



Modified Atmosphere Packaging Technology

Complete Solution for extending Freshness of
Vegetables, Fruits and Flowers

Multi Head Laser Perforation System

Perforation of Flexible Packaging

The PerfoTec Multi-Head Laser Perforation System is designed for suppliers of flexible packaging to create precise micro-perforations for Modified Atmosphere Packaging. It features real-time adjustments and quality control through patented closed-loop camera feedback. The combination of our high standards in hardware and self-developed intelligent software makes the PerfoTec laser system perfectly unique.

Industry Leader

Full Traceability

Captures **250 images per second**, ensuring traceable operations with comprehensive production reports.

Easy to Use

High-Speed Efficiency

Operates at speeds up to **450 meters per minute** with quick changeovers and fully automatic laser positioning.

Micro-Perforation Mastery

Precision Hole Sizing

Delivers precise hole sizes ranging from **50-200 μ** , ensuring optimal packaging performance. Film suppliers using our laser can offer 50-micron holes, making it ideal for meeting the specific needs of industries like salad packaging.



Fast Respiration Meter

R&D Unit

How It Works

Quick Measurement

In just 4 hours

Comprehensive Data Analysis

O₂ and CO₂ measurements



Why Use It?

Gain Insights

Build knowledge about the breathing behavior of your fresh produce.

Optimize Shelf Life

Calculate the ideal perforation pattern for maximum shelf-life.

Precise Settings

Determine optimal gas levels for your fresh produce at specific weight and temperature.

Laser Perforation System



- **Best in Market for Film Permeability**
- **Advanced On-Line Perforation**
- **Patented Closed-Loop Feedback Camera**

This system enhances produce shelf life by creating precise microperforations and maintaining accurate Oxygen Transmission Rates (OTR) with real-time adjustments. It is robust, effective in harsh environments, reduces food waste, and maintains consistent packaging quality. It adapts to respiration changes and provides cost savings on pre-perforated films.



O₂ Control System

- **Less Than 0.5% Deviation**
In Oxygen and Nitrogen levels
- **Gold Standard in Gas Flush Technology**
Suitable for all packaging equipment
- **Real-Time Data Capture & Adjustment**

An advanced gas flush system that delivers precise oxygen and nitrogen levels with less than 0.5% deviation using food-grade gases. It reduces waste, maintains gas consistency during stoppages, and boosts productivity while cutting costs by saving on the use of expensive gases.



Our technology benefits:

Growers
Producers
Retailers

Ensuring peak freshness from harvest.
Reducing waste and enhancing product appeal.
Extending shelf life and reducing spoilage.

How Does Our Technology Work?

Measure Respiration

The Fast Respiration Meter determines the respiration rate of each product.

Upload Data

Data is transferred to the laser system.

Laser Perforation

The laser precisely perforates the packaging film based on the model calculations.

Optimize Packaging

Each package receives the exact number of holes needed to safeguard quality.

PerfoTec MAP Liner

The PerfoTec Liner is an eco-friendly packaging material designed to help fresh produce stay fresher for a longer time.

Naturally Extending Freshness

How we do it?

Managing moisture: It allows just the right amount of water vapor to pass through, keeping produce from drying out or getting too wet.

Controlling gases: It regulates how much O₂ and CO₂ can move in and out, which helps control the respiration of the produce.

Laser perforation: Tiny holes created with lasers help create the ideal atmosphere inside the package, known as Modified Atmosphere Packaging.

Why use it?

Transition from Air freight to Sea Freight

No need for Controlled Atmosphere containers.



Stored for 35 days
at 8°C
in PerfoTec Liner

Extend the Season and Optimize Sales

Store products, sell at a higher value.

Prevent Claims

Avoid quality and weight loss issues.

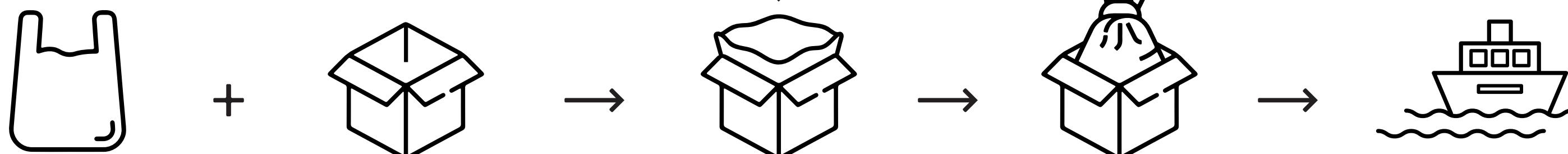


Sustainability at Its Core

- Made from natural potato starch
- TÜV Certified, OK Compost INDUSTRIAL

Designed for Bulk Transport

A robust material made from natural potato starch and bio-based polymers, suitable for bulk packaging.



By using PerfoTec Liners, you can switch to sea freight and reach farther destinations.

PerfoTec Pallet Cover Solution

A special pallet cover, engineered for rapid water vapour release. It manages moisture at pallet level to keep produce and packaging stable across the supply chain. Combined with produce-adapted laser perforation, it brings together practicality and peak freshness.



Why It Stands Out

Unlike simple polyamide shrouds, PerfoTec's material has ultra-high WVTR—even higher than our bio-based liners—so humidity escapes faster, reducing condensation and carton collapse in fluctuating temperatures.

Perfect Produce Match

Works across a range of commodities and respiration rates. Ideal for moisture-sensitive crops like berries, brassicas, leafy greens, and herbs, where moisture threatens quality and shelf life.

Operational Wins

- Easy apply/remove; standard pallet handling.
- Compatible with existing pre-cooling and QA routines.
- Optional variants to tune gas exchange if needed.

What it does

- Limits surface condensation and drip.
- Helps maintain firmness, colour, and net weight.
- Mitigates microbial decay risk linked to excess moisture.

Where it helps

- Long-haul export and DC storage.
- Routes with temperature variability.

The Big Payoff

Stronger arrivals, Fewer claims



Ready to optimize your fresh produce packaging?
Contact us today!

We'd Love to Hear from You!

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