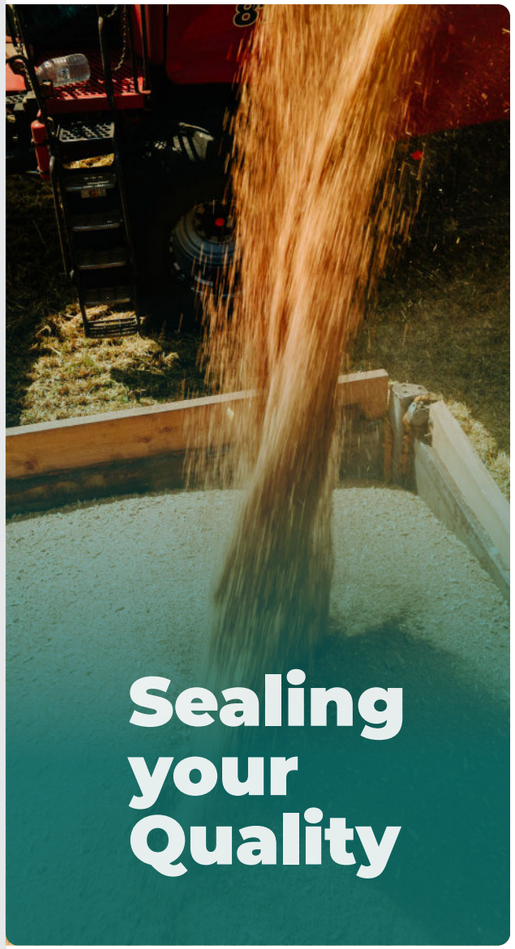
VACQPACK
MODIFIED ATMOSPHERE PACKAGING

Bulksized MAP for wheat farmers in the durum wheat chain



AN ORGANIC TREATMENT

What is Map?

In the world of pasta, everything revolves around authenticity, taste, and tradition. From the very first grains of durum wheat to the perfect al dente bite, every step in the chain defines the final result. But quality is fragile. Storage, transport, and time can compromise the natural properties of wheat and with it, the color, texture, and flavor of pasta.

Modified Atmosphere Packaging (MAP) provides the organic answer. By replacing oxygen with a carefully balanced protective atmosphere, MAP preserves the raw material in its purest state. It prevents mold, insects, and oxidation, while maintaining the wheat's aroma, nutritional value, and processing performance. MAP is more than packaging, it is a guarantee of quality, consistency, and the genuine taste of real durum pasta.

- A slowdown in the development of microorganisms;
- A moisture halt prevents mold and aflatoxin production;
- A deceleration of the oxidation process;
- The prevention of elimination of insects in all life stages.

MAP protect products at every stage of the chain

The (organic) wheat farmer

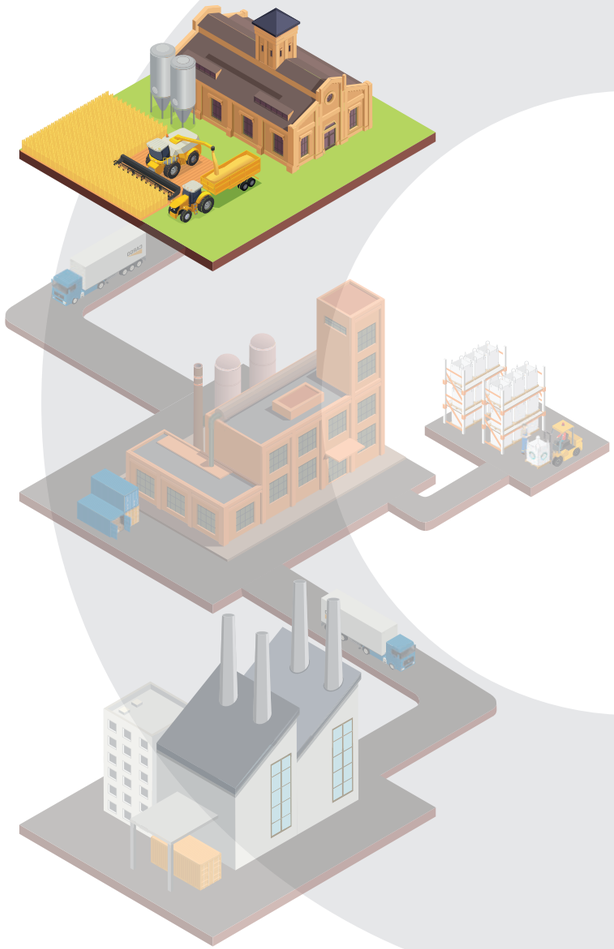
At the very start of the chain, the wheat farmer safeguards the harvest. MAP protects stored grain from insects, moisture and oxidation, ensuring every delivery of durum wheat arrives pure, safe, organic and ready for milling.

The flour mill

In the mill, consistency is key. MAP ensures incoming wheat maintains its quality during storage and transport, while outgoing semolina flour stays stable and uncontaminated, guaranteeing the highest standard for pasta production.

The pasta factory

For pasta makers, every batch must meet tradition and quality standards. MAP secures raw materials and finished products, preserving freshness, stability, and safety, while supporting efficient logistics from production to distribution across the global market.



INCOMING & FINISHED PRODUCT

Challenges

For growers, incoming and harvested grains face constant challenges. Wheat quality can fluctuate with moisture, pests, and climate conditions, directly influencing storage stability and the performance of every step further down the chain.

CHALLENGES INCOMING PRODUCT

Germination issues
Low oxygen environments help preserve seed vitality and ensure higher germination rates.

Oxidation
Exposure to oxygen can damage seeds over time; Modified Atmosphere Packaging (MAP) slows this process significantly.

Infestation
Insects are a major threat to stored seeds. MAP provides a non-chemical solution for insect elimination, keeping seeds safe and chemical-free.

CHALLENGES FINISHED PRODUCT

Oxidation
Reduced oxygen slows down deterioration, maintaining product quality

Infestation
MAP eliminates insects without chemicals, ensuring clean and safe products.

Transport protection
MAP prevents re-infestation during transit and shields products from external elements, ensuring they arrive in excellent condition.

VacQPack to tackle these challenges
Regardless of your role in the supply chain, preventing commodity loss is crucial for running your business successfully. This is where VacQPack's MAP technology, particularly when combined with solutions like big bags, becomes a game-changer.

THE VACQPACK SOLUTION

Quality preservation

Our solution elevates MAP to an industrial level, allowing you to take control of your commodities in bulk-sized proportions with big bags in almost all sizes and volumes. The system consists of the following components:

1. Sealing set

This set consists of a powerful sealer and a movable frame. Moving along a rail the sealer always provides with a gastight seal.

2. Inside liner

The VacQBag combines the advantages of a big bag and a high-barrier multi-layer film. All of our liners can be made to meet your specific needs.

3. VQPro

The enhanced VQPro is our turn-key movable system which allows for modified atmosphere packaging (MAP) on-site, at any scale.

4.Outside liner

The VacQLiner is a high-barrier multi-layer film to be mounted over a big bag. It protects against moisture, oxygen and insect infestation.

Patented gas exchange valve

Gases are introduced into the liner through our patented gas exchange valve. This valve allows for the restoration of the modified atmosphere after sampling. allowing repeated $\%O_2$ measurements without damaging the packaging.

Food loss and waste prevention

The VacQPack solution is more than a organic solution; it is a solution that helps you take control in ensuring quality, efficiency, and adaptability in your supply chain. Your valuables will be protected from contamination under long-lasting, measurable MAP conditions in high-quality packaging materials. Our products ensure that the high quality you invest in is reflected in the high quality you deliver to your customers.

- ✔ Shelf-life extension
- ✔ Optimization of loading
- ✔ Organic treatment
- ✔ Fast and easy handling
- ✔ Clean warehouse
- ✔ Postponed demand

Keeping it organic

An essential advantage of our system is its fully organic character. The non-toxic, curative treatment protects food safety and quality while keeping organic goods truly organic even during storage and transport. As a natural alternative to chemical fumigation, it ensures every link in the chain remains consistent with organic principles, a key factor in meeting Italy's growing demand for certified organic products.

VACQPACK
MODIFIED ATMOSPHERE PACKAGING

CUSTOMER CARE

A reliable partner

We deliver VacQPack equipment and packaging worldwide, ensuring real benefits. Our experts offer tailored solutions to preserve commodities and optimize your supply chain effectively.

The VacQPack solution 'as a service'
Not ready to invest? We provide the treatment as a service

On-site demo
Experience our solutions firsthand with a on-site demo

Staff training
We train your team for efficient operations

Worldwide support
We provide worldwide support for smooth operations.

Research & development
Our experts provide tailored solutions for you.

Get in touch

For more information, to discuss your specific needs, or to get started, please reach out to us:

+39 010 4714117
m.mottin@vacqpack.com
www.vacqpack.com

VacQPack Productions B.V.

Branche office
Via Operai 40/19
16149 Genova (GE)
Italy

Head office
Tol 14
4251 PX Werkendam
The Netherlands