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

VORMEK

Vormek – a Knowledge-based Machinery Company, an Innovation Reference with Superior Technology and High Reputation in its Field

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Traditional Packaging of Fish and Shrimp Compared to Modern Packaging

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Key Criteria for Buying a Tray Sealer Packaging Machine

Editorial: Dr. David Sterling

Key Criteria for Buying a Tray Sealer Packaging Machine

When an industrial buyer focuses only on price when purchasing a tray sealer packaging machine, in fact, their decision becomes one-dimensional, and many key factors that affect the total cost of ownership (TCO) and long-term success are ignored. The total cost of ownership refers to the sum of direct and indirect costs associated with purchasing, using, maintaining, and disposing of an asset or service over its entire lifecycle; in simpler terms,

Total cost of ownership equals purchase price + usage cost + maintenance cost + disposal or replacement cost.

Items that are usually ignored when the buyer focuses on price include:

1- Product Quality and Lifespan

A cheap product may break down sooner or require frequent repairs.

Ultimately, repair costs, production line downtime, or repeated replacements exceed the initial savings.

2- After-Sales Service and Technical Support

A reputable supplier with strong services can prevent production line stoppages and heavy losses.

3- Reliability in Supply and On-Time Delivery

In the industry, delivery delays can cause damages multiple times the purchase amount.

4- Standards and Safety

Cheaper equipment may not comply with safety, environmental, or industrial standards, causing legal issues or safety Teeters.

5- Innovation and Technology

Newer products may have lower energy consumption, higher efficiency, and better integration with existing systems.

6- Supplier Credibility and Stability

Choosing a seller solely based on price can lead to partnerships with suppliers who are not responsive or stable during crises.

7- Indirect Costs and Risks

Production stoppages, higher waste, higher energy consumption, or the need for more operators.

In conclusion, if an industrial buyer focuses only on "purchase price," they effectively ignore the actual cost and hidden risks of the deal. At Vormek, we make every effort to provide tray sealer packaging machines to our business partners with the highest possible quality so that their total ownership costs and future risks are significantly reduced.



The Value of the Vacuum Chamber Packaging Machine

A Perspective from Food Industry Engineering and Mechanical Engineering

Mr. Simon Füllenbach

In the food product packaging industry, the role of packaging is not limited to protecting the product; it also has a direct impact on shelf-life, quality, visual appeal, and sales. One of the advanced technologies in this area is the use of a vacuum chamber machine. This machine, by vacuuming air and precisely controlling the internal atmosphere of the package, creates ideal conditions for preserving food quality and can be evaluated from two engineering perspectives:

- From the perspective of food industry engineering to ensure product quality and safety
- From the perspective of mechanical engineering for performance accuracy and engineered design

Food Industry Engineering Perspective: Increasing Shelf-Life and Safety

1– Controlling the internal atmosphere of the package:

In ordinary packaging, oxygen causes fat oxidation, discoloration, and spoilage. The vacuum chamber machine, by removing air, creates conditions that reduce the rate of spoilage.

2– Preservation of appearance and flavor:

By controlling oxygen and moisture, the natural color of meat, the freshness of vegetables, and the taste of food products are preserved. It also prevents fat formation and pests in nuts. As a result, the product maintains its initial quality for a longer time.

3– Increased hygiene and safety:

Vacuum packaging prevents the entry of environmental contamination and meets national and international food safety standards. This reduces the likelihood of returned shipments and makes exporting easier.

4– Improved branding and marketability:

The vacuum system causes the film to fully adhere to the product and improves visual appeal. In addition to product protection, this enhances appearance and increases customer confidence. However, from the perspective of mechanical engineering, the following points can be mentioned about the horizontal vacuum chamber machine of Vormek:

1. Durable and robust structure:

The body of the machine is made of 304 stainless steel, which has high resistance to corrosion and washing. Therefore, the machine experiences less accuracy loss over the long term.

2. Powerful vacuum system:

An oil rotary pump with a capacity of 63 to 160 cubic meters per hour quickly removes air and provides the proper vacuum level so that air is eliminated from inside the package.

3. Smart control:

The presence of a PLC and a touch HMI screen allows the operator to precisely adjust temperature, time, and vacuum level and minimizes errors. Multiple packaging programs can also be defined in it.

4. Precise pneumatic system:

Pneumatic valves and precise sealing design ensure vacuum operations are performed without leakage. This increases the quality of packaging.

5. High speed and efficiency:

The speed is 1 to 3 cycles per minute. The presence of two chambers also reduces loading time.

6. Easy maintenance:

Easy access to components and quick replacement of heating elements reduce downtime and maintenance costs.



The Power of Perfect Sealing and Packaging in the Vacuum Chamber Machine; Designed and Manufactured by Vormek

The horizontal vacuum chamber machine of Vormek is an engineering-backed solution for two essential demands: "reliable sealing" and "flawless packaging." This machine, through the combination of intelligent mechanical design, precise control systems, and stable pneumatic mechanisms, enables vacuuming various food and non-food products in suitable bags so that the air inside the bag is

completely removed, the bag edge is sealed, and the final result is reliable in terms of strength and uniformity of the seal.

The structure of the machine consists of two main parts: the upper chamber, which houses the sealing assembly, and the lower body, which contains the vacuum pump, electrical panel, and motion mechanisms. In the body section, using the mechanism of springs and low-friction motion systems, the weight of the chamber is balanced so that the operator can move it smoothly and safely. This mechanical harmony enables repeatable cycles and reduces operator fatigue.

The value-creating heart of the machine is its sealing system. The sealing assembly consists of two belt-type heating elements with engineered design, installed on their respective components; they are placed modularly and without special tools and can be removed just as easily for service or replacement. This modular design minimizes line downtime during maintenance.

Electricity is transferred to the elements instantaneously and in a controlled manner; upon reaching the target temperature, the film layers melt-fuse under proper heat and pressure, creating a clean, continuous, and borderless seal.

Seal pressure is provided by a pneumatic cushion located in the upper chamber. This cushion, through pneumatic valves, applies compressed air with exactly the pressure needed to bond the film layers to the sealing section. Its key advantage is uniform force distribution along the sealing length and repeatable pressure across sequential cycles, resulting in a consistent seal across the entire bag width.

Additionally, the machine allows independent adjustment of parameters: heating time, pneumatic pressure, and control delays. This combination of settings enables the operator to create the optimal sealing profile based on the type and thickness of the film (from thin multilayer bags to thicker metallized structures). Due to this flexibility, the machine provides uniform, impermeable, and error-free seals even when facing high variation in bag types—even with changes in film thickness—setting it apart from many models available on the market.

Alongside sealing strength, overall vacuum process sealing is ensured through the precise design of the chamber sealing edge and accurate leak control; thus, stable vacuum pressure is provided before sealing, and full adhesion of film to the product, in addition to packaging aesthetics, contributes to increased shelf-life. The selection of durable, washable materials, the placement of the electrical panel, and easy access to consumable parts prepare the machine for shift work and industrial environments.



Clean-in-Place (CIP) System for the Filler Machine

A highly suitable method for hygiene, compliant with food machinery standards

This method is used to wash the internal surfaces of processing equipment such as tanks, pipes, fittings, and all parts that come into contact with the product.

In this method, cleaning, rinsing, and disinfecting solutions are automatically and under control passed through specific pathways of the equipment so that all product residues such as fat, protein, sugar, microorganisms, and mineral deposits are completely removed.

In the food industry, hygiene is not a choice; it is the foundation of safe and high-quality production. When food products come into contact with a machine, that machine must be thoroughly washed after every use so that microbial contamination does not form in the product. Throughout the entire filling process by the filler machine, precise sanitary control plays a key role. That is why Clean-in-Place (CIP) systems have become an inseparable component of filling lines.

Main components of this machine

1– Water storage tank for keeping hot water

2– Chemical storage tank

- For storing various solutions including:
- Alkaline materials (for removing fat and protein)
- Acidic solution (for removing mineral deposits)
- Disinfectants (such as peracetic acid)

3– Pumps and automatic valves

The special pump circulates the solutions through the equipment route with proper pressure, and the automatic valves accurately control the washing pathways.

4– Heating element and thermostat

For heating the water inside the tank to the required temperature (usually between 70 to 85°C) for effective cleaning.

5– Central control system (PLC)

Using industrial programming, all stages of washing, temperature, time, chemical dosage, and operation sequence are controlled and monitored.

6– Sensors and measuring instruments

Including thermometer, conductivity sensor, flow meter, and level sensor that monitor the status and performance of the system.

Main stages of the CIP operation

A standard washing cycle is performed in the following order:

1. Pre-wash with hot water:

To remove product residues and prepare for the main wash.

2. Washing with alkaline solution:

For cleaning fat, protein, and other organic residues.

3. Intermediate rinsing:

To remove alkaline residues before entering the acidic stage.

4. Washing with acidic solution:

For removing mineral deposits.

5. Final rinsing with clean water:

To ensure complete removal of chemicals.

6. Disinfection stage (if needed):

To eliminate microorganisms before production begins.

7. Air blowing (optional):

For drying the pathways or completely removing remaining residues.

Advantages of using the CIP system

1– Maintaining high levels of hygiene and food safety

Eliminating microbial contamination, reducing the risk of unsafe product production, and complying with standards such as HACCP, ISO 22000, and FDA regulations.

2– Saving time and manpower

No need to disassemble parts for washing and reduced need for manual labor.

3– Reduced water and chemical consumption

Ability to recycle solutions and use resources intelligently.

4– High accuracy and controllability

Uniform, programmable, and traceable cleaning with the PLC system.

5– Reduced production downtime

Ability to switch quickly between production shifts with precise washing scheduling.

6– Increased equipment lifespan

By preventing buildup of deposits and corrosion caused by contamination.



Edible Aquatic Animals in the Food Industry

Edible Aquatic Animals in the Food Industry

Edible aquatic animals include a wide range of aquatic organisms that are directly used in the human food supply chain. This group includes fish (such as salmon, tuna, trout, carp), crustaceans (such as shrimp, crab, lobster), mollusks (such as mussels, octopus, squid), and even edible algae (such as nori and chlorella). These protein sources not only hold an important place in traditional diets in many countries, but are also recognized as high nutritional-value raw materials in modern food industries.

Nutritional Value and Health Orientation

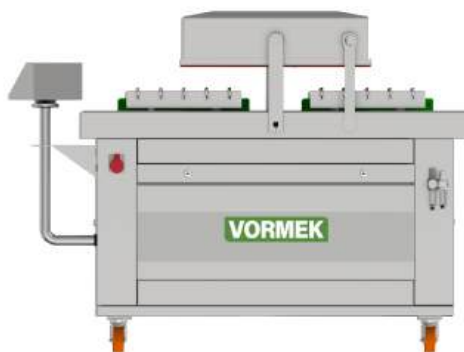
Aquatic animals are rich in high-quality proteins, omega-3 fatty acids, vitamin D, iodine, selenium, and other essential micronutrients. Regular consumption of them is associated with reduced risk of heart disease, improved brain function, and strengthened immune system. For this reason, many processed food products such as shrimp nuggets, fish protein powder, and fish oil supplements have gained significant global market acceptance.

Industrial Applications and Processing

In the food industry, aquatic animals are offered fresh, frozen, smoked, salted, dried, or powdered. Their by-products (skin, bones, head) are also used to produce gelatin, flavor extracts, fish oil, and even livestock and poultry feed. Technologies such as IQF rapid freezing, vacuum packaging, and bioactive coatings help preserve quality and increase shelf-life of these products.

Consumer Market and Emerging Trends

With rising consumer awareness regarding healthy nutrition and sustainable protein sources, demand for edible aquatic animals is increasing. Markets such as Europe, North America, and East Asia—especially in the field of ready-to-eat seafood, sushi, and protein products as alternatives to red meat—have seen significant growth. Additionally, aquaculture is expanding as a sustainable solution for meeting this demand.



Technical Point of This Monthly Magazine

Mr. Alexander Hoffmann (Deputy of Vormek)



One of the prominent engineering technical points in the vacuum chambers of Vormek is the integration of the intelligent packaging system using Modified Atmosphere Packaging (MAP) with rotary or oil vacuum pumps, which provides the capability to reduce the internal pressure of the chamber to levels close to absolute vacuum (usually in the range of 0.1 to 1 millibar). This system, using PID (Proportional-Integral-Derivative) controllers for the precise adjustment of inert gases such as nitrogen (N_2) or carbon dioxide (CO_2) after air removal, creates a controlled environment that reduces the oxygen penetration rate to less than 0.5 percent. The structural materials made of stainless steel 304 or 316 (with high corrosion resistance according to ASTM A240) include hydraulic cylinders for opening and closing the chamber door, and this engineering design allows operational cycles to be performed at a speed of 4–6 cycles per minute, while pressure sensors (such as digital gauges with 0.1 millibar accuracy) and type K thermocouples with a range of -50 to $+150$ degrees Celsius continuously monitor parameters and ensure process stability, all designed based on ISO 9001 and FDA standards for safety and quality.

This technical feature not only increases efficiency by reducing air-evacuation time (less than 30 seconds for standard volumes), but also ensures uniform gas distribution through gas-flow modeling based on the Navier–Stokes equations and prevents the formation of cold or hot spots inside the chamber. Compared to traditional systems, these vacuum chambers, with the ability to customize gas ratios (such as 70% N_2 and 30% CO_2 for meat) and integrate with PLC for automation, reduce energy waste by up to 20 percent and increase mechanical durability with fatigue testing to over 100,000 cycles. Additionally, the CIP (Clean-In-Place) washing system using spray nozzles and disinfectants facilitates maintenance and ensures operator safety with safety-lock interlocks.



From Sea to Exports

Packs which Reduce Costs

VORMEK

Review of the economic advantages of packings under vacuum and also packings using Modified Atmosphere Packaging (MAP)

In the fish and shrimp industry

from reducing labor to increasing productivity and exportability

2

Healthy Heart with Fish



Fish is a rich source of high-quality protein and omega-3 fatty acids, which help maintain heart health

3

Shrimp; The Star of Asian Kitchens



Shrimp is one of the most consumed aquatic products in the world and plays a key role in many Asian dishes.

4

Brain Food: Fish

Regular consumption of fish can improve brain function and reduce the risk of Alzheimer's



5

Shrimp; Low-Calorie Protein

Shrimp, with low calories and high protein is an excellent option for healthy diets.

6

Shrimp and Immune Boost

Shrimp is rich in selenium and vitamin B12, which play an important role in strengthening the immune system.

7

Natural Omega-3



Fatty fish such as salmon and sardine are the best natural sources of DHA and EPA.

8

Smell of the Sea, Sign of Freshness

Fresh fish should smell like the sea, not unpleasant; this is one of the signs of high quality.

9

Small Shrimp, Delicate

Small shrimp have a more delicate texture and are very suitable for preparing seafood salads.

10

Sustainable Catch, Sustainable Future

Choosing sustainably caught fish is an effective step in preserving marine resources for future generations.

11

Vacuum; Freshness Lock at the Moment of Tray Packing

By removing a certain percentage of air, vacuum tray packing prevents bacterial growth and product oxidation and preserves the freshness of fish and shrimp many times longer.

12

MAP; Engineered Breathing for Aquatic Products

In Modified Atmosphere Packaging (MAP), the precise gas composition helps maintain the color, texture, and natural taste of the product without the need for additives.



Transparency, Safety, Attraction

Modern vacuum and MAP tray packings not only ensure food safety but also, with their transparent and professional appearance, gain consumer trust.

14

Smart Tray Packing; Export

Using advanced tray packing technologies facilitates the export path of fish and shrimp and preserves product quality in the international cold chain.



15

Reduction of Operational Costs

With the mechanization of the tray packing process, the need for human labor in quality control, arrangement, and packing stages is reduced, and human errors are minimized.

16



The Birth of a National Technology:

KPTAUFH1556 Smart Autoclave Made in Iran for the Global Market

The KPTAUFH1556 smart autoclave is a product of Iranian knowledge, experience, and engineering, designed and manufactured to meet the needs of modern food industries. This machine is produced by Khorasan Packaging Tools Company (NMC) and is based on 15 years of design and production experience.

Engineering Background and Experience:

Behind this industrial achievement stands Engineer Mohsen Nasari, founder of NMC and a pioneer in thermal engineering in Iran, with over four decades of practical experience in designing food-industry machinery. He has initiated many technical innovations in this field and paved the way for local equipment production. Together with a young team, including Engineer Omid Nasari (Deputy) and Engineer Navid Nasari (Chief Designer and Technical Deputy), the KPTAUFH1556 autoclave with global technology made in Iran has been realized.

This autoclave has even been exported to Turkey.

Key and Innovative Features:

The KPTAUFH1556 provides complete performance in all thermal and cooling processes.

- **Multiple Heating Platforms:** Includes direct steam injection, water shower, and immersion.
- **Professional Cooling:** Four combination modes, including mist pre-cooling, compressed air, immersion + shower, and connection to glycol, ice bank, or chiller. It also includes a 1,572 kW plate heat exchanger manufactured by TGT – Iran.
- **Advanced Shaker System:** A double reciprocating shaker system with a bevel-helical gearbox and Siemens servo motor is one of the key advantages of this autoclave. It allows adjustment of stroke, frequency, and shaking speed for each product, even for a single basket, providing smooth, uniform, and effective vibration for cooking thick or sticky materials, reducing TPT, and increasing thermal uniformity.

- **Intelligent Control (Automation):** Designed with Siemens industrial PLC and DELTA 10 touch HMI. Capable of storing and executing 100 process programs and fully controlling all positioners, proportional valves, fans, shaker, and complete cycles with feedback.

- **Connectivity and Safety Features:** Equipped with real-time data logger connectivity, data recording (temperature, pressure, time) on USB flash, and upgradable to MES, SCADA, or smart factory systems. For safety, maintainability, and industrial organization, it has four fully separate cabinets (electrical, facilities, pneumatic, HMI and independent UPS). UPS control is provided for power outages.

- **Support for Various Containers:** Compatible with all types of cans, PET, glass, Doypack, Astral, and PP closures.

Global Competition and Operational Advantages:

This autoclave, adhering to construction, safety, process control, and welding quality standards, is designed according to European CE certification requirements and is ready for export markets in Central Asia, Turkey, the Middle East, and North Africa.

Compared to leading global brands, it offers significant competitive advantages:

- **Against Steriflow (France),** which lacks a shaker system, the KPTAUFH1556 features a double reciprocating servo shaker, enabling uniform processing of sticky and thick products.

- **Against Lagarde (France),** which is usually designed only for steam or water heating, the KPTAUFH1556 has a three-mode combination (steam, shower, immersion) with cold water and steam misting system.

With stable temperature and pressure control (fluctuation less than $\pm 1\%$), reduced energy consumption (electricity: 28–35 kW / steam: 360–400 kW), and full process recording, it is a top choice for technical and production managers. NMC also emphasizes maintainability in its design, offers low operational costs, and provides genuine spare parts and service, supporting customers across Iran.



World Food Day: Global Solidarity for a Healthier Future

World Food Day is celebrated every year on October 16, in honor of the founding of the Food and Agriculture Organization of the United Nations (FAO) in 1945. This day provides an opportunity to reflect on challenges related to food security, healthy nutrition, resource sustainability, and the role of the food industry in sustainable development. The global slogan for 2025 is "Hand in Hand for Better Food and a Better Future", emphasizing the necessity of cooperation among governments, industries, communities, and consumers.

In many countries, this occasion is marked by conferences, exhibitions, educational workshops, and awareness campaigns. For example, in Iran, conferences have been held on topics such as "Functional Foods," "Reducing Food Waste," "Artificial Intelligence in the Supply Chain," and "Nanotechnology in the Food Industry," reflecting the growing connection between science and industry in improving food quality and safety.

World Food Day also provides a platform to focus on humanitarian crises such as hunger, malnutrition, and food poverty in underprivileged regions. According to reports, millions of people worldwide still lack access to sufficient and nutritious food, and this day serves as a reminder of our ethical and social responsibility toward this global challenge.

Support programs, sustainable agricultural development, and nutrition education are among the strategies emphasized on this day.

Ultimately, World Food Day is not merely a symbolic occasion, but a point for global synergy in transforming food systems. From technological innovations in the food industry to the revival of traditional and indigenous foods, all can contribute to building a healthier, fairer, and more sustainable future. This day is an opportunity to rethink food choices, support responsible producers, and move toward a table that aligns both with human health and the health of the planet.



SEMI-AUTOMATIC
TRAY SEALER MACHINE

AUTOMATIC TRAY SEALER
PACKAGING MACHINE

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Traditional Packaging of Fish and Shrimp Compared to Modern Packaging

Ms. Yazdi

Traditional packaging

After being caught, fish were usually preserved by heavy salting or sun-drying in wicker baskets, cloth bags, or clay containers to prevent spoilage and allow for easier transport. Shrimp, too, after being boiled in saltwater, was dried and placed in simple yet effective packaging. Despite their simplicity, these methods played an important role in maintaining quality, increasing shelf life, and supporting the traditional trade of aquatic products, and today they inspire sustainable designs in modern packaging.

Modern packaging

Fish and shrimp are designed using advanced technologies such as vacuum packaging, modified atmosphere packaging (MAP), multilayer barrier films, and bioactive coatings to significantly increase shelf life, microbial safety, and sensory quality of the product. These packaging systems not only prevent fat oxidation and bacterial growth, but also, through the use of eco-friendly materials and digital traceability, meet the needs of export markets and today's informed consumers.

Ergonomic design, transparent nutritional information, and easy-open and resealable features are among other characteristics of modern aquatic-product packaging that enhance the consumer experience and strengthen brand value.

Modern packaging plays an important role in reducing fish and shrimp waste

By using technologies such as vacuum, modified atmosphere, and barrier films, early spoilage, fat oxidation, and microbial growth are prevented. These methods not only increase the product's shelf life but also enable long-distance transport, storage within the cold chain, and distribution to distant markets. In addition, smart packaging with traceability and freshness-indicator features helps consumers use the product at the right time and avoid food waste, ultimately contributing to supply-chain sustainability and reducing pressure on natural resources.

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

- Tray Sealer packaging machines, with easy operation and simple maintenance, make it possible to package a wide variety of food products. In addition to extending shelf life, they give the product a stylish and professional appearance.
- Thermoforming packaging machines, in addition to producing trays, also carry out the filling and packaging process. These machines, in different types such as soft film, hard film, and skin pack, can package food products in a highly professional and attractive way with complete precision.
- Vacuum Chamber machines, by completely removing the air (vacuum) from inside the filled pouches, can ensure freshness, safety, and long-term preservation of food products. Furthermore, the installation of various fillers and dedicated options on these machines makes the packaging process more automated, hygienic, and faster.
- This technological combination elevates packaging standards and, while modernizing the production process, creates trust and a modern image of the producer's brand in the minds of customers.



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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.



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Modified Atmosphere Packaging (MAP): The Magic of CO₂ for Keeping Fish and Shrimp Fresh!

What is MAP and what role does CO₂ play?

In MAP packaging, normal air (which contains about 21% oxygen and 78% nitrogen) is replaced with a mixture of gases. The main gases include carbon dioxide (CO₂), nitrogen (N₂), and sometimes oxygen (O₂). Carbon dioxide is the hero here because it has strong antimicrobial properties. This gas dissolves in the water of fish and shrimp muscles, forming carbonic acid, which lowers the pH and creates an unfavorable environment for aerobic bacteria such as *Pseudomonas* and *Acinetobacter*. The result? Slower bacterial growth and reduced spoilage.

For seafood products, a common mixture contains 40–60% carbon dioxide. For example, studies on Pacific white shrimp showed that high CO₂ packaging significantly reduced chemical and microbial changes.

Impact on Fish: Fresher, Firmer, Tastier!

Fish are sensitive too much oxygen causes fat oxidation and off-odors. CO₂ addresses these issues by reducing oxygen and inhibiting bacteria. In one study, packaging with 60% carbon dioxide showed the least degradation of myofibrillar proteins (responsible for fish firmness) and preserved fish texture.

It also slowed the accumulation of volatile compounds such as amines, which cause unpleasant odors.

Interestingly, CO₂ can dissolve in fish muscles and lower pH, sometimes creating a slightly acidic taste but this change is usually positive and helps maintain freshness. However, excessive CO₂ can cause the packaging to collapse (due to gas absorption by the product), so balance is important.

Impact on Shrimp: Fighting Melanosis and Bacteria

Shrimp are even more sensitive they blacken quickly (melanosis) and bacteria love them. Carbon dioxide acts as a guardian here: it can reduce bacterial growth by up to 60% and slow the accumulation of volatile nitrogen compounds (TVB-N), which indicate spoilage. In high CO₂ packaging, shrimp retain their color, texture, and flavor longer. For example, studies on shrimp showed that adding CO₂ to packaging increased shelf life from a few days to over a week.

One interesting note: sometimes high CO₂ can alter shrimp aroma because it dissolves in the muscle's liquid phase. To prevent this, CO₂ emitters (which release gas gradually) are often used.

Ultimately, CO₂ in MAP acts like an invisible shield that protects fish and shrimp from spoilage.



Ogink: With You in Delivering the Freshest Aquatic Products with Standard Cutting and Packaging

Ogink, a specialist in technology and processing of various aquatic products, with diverse cuts and packaging for both bulk and household consumption, has always been at the forefront of delivering fresh and cleaned fish and shrimp to Iranian kitchens and tables. The company was established in 2019 with the aim of facilitating access and increasing per capita consumption of aquatic products in the country, and since the beginning of its activities, under the management of Mr. Namjoo, it has continued its growth and development path with strength.

Ogink's expertise is bringing the true, fresh taste of fish and shrimp to Iranian homes. Leveraging the experience and efficient management of Mr. Namjoo and utilizing specialized knowledge in fish and shrimp meat, Ogink knows exactly how to deliver the best quality to its customers in the shortest time.

Introduction to Vormek

In 2012, Mr. Namjoo became acquainted with Vormek, and Ogink became the first provider of aquatic-product packaging in Modified Atmosphere Packaging (MAP) conditions.

Success in Obtaining Veterinary Organization Approvals

Mr. Namjoo believes that one of the main factors behind the company's success in obtaining approvals from the country's Veterinary Organization was the high quality of Vormek packaging machines, which ensured these approvals and guaranteed the safety and quality of the products.

Challenges in Preserving Seafood Products

Fish, among all types of meat, contains the highest protein content and, due to its low collagen, is a light, easily digestible food suitable for children and even the elderly.

However, unfortunately, freezing and long-term storage in warehouses reduce its natural taste and diminish some of its protein values. Additionally, frozen fish meat is more exposed to contamination.

Increasing Shelf Life with Modified Atmosphere Packaging

Ogink Food, using Vormek packaging machines and MAP technology, succeeded in extending the shelf life of its seafood products from 3 days to 8 days. This achievement, in addition to improving product quality and freshness, reduced waste and ultimately increased the company's profitability.

Modified Atmosphere Packaging (MAP) is one of the most modern technologies in the food industry, which, by changing the composition of gases inside the package, creates suitable conditions for preserving product freshness and quality. This method slows down microbial growth and oxidation processes, significantly increasing the shelf life of food products. Using MAP while preserving taste, color, and nutritional value reduces waste and allows broader distribution of products in the market.