

# CONTIjet®



## SPOTLIGHT ON OUR CUSTOMERS

### NONSTOP PRODUCTION

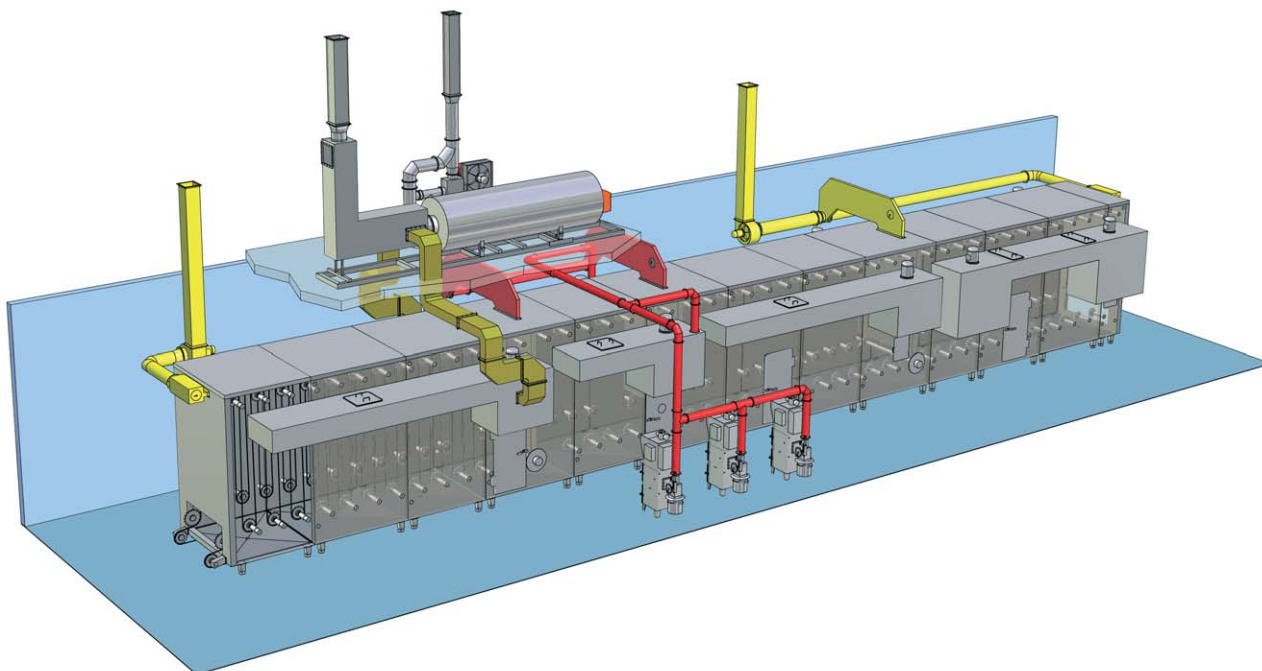
Equipment systems with customized conveyor solutions that can be operated continuously are particularly ideal for producing in large quantities. The products are processed continuously from aging to cooling to packaging. The functions and conveyor systems used are designed to perfectly match the client's needs.

### CONSISTENT QUALITY

The fully-automated CONTIjet systems consistently produce high-quality products. Using Schröter's technology, standardized meat and poultry products like hot dogs, small sausages, and sliced meats, as well as a wide range of convenience products can all be processed into top of the line products. Time-saving automated loading and unloading systems are also available as optional extras.

### HIGHLY ECONOMICAL

CONTIjet – the name stands for optimized production times, low use of human resources, and the highest possible product output, using the smallest possible space. When building CONTIjet systems, Schröter takes the type and scope of planned use, specific surrounding conditions at the company, as well as the long-term goals of the client all into account.

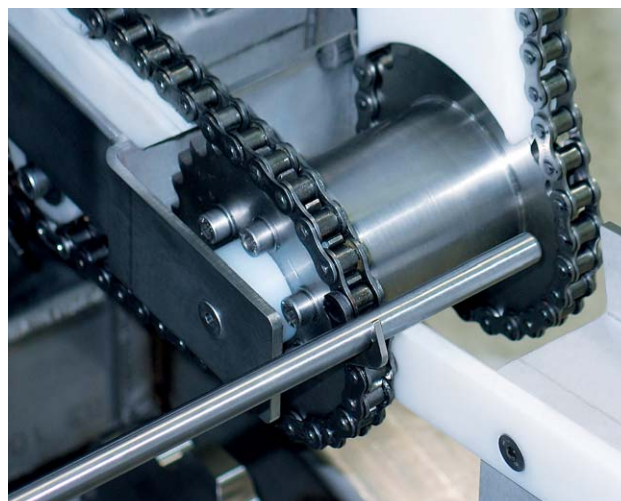




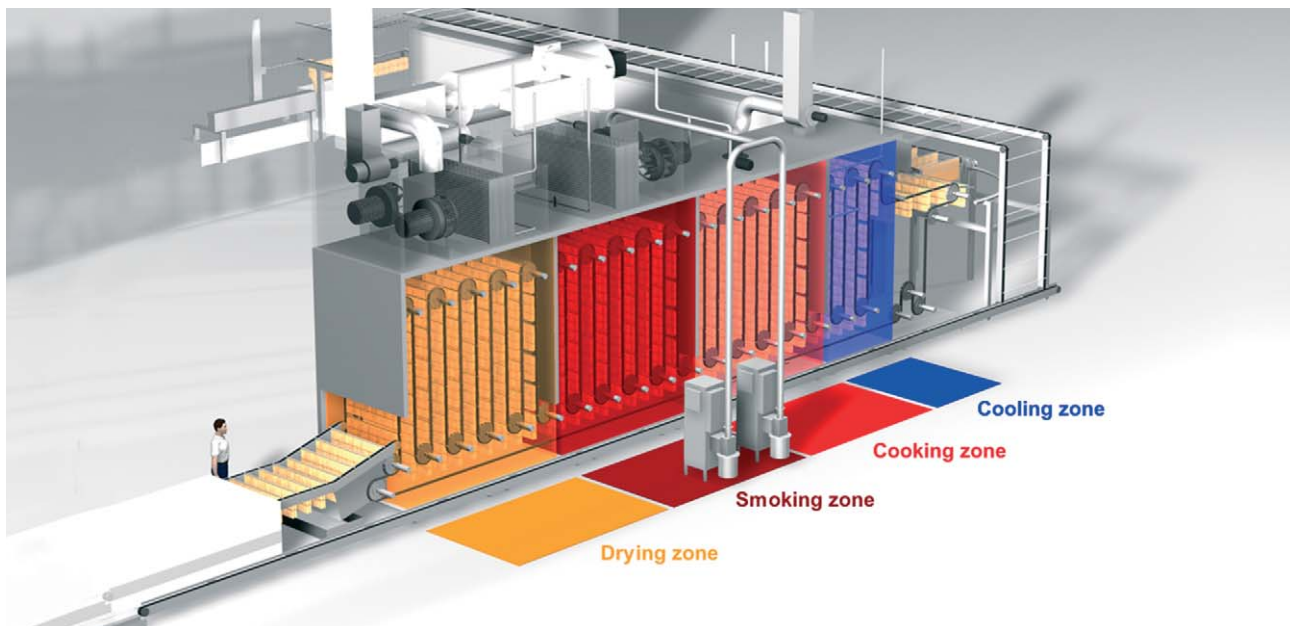
## UNABATED TREND TOWARD AUTOMATION

Our CONTIjet systems perform functions such as cooking, smoking, intensive cooling, or pasteurizing in a continuous processing run, and do so quickly, efficiently, and without requiring significant human resources. These characteristics are truly valued by our clients, especially those that produce in large quantities. When it comes to our systems, we place great importance on maximum quality and reliability – an important point, since our continuous systems are operated nonstop. The size and design of our systems is just as customized as our paternoster system, which we offer as both a horizontal or vertical model. Many clients are surprised to hear that our continuous systems can also consistently produce high-quality products of a delicate nature, such as sausages with natural casing.

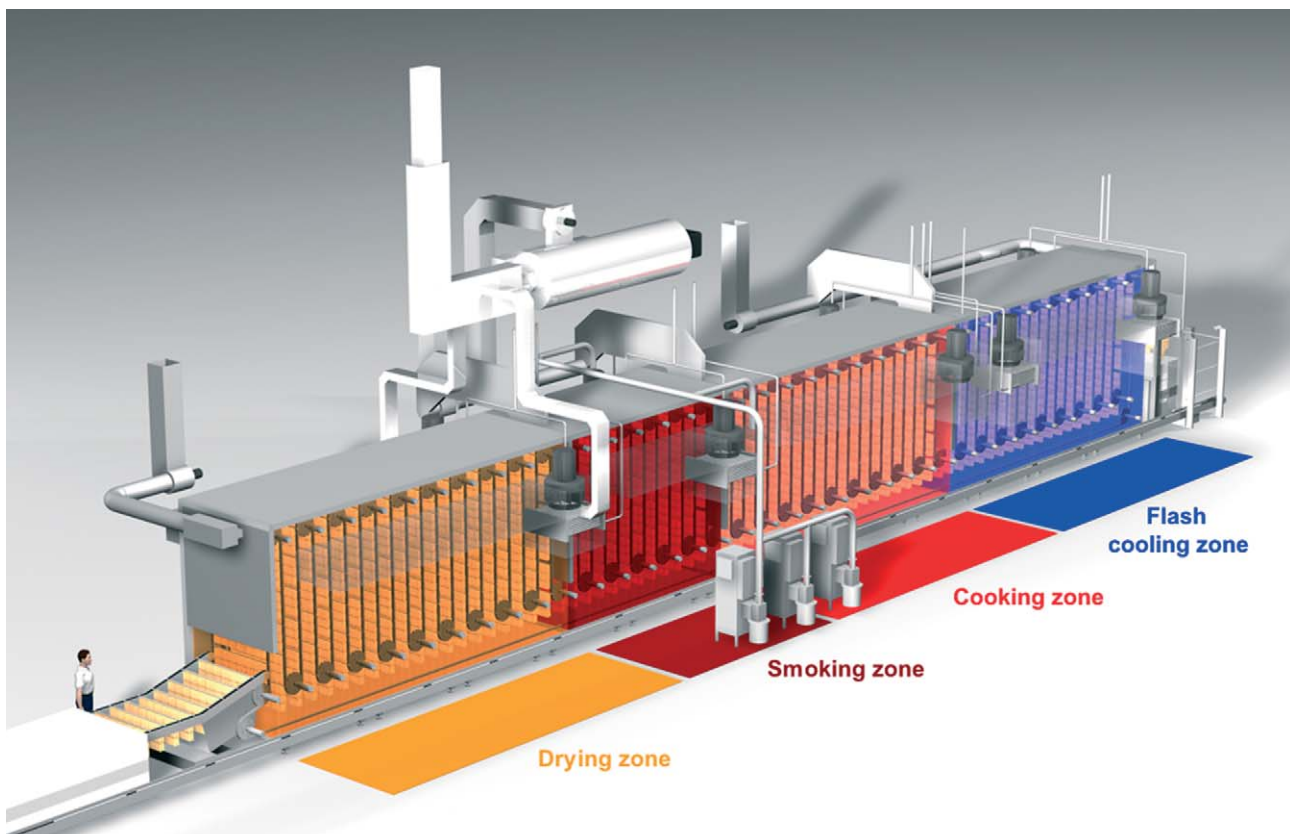
For quite some time, the trend in continuous equipment systems has moved unabated toward automation. The new robotic technologies for loading and unloading the continuous systems are in demand all over the world, particularly in Scandinavia. When deciding on whether or not to purchase a robotic automation system, in addition to saving on the cost of labor, the extremely high performance of the systems should also be taken into consideration: The robots can take care of loading and unloading the continuous systems 24 hours a day, as well as lift extremely heavy loads – which is a clear advantage over manual loading, especially with regard to hygienic aspects. At the 2004 IFFA, we demonstrated a robotic application for the automatic loading and refeeding of sticks, with subsequent cleaning, for use with smoking sticks that have lengths of between 1000 and 1600 millimeters. Using this equipment, a wide variety of products can be transported through the system, such as small sausages, pork sausage in a ring, or standard products. The loading weight of each unit is dependant on the product and can total more than 15 kilograms, including the stick.



## EXAMPLES



CONTIjet V-Line



CONTIjet V-Line



## DESIGN FEATURES

**Special challenges require special solutions. And the two orders we received from Japan had just about everything that constitutes a real challenge: Time pressure, tricky building parameters, innovation, and a different culture. We'll tell you the result up front - mission accomplished in every regard!**

Our first visits to the two largest Japanese manufacturers of sausages with natural and peel casings in December of 2004 and January of 2005 quickly led to each placing an order with a production capacity of between 1,000 and 1,500 kg/h. The first significant challenge stemmed from having to customize the Schröter systems to fit the parameters of the buildings where they would be installed. In the first case, the solution was to install a corner transfer unit between the cooking and cooling zones, while in the other case the system was customized to fit the room's low ceiling height by installing the machines on the side of the equipment. Designing and planning both systems was carried out in record time, which meant we could already begin the first phase of testing during the end of April and middle of June, respectively. The process ran successfully and allowed us to complete the systems and bring them into operation on schedule in May and July of the same year. To ensure that we kept the deadline, the systems were actually constructed in sections which both fit into shipping containers and were optimized for easier installation.

### INTERCULTURAL TEAMWORK

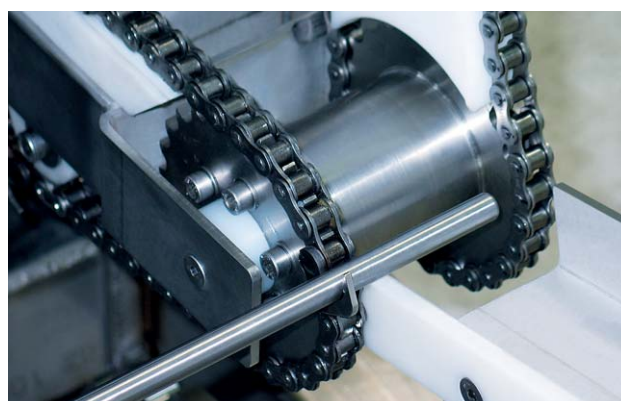
"Thanks to our highly motivated design and assembly team, we completed our tasks perfectly, and on such a tight schedule," reports President Max Schröter. "Furthermore, we would like to sincerely thank the Japanese teams involved for their cooperation, particularly Kanematsu KGK, the people at OKI (Japanese assembly group), as well as the Hitec company for the constant supply of freshly-filled sausages and the Takumi company for taking the finished sausages to the peeler and respectively separating and then transferring them to the packaging machines. All the teams worked in an incredibly goal-oriented and efficient manner – which is the main reason why we completed the entire project in such a short period of time."

### SPECIAL FEEDING AND SEPARATION OF THE STICKS

The two fully-automated CONTIjet continuous systems for sausages with natural and peel casings feature automatic loading and unloading, stick refeeding, and automatic stick cleaning, and are an example of perfectly thought-out, high-end technology – especially with regard to the feeding and separation of the sticks. The special mechanism to feed the sausage sticks through a buffer and separation area ensures that the sausages are continuously fed into the CONTIjet system at exactly the right time and place in the main chain. And the main chain itself also has special feature: It is equipped with a novel "trap" that allows the sausage sticks to be fed into the system locked into position. This ensures that the sticks cannot fall out during the entire time make their way through the system's meandering path, regardless of the position they are in. Only at the end of the process are the stick released from their locked position and transported on for further processing.



Loading zone



Feeder chain to main chain



Main chain



Sausage output

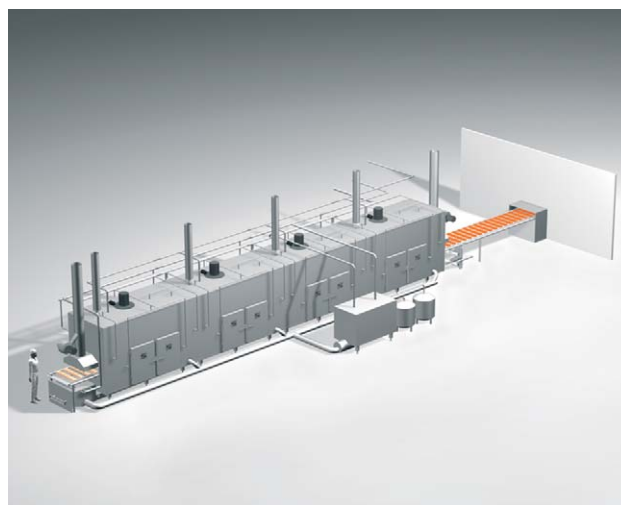
## ROASTING SYSTEM CONTIjet®

**When discussing frozen convenience products made from all types of poultry, HANNA Feinkost AG headquartered in Delbrück, Germany is really in its element. As one of the industry's market leaders, the family business relies on state-of-the-art manufacturing technology which is both up-to-date and complies with strict hygienic regulations. Which is why Schröter equipped the company with a continuous CONTIjet baking system, and in doing so developed a solution which was customized to exactly meet the client's needs.**

HANNA Feinkost placed great importance on browning its products, particularly its breaded products, without the use of any additives. At the same time, they wanted their products' taste, smell, and visual appearance – meaning their entire sensory quality – to be optimized. Schröter fulfilled these requirements by using an adjustable fan in each of the baking segments. In addition, a continuous valve which can be precisely adjusted ensures that the products are humidified in an ideal manner using steam. This way, weight loss resulting from the roasting process is avoided and the products, such as chicken breast filets or roulades, remain juicy. Last but not least, because the temperature, steam, and amount of circulating air are all variable, the temperature is guaranteed to remain constant during the entire production process, which can last from 5 to 25 minutes. As a result of the high temperatures of up to 250 degrees Celsius and the fact that the system is extremely long (with a length of 25 meters), the materials used in its construction are subject to a large amount of stress. Schröter used high-strength, temperature-resistant, stainless steel for the 54-meter-long, small-meshed conveyor belt. In addition, the design team also scored a touchdown engineering a system with a maximum product capacity of 1,800 kilograms per hour and outstanding thermal insulation, which even allows the company to save energy.

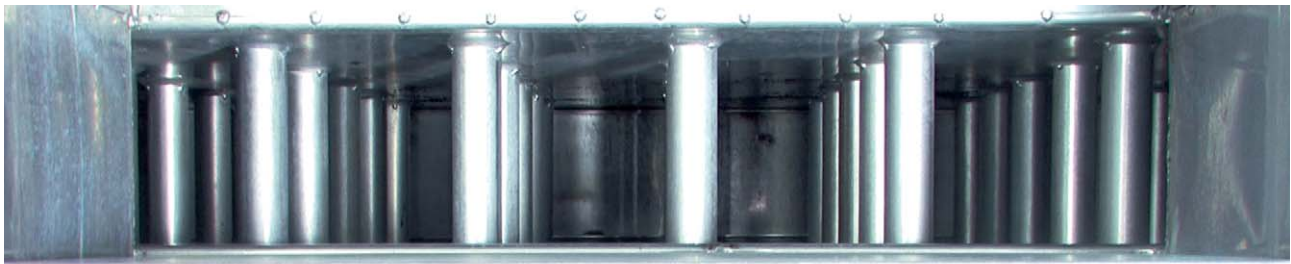
### OPTIMUM HYGIENE THANKS TO CIP

In the food industry, hygiene plays an extremely important role. That's why HANNA relies on a CIP cleaning system (Clean in Place) which makes manually cleaning the system after finishing production unnecessary, since fully-automated, rotating nozzles take care of this job inside the equipment. An added bonus: Since the entire cleaning program, with its soaking, pre-rinsing, cleaning, and rinsing cycles operates in a closed system, the amount of water used is minimal. Furthermore, during production the conveyor belt is cleaned before it comes into contact with fresh products, every single time. Large inspection hatches allow the employees to thoroughly check the cleanliness of the machines at any time. Especially short installation times were also of particular importance to HANNA Feinkost, even right after the new system was launched. Schröter managed to install the CONTIjet within a remarkably short period, thereby keeping production downtime to a bare minimum.

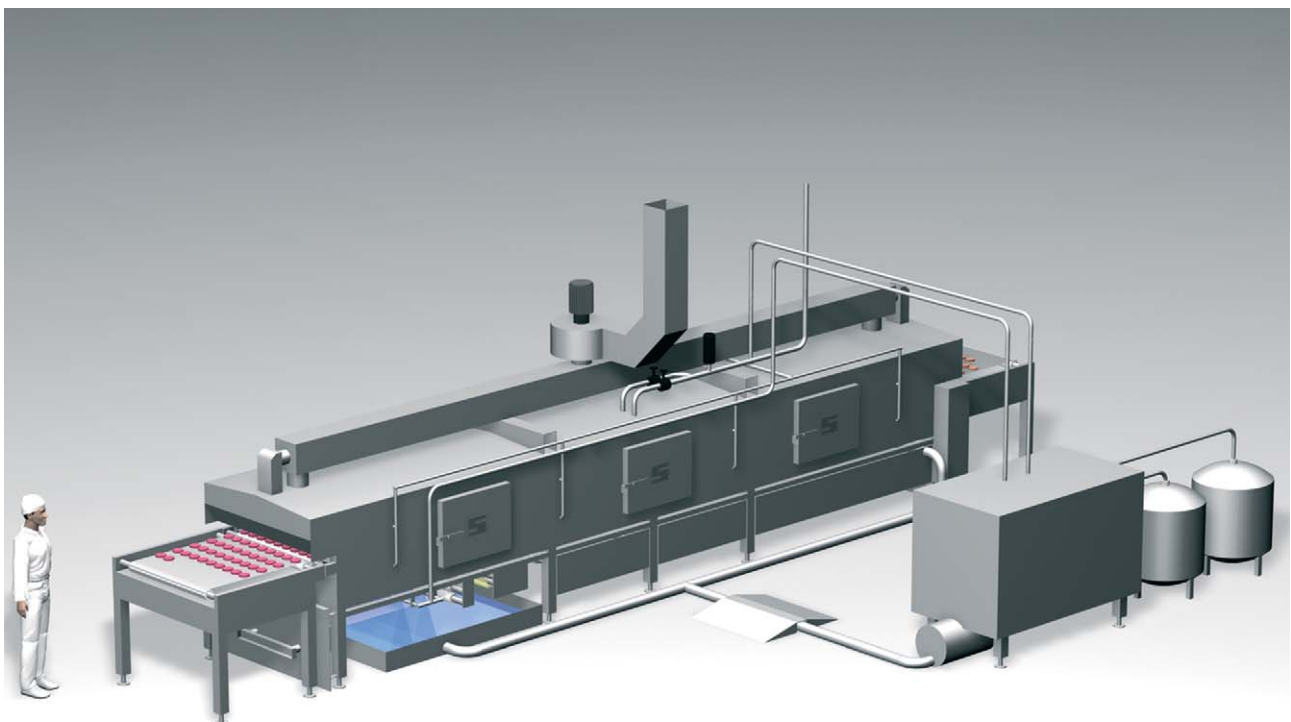




## ROASTING SYSTEM **CONTIjet®**



## H-LINE CONTIjet®



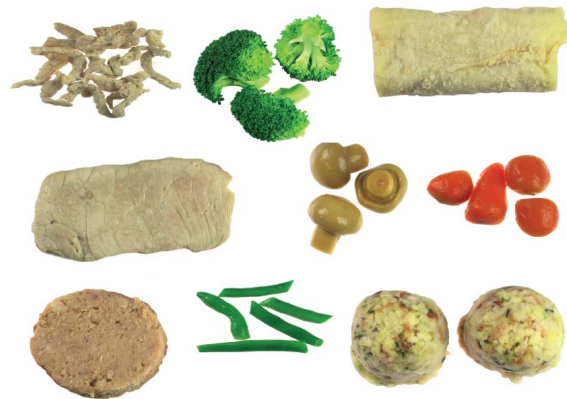


## THE IDEAL SYSTEM TO COOK A VARIETY OF DIFFERENT PRODUCTS

The amount of steam, the temperature (controlled through steam extraction), and the processing time are all variable, allowing for an infinite number of combinations.

As result, the system offers a wide variety of different production capabilities and the ideal production parameters for every product.

- > Consistent product quality through precision controls
- > High flexibility with regard to the product range and production speed
- > Homogeneity of the products (core temperature)
- > Easily serviced thanks to a low number of mechanical components
- > Compact measurements
- > Attachable loading and unloading modules
- > Continuous cleaning of the transport belt in a closed water circulation system with a filter unit
- > CIP cleaning
- > Small-meshed conveyor belt which allows extremely thin and narrow products to be transported safely





## SCHRÖTER'S COMPACT CONCEPT: **CONTIjet®**

### STRUCTURAL CHARACTERISTICS

- > Chassis and all relevant components are built to be structurally gas and steam tight
- > All components, such as insulation, motors, fans, and ducts, have the ideal dimensions

### CUSTOMER BENEFITS

- > Speed
- > Homogeneity
- > Energy savings
- > Minimal weight loss
- > Quickly reach target value + accurately maintain target value
- > Consistent results
- > Accurately repeat a predefined result
- > Ideal temperature and humidity
- > Products are handled in an absolutely gentle and uniform manner





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