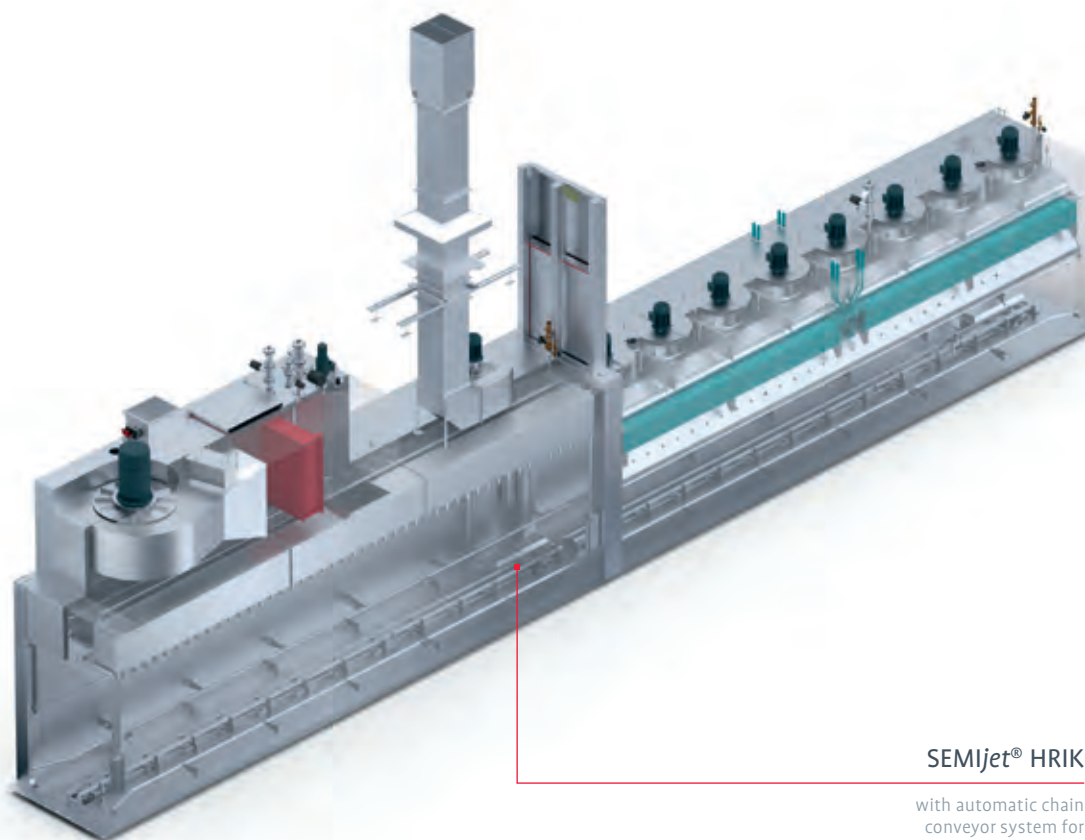
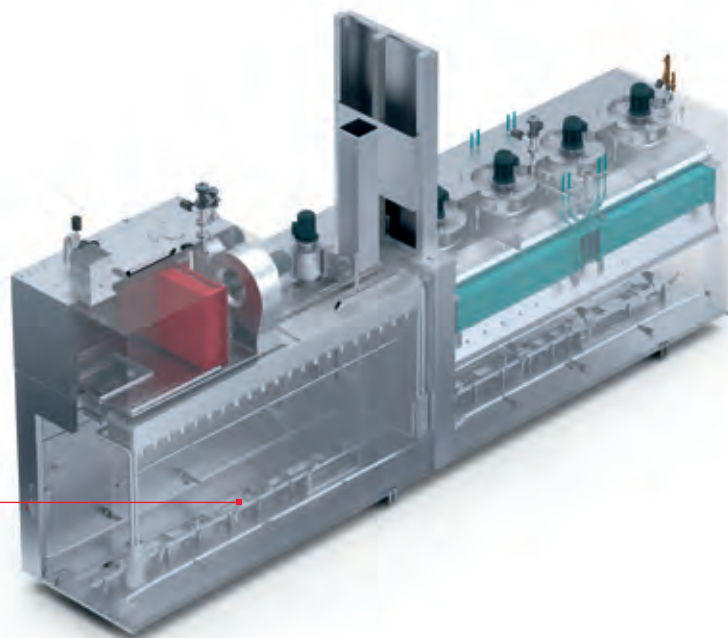


SEMIjet® HRIK

Double-row system with walking beam transport system

SEMIjet® HRIK

Single-row system with automatic walking beam transport push-rod conveyor system for extremely heavy product wagons



SEMIjet® HRIK

with automatic chain conveyor system for perfectly timed transport





CONTIjet®

CONTIjet®

> The fully continuous CONTIjet® from Schröter dries, smokes, cooks, cools, or pasteurizes in a single operation – quickly, efficiently, and without high labor costs. Automatic stick loading, removal, and reloading with subsequent system cleaning ensure processes are completely automated. As a result, it offers invaluable benefits to customers who produce large quantities. The size and design of the systems are individually adapted to the customer's products and the situation in their production facility.

NON-STOP, CONTINUOUS PRODUCTION

THE FULLY CONTINUOUS CONTIjet® PRODUCTION LINE WITH CUSTOMIZED CONVEYOR SYSTEM IS IDEAL FOR PRODUCING LARGE QUANTITIES, BECAUSE THE PRODUCTS ARE PROCESSED IN A CLOSED CYCLE FROM HEATING TO COOLING TO PACKAGING.

Schröter tailors the functionality and conveyor system to the exact requirements of each individual customer. This makes it possible to vary and combine steam quantity, temperature, and throughput time as needed. This results in numerous production options and the perfect parameters for each product.

In this way, CONTIjet® systems, which are operated fully automatically, produce consistently high-quality products at all times. Standardized meat and poultry products such as hot dogs, sausages, and cold cuts, as well as various convenience products, can all be processed into top-quality products using Schröter technology. For example, a finely-meshed wire conveyor belt can transport very thin and narrow products safely. The conveyor belt is continuously

cleaned in a closed water system with filtration for maximum hygiene. Time-saving loading and unloading automation is also available as an added option. In short: The name CONTIjet® is synonymous with optimized production times, low use of human resources, and maximum product output in minimal space.

Since the continuous lines are in constant use, Schröter is committed to achieving best-in-class quality and reliability. We design our systems tailored to the type and scope of their intended use and the specific circumstances of your business – to ensure that you meet your long-term goals.

01-05 Fully continuous bacon production





02

CONTIjet®



03



04



05

THE CONTIjet® – FULLY PROCESSED IN A SINGLE OPERATION

01-04 Fully continuous hot dog production with circulating ice water cooling



SCHRÖTER



CONTIjet®

THE SCHRÖTER CONTIjet® AT A GLANCE

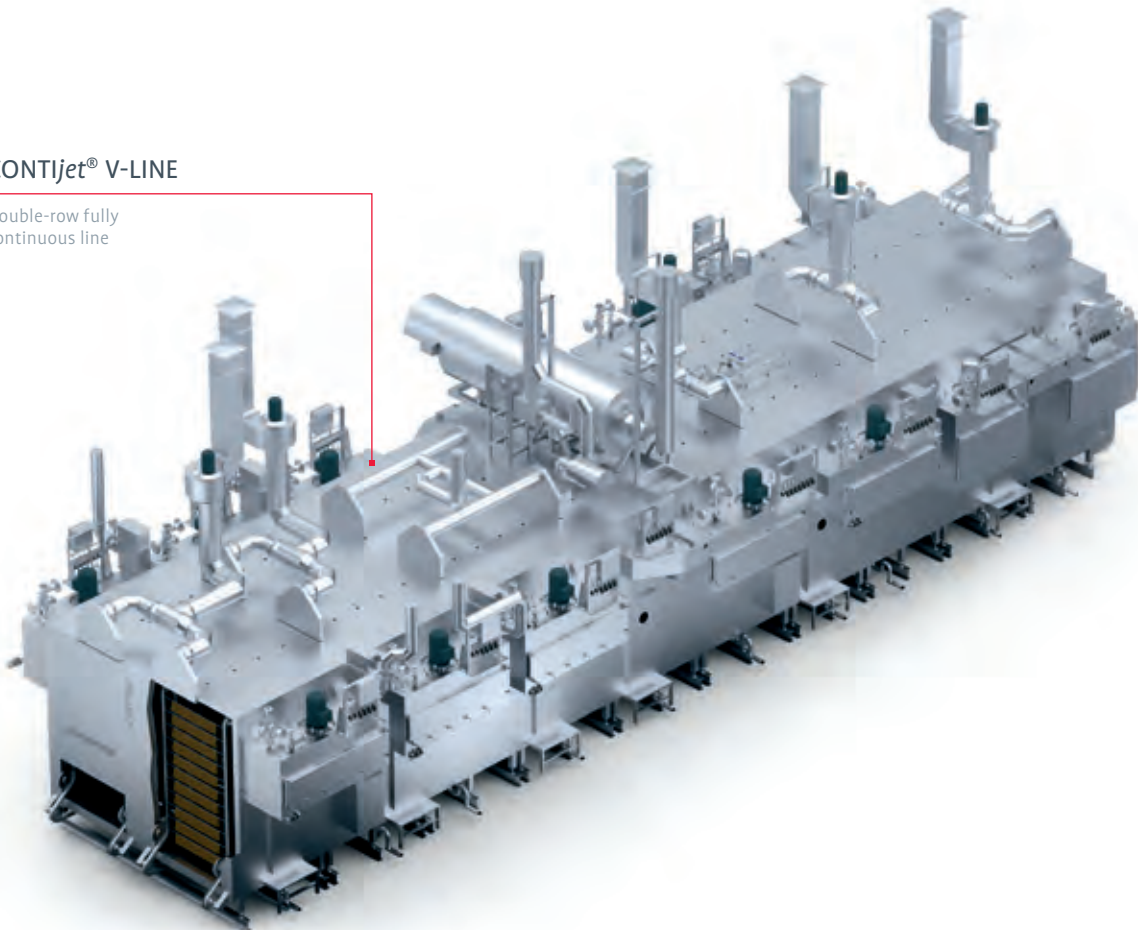
The CONTIjet® is the all-rounder among the fully continuous systems for smoking, cooking, cooling, or pasteurizing.

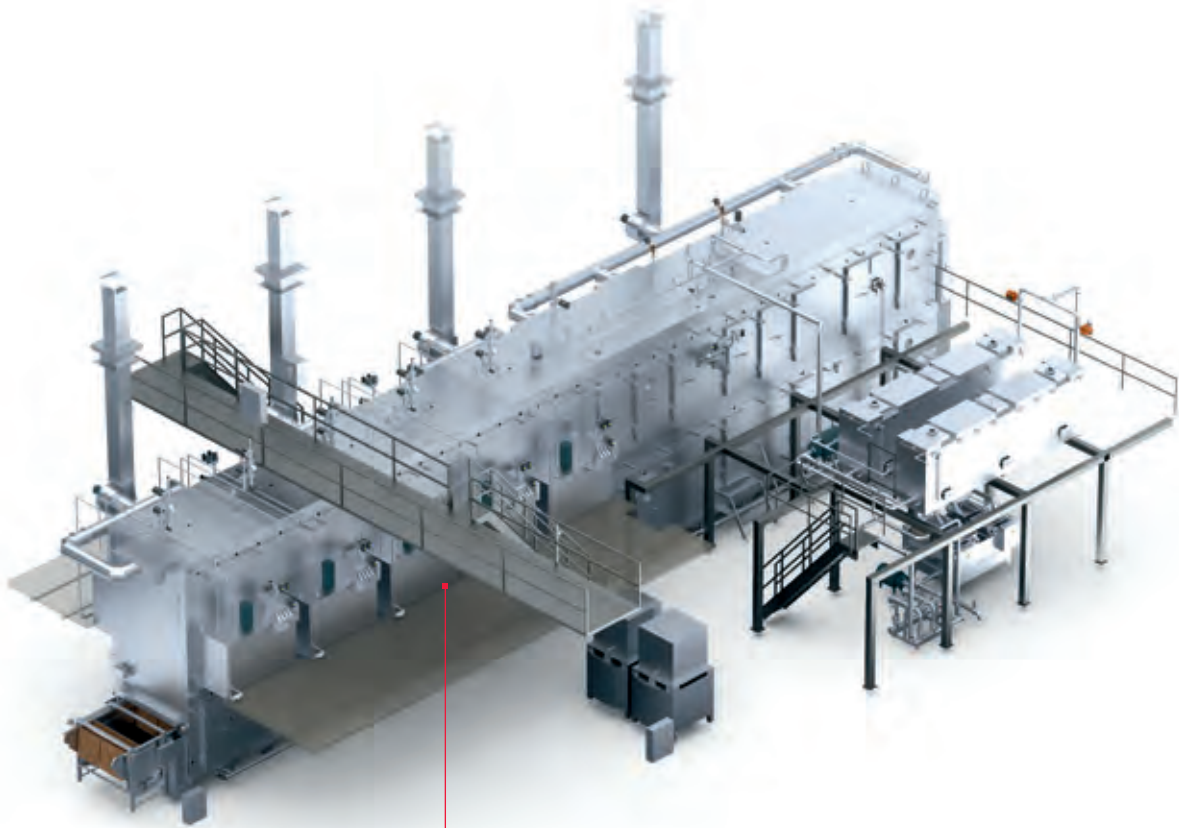
Key features at a glance:

- > Fully continuous production system
- > Automatic stick loading, removal, and reloading (sausage production)
- > Automated loading and unloading systems
- > Particularly suitable for large-scale production
- > Customized system design

CONTIjet® V-LINE

Double-row fully continuous line





CONTIjet®

CONTIjet® V-LINE

Single-row fully
continuous line

 **SCHRÖTER**

CLIMAjet





CLIMAJET®

CLIMAJET®

> CLIMAJets® are systems with individual air guidance for processes along the entire production chain – from defrosting and climatic smoking to aging and maturing. This sophisticated system technology is equally suitable for artisanal and industrial users because it can be flexibly adapted to different products and capacities. The products are processed in an absolutely uniform and gentle manner – from the smallest to the largest post-maturing chamber – via a finely structured duct system that circulates air throughout the chamber. In addition, Schröter adapts all climatic smoking, maturing, post-maturing, and defrosting systems to fit your building. In addition, we also always find the best solution for your new construction project.

CLIMATE CLEVER FOR MAXIMUM QUALITY

WHEN IT COMES TO THE MANUFACTURE OF MEAT PRODUCTS, THE CLIMATIC CONDITIONS DETERMINE THE QUALITY. SCHRÖTER'S TRIED-AND-TESTED CLIMAJets® CREATE THE IDEAL TEMPERATURE AND HUMIDITY REGARDLESS OF THE OUTSIDE CLIMATE.

Schröter continuously tests its air circulation systems for thermal meat and sausage processing, and tailors them to different processes and product properties. Its process optimization efforts focus on new and more effective system components, product-specific and energy-saving control options, as well as various types and speeds of air flow for uniform product maturing. With extensive visualization options such as permanent parameter documentation, batch and operator verification, and batch traceability, the East Westphalian systems manufacturer also ensures that its customers meet HACCP requirements (Hazard Analysis and

Critical Control Point) with ease. Last but not least, Schröter develops its systems with cost-effectiveness in mind and always strives to achieve best-in-class performance with low energy consumption.

In order to fully meet real-world requirements, we collaborate with Germany's leading raw sausage producers, scientific institutions, and vocational schools. A highly qualified team of designers, mechanical engineers, and meat technologists then transforms the results into sophisticated system designs.

- 01 Climatic post-maturing system for tall wagons
- 02 Pepperoni drying system with 88 racks





CLIMAJET®



01



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03



04



05

INTELLIGENT AIR FLOW

The multi-channel CLIMAJet® MAS is particularly clever. Thanks to various air inlet and recirculation options, this system supplies all areas of the chamber with conditioned drying air – for a perfect drying result. An alternating flow of air ensures that products dry in an extremely uniform manner right from the first hour of maturing – whether small or large-diameter products and low or high degrees of drying. An additional benefit is that the air flow is gentle on the products.

Furthermore, the split air inlet ducts, which are adapted to the respective chamber size, have proven themselves in everyday use. Depending on the program, alternating dampers supply the horizontal or vertical inlet ducts with conditioned air. In this process, the correct ratio between air that is directed horizontally and vertically is crucial.

- 01 Climatic raw sausage system, four rows
- 02 + 03 Product example: Raw sausage with natural mold
- 04 Product example: Teewurst
- 05 CLIMAJet® post-maturing system, 700 m²
- 06 Multi Airflow System (MAS) multi-channel system for horizontal and vertical air flow



GENTLE MATURING AND DRYING

Raw sausages and hams should mature and dry gently and quickly with the lowest possible energy consumption. With the innovative LIMIT process control based on the principle of “alternating humidity control,” the systems manufacturer is demonstrating a novel approach.

In this process, an interval of minimum and maximum temperature and humidity values is defined, and the parameters of this interval control the system’s continuous alternation between running and paused operation. During a pause interval, the moisture in the product diffuses from the core to the surface, where it is released into the circulating air, thereby increasing the humidity in the chamber. The highest level that the humidity in the chamber is permitted to reach, the external LIMIT value, is adjusted to the respective product properties.

- 01 CLIMAJet® climatic post-maturing system for tall wagons
- 02 Climatic maturing system (MAS) for small-diameter products, for example Landjäger sausage
- 02 + 05 Climatic maturing system for air-dried and smoked ham
- 03 Air-conditioning machine units for 60-wagon systems
- 04 Product example: smoked Camembert
- 05 Product example: smoked ham

When it is reached, the pause period ends and the system begins operation once again. By increasing the circulating air and adding cooling, heating, drying, and fresh air, the chamber humidity is reduced and the climate values fall back within the preset internal LIMIT parameters. The system then automatically switches to pause mode, and the climate once again develops solely as a result of the moisture released by the product. The LIMIT control system also incorporates fresh air into the process via state-of-the-art enthalpy control systems. A “negative” maximum deviation from the target value can be set so that the product does not become too dry. If the chamber humidity level falls below this value, the system moves back toward the regular LIMIT range by means of additional humidification.

This minimizes maturing errors, increases the longevity of motors and machine parts, reduces maintenance requirements – and, last but not least, conserves valuable energy.



01



02



03

CLIMAJet®



04



05



Shortloin/T-Bone USA

CORRECTLY MATURING DRY-AGED BEEF

Dry-aged beef is a gourmet food which requires a special maturing process. Schröter offers the best conditions for meat that is matured on the bone with the CLIMAJet®. This system offers pinpoint control parameters: the temperature in the dry-aged beef maturing room remains constant between 0.5 and 1 °Celsius and the humidity is held at between 75 and 85 percent relative humidity with a low and constant air speed. Thanks to the ability to precisely maintain these parameters, the CLIMAJet® offers excellent maturing results.

Depending on individual needs, the pieces of meat usually mature with pinpoint accuracy for between 14 and 35 days, and can then be delivered exactly portioned to restaurants. The result is a culinary delight – beef at its best. This is because the dry maturing and the associated water loss intensify the flavor, which is further increased by the meat's fat marbling. This leads dry-aged beef to develop its one-of-a-kind, buttery-nutty taste.



01 + 02 Dry-aged beef matures with pinpoint accuracy

03 Maturing room for dry-aged beef



QUICK AND SAFE DEFROSTING

Schröter developed the innovative CLIMAJet® to defrost frozen products in particularly gentle process without any loss of quality. Its climatic process control system and variable air flow ensure that products are defrosted uniformly with minimal weight loss and natural, high-quality freshness – even massive blocks of frozen meat.

Before it can be processed, meat frozen to a temperature of -24 degrees Celsius must be defrosted to approximately -1 to 0 degrees Celsius. Up to now, this was often carried out in a water bath. But this has drawbacks, such as an extremely high level of water consumption and negative effects on the quality of the meat due to leaching and protein loss. Thanks

to a new defrosting process with steam, the systems from Schröter not only reduce defrosting losses but also cut energy consumption by ninety percent. In this context, the frozen blocks of meat are placed in multiple layers on rolling wagons or racks. Steam that is fed into the defrosting chamber heats it to the predefined temperature and ensures that heat is distributed evenly throughout. Variable air flow also guarantees that uniform heat and humidity distribution. In this context, product probes inserted directly under the product surface and in the product core control the uniformity of the defrosting process. This means the system constantly operates in the ideal range and safely prevents overheating and microbial growth in the products being defrosted.



- 01 Defrosted blocks of meat
- 02 Salmon fillet during the defrosting process
- 03 Defrosting system with rolling wagons
- 04 + 05 Defrosting systems with two-level racks
- 06 Defrosting process with core and surface probes





03

CLIMAJet®



04



05



06

THE SCHRÖTER CLIMAJet® AT A GLANCE

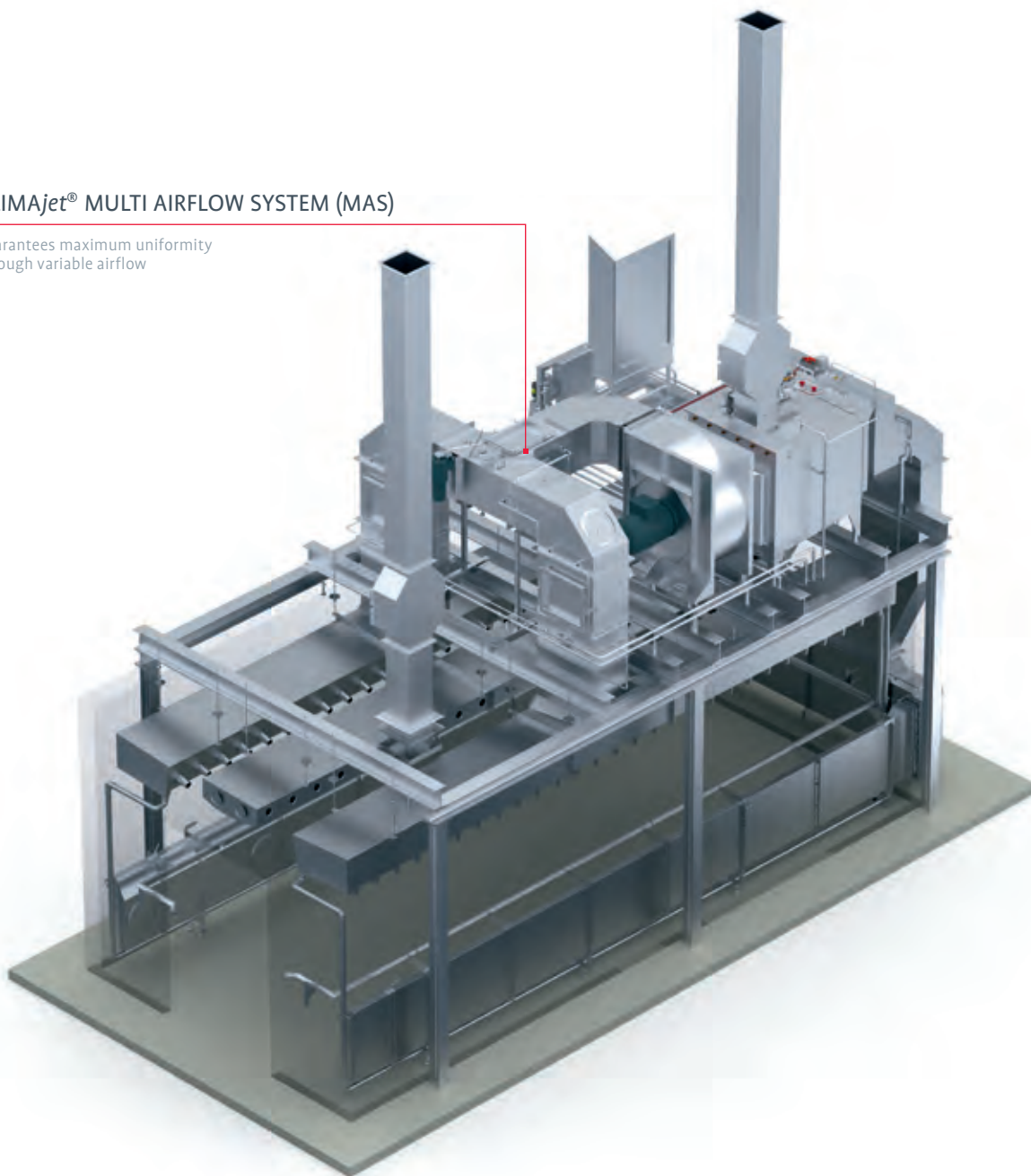
The CLIMAJet® is the all-rounder for climatic processes along the entire production chain, from defrosting to climatic smoking to maturing and post-maturing.

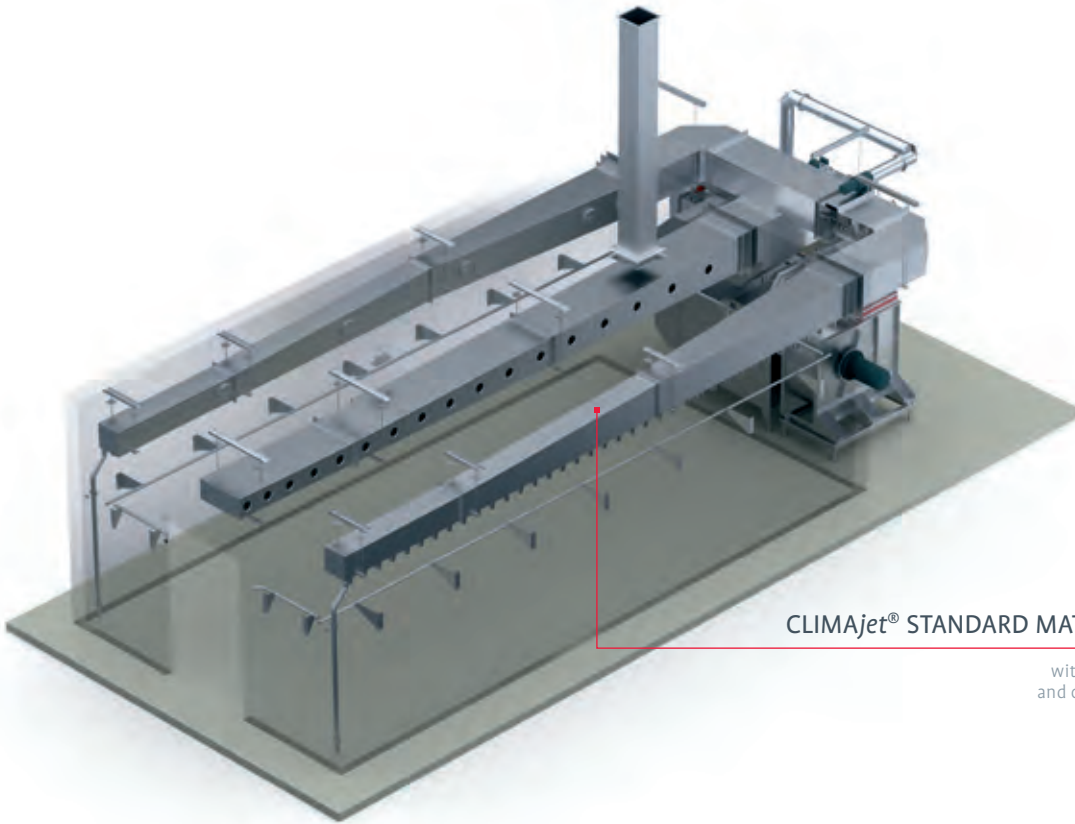
Key features at a glance:

- > Tailored in a flexible manner to the products and capacity
- > Finely-structured duct system
- > Customized design
- > Documentation and batch traceability according to HACCP

CLIMAJet® MULTI AIRFLOW SYSTEM (MAS)

guarantees maximum uniformity through variable airflow



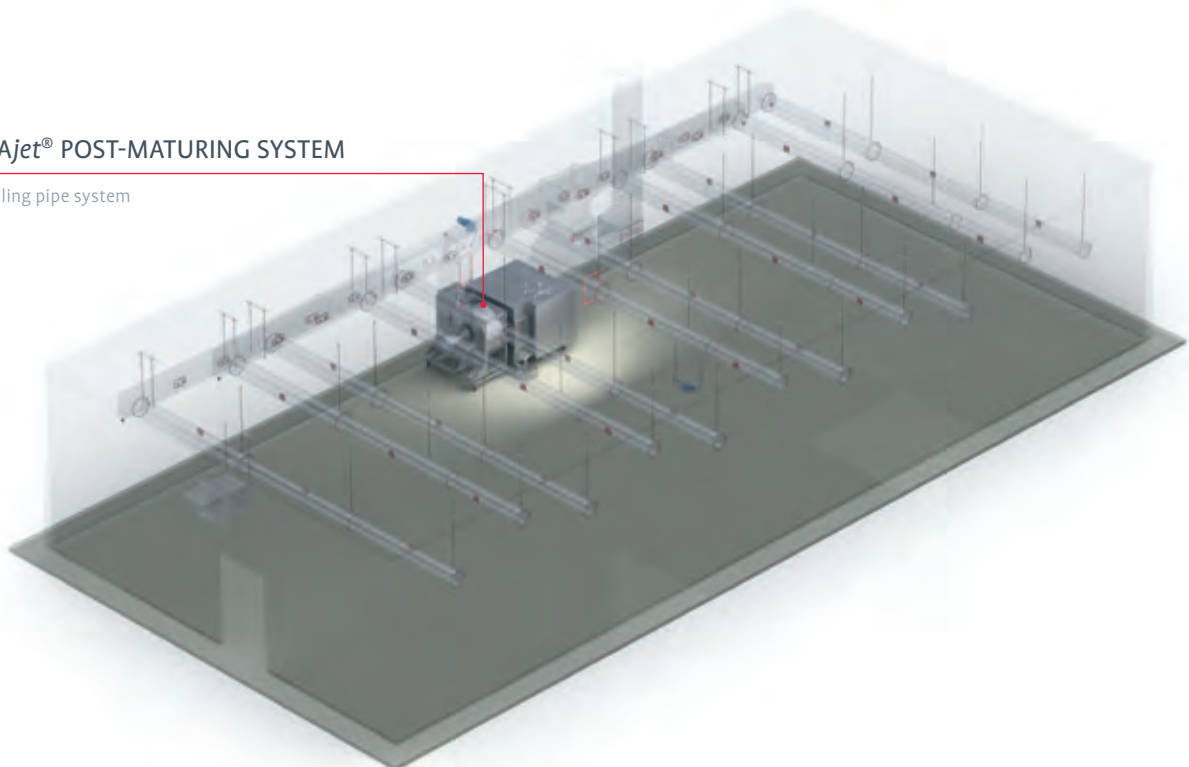


CLIMAJet® STANDARD MATURING SYSTEM

with lateral air inlet ducts
and central air recirculation

CLIMAJet® POST-MATURING SYSTEM

with ceiling pipe system



 **SCHRÖTER**



 **SCHRÖTER**





FISHjet®

> The FISHjet® is the perfect means of transforming raw fish into an equally tasty and healthy pleasure. Whether smoked fish such as eel and mackerel or dried stockfish, Schröter's state-of-the-art drying and smoking systems for hot and cold smoking ensure that the preparation of numerous delicacies is always a resounding success. This is because uniform, gentle drying results in outstanding quality with low weight loss and an appetizing color.

FIRST-RATE FISH PROCESSING

WITH ITS SYSTEMS FOR DRYING AND SMOKING FISH, SCHRÖTER HAS REINTERPRETED A TRADITIONAL METHOD ON A GRAND SCALE. AS A RESULT, THE FISHjet® ENHANCES THE CHARACTERISTIC TASTE OF A WIDE VARIETY OF PRODUCTS AND AT THE SAME TIME IMPROVES THEIR SHELF LIFE.

Whether as an adapted single-wagon system or a fully continuous production line, the FISHjet® is suitable for fish that is processed both hanging and lying down. Perfectly uniform results are achieved first and foremost thanks to its excellent heating, cooling, and dehumidification performance. They also result from the infinitely variable control of the circulating air system with powerful fresh air supply and substantial smoke volume.

The Schröter product line includes pasteurization systems for preserving fish roe in cans and jars as well as vacuum-packed surimi variations and defrosting systems for blocks of fish specially developed for the fish industry. We select the best heating option and ideal system configuration for your needs

depending on which fish specialty you want to process. The customized control and feedback control technology enables cost-effective process control.

Thanks to the use of state-of-the-art conveyor technology and racks or trays, the various process steps such as drying, smoking, and cooling can be carried out in an efficient and extremely productive manner. The fish is manually loaded and unloaded in trays and empty cans in the loading or unloading zone without the need for time-consuming skewering. The fully automated feeding or discharge of the empty and full cans increases the productivity and efficiency of Schröter's continuous production lines.

01 Product example: smoked mackerel fillets, 30 layers per wagon

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





FISHjet®





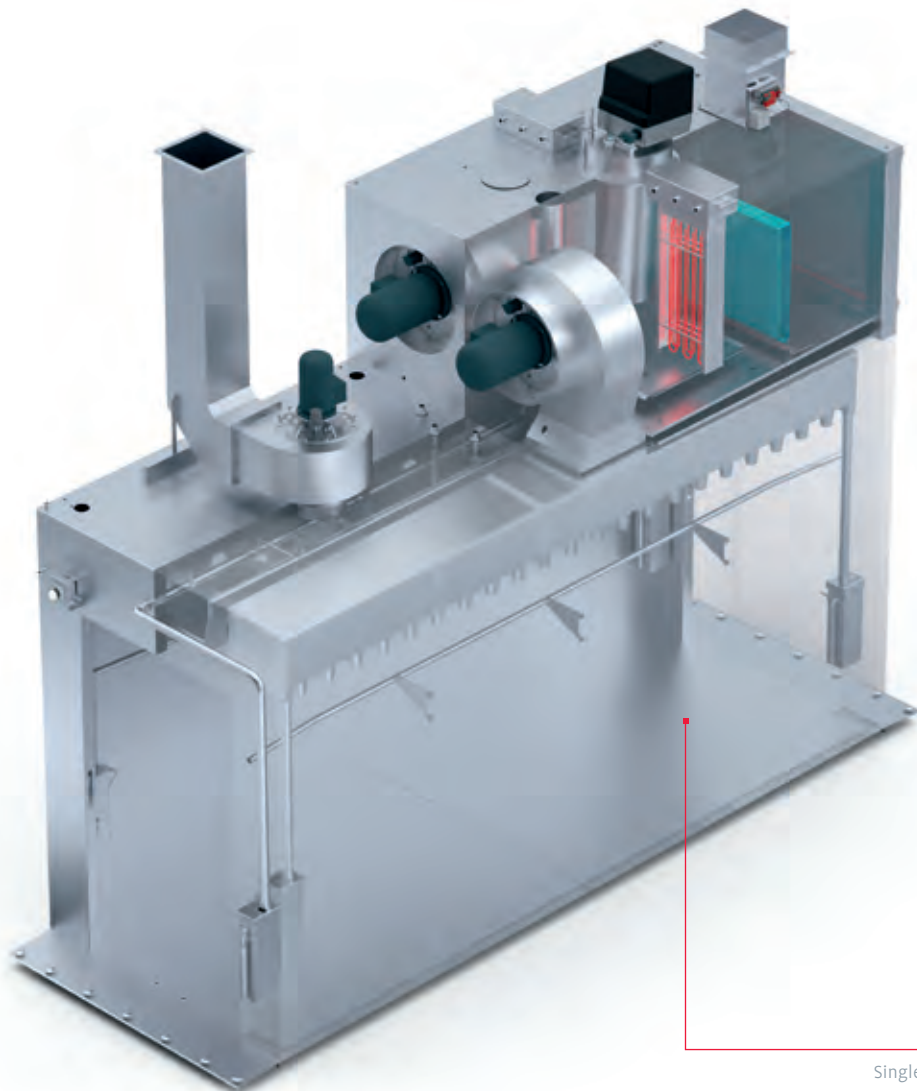
R

THE SCHRÖTER FISHjet® AT A GLANCE

The FISHjet® is the state-of-the-art specialist for traditional smoking and drying of various types of raw fish.

Key features at a glance:

- > Drying and smoking systems
- > Hot and cold smoking
- > For both hanging and lying products
- > Excellent heating, cooling, and dehumidification performance

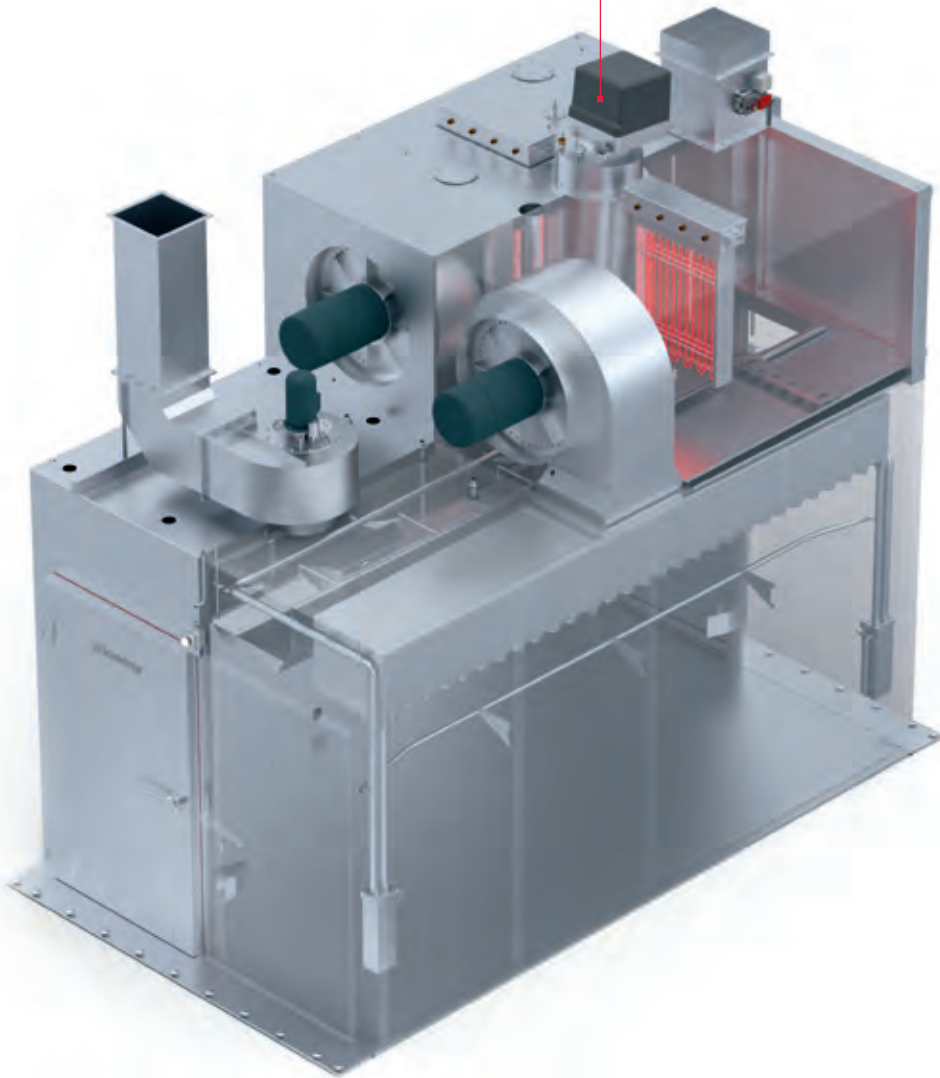


FISHjet®

Single-row system

FISHjet®

Double-row system



 **SCHRÖTER**

Caution
Explosion hazard

Technical specifications and safety information label.

SMOKjet RH09





SMOKjet®

> Whether mild or intensely smoked, different products require different smoking intensities. This is why Schröter offers four SMOKjet® smoke generators for hot and cold smoking systems: wood-chip smoke generators for wood chips and saw chips, steam and friction smoke generators, and liquid smoke atomizers. In addition, wood-chip and steam smoke generators produce a minimal amount of exhaust air that can be cost-effectively scrubbed using exhaust air treatment systems. Friction smoke generators, on the other hand, stand out thanks to their closed-loop operation, and liquid smoke systems generate smoke through compressed air atomization in closed systems.

EXQUISITE SMOKY FLAVOR

WHEN SELECTING A SMOKE GENERATION METHOD, TASTE AND INTENSITY ARE THE MOST IMPORTANT FACTORS. IN ADDITION, THE CHOICE HAS AN IMPACT ON THE SELECTION OF A SUITABLE AND EFFECTIVE EXHAUST AIR CLEANING SYSTEM.

WOOD-CHIP SMOKE GENERATORS come closest to traditional smoke generation by burning either coarse wood chips or finer saw chips. The latter provide a mild smoke. This is produced by burning the wood or saw chips at temperatures of 400-700 degrees Celsius on a heated burner plate. The smoke and the air that transport it mix together, exit through the smoke outlet at the back, and then are guided to the chamber via the smoke pipe.

FRICTION SMOKE GENERATORS produce a smoky flavor of medium intensity. In this process, a wood bar is pressed against a rotating friction wheel to generate smoke. The wood bar is pressed against the wheel pneumatically via a stainless steel drive chain. The smoke generator has a magazine with space for up to five wood bars.

STEAM SMOKE GENERATORS extract the desired substances in the wood chips via superheated steam. The smoky flavor is medium to strong. A steam-air mixture is heated to a temperature between 360-450 degrees Celsius using electric heating elements and forced through continuously moving wood chips. The unique advantages of this method are that the steam smoke has a constant intensity, is conveyed via condensation, and thus reduces the weight loss of the product.

LIQUID SMOKE SYSTEMS are suitable for all common liquid smoke brands worldwide. In this method, a liquid, undiluted smoke concentrate is atomized by compressed air in the process chamber. Depending on the recipe, the smoky taste is medium to strong.



01 SMOKjet® RH wood-chip smoke generator

02 SMOKjet® RD steam smoke generator

03 Two-component jet for liquid smoke

04 SMOKjet® RF friction smoke generator





SMOKjet®

THE SCHRÖTER SMOKjet® AT A GLANCE

The SMOKjet® smokes perfectly at various levels of smoke intensity. In this context, we offer four different smoke generation methods to enhance your products.

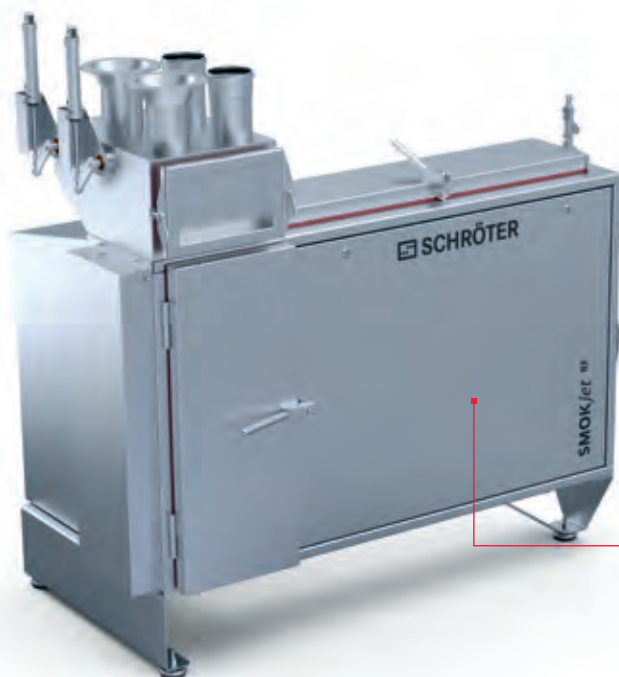
Key features at a glance:

- > Wood-chip smoke generator for wood chips and saw chips
- > Steam smoke generator with exhaust air treatment system
- > Friction smoke generator with closed-loop operation
- > Liquid smoke systems with compressed air atomization or pump systems



SMOKjet® RH09/RS09

Wood-chip smoke generator with automatic chip removal
Example: dual smoke outlet



SMOKjet®-RF

Friction smoke generator
Example: dual smoke
outlet



SMOKjet®-RD

Steam smoke generator
Example: single smoke outlet



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CLEENjet®

> Schröter's thermal exhaust cleaning systems are used to treat high-volume, heavily contaminated exhaust gas flows – from 200 to several thousand cubic meters per hour. They are available as a single-source solution or as a central system for several emission sources. Downstream units for heat recovery can also be integrated into the system. Schröter's CLEENjet® is available in a number of varieties either in the classic design or as a weatherproof and soundproof container solution. Our water scrubbers are also an alternative for systems with steam smoke generators. We also offer customized solutions for low-contamination air flows.

A CLEAN AFFAIR

IN THE MEAT PRODUCTS INDUSTRY, PRODUCTION PROCESSES GENERATE SMOKE EMISSIONS THAT POLLUTE THE ENVIRONMENT. AS A MANUFACTURER OF CLIMATIC AND HOT-SMOKING SYSTEMS, SCHRÖTER OFFERS CUSTOM-DESIGNED, ENVIRONMENTALLY FRIENDLY SOLUTIONS, INCLUDING THE CLEENjet® THERMAL EXHAUST AIR CLEANING SYSTEM.

Thermal exhaust treatment consists of a kettle-shaped combustion chamber with a built-in raw-gas preheater. Here the exhaust gases from the smoking process are purified at temperatures of more than 750 degrees Celsius. This means that the carbon compounds and atmospheric oxygen present in the raw gas are almost completely converted into CO₂ and water vapor (H₂O). In addition, Schröter does not allow the excess heat energy to go to waste, but uses it in an optimal manner to either heat the process water, feed it into the heating systems, or heat thermal oil for frying lines. In order to offer customers a system solution that meets their needs, Schröter analyzes both the amount of exhaust air that will be produced and its level of contamination.

We also offer a four-column scrubber as an alternative for systems with steam smoke generators. This cleans the exhaust air by spraying it with water. A level sensor determines the maximum and minimum water level so that the water

can either be partially or completely exchanged automatically. If the exhaust air scrubber is outside, an automatically controlled electric heater prevents the scrubber water from freezing during the cold season.

In addition, biological exhaust air purification is also available. In this context, an effective biofilter system with an organic bed including an exhaust air scrubber cleans odorous process exhaust air. Odor and grease particles are first effectively separated in the scrubber. Then the air with the remaining odor particles flows into an organic bed, where it penetrates a one-meter-thick layer of bark mulch and is metabolized and purified by the microorganisms present. In addition, Schröter offers other alternative exhaust air cleaning systems tailored to customers specific needs upon request.

- 01 Biological exhaust air purification with an organic bed
- 02 Purification of exhaust smoke gases with a thermal exhaust air purification system
- 03 RWK four-column scrubber for slightly contaminated air flows



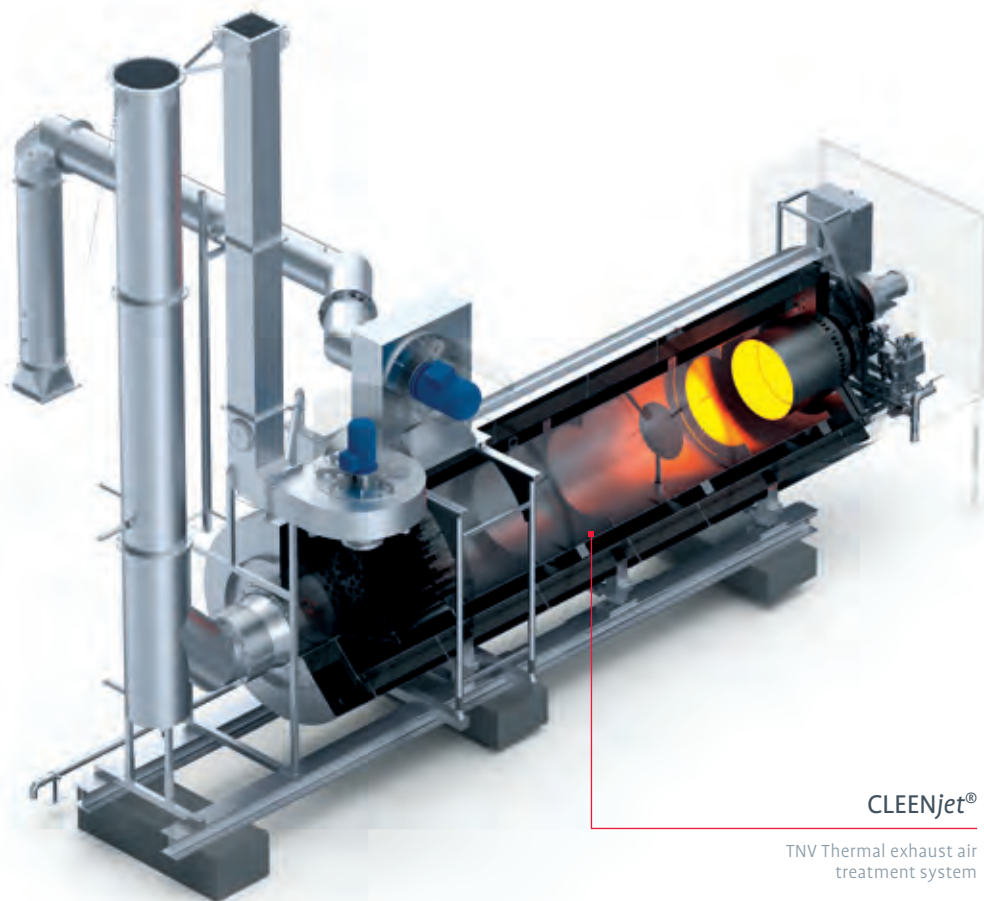


THE SCHRÖTER CLEENjet® AT A GLANCE

The CLEENjet® is the emissions expert among Schröter systems. These thermal exhaust cleaning systems are used to treat high-volume, heavily contaminated exhaust gas flows.

Key features at a glance:

- > Systems available to treat from 200 to up to several thousand cubic meters per hour
- > Available as a single-source solution or central system
- > Equipped with preheating device for untreated exhaust gas
- > Additional heat recovery units can be connected
- > Under-roof solution or weatherproof, soundproof container solution also available for outdoor installation
- > Four-column water scrubber available
- > Exhaust air cleaning through biofilter system with organic bed available as an alternative

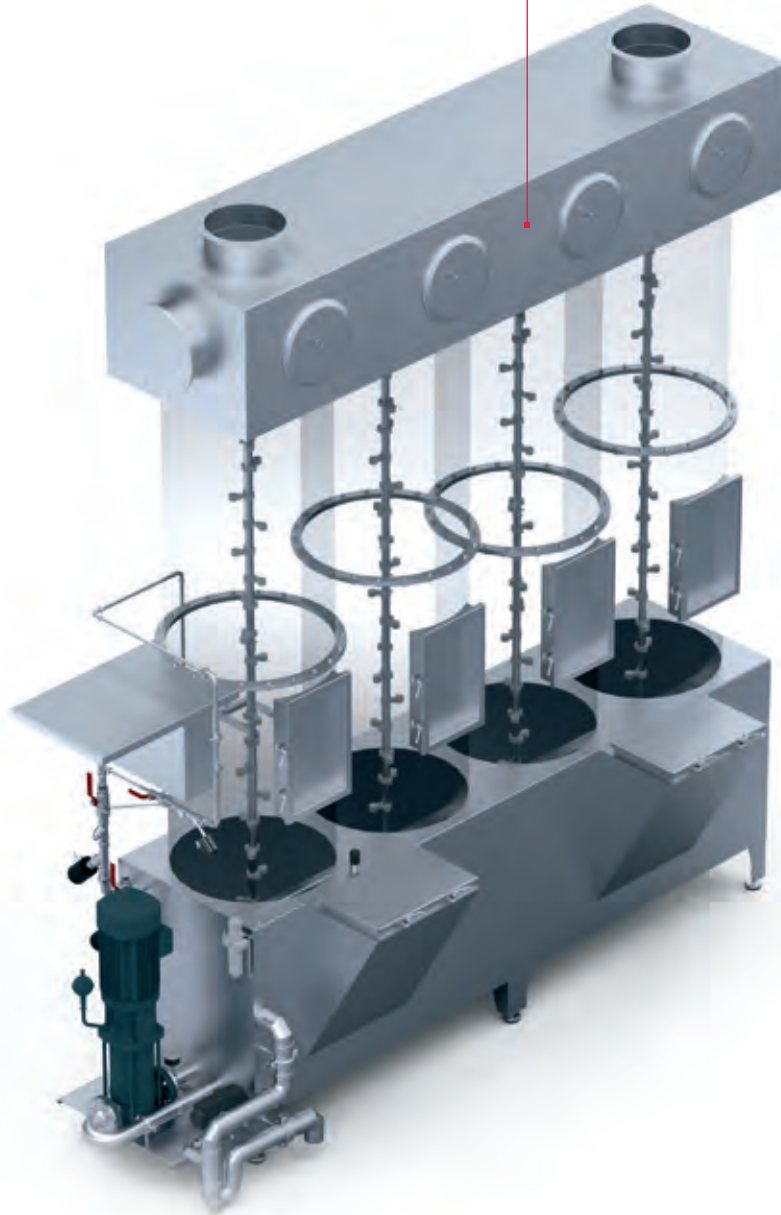


CLEENjet®

TNV Thermal exhaust air
treatment system

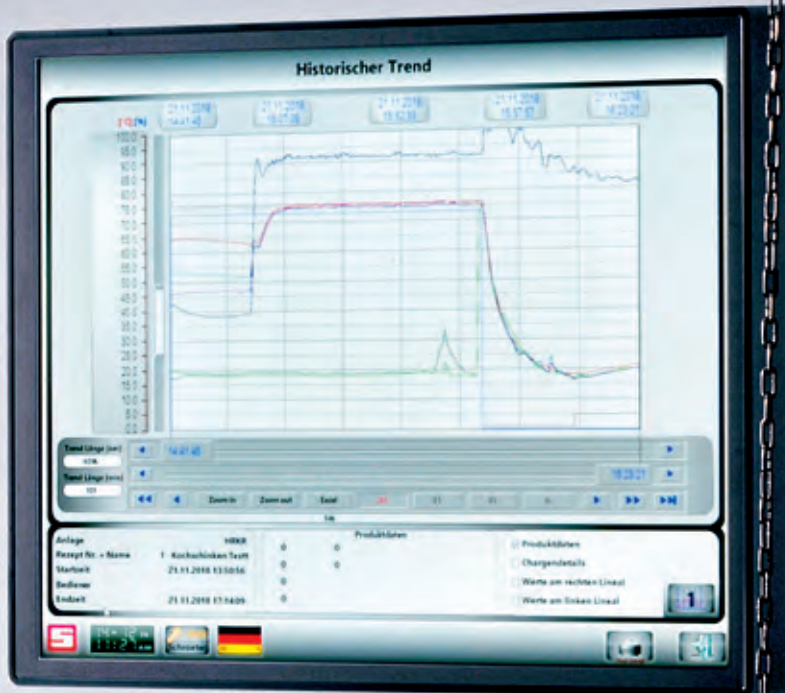
CLEENjet®

RWK four-column scrubber





 SCHRÖTER



CONTROL & VISUALIZATION

> Schröter offers its systems with four different control systems. They are all programmed to meet our customers' specific needs, so that you can easily manage your data. The clearly arranged visualizations show all of the connected systems and the current values quickly and at a glance. These system make it possible to manage processing programs for different products from a central location and track production steps. And if you ever need help, our online Quick Support is always available.

CONTROL TECHNOLOGY FOR TRANSPARENT PROCESSES

WITH FOUR DIFFERENT CONTROL SYSTEMS IN ITS PORTFOLIO, SCHRÖTER CAN OPTIMALLY EQUIP AND PROGRAM ITS PRODUCTION SYSTEMS AROUND THE GLOBE – DEPENDING ON THE NEEDS AND PREFERENCES OF ITS CUSTOMERS.

PLCs from Siemens are the most popular systems, and are predominantly sold on the European market. Japanese customers, on the other hand, prefer Mitsubishi systems with the complete Japanese character set. Allen-Bradley control systems are widely used in America. They all have a touch screen control panel. Almost all control systems are programmable logic controllers (PLC), and up to 99 percent can be programmed by Schröter. The modular control systems offered by Schröter are manufactured in large quantities based on industry standards, are reliable, and always state of the art. This means that they can also be supplied worldwide over many years in the event that they need to be replaced.

The visualizations shown by the systems provide an initial overview of all connected systems with the current values.

When a specific system is selected, the target/actual values are displayed – including graphically in the form of a trend curve, if required. In addition, the processing programs for the various products can be managed centrally. The visualizations usually allow you to trace back production steps and program sequences for up to a few years.

The Siemens and Allen Bradley control systems are continuously updated with new languages and programmed in several languages for maximum ease of use. This makes it easier to understand text-based descriptions, operator instructions, or error messages and alarm lists. At the present time, 27 different languages are available.

- 01 Control system from Mitsubishi
- 02 Control system from Siemens
- 03 Schröter Panel PC to control up to 30 production systems from a central location
- 04 Control system from Allen-Bradley



01



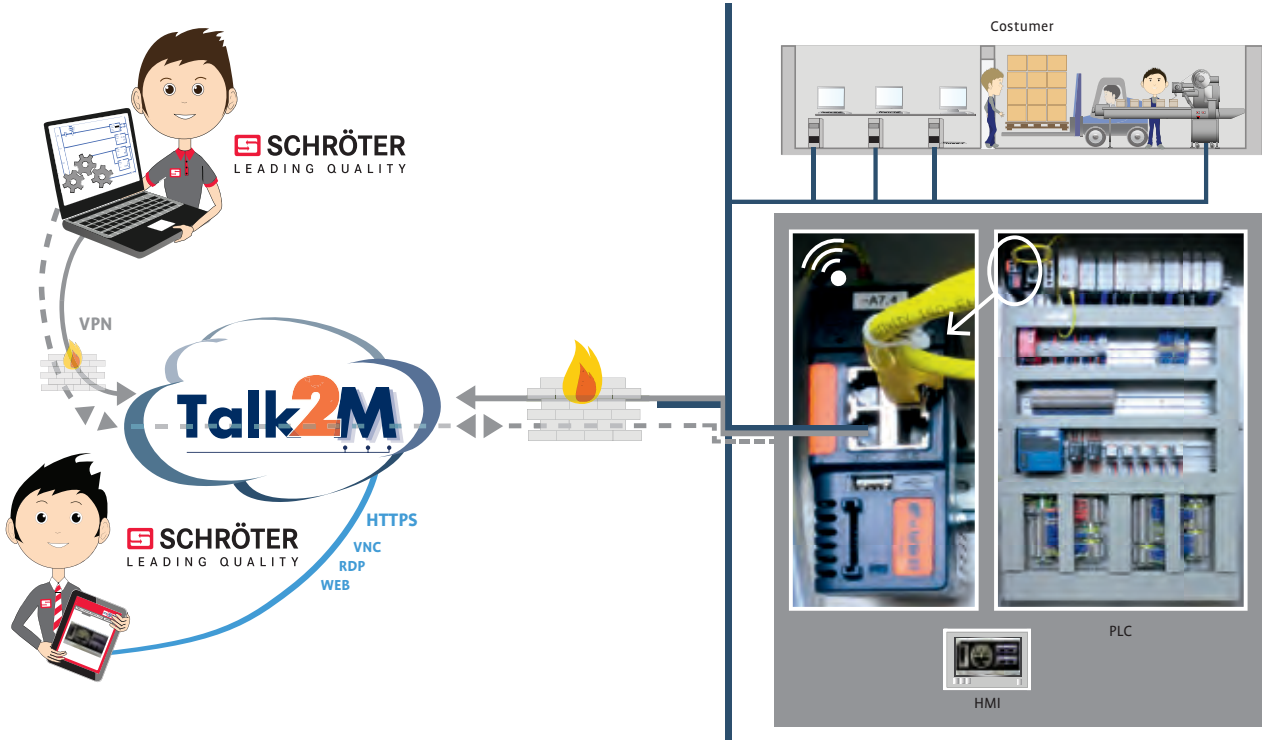
02



03



04



01



02



03

REMOTE MAINTENANCE – SIMPLE, SECURE, FLEXIBLE

Production systems need to run smoothly. If a technical issue arises, rapid assistance is required – worldwide. As a result, Schröter relies heavily on remote maintenance and now offers its customers new options with the eWon security router from Wachendorff Prozesstechnik GmbH & Co. KG. Customers receive support within the shortest possible time and avoid costly, protracted on-site visits. The universally deployable remote maintenance system allows Schröter to view all of the system parameters in compliance with the strictest safety regulations.

With the nonproprietary eWon VPN router, remote maintenance of Schröter's systems is both easy and flexible. The device fits on the profile rail next to the control unit and establishes a secure VPN connection over the Internet with the service team in Borgholzhausen. In this context, the customer's internal network can be completely isolated from the equipment network. This means that the service team only

has access to Schröter's control systems. In addition, the service technicians don't automatically have around-the-clock access to the data from the systems; instead, the customer determines whether or not and when the service team has access. For this purpose, a switch is installed that only opens up a secure OpenVPN tunnel (thereby preventing unauthorized access) when set to "Service." The eWon router only sends the encrypted system data to the service team when the customer manually flips the switch on site. This data can then only be accessed, analyzed, and processed by the authorized users of the respective service team for the purpose of rapid troubleshooting. The eWon VPN router supports a variety of media and communicates with leading control systems, since the device is preprogrammed with all the major protocols. Furthermore, it comes with all the necessary international certifications, meaning it can be used by companies around the world. User administration with different access permissions and hierarchy levels provides additional security.

- 01 Practical online support from Schröter
- 02–05 Multilingual programming including characters
- 02 Process displayed in Korean
- 03 Alarm list in English
- 04 Modification screen in English
- 05 Process displayed in Chinese



04



05

INTOUCH GETS A FRESH NEW LOOK

The InTouch process visualization software that is used to display and easily control Schröter production systems has been optimized and now features modern graphics, a multilingual display, improved database storage, and extremely fast data access.

Today, fast data access was one of the most important factors when reprogramming the software. The data is stored in Microsoft Access or Microsoft SQL databases, allowing the customer to integrate it into the company's own ERP systems. The process visualization software exports reports to Excel, either as a file or to print out a copy.

Connecting to PC systems via Ethernet networks now makes it possible to load even large amounts of data from the connected systems extremely fast. Two versions, new system groupings, and a new recipe editor round out InTouch's new features.

- 01 View of the systems in different languages, in this case Russian, Thai, Korean, and Japanese
- 02 Control cabinet for cleaning system and control unit with Schröter Panel PC
- 03 Schröter operating units with built-in Siemens touch panel





CONTROL



Einblas.
waagrecht
rechts

Einblas.
senkrecht
rechts

Ansaug.
oben
vor MK

Ansaug.
oben
innen

Ansaug.
rechts
hinten

Ansaug.
rechts
vorn

Ansaug.
links
hinten





CLEANING

> Automated cleaning is becoming an increasingly important feature of large industrial facilities. That is why the experts at Schröter have developed a programmed control unit that covers all of the steps in the process. It helps clean the systems consistently well and as quickly as possible, using the least amount of chemicals and water as possible. The automatic cleaning device operates using a booster pump and can be used for more than one production system. In this context, the process visualization software documents every cleaning with the same level of precision as it does the production processes. As a result, system operators can always see when the system was cleaned. With its automated cleaning system, Schröter makes the production process safer and ensures that resources are used in an ideal manner.

A PROPER CLEANING

SCHRÖTER OFFERS CUSTOMIZED CLEANING SOLUTIONS FOR EVERY SYSTEM SIZE AND DIFFERENT LEVELS OF CONTAMINATION. WE OFFER FULLY AUTOMATED SYSTEMS FOR LARGE PRODUCTION LINES THAT CLEAN USING LIQUID DETERGENTS OR FOAM. FOR SMALL AND MEDIUM-SIZED INSTALLATIONS, WE OFFER THE RG300 MOBILE SOLUTION AS AN ALTERNATIVE. AN INTERIOR CLEANING IS AVAILABLE AS AN OPTION.

With automated cleaning, the valves of the system's individual cleaning zones are individually controlled by a software application. In this context, more heavily soiled areas are exposed to cleaning agents for a longer time or more often. At the end, all zones are rinsed with water. The defined parameters ensure that cleaning agents and water required to rinse the systems are always used sparingly.

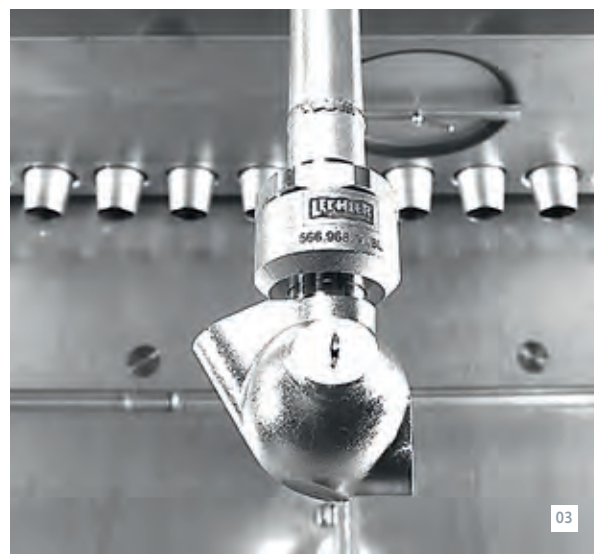
The automatic cleaning unit is installed at a central location and can be permanently connected from there to the cleaning distributors of several systems. The detergent tank is connected to the unit and detergent is measured out automatically. The control systems then access the cleaning devices one after the other.



- 01 Foam cleaning system
- 02 Control system for a cleaning program
- 03 Rotating cleaning head for fullyautomated interior cleaning
- 04 RG 750 fully automated cleaning system for large production lines
- 05 RGA automatic cleaning dispenser
- 06 RG 450 fully automated cleaning System



02



03



04



05



06

CLEANING



GORBEL 2

5. POSITION



TECHNICAL INFORMATION

> Schröter's systems are meticulously designed down to the last detail, feature best-in-class workmanship, and are manufactured from high-quality materials. We flexibly adapt every thermal processing system and every door system to the customer's specific requirements, right down to the smallest piece of equipment. We even tailor accessories such as smoking, cooking and baking wagons, or racks for industrial trucks to your exact requirements. The following pages contain all of the dimensions and connection values for our hot-smoking, cooking, baking, intensive chilling, smoking, climatic raw sausage, and climatic post-maturing units, kettles, and exhaust air cleaning systems.

SCHRÖTER'S DOOR SYSTEMS AT A GLANCE

Schröter's systems are equipped with high-quality lifting doors, standard, or double-wing doors.

Key features at a glance:

Double-wing doors

- > With inflatable door seals
- > Large, heavy doors available
- > User-friendly handling
- > Optimized for automated transport systems
- > Low-maintenance
- > Mechanical interlock available
- > Sanitary hinge design
- > Modular design of hinges ensures fastest possible delivery of spare parts



DOUBLE-WING DOORS

with inflatable door seals



LIFT DOOR SYSTEM

with sanitary design

Key features at a glance:

Lift door:

- > with sanitary design
- > Space-saving
- > Meets current safety standards
- > Ideal for semi-continuous systems
- > Electrical interlock available



Key features at a glance:

Standard swing door:

- > Cost-effective solution
- > For a variety of applications
- > Mechanical interlock available
- > Low-maintenance
- > Sanitary hinge design
- > Modular design of hinges ensures fastest possible delivery of spare parts

SINGLE-WING STANDARD DOOR

THERMICjet® HR: SINGLE- AND DOUBLE-ROW HOT-SMOKING SYSTEMS

SINGLE-ROW HOT SMOKING SYSTEMS											
DIMENSIONS	UNIT	1-wg.	1-wg. JS	2-wg.	3-wg.	4-wg.	5-wg.	6-wg.	7-wg.	8-wg.	10-wg.
Length – compact system *	mm	1200	1680	3100	4200	5510	6610	7930			
Length – flow-through system	mm			2360	3460	4560	5660	6760	7860	8960	11160
Width	mm	1440	1560	1510/1640	1510/1640	1640/1760	1640/1760	1640/1760	1760	1760	1760
Height – compact system	mm	2650	2550	2550	2550	2550	2700	2700			
Room height for compact system	mm	3200	3250	3300	3300	3300	3400	3400			
Height – flow-through system	mm			3600	3600	3600	3750	3850	4050	4050	4050
Room height for flow-through system	mm			4200	4200	4200	4400	4750	5000	5000	5000
CONNECTIONS	UNIT										
Electricity	kW	3	4	10	13	18	18	25	25	35	35
Heating: steam, electric, gas	kW	27	36	80	120	160	200	220	240	260	300
Humidification and cooking: steam	kg/h	65	65	125	150	200	250	300	325	350	450
Shower: cold water	l/min	18	18	36	54	72	90	108	125	144	180
Weight	kg	1400	1700	2200	2400	2700	3000	3700	4000	4600	4900

DOUBLE-ROW HOT-SMOKING SYSTEM										
DIMENSIONS	UNIT	4-wg.	6-wg.	8-wg.	10-wg.	12-wg.	14-wg.	16-wg.	18-wg.	20-wg.
Length – compact system*	mm	3310	4410	5510	6610	7710	8980	10080	11480	12580
Length – flow-through system	mm	2360	3460	4560	5660	6760	7860	8960	10060	11160
Width	mm	2860	2860	2860	2860	2860	2860	2860	2860	2860
Height – compact system	mm	2550	2550	2700	2700	2700	2700	2700	2850	2850
Room height for compact system	mm	3200	3200	3200	3400	3400	3600	3600	3800	3800
Height – flow-through system	mm	3600	3700	3700	3900	4500	4500	4500	4700	4700
Room height for flow-through system**	mm	3800	4000	4000	4100	5000	5000	5000	5200	5200
CONNECTIONS	UNIT									
Electricity	kW	18	25	35	40	40	50	65	95	95
Heating: steam, electric, gas	kW	120	180	250	350	400	500	600	700	800
Humidification and cooking: steam	kg/h	200	300	350	450	525	600	675	750	825
Shower: cold water	l/min	72	108	144	180	216	252	288	324	360
Weight	kg	3100	3500	4000	4600	5200	5700	6200	6800	7500

Dimensions applicable to wagon size: 1.0 x 1.0 x 2.0 m. Energy supply figures represent maximum connection values. Consumption values are lower depending on the product.

* Gas-fired compact systems are 500 mm longer. A service corridor of approx. 800 mm is required behind the systems.

** Electrically heated compact systems require an additional 500 mm of room height.

THERMICjet® KA:

SINGLE- AND DOUBLE-ROW COOKING SYSTEMS

SINGLE-ROW COOKING SYSTEMS							
DIMENSIONS	UNIT	1-wg.	2-wg.	3-wg.	4-wg.	5-wg.	6-wg.
Length	mm	1260	2360	3460	4560	5660	6760
Width	mm	1400	1400	1400	1400	1400	1400
Height	mm	2550	2550	2550	2550	2550	2550
Room height	mm	3600	3600	3600	3600	3600	3600
CONNECTIONS: COOKING SYSTEM	UNIT						
Electricity	kW	1,5	3	3	6	6	9
Cooking: steam	kg/h	50	100	150	175	200	250
Shower: cold water	l/min	18	36	54	72	90	108
Weight	kg	900	1200	1500	1900	2250	2600

DOUBLE-ROW COOKING SYSTEMS					
DIMENSIONS	UNIT	4-wg.	6-wg.	8-wg.	10-wg.
Length	mm	2360	3460	4560	5660
Width	mm	2860	2860	2860	2860
Height	mm	2550	2550	2550	2550
Room height	mm	3600	3600	3600	3600
CONNECTIONS: COOKING SYSTEM	UNIT				
Electricity	kW	6	9	12	15
Cooking: steam	kg/h	175	250	300	350
Shower: cold water	l/min	72	108	144	180
Weight	kg	1800	2300	2800	3300

Dimensions applicable to wagon size: 1.0 x 1.0 x 2.0 m.

THERMICjet® KK: KETTLE

KETTLE								
DIMENSIONS: HOUSING	UNIT	200 ltr.	300 ltr.	400 ltr.	500 ltr.	600 ltr.	800 ltr.	1000 ltr.
Width	mm	1050	1200	1350	1600	1850	2350	2850
Depth gas/oil	mm	1250	1350	1450	1450	1450	1450	1450
Depth steam/electric	mm	1100	1200	1300	1300	1300	1300	1300
Height	mm	950	950	950	950	950	950	950
DIMENSIONS: INNER KETTLE	UNIT							
Width	mm	700	850	1000	1250	1500	2000	2500
Depth	mm	700	800	900	900	900	900	900
Height	mm	450	450	450	450	450	450	450
CONNECTIONS	UNIT							
Natural gas	m ³ /h	1.4	1.9	2.54	3.4	3.8	5.1	5.9
Liquid gas (propane)	kg/h	1.1	1.6	2.07	2.8	3.1	4.1	4.8
Electricity	kW	13	18	22	32	36	48	56
Steam – 3.0 bar	kg	52	78	104	130	157	209	261
Steam – 0.6 bar	kg	50	75	100	125	150	200	250

BAKEjet® BA: CROSSFLOW ROTARY BAKING SYSTEM

BAKEjet® BA			
DIMENSIONS	UNIT	Normal wagon	Special wagon
Length	mm	2000	2580
Width	mm	1980	2380
Height	mm	3150	3150
Room height	mm	3300	3300
Operating temperature range		40 to 250 °C	40 to 250 °C
Relative humidity		20 to 98%	20 to 98%
CONNECTIONS	UNIT		
Total electricity	kW	89	128
Humidification and cooking: steam	kg/h	65	100

Normal wagon: 1.0 x 1.0 x 2.0 m | Special wagon: 1.5 x 1.0 x 2.0 m

BAKEjet®: CROSSBACK BAKING SYSTEM

SINGLE-ROW SYSTEM							
DIMENSIONS	UNIT	1-wg.	2-wg.	3-wg.	4-wg.	5-wg.	6-wg.
Length	mm	1340	2440	3540	4640	5740	6840
Width	mm	1800	1800	1800	1800	1800	1800
Height	mm	3100	3100	3100	3100	3100	3100
Room height	mm	4500	4500	4500	4500	4500	4500
CONNECTIONS	UNIT						
Electricity	kW	7.5	15	23	30	38	45
Heating: gas, electric	kW	70	120	180	240	300	360
Weight	kg	1800	2100	3200	4200	5300	6300

Dimensions applicable to wagon size: 1.0 x 1.0 x 2.0 m.

ARCTICjet® IK: SINGLE-ROW AND DOUBLE-ROW INTENSIVE CHILLING SYSTEMS

SINGLE-ROW INTENSIVE CHILLING SYSTEMS							
DIMENSIONS	UNIT	1-wg.	2-wg.	3-wg.	4-wg.	5-wg.	6-wg.
Length	mm	1260	2360	3460	4560	5660	6760
Width 1	mm	1500	1500	1500	1500	1500	1500
Width 2	mm	1760	1760	1760	1760	1760	1760
Height 1	mm	3020	3020	3020	3020	3020	3020
Height 2	mm	2550	2550	2550	2550	2550	2550
Room height 1	mm	3700	3700	3700	3700	3700	3700
Room height 2	mm	3250	3250	3250	3250	3250	3250
CONNECTIONS: COOLING SYSTEM							
Electricity	kW	3	6	9	12	15	18
Shower: cold water	l/min	18	36	54	72	90	108
Cooling *	kW	15	30	45	60	75	90
Weight	kg	1100	1600	2100	2600	3100	3600

DOUBLE-ROW INTENSIVE CHILLING SYSTEMS					
DIMENSIONS	UNIT	4-wg.	6-wg.	8-wg.	10-wg.
Length	mm	2360	3460	4560	5660
Width 1	mm	2860	2860	2860	2860
Width 2	mm	3380	3380	3380	3380
Height 1	mm	3020	3020	3020	3020
Height 2	mm	2550	2550	2550	2550
Room height 1	mm	3700	3700	3700	3700
Room height 2	mm	3250	3250	3250	3250
CONNECTIONS: COOLING SYSTEM					
Electricity	kW	12	18	24	30
Shower: cold water	l/min	72	108	144	180
Cooling *	kW	60	90	120	150
Weight	kg	2400	3500	4400	5000

Dimensions applicable to wagon size: 1.0 x 1.0 x 2.0 m.

Dimensions 1 and 2 refer to the arrangement of the air coolers, depending on the layout.

*Power required for cooling depends on the process. Values apply to a reference chamber temperature of approx. 10 °C.

CLIMAJet® KR AND CLIMAJet® NR: CLIMATIC RAW SAUSAGE AND CLIMATIC POST-MATURING SYSTEMS

CLIMATIC RAW SAUSAGE SYSTEMS			
	CONNECTIONS		
Wagon	Electricity kW	Heating kW	Cooling kW
4	3	9	7
6	4	12	10
8	6	15	12
10	6	18	14
12	8	22	17
14	8	26	20
16	8	30	22
18	11	34	25
21	11	39	29
24	11	44	33
27	15	50	37
30	15	55	41
33	15	60	45
36	19	65	49
39	19	71	53
42	22	77	57
45	22	83	61
51	22	92	69
60	30	108	81

CLIMATIC POST-MATURING SYSTEMS			
	CONNECTIONS		
Room size m ²	Electricity kW	Heating kW	Cooling kW
20	2	5	7
40	3	10	14
60	4	14	20
80	6	18	25
100	8	23	30
125	8	29	38
150	11	35	46
175	11	40	53
200	15	45	60
250	15	56	75
300	19	68	90
350	22	79	105
400	30	90	120
450	30	101	135
500	37	112	150
550	37	124	165
600	37	135	180
700	45	157	210
800	55	180	240

CLEENjet®:

THERMAL EXHAUST AIR TREATMENT SYSTEM (TNV)

CLEENjet® TNV									
	DIMENSIONS				CONNECTIONS				
TNV	W	L	Electricity	Weight	Power	Gas Burner		WHR	Electricity
	mm	mm	kW	kg	kW**	Model	kW	kW	kW
300	1000	2950	3	700	70	WG 20	35-200	22	0.4
600	1000	3450	3	1150	140	WG 30	60-350	43	0.4
900	1250	4000	4	1575	210	WG 30	60-350	65	1.1
1200	1250	4450	4.5	1875	280	WG 30	60-350	87	1.1
1500	1250	4950	4.5	2175	350	WG 40	80-550	108	1.7
2000	1400	5160	7	2700	470	WG 40	80-550	145	2.2
3000	1400	5160	7	2850	700	WM-G 20	100-940	217	4.5
4000	1900	4680*	8	3500	1275	WM-G 20	150-1750	289	7.5
5000	1900	5120*	8	4000	1600	WM-G 20	150-1750	361	7.5

*Without built-in raw-gas preheating. | ** These are approximate values and depend on the exact conditions on site.

SMOKjet® RH09/RS AND RF: WOOD-CHIP AND FRICTION SMOKE GENERATOR

SMOKjet® RH/RS (WOOD-CHIP SMOKE GENERATOR)		
DIMENSIONS		
Length	1390/1340 mm	
Width	735/1000 mm	
Height	1810/1855 mm	
CONNECTIONS		
Electricity	230/400 V, 50 Hz	1.5 kW
Heating	Electricity	0.5 kW
Extinguishing	Cold water DN 10 3 bar	25 l/min
Control	Compressed air DN 10 6 bar	5 l/min
Fresh air demand	From the room	100 m³/h
Consumption	Chip size 2–16 mm	5.5 kW

SMOKjet® RF (FRICTION SMOKE GENERATOR)		
DIMENSIONS		
Length	970 mm	
Width	1690 mm	
Height	1300 mm	
CONNECTIONS		
Electricity	230/400 V, 50 Hz	9.5 kW
Extinguishing	Cold water DN 10 3 bar	25 l/min
Control	Compressed air DN 10 6 bar	15 l/min
Consumption	100 x 100 x 980 mm	75 m³/h
Friction wheel service life		300–500 h
Smoke generation process	30 s friction, 20 s pause	

SMOKjet® RD AND RL: STEAM AND LIQUID SMOKE GENERATORS

SMOKjet® RD (STEAM SMOKE GENERATOR)		
DIMENSIONS		
Length	1180 mm	
Width	1345 mm	
Height	1900 mm	
CONNECTIONS		
Electricity	230/400 V, 50 Hz	11 kW
Heating	Electricity	9 kW
Steam	Low pressure steam DN 25 0.3–0.5 bar	30 kg/h
Condensate	Free discharge	
Control	Compressed air DN 10 6 bar	5 l/min
Consumption	Chip size 1–4 (1–8) mm	8 kg/h

SMOKjet® RL (LIQUID SMOKE GENERATOR)		
DIMENSIONS		
Length	380 mm	
Width	380 mm	
Height	120 mm	
CONNECTIONS		
Electricity	230 V, 50 Hz	0.2 kW
Atomization	Compressed air DN 10 6 bar	150 l/min
Consumption	Liquid smoke per nozzle	3–4 l/h