

SealScope™ Case Study



SealScope™ enables end-of-line automation at Kaasbrik

Thanks to SealScope's in-line sealing inspection and monitoring technology, Kaasbrik was able to upscale its production capacity by adding end-of-line automation.

In 2013 Kaasbrik, a Belgian foodservice market leader in grated cheese, has invested €2M in order to increase its production capacity by 30% to over 7000 tons/year. With the addition of end-of-line automation, in-line manual inspection of packages became nearly impossible. Thanks to SealScope, Kaasbrik has been able to automate its inspection and warrant its packaging quality. Additionally, the monitoring ability of SealScope proactively helps the operators to keep the process within tolerance. This has enabled a higher effective line output thanks to less stand stills and a better running process.

Package integrity challenges

Packaging grated cheese is a real challenge. It can only be done using vertical machines (VFFS) and requires powder additives like starch. Additionally it is done under modified atmosphere to preserve the freshness of the cheese. Package integrity hence is really important to warrant shelf life. The critical point of the packaging process is the filling and subsequent sealing of every bag. The sticky nature of cheese and starch can very easily contaminate the top seal leading to open packages and reducing shelf life.

Additionally, the production of large bags of 1 kgs up to 5 kgs puts a lot of strain on the packaging film during filling, which in turn can cause wrinkles, increasing the risk of reduced shelf life



Typical example of product in seal & wrinkles

End-of-line automation

By adding end-of-line automation, the packages are no longer passing through operators' hands for manual inspection. Given the difficult nature of the process, an in-line monitoring system was needed to warrant package integrity.



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Overview of the end-of-line automation

Engilico, a Rotselaar (Belgium) based specialist in package sealing inspection and monitoring has developed the SealScope to address these issues.

Using advanced statistical analysis of vibration measurements of the sealing jaws, the SealScope can determine if a seal was made correctly or not. Wrinkles, product in seal and other inclusions that cause deviations from the normal sealing process can easily be detected and rejected. Additionally the SealScope can identify process drifts and warn the operator to do preventive maintenance in order to keep everything running smoothly.

SealScope results

The results of the SealScope at Kaasbrik are impressive. The overall equipment efficiency has increased with 10% while the number of compromised packages leaving the line has decreased by 80%. The operators have embraced the monitoring functionality and pro-actively manage the process to keep everything running smoothly.

“Quality is one of the corner values of Kaasbrik”, says Johan De Turck, Managing Director. “The SealScope combines better quality with a higher output. As a consequence we are currently looking into retrofitting the technology on our other two lines.”

Engilico is an innovative technology company that specializes in developing, manufacturing and marketing package sealing inspection and monitoring solutions. Engilico’s products improve packaging quality, increase machine output and reduce scrap. Engilico is based in Rotselaar, Belgium and is operational worldwide via a combination of direct sales and a growing distributor network. See www.engilico.com for more information.

Kaasbrik is a foodservice market leader for grated cheese (75% mozzarella, 25% Emmental-Cheddar-Gouda) with a market share of over 30% in Belgium. Kaasbrik has seen a steady revenue growth from 2004 to 2013. Kaasbrik is based in Halen, Belgium. See www.kaasbrik.be for more information.

