packaging journal

Shrink-Sleeve-Produktion um automatische UV-Inspektion erweitert - packaging journal (packaging-journal.de)

# Shrink sleeve production expanded to include automatic UV inspection


The new inspection system makes the image of the shrink sleeve and the fluorescent adhesive seam visible. (Image: Illert)

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**By installing a UniPrint 130M UV Web Inspection System from Unilux Europe GmbH, Illert has expanded its shrink sleeve production to include automatic UV inspection. The system for optical web inspection visualizes both the image of the shrink sleeve and the fluorescent adhesive seam in high resolution.**

Shrink sleeves have become an integral part of the world of product packaging. The versatile shrink film not only offers product manufacturers the opportunity to create decorative **packaging with a wide variety of geometries** in an uncomplicated way, but also serves as tamper-evident protection or as an attractive marketing tool for packaging duo, on or added value packs.

Made from polyethylene terephthalate (PET), orientated polystyrene (OPS), PLA (polylactide) or polyvinyl chloride (PVC), a key step in the production of the 'second skin' is the gluing of the film in a sleeve-laying machine. The **endless adhesive seam is a key quality feature** of the finished shrink sleeve and the most demanding aspect from a quality control perspective.

**Sometimes one (camera) eye sees more than two**

The glued seam is checked by using UV light. In the past, this essential quality control at Illert was done only manually. During the process, the machine operator had to inspect the seam of the continuous film tube at regular intervals using a UV hand lamp. Despite the high level of routine and expertise of the employees responsible, **the time-consuming, purely manual process no longer seemed up-to-date** and in need of optimization.

Illert therefore decided to install a UniPRINT 130M UV Web Inspection System from Unilux Europe GmbH for a newly purchased machine. The system for optical web monitoring consists of **a high-resolution UV camera**, which was mounted on the sleeve laying machine via a traverse and transmits the camera image to a monitor installed in the area of the machine's operating unit. This simultaneously visualizes both the image of the shrink sleeve and the fluorescent adhesive seam in high resolution.

The new system has obvious advantages for the machine operator: The manual process of spot-checking is no longer necessary. There is no need to leave the operating unit to check the glued seam, which significantly **reduces reaction times, for example in the event of a recognized fault in the gluing process**. In addition, the camera monitoring system enables uninterrupted monitoring in parallel with the operation and monitoring of the basic machine functions.

By significantly increasing the inspection frequency, the consistent quality of the glued seam can be guaranteed and the risk of subsequent complaints significantly reduced. Furthermore, the simplification of the inspection process provides the operator with additional safety and enables an **increase in production speed with consistently high quality**. As a result, optimizing the process is also an economically justifiable decision in the long term.

*Source:* Illert

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