

Laser Perforation System



Reducing food waste with PerfoTec freshness extension tools

The PerfoTec Laser Perforation System is an innovative Next Generation system to optimize the quality and shelf life of fresh produce while improving productivity and versatility of use and reducing waste and costs. Along with complimentary PerfoTec freshness extension tools, such as our PerfoTecO2Control and the Fast Respiration Meter 4.0, the Laser Perforation System offers great potential for a chain-wide approach to reduction of food waste.

Features & Benefits

- Closed-loop-feedback-camera system to create consistent and accurate amount and size of holes
- This consistency and accuracy is essential for Active Modified Atmosphere Packaging
- Reliable in every condition
- Ingenious Optical Path
- Guaranteed that all packages have the same exact required number and size of perforations



FLOWERS



FRUIT



VEGETABLES

The PerfoTec Laser System extends the freshness of fresh produce by optimizing the permeability of the packaging. Film permeability is the critical control point for the quality and shelf life of fresh produce. The permeability of the packaging can be controlled through micro perforation.

The PerfoTec Laser makes consistent and accurate amount and size of holes. These are essential features for Active Modified Atmosphere Packaging. The PerfoTec Laser System is the only laser in the world that has a patented closed-loop-feedback-camera system. The integrated camera inspects each hole, for quality control purposes, and also to be able to ensure the accuracy of the Oxygen Transmission Rate (OTR) of each pack. If necessary the laser is automatically adjusted 'on the fly' to balance out any variation in film thickness. The camera is located directly behind the laser perforation head and checks each perforation in the film. The holes are analyzed for diameter and shape.

If there is an inconsistency in the holes, the packaging machine can be stopped automatically. In this way, the system guarantees that all packages have the same exact required number and size of perforations.

The PerfoTec Laser is specially developed for integration with vertical or horizontal packing machines and tray sealers. The robustness of the laser perforation system is critical. The conditions under which the production takes place can be tough. The PerfoTec system is developed with these conditions in mind and is able to work reliably in wet, cold and dusty environments.

The PerfoTec laser can make very small holes of down to 55 – 60 micron in diameter. This is achieved by a special optical path. With this technology the very small micro perforations can be made with the highest consistency. This is especially important for salads and ready meal salads, because of the low respiration of these products.

Reducing food waste with PerfoTec freshness extension tools

Equipment height	370 mm
Equipment width	380 mm
Equipment length	690 – 1460 mm (varies per film width)
Maximum film width	1290 mm
Nett equipment weight	70 kg
Environment temperature	0-30°C
Electrical connection	115/230V, 1ph+N+E, 50/60 Hz
Amperage	max 2A @230V (4A @115V)
Compressed air	6 bar, 50NI/min
Internet connection	10Mbps, ethernet connection
Remote support	Router initiated, secure connection, via specialized servers