

# EFFICIENT LEAK TESTING AND WASTE REDUCTION

## The move to MAP has been highly successful for Linamar

### Linamar

Mariscos Linamar is a seafood company based in Cambados, Galicia, in northwestern Spain. The company was founded by pioneering businesswoman Lina Solla in 1998. Today it harvests, cleans and packages around five million kilos of shellfish each year – mainly mussels and clams. Approximately eighty per cent of the product is for the domestic market, with the remainder exported within Europe.

### New innovative idea

In 2004 the company began to investigate the innovative idea of packaging a proportion of its product in a modified atmosphere, with the aim to extend the product shelf life and improve its appearance.

The move, explains Linamar's Financial Director Gonzalo Molpeceres, was also important as a way of distinguishing the product from those of Linamar's competitors.

There then followed several years of intensive investigation requiring, says Mr Molpeceres, "Much personal time, much investment and much courage." After many months of research and trials, the optimal gas mixture, comprising oxygen and carbon dioxide blended in a ratio that depends on the product and the format of the package, had been decided upon as well as the best packaging approach – thermosealed trays.

In 2007 the MAP line commenced production. "There are many advantages of using MAP," says Mr Molpeceres. "The shelf life of the fresh, quality product is increased from around three or four days to ten days. The appearance of the package is an added advantage as it offers an attractive, clean and easy-to-handle product that does not exude a smell and which also protects the product inside from external contamination."



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# CASE STUDY LINAMAR

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Quality assurance and quality control are vital aspects of Linamar's business approach. The company has BRC and IFS certification and implements the HACCP (Hazard Analysis Critical Control Point) standards.



A crucial aspect of products packaged in a modified atmosphere is that the integrity of the packaging is retained and that there are no leaks. For the

first years of the MAP production at Linamar, leak testing was carried out both by visual inspection and also with packages selected at random and placed in a water bath, with leaks producing a stream of bubbles.

### Cooperation with MOCON Europe

"However, these methods were inefficient and wasteful", says Mr Molpeceres. They are labour intensive, and the water bath method requires the products to be repackaged. For these reasons, in 2014 the company invested in a Dansensor® LeakMatic II machine to improve efficiency and reduce waste while retaining the high levels of quality assurance that the company demands.

The Dansensor LeakMatic II is a fully automated, non-destructive leak detector which checks the seal integrity of every package that comes off the line.

The package enters a chamber where a partial vacuum is created. If there is a leak in the package, carbon dioxide will be forced out, which is detected by a highly accurate sensor. This results in an exceptionally efficient leak testing system with no waste arising from destroyed packages.



Linamar factory, Cambados, Galicia, Spain



To ensure that the gas mixture within the packages contains the correct proportions of carbon dioxide and oxygen, the company had been using a Dansensor® CheckPoint headspace analyzer. With the installation of the new Dansensor LeakMatic II, Linamar upgraded their gas headspace analyzer to a Dansensor® CheckMate 3, a high-performance, user-friendly benchtop headspace analyzer that allows the operator to tell

at a glance if the mixture is at the required levels. "We chose MOCON Europe because we knew they had very good references and are very well regarded," says Mr Molpeceres. "The instruments are simple to operate and we have made a very good start with them."

Overall, says Mr Molpeceres, the move to MAP has been highly successful, with around thirty per cent of Linamar's products now packaged in a modified atmosphere. "We were the first in this sector to use MAP and also the best in producing a quality product. MAP has definitely been the key to the growth and development of the company, and we keep growing both in our markets and in the volume of product. The MOCON Europe products that we have installed are very important elements to ensure quality and the reliability of the process."

Mr Molpeceres adds that Linamar proposes to place additional Dansensor LeakMatic leak detectors on the packaging line in the future.



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