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The First Specialized Monthly Magazine of Tray Sealer, Thermoforming and Vacuum Chamber Packaging Machinery Industry

VORMEK

Vormek an Innovation-based Machinery Company, an Knowledge & Progress Center with Superior Technology and High Reputation in its Field

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The Role of MAP Packaging in Extending the Shelf Life of Cereal and Bakery Products

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SEMI-AUTOMATIC
TRAY SEALER MACHINE



AUTOMATIC TRAY SEALER
PACKAGING MACHINE

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Editorial: Dr. David Sterling

With greetings and respect;

The entire effort of the editorial board and the editorial team of the specialized electronic monthly magazine "Vormek" is to provide practical and valuable content for food industry producers in the country who need tray sealers, thermoforming machines, vacuum chambers, and various fillers for packaging their products.

The 17th edition of the Vormek journal focuses on the role of tray sealer machines in the packaging of the "bread and cereals" industry. This is an industry that today, more than ever, faces challenges such as increasing shelf life, maintaining quality, optimizing production line efficiency, and meeting modern packaging standards.

In this issue, we have tried to focus on tray sealer technologies and offer practical and implementable solutions for food industry producers solutions that not only help reduce waste and improve product safety but can also strengthen the competitive advantage of brands in today's market.

If you see the future of the bread and cereals industry in the smart development of production lines, automation, and specialized packaging, this issue can serve as a technical roadmap for you to make more precise decisions and more effective investments.

It is an honor for us to have your attention, dear manager, alongside hundreds of other reputable and well-known food industry producers in the country who have trusted the expertise of Vormek Company.



New Generation All-Servo Piston Filler with Round Tank Design, Integrated Agitator and Scraper of **Vormek Brand**



Mr. Simon Füllenbach
Lead Machine Designer

In the food industry, the product filling process plays a decisive role in the quality, hygiene, accuracy, and productivity of the production line. Each product, according to its texture and form, requires a specific filler, and the higher the standards, the more specialized the filler design becomes.

Whenever a product has high viscosity, or a semi-solid structure with heterogeneous components, and also shows severe sensitivity to microbial contamination, it is necessary to use a special type of "piston cylinder" filler so that the process proceeds according to the desired requirements.

Various sauces, edible creams, pastes, fillings, Olivier salad, and other sensitive food products face multiple difficulties during the filling process. Adhesion to the tank wall, drying in contact with air, particle sedimentation, undesirable texture, as well as cleaning and the risk of microbial contamination, are examples of these problems. In this context, using a specialized filler that complies with hygienic standards becomes doubly important.

Vormek Company, under the Vormek brand, based on its experience in designing and manufacturing food industry machinery, has developed a new generation of servo-driven piston fillers; a machine designed with the aim of precise filling, maintaining product quality, complying with hygienic requirements, and increasing production line efficiency.

Machine Design Fundamentals

Many machines available on the market today are designed only for processing simple products; therefore, when faced with more sensitive and specialized products, they encounter functional limitations.

But the fundamental idea in the design of this machine is based on simultaneously meeting several key needs: precision in the filling process, uniform mixing of the product inside the tank at a controllable speed, the possibility of spiral outer trimming of the tank walls, integration and adjustability of all these processes through a touch panel, compliance with the highest level of hygiene, and ease of cleaning and reducing microbial load.

Technical Slogan of the Machine:
High Precision Servo-Driven Piston Filler with Integrated Special Mixers and Automated Spiral Outer Trimming.

This slogan accurately describes the technical structure of the machine; that is, a highly precise servo-controlled piston filler, equipped with a specialized mixing system and automatic wall scraping.



Servo-Driven Piston Filling System

The heart of the machine's operation is its cylinder and piston. The cylinder and piston system, due to its positive displacement nature, allows precise control of the product volume. In this method, a specific amount of product is displaced by the cylinder and piston and discharged into the container with high accuracy.

The use of servo motors in this system provides important advantages:

- Precise control of piston movement
- Simple and accurate adjustment of stroke, suction speed, and discharge speed
- Smooth, shock-free movement
- High repeatability and uniform accuracy at high production capacity

These features allow the product to be filled with high precision without damaging its physical structure.



Custom Tank Design

One of the most important parts of this machine is its custom tank. This tank is designed based on a specific geometry, with a structure resembling two truncated cones attached to each other. This design has important advantages:

1. Better Product Conduction:

Curved surfaces allow thick materials to be guided more easily toward the bottom of the tank, reducing material accumulation.

2. Elimination of Dead Spots:

In conventional square tanks, corners are places where product accumulates. This accumulation not only reduces product quality but also makes cleaning difficult. The curved design largely eliminates this problem.

3. Improved Cleaning:

Round, cornerless surfaces make the cleaning process much simpler and more hygienic.

4. Reduction of Microbial Contamination:

Reduced material accumulation and ease of cleaning minimize the risk of microbial growth.

Specialized Mixing System

In heterogeneous products, uniform mixing is very important. In this machine, each side of the tank has an independent mixing system, and a total of four servo motors control the mixers.

These mixers do not have a simple rotational movement; instead, they move radially and reciprocally with a 180-degree range of motion.

The movement of the mixers is designed to be completely consistent with the tank geometry to ensure full coverage of internal surfaces.

Dual Function of the Mixers

One of the unique features of the machine is the dual function of the mixing system. These mixers are not only responsible for mixing the product but also simultaneously perform wall scraping. This is very important because in thick products, adhesion of materials to the tank wall causes the product to dry in contact with air, changing its physical properties, damaging its texture, and reducing its final quality.

The wall scraping system solves this problem and prevents product from remaining on the walls.



Anti-Drip Nozzles

In many production lines, nozzle dripping causes dirt and contamination in the machine, product waste, and reduced visual quality of the final product.

In this machine, the nozzles are designed as anti-drip to ensure a drip-free filling operation.

Specialized Rotary Valve

The machine's rotary valve is one of its key components. This valve controls the flow path between the tank, cylinders, and nozzles.

During the suction stage, the path from the tank to the cylinders opens, and during the discharge stage, the path from the cylinders to the nozzles is directed.

This valve features a Quick Release design; it can be easily opened and quickly cleaned, and then simply reinstalled. It should be noted that this component is manufactured with high precision and has a very accurate sealing system.

All Stainless Steel Construction

In the machine's design, all sensitive components are made of corrosion-resistant stainless steel, grade 304 and 316. Stainless steel bearings, washable components, and high resistance to industrial detergents make the machine completely suitable for continuous use in the food industry.

These features, in addition to increasing the machine's lifespan, also help comply with hygienic standards.



CIP System and Hygienic Design

The new piston cylinder filler from this company is designed based on Hygienic Design principles.

The presence of a CIP system, washing nozzles, easy access to components, and design without contamination accumulation points make the cleaning process very fast and reliable.

At the back of the tank, a central plate is designed where all inlet and outlet paths are concentrated. This design provides better organization, better access, and easier servicing.

- Inlet and outlet pipes for the double-walled tank
- CIP system inlet pipe
- Material inlet pipe
- Washing nozzle inlet pipes

Double Walled Tank for Heating and Cooling

Maintaining quality in many food products depends on precise temperature control. Therefore, the machine's tank is constructed with a double jacket. This system allows heating and cooling as well as maintaining a stable product temperature.

Furthermore, this feature is very important for products sensitive to temperature changes.

Tank Lids with Special Mechanism

The tank has two independent lids designed with a spring-loaded mechanism.

The operator opens the lid to a specific angle, and then the spring mechanism holds the lid at a 90degree angle.

This design, on one hand, makes inspection and monitoring of the tank interior easier, and on the other hand, facilitates the cleaning process while increasing operator safety.

Industrial clamps on the lids are responsible for precise sealing and prevent excessive air ingress.

Movable Base and Serviceability

The filler can be mounted on an independent, wheeled base. This design allows the machine to be moved for cleaning or servicing.

At the end of the work shift, the operator can remove the filler unit from the line, wash it in an appropriate location, and prepare it again for the next shift.

Key Features of the Machine

1. High-precision piston cylinder filling system with servo motor
2. Suitable for thick and semi-solid products
3. Capability to work with heterogeneous products
4. Specialized mixing system with two mixers and 4 servo motors
5. Automatic wall scraping to prevent adhesion
6. Anti-drip nozzles (drip-free)
7. Fully hygienic design equipped with CIP
8. Double-jacket for heating and cooling
9. All-stainless steel construction, corrosion-resistant, and washable
10. Movable base for easy servicing and cleaning

Technical Specifications Table

Description	Specification
Brand	Vormek
Manufacturer	Vormek
Machine Type	Servo-Driven Piston Filler
Application	Food industry
Product Types	Thick / semi-solid / heterogeneous
Filling System	Piston cylinder with servo motor movement
Mixing System	Specialized dual – mixer with wall scraping
Mixer Movement	Radial 180 degrees
Nozzle Type	Anti-Drip
Flow Control Valve	Rotary Valve Quick Release
Component Material	Stainless Steel
Cleaning System	CIP
Temperature Control	Heating and cooling
Lid Type	Spring-loaded with industrial clamp
Mobility	Wheeled base

Exceptional precision, unparalleled hygienic design, specialized mixing system, intelligent wall scraping, professional cleaning capability, and a robust structure during operation all these elements have come together to make this machine an ideal choice for manufacturers for whom product quality, process accuracy, and microbial purification are of vital importance.

Vormek Company, relying on its valuable experience in designing and manufacturing specialized food industry machinery, has endeavored in this product to bridge the gap between advanced technology and real, practical application.





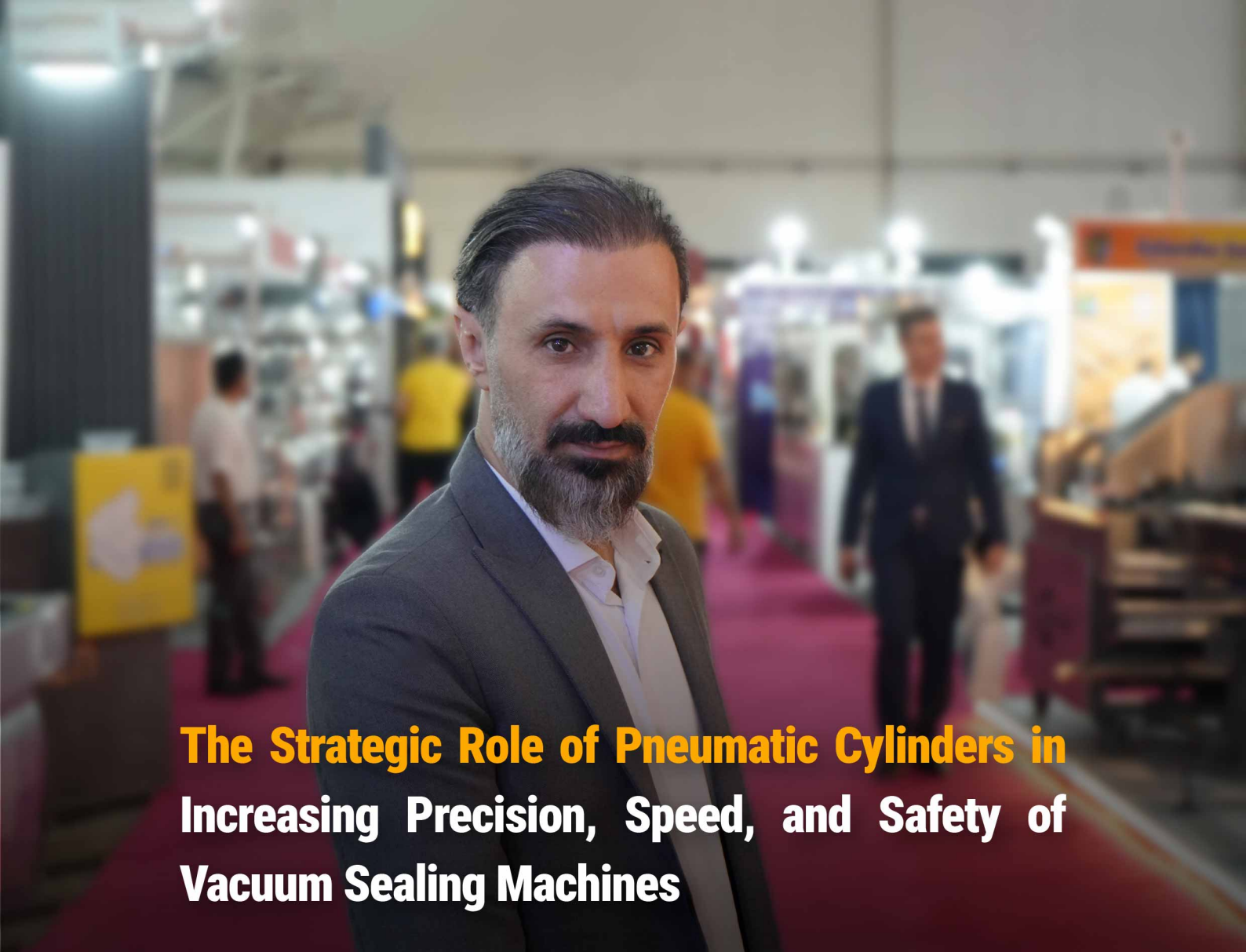
The Role of MAP Packaging in Extending the Shelf Life of Cereal and Bakery Products

Sophia Brown

Bread and cereal products are among the most widely consumed food products in the world. Their high nutritional value and sensitivity to spoilage have presented the food industry with the challenge of increasing shelf life without the use of synthetic preservatives. The main limitations on the shelf life of these products include microbial spoilage (especially the growth of molds and yeasts), staling, and oxidation of fats (rancidity). Among these, microbial spoilage, due to the aerobic nature of microorganisms, is considered the most important factor reducing the useful life of bakery products.

Modified Atmosphere Packaging (MAP) technology is one of the most effective industrial methods for extending the shelf life of cereal products. In this method, the air inside the package (containing oxygen) is evacuated and replaced with neutral and inhibitory gases such as carbon dioxide (CO₂) and nitrogen (N₂). Carbon dioxide, with its bacteriostatic properties, inhibits the growth of molds and yeasts, while nitrogen acts as a filler gas, preventing the product from being compressed or crushed. Contrary to common belief, the MAP method does not have a direct effect on the staling process; however, by controlling oxygen, it prevents the oxidation of fats and the development of unpleasant odors in fat-containing products.



A man with a grey beard and mustache, wearing a grey suit jacket over a light-colored shirt, stands in the foreground of a busy trade show. He is looking directly at the camera. The background is filled with blurred figures of other attendees and various exhibition booths under bright overhead lights.

The Strategic Role of Pneumatic Cylinders in Increasing Precision, Speed, and Safety of Vacuum Sealing Machines

Mr. Alexander Hoffmann (Deputy CEO of Vormek)

In the sensitive industries of food and pharmaceutical packaging, the use of pneumatic cylinders in vacuum sealing machines goes beyond a technical choice – it is a strategic necessity. This technology directly impacts final product quality and production line efficiency, bringing advantages that significantly enhance the competitiveness of industries. One of the most outstanding advantages of pneumatic cylinders is their ability to perform controlled and uniform motion. The capability to precisely adjust air pressure in these systems allows for optimal pressure application on packaging containers at the moment of sealing. This high precision simultaneously ensures two critical benefits: first, protecting the thin plastic layer from tearing or damage caused by excessive pressure; second, creating a complete and impenetrable seal that prevents air ingress, which plays a vital role in preserving freshness and extending product shelf life in the vacuum process.

In vacuum sealing machines, the operational cycle consists of air evacuation, lowering of the sealing jaw, and its return. Pneumatic cylinders, with their instant response to solenoid valve commands, complete this cycle in the shortest possible time. The result of this fast and uninterrupted performance is a significant increase in the number of packages per minute and overall production line efficiency.

Furthermore, the mechanical simplicity and high durability of pneumatic cylinders bring exceptional reliability to the machine, leading to reduced downtime and maintenance costs.

On the other hand, adhering to strict hygienic standards in the food and pharmaceutical industries requires the use of equipment with minimal contamination. Pneumatic systems are inherently cleaner compared to hydraulic systems, and the most important advantage in this regard is the absence of oil and industrial lubricants exposed to the production environment. As a result, the risk of oil leakage – which can lead to product and production line contamination – is completely eliminated, making it much easier for production units to comply with hygienic standards and obtain international certifications.

In conclusion, the use of pneumatic cylinders in vacuum sealing machines is a smart investment for manufacturers seeking a combination of precision, speed, and safety. This technology, by ensuring hygienic and robust packaging, plays an effective role in increasing product shelf life, reducing waste, and ultimately enhancing brand credibility in the market.

Packaging Series

This Episode: Bread



1

Bread and Its Packaging Challenges

Bread, due to its sensitive structure and susceptibility to microbes, is a food product that quickly dries out and is exposed to contamination. Proper bread packaging not only preserves its taste and moisture but also prevents its spoilage due to the growth of microorganisms.



2

Contamination Issues Related to Bread

1. Health and Safety Risks

- **Microbial contamination** The biggest enemy of bread is mold and yeast. Because of its moisture and nutrients, bread is an ideal environment for fungal growth. If the baking process or packaging environment is not completely sterile, mold appears within a few days.
- **Cross-contamination** In the production line, there is a risk of introducing bacteria such as *Bacillus cereus* (which can be heat-resistant) or environmental bacteria.
- **Residues of chemicals** Excessive use of preservatives or bleaching agents in flour, if exceeding permissible limits, can be hazardous to consumer health.
- **Allergens** The presence of gluten in bread is a serious risk for sensitive individuals. Mismanagement in the production line causing contact between gluten-free bread and regular bread is a serious safety error.

3



2. Quality and Stability Challenges

- **Staling** This is one of the biggest challenges in bakeries. Bread becomes hard and dry over time. This process is caused by the rearrangement of starch molecules (retrogradation), not necessarily by drying out.
- **Loss of texture and aroma** Fresh bread has a soft texture and pleasant smell; over time and through interaction with the environment, these qualities are quickly lost.

4

Why Does Bread Get Moldy in Improper Packaging?

- Bread, due to its high moisture, simple sugars, and suitable nutrients, creates an ideal environment for the growth of microorganisms such as molds. In improper packaging, these conditions are easily promoted.
- Improper packaging typically fails to control moisture and gases; either it is too tight (preventing gas exchange and causing moisture accumulation inside the package) or too loose (causing rapid drying of the bread and creating conditions for mold growth on the dried surface).
- Accumulation of water vapor inside the package due to non-breathable packaging materials creates a moist and warm environment that quickly triggers mold growth.



5

Difference Between Traditional Bread Packaging and MAP Packaging

Traditional bread packaging usually consists of paper, thin plastic, or simple fabrics that have limited control over moisture, oxygen, and gases inside the package. Due to a lack of proper breathability or high permeability, this type of packaging cannot adequately maintain bread moisture, leading to rapid drying or moisture accumulation and mold growth. In contrast, Modified Atmosphere Packaging (MAP) is an advanced technology in which the gases inside the package are controlled to inhibit the growth of microorganisms.

6

Difference Between Traditional Bread Packaging and MAP Packaging

- In MAP, oxygen is reduced and replaced with carbon dioxide (CO_2) and sometimes nitrogen (N_2).
- CO_2 , specifically has antimicrobial properties and helps reduce the growth of molds and bacteria.
- This method also, by controlling moisture and preventing water vapor accumulation, keeps bread quality two to three times longer. Thus, the main difference is that traditional packaging offers only physical protection, while MAP actively delays the spoilage process and significantly increases the shelf life of bread.

7

Which Packaging Style Is More Cost-Effective and Longer-Lasting?

In terms of shelf life, MAP is significantly superior to traditional packaging. By reducing oxygen and increasing carbon dioxide, it actively inhibits mold and bacterial growth and extends bread's useful life by two to three times.



In contrast, traditional packaging, due to lack of internal environment control, quickly dries or sweats the bread and spoils in a short time.

8

Conclusion:

If the goal is low cost and process simplicity, traditional packaging is more suitable. However, if the goal is increased shelf life, reduced waste, and preserved product quality, MAP packaging despite higher initial cost is more cost-effective and appropriate in the long term.

9

The Position of Tray Sealer Machines in Bread and Cereal Processing:

Freshness, Efficiency, and Market Share

In recent decades, the bread and cereal industry has faced fundamental changes in consumer behavior, health requirements, and intense market competition. Today's consumers do not only pay attention to the basic quality of the product; factors such as freshness, shelf life, food safety, packaging appearance, and ease of transportation also play a decisive role in their purchasing decisions. In such circumstances, packaging technology has become one of the most important tools for marketing and value chain management in the food industry. Among these, tray sealer machines, as one of the modern packaging technologies, have found a special position in the processing of bread and cereal products. These machines not only increase product shelf life but also enable standard, attractive, and hygienic packaging, helping producers create a sustainable advantage in today's competitive market.



In cereal and bakery products, the most important achievement of MAP is preventing staling and maintaining product crispness. This is of strategic importance for brands operating in wide distribution networks, because longer shelf life enables wider distribution and reduces waste.

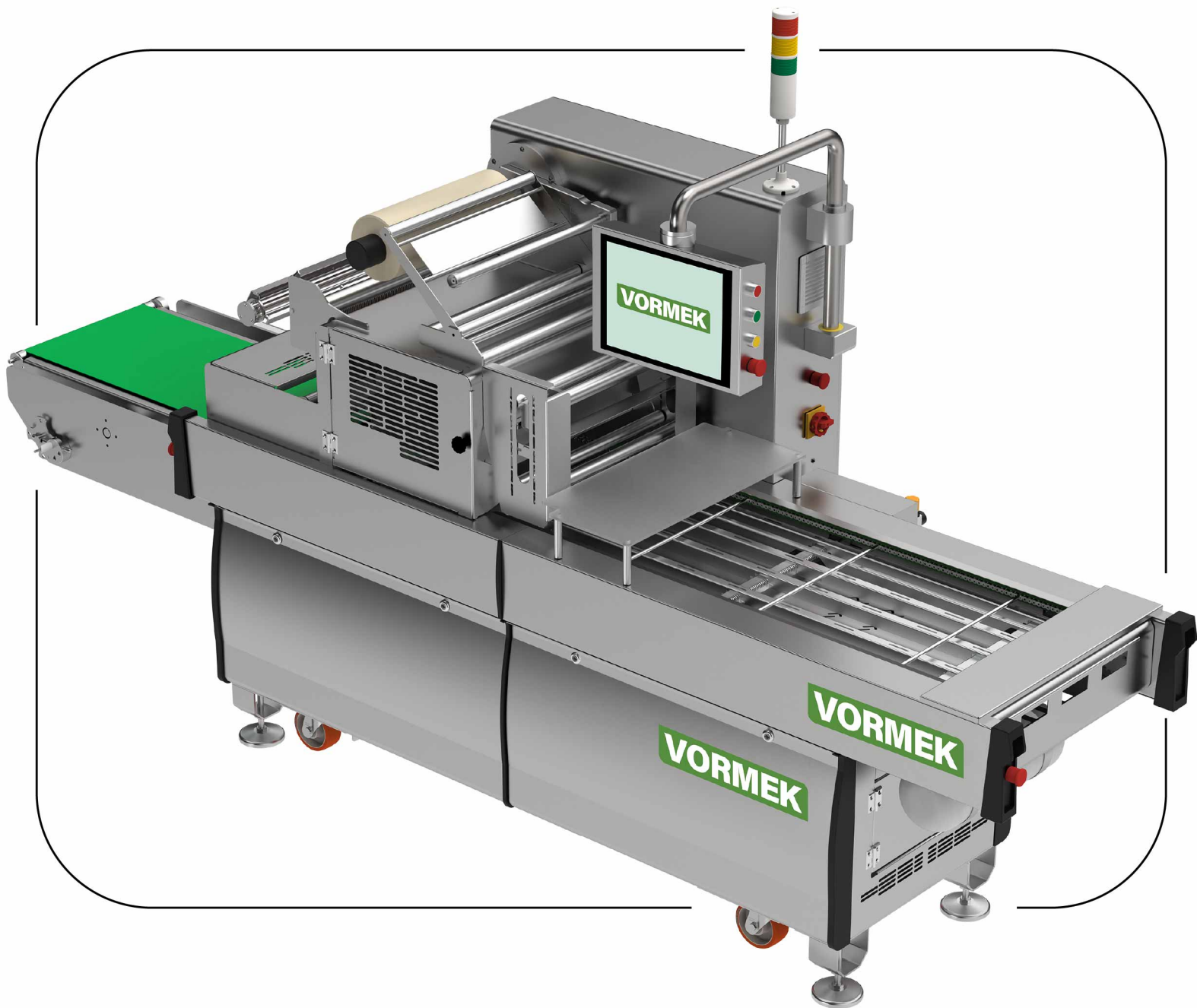
From a marketing management perspective, packaging is no longer just a protective tool; it is part of the brand identity and customer experience. In the competitive market of the food industry, the first point of contact between the customer and the product is its packaging. Therefore, packaging quality can directly affect the customer's perception of product quality.



One of the most important advantages of tray sealer machines is the possibility of using Modified Atmosphere Packaging (MAP) technology. In this method, the air inside the package is replaced with gases such as nitrogen or carbon dioxide. From a scientific perspective, reducing oxygen inside the package leads to:

- Slowing down the oxidation of fats
- Preventing loss of flavor and aroma quality
- Reducing the growth of microorganisms
- Preserving the color and appearance of the product



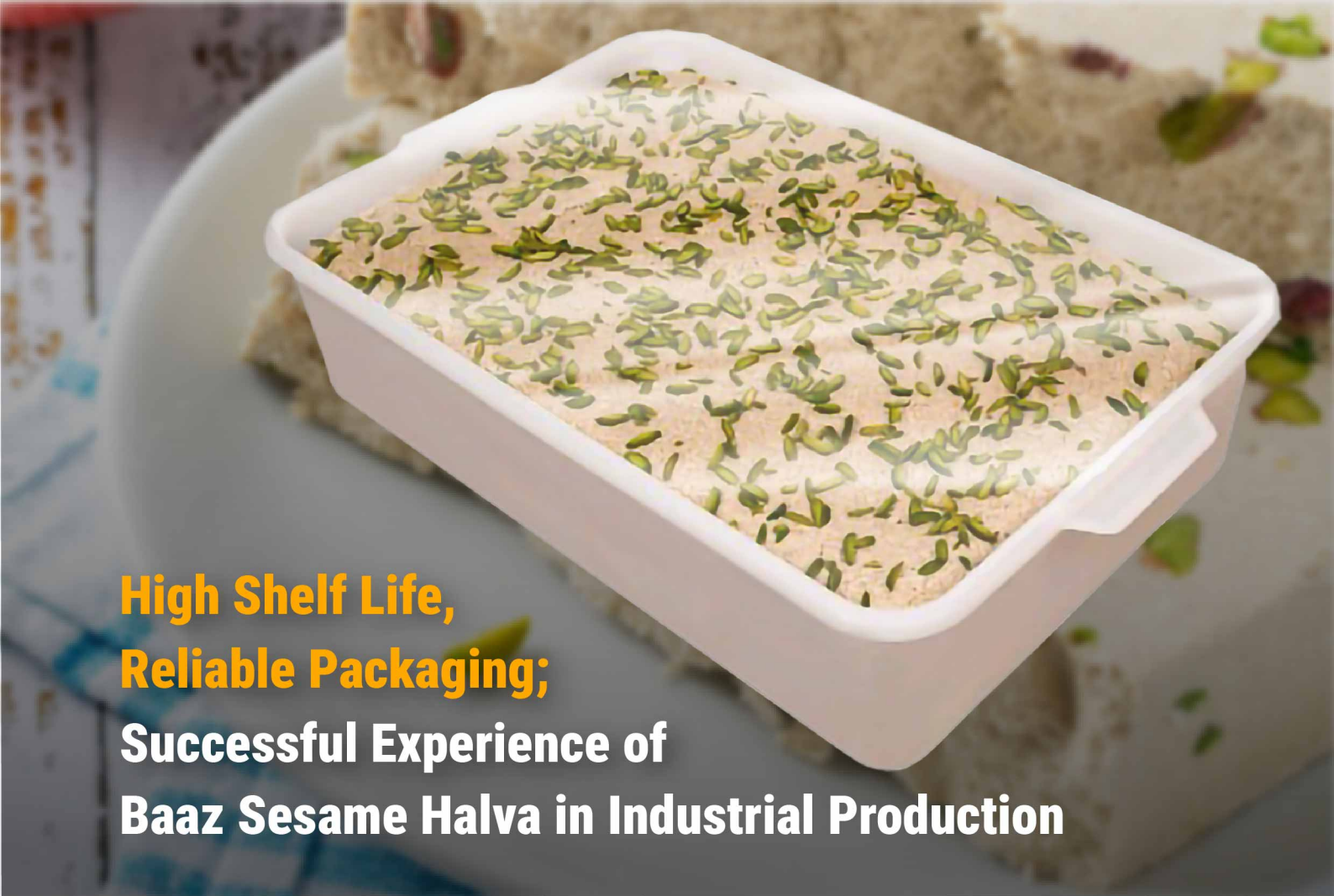


Tray sealer machines help producers in the bread and cereal industry to:

- Create professional and uniform packaging
- Increase the visual appeal of the product
- Strengthen consumer trust
- Enhance the perceived value of the brand

Transparent and standard packaging allows consumers to better observe product quality and feel more confident about its health and hygiene. This is particularly important in chain stores and export markets.

In conclusion, tray sealer machines are no longer just packaging equipment; they are part of the competitive and marketing strategy of the bread and cereal industry. This technology helps producers create greater value for consumers by increasing shelf life, preserving freshness, improving hygiene, reducing waste, and enhancing packaging appearance. In a situation where competition in the food industry market is becoming increasingly intense, the use of modern packaging technologies such as tray sealers can play a decisive role in brand success, market development, and productivity improvement



High Shelf Life, Reliable Packaging; Successful Experience of Baaz Sesame Halva in Industrial Production

As part of our ongoing after-sales service field visits, this time we spoke with the technical manager of Baaz Sesame Halva collection a company managed by Mr. Sower active in the production and packaging of Sesame Halva which carries out its packaging process using our company's machines.

This collection uses a heat sealing system for packaging its products. Notably, with this type of packaging alone, they have been able to maintain product shelf life for up to one year while preserving the quality, texture, and original appearance of the product. According to the technical manager, the sealing quality of the machine plays a very important role in preventing product quality loss and has helped the Sesame Halva retain its original condition over time.

One of the important advantages of this packaging line is the use of two moulds in different sizes, so that with one mould, 8 kg packages are produced, and with the other mould, 10 to 12 kg packages are produced. This mould variety has allowed the company to have greater flexibility in production according to market needs and customer orders.

He explained that production is carried out on a custom basis, and production capacity varies depending on order volume. Nevertheless, the packaging line can easily package up to 1,000 packages per day, and in times of increased orders, the machine can handle higher volumes without any drop in performance. This has made the production and order delivery process faster and more reliable.

One of the most important points mentioned in this conversation was the absence of product returns after using this type of packaging. According to the technical manager, the high quality of the seal prevents oil from leaking out of the product, and the final packaging has a clean, professional, and trustworthy appearance. This feature is particularly important for oily products such as Sesame Halva in maintaining quality and customer satisfaction. The packaging process in this company is carried out with two operators. According to him, using this packaging model has had a direct impact on increasing profitability and order stability. He also noted that since using our company's machines, not only has the visual quality of the product improved, but customers have also shown much greater acceptance of the product presentation and packaging.

At the end of the conversation, he emphasized:

"Packaging for a product like Sesame Halva is not just about appearance; maintaining quality, preventing oil leakage, and proper shelf life are very important. Fortunately, your machines have been able to provide these for us well, and this has helped maintain customer satisfaction and order stability."



Henry Miller

I am Henry Miller, CEO of the Shantia brand. Since 2017, we have been active in producing 100% pure barley bread and walnut cookies. In addition to our own products, we also handle the packaging of pickled products for partner companies.

In 2023, we became acquainted with Vormek Company and purchased a semi-automatic tray sealer machine from them. This machine has greatly assisted our packaging process and significantly reduced labor costs.

We package an average of 600 to 700 packages per day and are very satisfied with Vormek's machines. We are especially pleased with their after-sales service; whenever we have encountered an issue at any hour of the day or night, they have been responsive once, for a small part, they even came in person at 12 o'clock at night.

We have now been using Vormek's tray sealer machines for over five years and are completely satisfied.





Interpack 2026 Germany; A Turning Point for the Packaging Industry

Interpack 2026, the world's largest packaging industry event, was held from May 7 to 13, 2026, in Düsseldorf, Germany. This edition, with 2,804 exhibitors from 65 countries and visitors from 161 countries, was the most visited version in history. 75% of visitors came from outside Germany, and 28% from outside the European continent.

Innovations and Transformations in the Packaging Industry at Interpack 2026

Among all the achievements showcased at Interpack 2026, one topic stood out above all: the new European Union Packaging and Packaging Waste Regulation (PPWR). This regulation was recognized as a turning point for the entire industry. The message resonating throughout the exhibition was that sustainability is no longer just a peripheral idea or a parallel stream to innovation; it has now become the main and fundamental framework for the development of materials, formats, and machinery.

In the field of innovative materials, the development of fiber-based (cellulose) packaging was one of the most important and remarkable transformations. Exhibitors demonstrated that a suitable alternative to traditional aluminum foil can be found by introducing recyclable fiber-based ice cream wraps. Also showcased were the first recyclable paper tube with 87% fiber and molded fiber packaging with high-barrier layers.

In the flexible packaging sector, significant progress was made in mono-material solutions. Polypropylene mono-material packaging with digital printing capability, as well as a recyclable mono-material retort pouch capable of withstanding temperatures of 131°C for up to 30 minutes, were among these innovations.

Another interesting point was the serious entry of artificial intelligence into the mainstream of the industry. While the previous edition focused on Industry 4.0, we are now witnessing practical applications of AI. For example, X-ray systems can detect packaging anomalies such as missing labels. Pick & Place systems are also capable of automatically sorting and reorienting products on conveyor belts. Additionally, smart labels change color by detecting gases released from spoiling food. This technology enables the elimination of conservative expiration dates and increases accuracy in determining the actual shelf life of products.

In the field of tray sealer and thermoforming machines, exciting developments also took place. Many exhibitors focused on reducing operational costs (TCO) and implementing 100% mono-material PET trays. New thermoformers designed for small-scale production operate without the need for compressed air. Advanced technologies with temperature accuracy of $\pm 1^\circ\text{C}$ were introduced for medical packaging. New tray sealers with easy maintenance features, as well as thermoformers with larger loading areas and robot-customization capabilities, were among other innovations in this field. Finally, some exhibitors with the inspiring slogan "Powering What's Next" showcased fully integrated production lines.

Interpack 2026 was more than a successful exhibition it was a turning point in the transformation of the packaging industry. The strong presence of international companies, the focus on practical solutions, sustainable materials, artificial intelligence, and constructive interaction between material suppliers, machinery manufacturers, and brands were among the distinctive features of this edition. The next Interpack will be held in 2029.



Introduction to Atlas Food Machinery Company; Pioneer in Designing and Manufacturing Complete Production Lines for Bread and Grain Products

CEO: Robert Harrison

Atlas Food Machinery Company, However, its specialized and focused work in the design, manufacturing, and supply of equipment for the food industry, especially the bread and grain products sector, officially began in the early 1980s.

Relying on indigenous technical knowledge and decades of experience, this company has been able to establish its position as one of the reputable manufacturers of baking ovens, mixers, and related auxiliary equipment for both flat and bulky breads. The company's products cover a wide range of production needs for cake and cookie factories, industrial bakeries, and bread production units.

One of the outstanding features of Atlas Food Machinery Company is its capability in designing and implementing complete semi-automatic production lines and a batch-based system. This approach allows producers to have precise control over the production process, optimize energy consumption, and increase efficiency.

In addition to having a strong presence in the domestic market, Atlas Food Machinery Company has been continuing its export activities to various global destinations, including African countries, Arab countries, Uzbekistan, and other international markets for many years, proudly upholding Iran's name in the field of food industry machinery manufacturing.

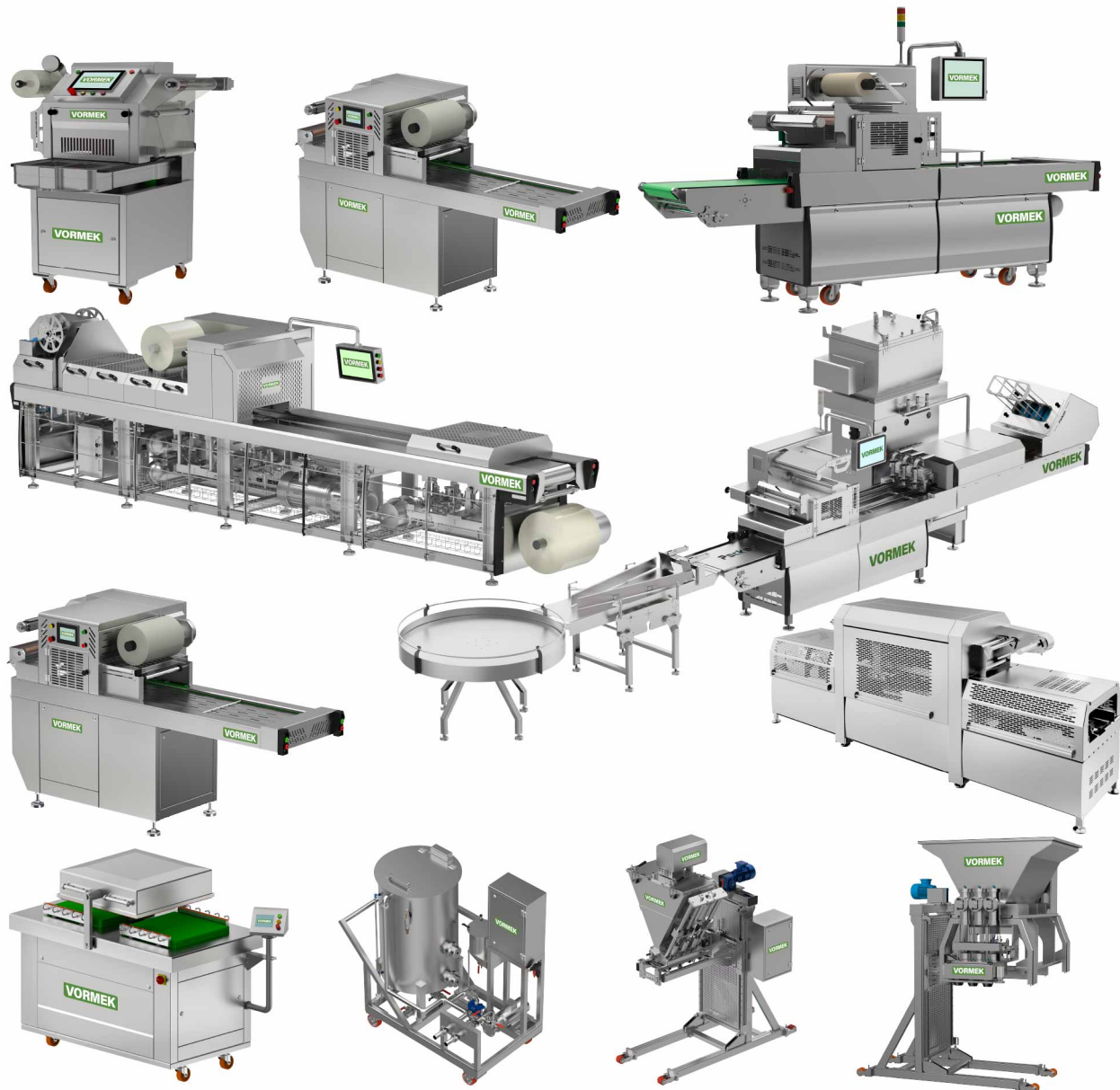
This company has always stood alongside industrialists and producers of bread and grain products. By designing and manufacturing complete production lines, it has taken effective steps towards industrial self-sufficiency, reducing dependence on foreign equipment

The Importance of Using Tray Sealer, Thermoforming, and Vacuum Chamber Machines in Today's Packaging Industries

Not too long ago, food packaging was simple and inefficient. Products were placed in a container, covered with a layer of film, and it was hoped they would remain safe until consumption. Reality, however, was different: short shelf life, inconsistent quality, an unprofessional appearance, and contamination risks that often went unnoticed by operators. Today, expectations have changed. Consumers no longer buy food based solely on taste and freshness; they also value attractive packaging, hygiene, and extended shelf life. Manufacturers who still rely on traditional packaging methods find themselves at a disadvantage when competing with industries that embrace modern technologies.

Fortunately, today's innovations have addressed these challenges. Tray sealers offer easy operation and simple maintenance while enabling the packaging of a wide range of food products. They help extend shelf life and give products a professional, appealing appearance. Thermoforming machines go a step further by forming containers, filling, and packaging products within a single integrated process. Vacuum chamber systems remove air completely, preserving freshness, enhancing food safety, and significantly extending product shelf life. In addition, packaging lines equipped with these machines and a variety of optional features make the packaging process more efficient, hygienic, and faster.

This technological integration elevates product packaging, modernizes production processes, and positions your brand as a trustworthy and forward thinking business in the minds of customers. Packaging is not merely the final step in production; it is a window through which customers perceive your expertise, commitment to quality, and reliability.



We warmly invite you, our dear audience, to share your topics of interest with us. Your opinions and suggestions not only help enrich our content but also guide us in providing more practical material to meet your needs. **Would you like to read a report about a specific industry or a special technology in the field of packaging?**

Share your thoughts with us so we can cover them in upcoming editions.