# Optimization of resource consumption

Reliable data recording and quality control

Waldkirch/Hanover, Germany, April 2016 – At the Hanover trade fair 2016, SICK AG is demonstrating how goods in the production process and supply chain are reliably and uniquely identified so that they can support efficient automated control. It is possible to optimize the consumption of resources thanks to extremely flexible quality control with the help of the combination of the TriSpector1000 industrial 3D vision sensor and the Lector63x image-based code reader.

Two different product types (in this case a metal tin) are inspected for various features in three dimensions. In the case of the product without a lid, the system verifies whether the tin is positioned correctly or if it is upside down. In the case of the second product, the system verifies whether the lid is present and sealed correctly. The Lector63x reads the bar code and sends the product type directly to the TriSpector1000 so that it can distinguish the correct inspection features for each part.

This demonstrates how, even as product customization levels increase with the ultimate aim of “batch size 1”, errors can be detected irrespective of the product version currently in production. In this case, a cloud-based analysis service can detect the cause of the error.

TriSpector1000 3D vision sensor

The TriSpector1000 is a configurable stand-alone sensor for cost-effective 3D inspections. It can inspect objects for contents, completeness, and emptiness in all dimensions, regardless of the shape, color, or alignment of the product. For example, it is ideally suited to use in quality control systems in the consumer goods and packaging industry, where it counts and positions objects, measuring their volume and thickness. It is also ideal for measuring volume in the food industry and monitoring the integrity of totes including contents, completeness, and emptiness.

**Lector63x image-based code reader**

The Lector63x is a flexible, image-based code reader which meets a wide variety of requirements thanks to its high image resolution, compact housing, and replaceable optics. It is ideally suited to small codes, high production speeds, and code-reading from a great distance. The Lector63x is easy to handle, its optics can be replaced quickly, and it features an intuitive operator interface. It also features an aiming laser, an acoustic feedback signal, a feedback LED, and a microSD memory card. This makes commissioning, operation, and maintenance very simple.

Image: TriSpector1000\_IM0061943.jpg  
With the TriSpector1000, 3D images are captured and analyzed directly.

Image: Lector63x\_IM0057151.jpg  
The Lector63x image-based code reader reliably transmits even small codes.

SICK is one of the world’s leading producers of sensors and sensor solutions for industrial applications. Founded in 1946 by Dr.-Ing. h. c. Erwin Sick, the company with headquarters in Waldkirch/Germany ranks among the technological market leaders. With more than 50 subsidiaries and equity investments as well as numerous agencies, SICK maintains a presence all around the globe. In the fiscal year 2015, SICK had more than 7,400 employees worldwide and achieved Group sales of just under EUR 1.3 billion.