

MOVING FROM MANUAL TO AUTOMATIC ON-LINE CONTROL

Providing a consistent taste experience with on-line quality assurance measures

Systemfrugt is on a mission to inspire natural choices, matching modern consumer demands and lifestyle. It is a highly innovative company and member of the UN Global Compact that sets standard for worldwide CSR as well as being part of the BSCI Code of Conduct. We teamed up with them and the results are noteworthy.

When we first talked to Tavs Overgaard at Systemfrugt in Denmark, the concept of flushing gas was fairly new to them. But it quickly became clear that the benefits of the method was very much in line with their mission. They are truly dedicated to a high level of food safety and quality of their products. Providing a consistent taste experience is one of their main values and progress is part of their mission. The final solution

included a vertical flowpacker, that mixed and monitored the gas inside the packages. Coming from a system with manual quality checks, this was big leap forward. And the benefits are obvious:

- 25-30% reduction in gas consumption
- Consistant taste in every package
- Longer shelf life
- Less dependency on the human factor
- Less food waste
- Improved brand loyalty

The trouble was well worth the benefits

It's fair to say that that there were issues during the upgrade and that both both MOCON and Systemfrugt learned a lot during the process. However, dedicated troubleshooting and problem solving goes a long way, and in the end, collaboration and mutual understanding won out. Today MOCON does regular maintenance on the production line.



The mission: To inspire natural choices matching modern consumer demands and lifestyle.



Tavs Overgaard holding the specially developed gas sleeve implemented in the product line.

“There were issues, yes. It was a new way of producing for us. But the consistency in quality and brand experience has been well worth it. It simply makes good business sense.”

–Tavs Overgaard, Plant Maintenance Manager

One of the issues that needed to be addressed was the filling pipes. To fill each package with gas, a smaller gas sleeve had to be fitted inside the outer tube, allowing the fresh fruit to pass freely around it without sticking or creating unnecessary friction. A solution was developed specifically to meet the need of Systemfrugt. Not a standard solution by any means, and therefore, not an uncomplicated one. But it was worth it!

Product overview

Dansensor on-line gas analyzers combine gas content analysis with real-time control of package flushing, which for most manufacturers reduces gas consumption by 20-50%.

The specific model used in Systemfrugt’s solution is a Dansensor MAP Check 3. The benefits are clear:

- Major gas savings with optional GasSave function or when paired with Dansensor MAP Mix Provectus gas mixer
- On-line Quality Assurance of every package – more efficient and with reduced labor and waste
- Logging and displaying of actual gas consumption with the GasSave function for easy traceability
- Automatic stopping of the packaging machine if preset limits are exceeded, helping to avoid recalls and repacking
- Reduced CO₂ levels in the work area to protect employees

Systemfrugt’s main brand, Earth Control, includes cashew nuts, jumbo raisins, cranberries, pine nuts and apricots. They also develop private label products for selected customers.

Systemfrugt Case Study, August 2020



Systemfrugt’s automated on-line solution is controlled by the Dansensor MAP Check 3.

“Quality and consistency are not buzzwords here. It’s our vision and reason to exist.”

–Flemming Ib Windfeld, Group CEO

