# Quality control on the way toward Industry 4.0

Reliable data recording and tracking

Waldkirch/Hanover, April 2015 – At the Hannover Messe Industrie (HMI) trade fair, SICK AG will be using the example of an intralogistics process to demonstrate how increasing quality standards and the need for efficient use of resources can be implemented in the context of Industry 4.0. The sensor technology detects changes to the object and enables gap-free data recording. The software solution analyzes the process data and initiates actions. The combination of a multitude of data and the evaluation software is a key prerequisite for the future-oriented subject of Industry 4.0.

Reliable and unambiguous identification of goods in the production process and supply chain is a vital prerequisite for efficient, autonomous control. Whether it’s a single parcel on the belt or a complete overview of millions of parcels that are transported every day, the status of all recorded data must be easy to retrieve and analyze.

Intelligent sensors record and communicate this data, but there's no real added value involved until this data can be used to make decisions on ways to improve processes. On the one hand, this data offers great opportunities; on the other hand, however, the process of preparing it in a way that allows companies to make the right decisions presents a significant challenge. This seamless flow of data and information from the sensor to the control and back again is the cornerstone of Industry 4.0.

Autonomous error detection

In the future, parcels will be transported more and more quickly, while the spacing between the parcels decreases. This is why it is even more important to check the quality of the products. Data relating to the parcels on the belt is scanned and imported into the software. The parcels are identified and compared: Is the parcel damaged? Is the code complete? Are the weight and volume the same? Is there a jam or has a parcel got lost?

Extensive product and production data enables autonomous error detection. All of the data is compared in a matter of seconds. Any defects can be tracked via all centers and the trouble spot can be identified. In addition, quality defects in the process can be identified and resolved. As the speeds on the belts are further increased, maximum productivity is guaranteed – not just within one site, but all over the world.

Image: Quality\_IM0024019.jpg

Reliable data recording and analysis is of fundamental importance in the context of Industry 4.0.

SICK is one of the world's leading manufacturers of sensors and sensor solutions for industrial applications. Founded in 1946 by Dr.-Ing. h. c. Erwin Sick, the company with headquarters in Waldkirch im Breisgau near Freiburg ranks among the technological market leaders. With more than 50 subsidiaries and equity investments as well as numerous representative offices, SICK maintains a presence all around the globe. In the 2013 fiscal year, SICK had more than 6,500 employees worldwide and achieved Group sales of EUR 1,009.5 million.  
  
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