# More data = greater efficiency?

SICK demonstrates the uses of sensor data in business processes at the Hannover Messe 2016 trade fair

Waldkirch, January 2016 – Integrated solutions based on Industry 4.0 are at the heart of SICK's presentation at the Hannover Messe 2016 trade fair, with typical production applications presented in four different exhibits. SICK demonstrates how the intelligent use of sensor data is already boosting flexibility and productivity today. The data is also aggregated in a cloud in a live demonstration, while various web services show the possibilities of fully integrated solutions online.

The intelligent linking of application knowledge with the flexibility of state-of-the-art software architectures enables the next development stage for sensors. This is characterized by the possibility of sensors that can perform more extensive analysis, automatically adapt to changes, communicate in the network and remotely solve complex tasks within a larger manufacturing network.

In other words, the sensor links to the machine, system, factory, and the entire value-creation chain and provides for transparency in production. As a result, it provides the entry point into the world of Industry 4.0. For all virtual worlds, however, sensor intelligence remains one thing above all – part of a sensor. Even the cloud and apps need to have a physical basis in the real industrial environment, namely, a rugged and reliable piece of hardware.

**Comprehensive solution for Industry 4.0**

Visitors to SICK's stand can discover how the complete integration of the sensor into the cloud can be presented simply for companies of different sizes and for the widest possible range of applications. Examples of the advantages of Industry 4.0 are demonstrated using four application examples.

If the factory or machine is to have a high level of availability, preventive maintenance is required. By monitoring the drive, the customer can always operate the system as effectively as possible and can intervene in good time if necessary. What's more, he is also informed about implementing maintenance intervals in good time.

The safety of people is a priority when it comes to collaboration between people and robots. Thanks to adaptive protective field monitoring with laser scanners, the robot senses when a person is approaching. It either abandons its task or works more slowly, depending on where the person is. These safety solutions, which can respond flexibly, are optimized to the high efficiency of the machine and to the more flexible production methods of the future.

Goods in the production process and the supply chain must be reliably and uniquely identified so that these can support efficient automated control. It is possible to optimize the use of resources thanks to highly flexible quality control with the help of the combination of an industrial 3D sensor and an image-based code reader. In addition, it is able to achieve increasing product individualization with the keyword “batch size 1”.

Identification and location solutions are required to ensure universal transparency in production – the traceability of products, in other words. SICK demonstrates this using RFID technology, which ensures the highest level of availability and a transparent material flow.

SICK is one of the world’s leading manufacturers of sensors and sensor solutions for industrial applications. Founded in 1946 by Dr. Erwin Sick, the company is headquartered in the German town of Waldkirch, in the Breisgau region near the city of Freiburg. It is a technology and market leader, maintaining a global presence with more than 50 subsidiaries and equity investments as well as numerous agencies. In the 2014 fiscal year, SICK had around 7,000 employees worldwide and generated Group revenues of €1,099.8 million.