

CASE STUDY

MAP

QUALITY

ASSURANCE

October 2012

Dansensor fits into your processing line with testing equipment designed specifically for MAP products.

Tulip saves money with new MAP gas mixer and analyser

Tulip

Tulip is one of Denmark's leading producers of processed food for the domestic and export market, supplying sausages, bacon, soups, sliced meat and many other products. At its plant in Svenstrup near Aalborg the company produces around 90 tonnes of sausages each day. A large proportion of these – about 60 tonnes a day – is packaged under a modified atmosphere of carbon dioxide and nitrogen to keep the product fresh and improve its shelf-life. This Modified Atmosphere Packaging (MAP) is carried out on 20 packaging lines.

More efficient gas flushing system

The company realised that its existing gas flushing system was not efficient and that significant quantities of gas were being wasted. In addition, manual samples are taken at frequent intervals to ensure that the correct mixture is being introduced into the packages. This takes time and also incurs labour costs.

In a drive to improve efficiency and cut costs, the company invested in technology from MAP specialist Dansensor. Two new pieces of equipment from Dansensor have been installed on four of the packaging lines. These are the MAP Check 3

gas analyser and MAP Mix Provectus gas mixer, which in tandem provide constant monitoring of the gas content and automatic adjustment of the gas flow for an improved quality and reduced cost of operation. At the same time the MAP Mix Provectus and MAP Check 3 offer a unique option to log quality assurance data on each packaging

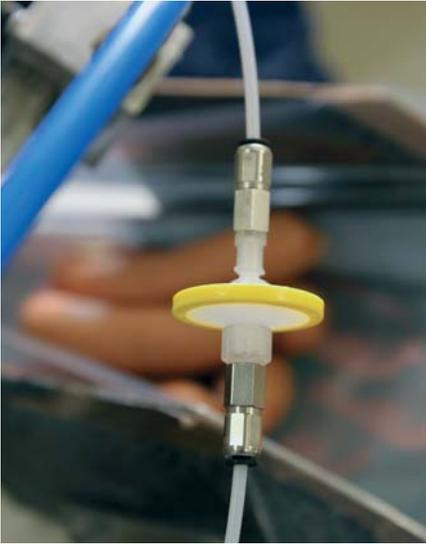
line, including information such as the gas content and the gas consumption. Other MAP-critical data can be stored in the units or a central database.

Perfect solution

The impact of the new system has been impressive, says company engineer



Tulip meat processing factory, Svenstrup, Denmark



Thomas Jensen. "We have reduced gas consumption on these four lines by 30–40 per cent, which results in a direct saving of money. In addition we have been able to reduce our manual sampling by about half. This means that the people who do the sampling have more time to do other things in the factory so we are able to use our workforce more efficiently."

Extra benefits

Another key benefit of the system is the automatic data logging by the software. "This is a very useful feature," says Mr Jensen. "We can look into the computer to see all the data for a day or a week

or a month. If we do get a query from a customer we can go into the system and find where the problem occurred and how many packages may have been affected. This is not possible with the manual testing process."

It is also good for customer relations. "When we show our customers the system, we can demonstrate that we have very close control over the process, with all the relevant information easy to obtain and to check back on," Mr Jensen says.

The system is, says Mr Jensen, simple to operate with only a couple of days needed to train staff.

Savings of costs and labour time

"Overall we are very, very pleased with the new analysis and mixing system," Mr Jensen concludes. "It is simple to operate, it saves us money directly by using less gas, it saves us time on manual testing and not having to write things down on paper, and it gives us a very accurate computer record. It is not possible to say exactly how long it will take us to pay back on the investment, but certainly I would think within only a few years, and we will be looking to introduce the system to further lines in the future."



MAP Check 3 & MAP Mix Proventus - Guarantee permanent monitoring and automatic adaptation of the gas mixtures and gas flow.

Efficiency is the key

If there is one aspect of Tulip that matters to them above any other it is efficiency. "The impact of the new system has been impressive," states company engineer Thomas Jensen. "We have reduced gas consumption on these four lines by 30–40 per cent, which results in a direct saving of money. In addition we have been able to reduce our manual sampling by about half. This means that the people who do the sampling have more time to do other things in the factory so we are able to use our workforce more efficiently."

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