

CASE STUDY

MAP

QUALITY

ASSURANCE

April 2013

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

MAP Check 3 - A winner for German specialist bakery

Bagel Bakery

Bagel Bakery is a rapidly expanding company based in Droßdorf in central-eastern Germany that specialises in the production of American-style baked products, including bagels, muffins and brownies. The products are sold mainly in Germany, but the export market is increasing across Continental Europe. The bakery's cake products – the brownies and muffins – are packaged under carbon dioxide to improve shelf life and retain freshness.

Monitoring residual oxygen

The company, which employs around 100 people, has recently installed a Dansensor MAP Check 3 on-line gas analyser on this flow-packaging line. MAP Check 3 constantly monitors residual oxygen within the package and adjusts carbon dioxide flow rates automatically to ensure that the correct amount of gas is being used – sufficient to flush out the unwanted oxygen to a predetermined level, but without using excess CO₂. The reduced levels of CO₂ not only produce a cost saving, but also results in less of the gas within

the production hall, providing more agreeable working conditions and reducing the need for ventilation.

“We were already using Dansensor's earlier version of its on-line gas analyser, and were very happy with it, but it did not

have feedback control,” explains Bagel Bakery's general manager Christian Kiefer. “So while this would alert us if the oxygen level in the packages got too high, we did not know if we were using an excessive amount of CO₂ for flushing.”



Christian Kiefer, General Manager at Bagel Bakery, Droßdorf, Germany



Reduced CO₂ levels

The new MAP Check 3 has addressed this issue. "Since we installed the new instrument we have noticed that our CO₂ consumption has dropped significantly," says Mr Kiefer. "We estimate a reduction of at least 20 to 25 per cent. At current prices this means that we will have paid for the MAP Check 3 in less than a year. There is no doubt that it has been a good investment."

Extra benefits

Mr Kiefer is also impressed with the ease of operability of MAP Check 3. "The human-machine interface is good, and it provides a lot of statistics and data that allows you to log in and see what levels it has been running at. The ease of use, plus all this information, is far in advance of the old machine and everyone who has used it is very happy. Overall it does what we want it to do very efficiently and it is easy to handle and use."

Future installations

As the company expands and new production lines are added, it is likely that MAP Check 3 will be deployed on additional lines, Mr Kiefer says. "We will certainly be looking to use this technology on future MAP lines. The equipment pays for itself in only a few months so the economic arguments for installing it are obvious."



**MAP Check 3 -
On-line gas analyser for quality assurance on MAP-enabled flow packaging machines.**

MAP Check 3

Unlike random, off-line quality control, on-line quality assurance with the MAP Check 3 means that every package is tested — far more quickly and efficiently than with manual testing. And if there's a problem, production stops automatically, helping to avoid recalls or the need to repack entire batches.

Benefits

- Enables major gas savings with optional GasSave function or when paired with MAP Mix Provectus gas mixer
- Logs and displays actual gas consumption for easy traceability with GasSave function
- Reduces labour and waste costs compared to manual testing
- Avoids recalls/repacking by stopping packaging machine if machine exceeds preset limits
- Reduces work area CO₂ levels to protect employees

Features

- 5" colour touch screen
- Improved data logging capabilities with USB, Ethernet, TCP Modbus
- Ability to control MAP Mix Provectus gas mixer
- Delivered with PC software
- *OPTION*: 3-channel multiplexer