In operation at SÜDPACK: Significantly more than a standard 100% inline inspection system

Advanced Hazing Detection reliably detects color hazing on transparent films

To inspect the print quality of its packaging films, Swiss manufacturer SÜDPACK Bioggio SA uses the PrintSTAR 100% inspection system by ISRA VISION, a world leader in surface inspection. The inspection system, equipped with the “Advanced Hazing Detection” assistant, enables the reliable and early detection of color hazing on transparent films that are invisible to the human eye. In addition, the retrofitted “QuickProof” module compares the print image with the reference file before production begins. Using the two assistance systems prevents customer complaints, as well as unnecessary material waste.

The SÜDPACK Group produces packaging solutions, which not only provide optimal protection for the products but also generate an attractive appearance at the point-of-sale, as well as maximum convenience for the customer. With its innovative concepts, cutting-edge technology and company values, such as reliability and stability, the company has developed into a leading provider of film packaging in Europe. The manufacturer of plastic films for food packaging, medical technology products and high-quality engineering goods does not compromise when it comes to the quality of its products and services.

Furthermore, SÜDPACK consequently relies on automation. The company prioritizes the discovery of new methods to further optimize production, increase efficiency and therefore ensure greater sustainability. The PrintSTAR 100% inline inspection system from ISRA VISION has been successfully deployed already. SÜDPACK is familiar with the ISRA solutions that have proven themselves in their applications.
The company is particularly impressed with the defect classification system, a solution that enables defect recognition to be set very accurately depending on the calibration. This ensures achieving very reliable results. The parent company, SÜDPACK Verpackungen GmbH & Co. KG initiated a comprehensive digitalization program. In the context of this program, the Swiss subsidiary SÜDPACK Bioggio SA – located in Bioggio near Lugano in Switzerland – began investigating the use of innovative assistance systems that now contribute significantly to quality assurance.

Reliably detect color hazing on transparent substrates
The company deems the recently installed “Advanced Hazing Detection” PrintSTAR option as a clear benefit. This option helps ISRA stand out from the competition in printing inspection processes. An additional bank of cameras enables slight color hazing on a transparent substrate to be reliably detected across the entire web width, even during the printing process. Hazing is a faint but unwanted color transfer in non-image ranges. Wear to the doctor blade can result in barely visible color hazing appearing on the product motif. These hazing effects are invisible to the operators at high production speeds and are also defects typically not detectable by inspection systems. Therefore, the production of defective films would not be stopped, as these defects were often only detected during further processing.

With its new “Advanced Hazing Detection” solution, ISRA VISION has found a reliable solution that automatically detects these errors. The multi-colored transparent films that SÜDPACK Bioggio produces are now free from hazing defects and can therefore be delivered to the customers without the fear of complaints. Faulty production runs are avoided, as the system alarms the operator of defects, enabling an immediate cause analysis and the implementation of countermeasures. Complaints and defective prints with the respective material waste are now a thing of the past. Furthermore, it is also a valuable contribution to sustainable production.
Monitor all print-related specifications prior to starting production

The QuickProof function of the ISRA PrintSTAR system provides further benefits. It is very difficult for the operator to determine if the wrong printing plate has mistakenly made it onto the machine, as technically, this is not a print defect. Delivering the incorrect content to the customer can quickly result in significant financial damages. QuickProof compares the print image with the reference file (PDF comparison) prior to the start of production, thereby preventing unnecessary waste and additional work. The system performs a completely automatic version check and inspects the content for deviations. This works flawlessly for all font types, including non-Latin characters.

Since all print-related specifications are monitored and automatically adjusted, the production and quality management processes at SÜDPACK Bioggio have accelerated significantly. Between 10 and 15 minutes are saved per order. At multiple orders per day, significant time savings are realized when making the requisite adjustments for each order. Simultaneously, those responsible for quality assurance require less time for outgoing goods inspections. On average, the company can now complete more orders per day, which has a significant impact on the annual performance.

Continuously increasing productivity

100% verified and inspected quality is an unbeatable sales argument for the packaging materials manufacturer. The ISRA technology resulted in a tangible acceleration of the workflow and improvements in quality management. Improved product quality and lower error-rates mean SÜDPACK Bioggio benefits from a decreasing number of complaints, which results in additional cost savings. The manufacturer's reputation as a reliable provider of high-quality products has been further underlined with the addition of the “Advanced Hazing Detection” assistant.
In the future, the information from the inspection system, which is saved in the production log, is to be used for the more efficient use of the winder. Relevant defects can thus be cut off the roll more quickly and in a more targeted manner. This further increases the productivity and reliability of the winder. In combination with the highly flexible assistance systems, PrintSTAR is the tailor-made answer for even the most complex printing tasks.
The Advanced Hazing Detection assistant on the PrintSTAR inspection system enables toner defects to be detected during production.

The deployment of the PrintSTAR 100% inline inspection system helps SÜDPACK Bioggio increase product quality and reduce waste.
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