

SealScope™ Case Study



Handl Tyrol invests in SealScope™ for stricter quality control on outgoing products

Tucked away in the Austrian Alps, Handl Tyrol manufactures its famous cold meat delicacies using only ingredients of exceptional quality. Handl Tyrol enjoys a solid reputation for tradition, quality and exquisite taste. Quality packaging ensures a product retains its original flavor until it reaches the consumer. Flawed packaging reduces the shelf life of a product and leads to customer complaints. Where horizontal flow-wrap (HFW) machines are used in cold meat manufacturing, typical elements that affect packaging quality are plies, folds or product stuck in the seal.

Packaging challenges

Handl Tyrol has always played a leading role in the industry when it comes to quality and innovation. In order to control the quality of the flow packs, used for an expanding range of product variations, and produced at higher output rates, Handl Tyrol performed a market research for an in-line seal inspection system. Controlling the quality of flow packs is challenging because this type of packaging is flexible, meaning camera-based visual checks are not feasible. Also, traditional CO₂ detectors used in the final packaging have limitations; not only do they slow the process down, but they can also only detect larger openings in packaging. For this reason, Handl Tyrol required a more effective and versatile solution.



The SealScope™ solution by Engilico™

Engilico™, a company based in Rotselaar (Belgium), specializes in controlling and monitoring flexible packaging, and developed SealScope™ for in-line, 100% seal inspection. Mechanical sensors on the sealing jaws measure the signals during the sealing process. The intelligent SealScope™ software analyses whether the seals have been manufactured correctly by comparing the measurement to a reference signal. The technology easily detects any plies or areas where the product or foreign material have been caught in the seal. Compromised packaging can then be ejected and the product can be re-packaged. In addition, the SealScope™ system detects process drifts and sends an early warning signal so that preventive actions can be taken to keep the machines running smoothly. The sensitivity of the system can be adjusted to the customer's own QA guidelines in order to find the most cost-effective balance between acceptable packaging and production speed.



SealScope™ Case Study

Seal inspection

Each type of packaging presents its own typical challenges. Companies that use horizontal pillow bag machines, for example, need to pay attention to the quality of the film they use and to the atmospheric treatment of products.



Product in seal



Wrinkles in seal

The goal is to ensure consumers receive quality packaging and reliable best before dates. The critical point in the process is when the product is filled into the bag and the bag is sealed. If a fragment of the product is caught in the seal, or there is a ply or fold in the bag, the seal may be damaged, and the product is no longer vacuum sealed. This reduces the shelf life of the product, leading to possible call-backs and customer complaints.

Impressive results at Handl Tyrol

Today, four packaging lines are equipped with the **SealScope™** solution. Imperfect seals and large wrinkles are systematically identified; this has significantly improved the quality of the finished goods, leading to greater customer satisfaction.

The introduction of the **SealScope™** system has also improved productivity levels. Thanks to the monitoring of the sealing process, simple preventive maintenance measures – e.g. cleaning the sealing jaws – can now be taken in time. The monitoring function ensures that the packaging process operates within the correct tolerances. As a result, Handl Tyrol gained more control over its packaging process; downtime is reduced, and capacities are optimized.

“Thanks to **SealScope™**, we have been able to significantly improve the packaging quality as well as the underlying processes,” reports the head project engineer for Handl Tyrol. “In my opinion, **SealScope™** is one of the greatest innovations in the packaging industry in recent years.”

Engilico™ is an innovative technology company that specializes in developing, manufacturing and marketing sealing inspection and monitoring solutions for flexible packages in the food, pet care and other industries. Engilico’s products improve packaging quality, increase packaging line performance and availability and eliminate manual inspection. 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.

