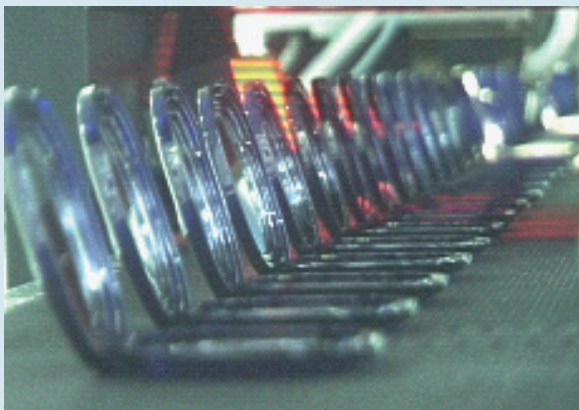


Packing control

Completeness checks for assembled cosmetics article

The task

A large number of different cosmetics products, such as face powder and eye shadow, must be checked to make sure that they are complete and properly packed with powder puff, applicator, brush, sponge and protective film. An inspection system on the packaging line is necessary to also monitor the opening and closing of these containers. Vitronic's VINSPEC solution optically monitors this to ensure high availability of the packaging system. In a similar application, Vitronic also equipped the system with a character recognition system, which reads the batch number and the „use by“ date on the bottom of the article. The subsequent inspection ensures that the thermal transfer printer has applied the correct date and rejects the article immediately if the incorrect date has been printed.



Completeness check for the packing of powder tins

Benefit

Optical inspection prevents the delivery of incorrectly or incompletely packed cosmetics products. The availability of the packaging line is increased by the prompt rejection of improperly opened or closed products. The modular design of the system gives the customer great future flexibility, since new types can be adapted very easily.

Implementation

The quality inspection system VINSPEC is equipped with four CCD-cameras and adaptive strobe LED lighting units. It checks the products at a conveyor speed of up to 80 parts per minute. The pixel resolution is approx. 200 µm. An analysis computer processes the asynchronous images from the four inspection stations, and transmits the results by Profibus to the system controls.

Technical data

Cameras:	4 CCD-matrix cameras
Illumination:	Adaptive strobe LED
Resolution:	200 µm
Throughput:	Up to 80 parts per minute
Image acquisition:	Asynchronous imaging acquisition at 4 inspection stations
Hardware / Interfaces:	Industrial PC Profibus-DP