# Smart Service Suite from SICK: Added value for digitalized automation

Introduction to Industry 4.0 and the development of new business models for greater system productivity

Waldkirch, June 2018 – The Smart Service Suite from SICK, which the company will present at Automatica in Munich, is both a modular concept and toolbox that allows for a safe and easy introduction to the implementation of Industry 4.0. The digital maintenance manager is the foundation; it displays, administers and monitors a user’s installed sensor basis. Based on this, the visualization tool enables web-based display of measured values and parameters and transfers them to the system condition monitoring. These two products of the Smart Service Suite are supplemented to include project- and customer-specific solutions for predictive system maintenance and - in the future - will involve a prescriptive concept which will enrich this predictive maintenance information with automatically generated handling instructions in the event of maintenance and service cases. Successive improvement of machine availability and production is achieved with every expansion level of the Smart Services. Furthermore, they create the foundation for the development of new, digital business models such as managed services.

The Smart Service Suite is a component of the SICK LifeTime Services which are available all over the globe. The spectrum ranges from product-independent consultation services and classic product service to the implementation of digital solutions in the field of Industry 4.0. The common goal of all LifeTime Services is to ensure the safety of humans, to optimize the productivity of machines and systems and create the foundation for sustainable economic activity.

**Digital maintenance manager**

The digital maintenance manager is the basic module of the web-based Smart Service Suite from SICK - and at the same time it is the prerequisite for a successful start in implementing Industry 4.0. This is a service platform which digitally displays the entire installed sensor basis and delivers the customer information on the condition of its machines and systems. It enables targeted execution of maintenance and service measures or safety inspections, which in turn minimizes machine failures and downtimes, optimizing availability and productivity and ensuring employee safety. The digital maintenance manager also facilitates the management of all relevant service documents and provides remote access to appropriate sensors.

**Visualization**

The Smart Service Suite visualization module draws on digitalized stock management and the data of the digital maintenance manager. It continuously displays the measured values, parameter data, additional information and messages of all sensors and transmits this information to the individually customizable condition monitoring solution of the customer, thereby generating a transparent digital image of the system. The information can be displayed either via a web browser or via a smart mobile end device.

**Predictive services**

The third evolutionary level in the Smart Service Suite is predictive services. In contrast to the digital maintenance manager and the visualization, these are not existing and adaptable software products, but rather customer-specific product solutions, for example for the maintenance of machines and systems. With the help of comprehensive analysis methods and intelligent algorithms, trends for long-term state evolution of sensors, machines and systems are predicated using the digitalized, visualized data. Customer- and machine-specific concepts for predictive system maintenance can be derived and implemented efficiently from these trends. Possible faults and their causes - for example increasing contamination of the optics of a MicroScan3 safety laser scanner on a robot - are detected early on and can be remedied in a timely manner. This work can be planned for unproductive system times, for example during a planned shut-down, meaning productivity will not be affected. Another example of a predictive service is the evaluation of intralogistical process data, for example announcing the arrival of pallets in the front zone of a high-bay warehouse with an exact time, thereby optimizing the provision of transfer cars, or reporting the predicted arrival time of material supply trains to different workstations in production or mounting.

**Prescriptive services**

With predictive services, SICK is taking an approach for the future which expands the predictable trends and state evolution of predictive service solutions to include automatically-generated, concrete handling instructions that are increasingly oriented on the applications, requirements and environmental conditions of customer-specific projects. The pre-failure notification of a sensor, for example, is linked to specific handling instructions which can be structured in different ways when it comes to content. From here, the mental leap to new business models such as managed services is not great, where customers are no longer responsible for plant availability, but instead hand over responsibility to SICK as part of an operator model.

Digitalization, visualization, predication and handling specifications - the Smart Service Suite from SICK enables safe introduction to and successive implementation of Industry 4.0.

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Image: SICK\_Condition Monitoring

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Image: SICK\_LifeTimeServices\_0039025

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SICK is one of the world’s leading producers of sensors and sensor solutions for industrial applications. Founded in 1946 by Dr.-Ing. e. h. 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 agencies, SICK maintains a presence around the globe. In the fiscal year 2017, SICK had almost 9,000 employees worldwide and a group revenue of around EUR 1.5 billion.

Additional information about SICK is available on the Internet at http://www.sick.com or by phone on +49 (0) 7681 202 4183.