

SYS TEC electronic AG

TeamViewer supports predictive maintenance for medium-sized businesses

Networked factories are now reality, at least for the industrial giants. But getting started can be a major challenge for medium-sized businesses. However, with the support of TeamViewer IoT, SYS TEC electronic AG offers its customers an extremely simple solution for remote monitoring and predictive maintenance.

Erich Köster is annoyed. That was the fourth call today from a customer reporting a problem. Köster works as a technician at a medium-sized mechanical engineering company and is always the first point of contact when customers run into problems with their systems. He actually enjoys troubleshooting, but when the cries for help pile up – like today – then he cannot get on with his other work.

However: His company recently integrated the sysWORXX CTR-700 Edge Controller from SYS TEC electronic into almost all of its machines and systems. This has already resulted in a significant increase in efficiency and a reduction in machine downtimes for customers. The controllers enable customers to monitor their machines and systems in real time, by reading out and making available the data they generate. This – along with the necessary expertise – enables faults to be detected before they occur, as well as optimising processes and maintenance intervals.

An especially practical feature: The sysWORXX CTR-700 also supports retrofitting. This means that the controller can also read out data of older machines, and existing systems and machines can be easily upgraded and digitised.

Predictive maintenance and convenient maintenance via remote access

Today, however, Erich Köster thinks again how much easier and more efficient his work could be if the machine data were not only accessible on site directly at the machines, but also from his office. A solution, therefore, that enables external monitoring, maintenance and control of machines via a communication interface to the Edge Controller from SYS TEC electronic.

That is exactly what SYS TEC electronic has developed in collaboration with TeamViewer, as Nadine Mensdorf, Head of Product Management at SYS TEC electronic, explains: “We see ourselves as a premium provider for electronic services; our solutions are always individually tailored to our customers. It is practically part of our DNA that we consider how we can solve the problems faced by our customers.”

Many of these customers are medium-sized manufacturers of specialised machines, for example. And they are increasingly moving in the direction of Industry 4.0. “First of all, they want to utilise the value-added potential of IoT, especially in the areas of live monitoring and predictive maintenance, for their own production facilities. Another important aspect, however, is the added value that they can offer to their own customers through additional services based on IoT.” The need for suitable solutions is there – and growing, explains Mensdorf.

Initially, SYS TEC electronic used a range of partner solutions for remote access to its controllers, and these could be used with any cloud. “But the handling was not easy. And medium-sized businesses in particular often have strong reservations about using cloud solutions, due to concerns about the security of the data both in and during transfer to the cloud.”

Secure networking of critical production systems

This meant that a solution was needed that would enable customers to access data not only via the cloud but also within their local network. It also needed to be easy, safe and quick to implement. TeamViewer IoT provided the ideal solution. Now SYS TEC electronic offers its customers the possibility of flexible access to the data collected by the Edge Controllers, thanks to TeamViewer IoT. It is flexible because the user decides where the data is stored and who may access it. “Our customers and their own end users are pleased to have complete control over data access. The users and machine owners make completely autonomous decisions about whether the data can be used in their own network or if, for example, the machine manufacturer may access it externally.” All TeamViewer connections are made over completely secure data channels that are established with a 2048-bit RSA public/private key exchange and encrypted with 256-bit AES. Since the private key never leaves the client computer, this technology ensures that no intermediate computers connected on the internet can decrypt the data stream.

The TeamViewer IoT integration enables a machine’s performance and status data and current maintenance requirements to be recorded without the need for a technician to do this on-site. Technicians can remotely monitor the “health” of the equipment, define thresholds and set appropriate alarms, all from their own offices. This allows early warnings and signs of wear to be detected and remedied before they become a serious problem. Thanks to predictive maintenance, the overall costs of a system can be significantly reduced.

“It is a lean, commercially viable solution that is simple to integrate and easy to scale,” says Nadine Mensdorf. “It gives our customers an easy starting point in the field of Industrial IoT. Instead of needing to start a large, expensive IoT initiative, they can explore the technology

with our solution. We support them in this process and help with implementation and scaling.”

It is also helpful that TeamViewer is well known in Germany and enjoys a very good reputation and a high degree of trust. “That makes it easy to persuade our customers of the benefits of this solution.” TeamViewer IoT is integrated in the sysWORXX CTR-700 Edge Controller as standard and is used in a variety of customer integration projects.

At the same time, the company is also investigating the additional possibilities that this solution opens up. This involves questions such as: What new values can we record for monitoring, so that the customer receives even better input? What additional access possibilities to sensors and actuators in the machines can be used for predictive maintenance scenarios?

With each new project, SYS TEC electronic gains more experience for the application-specific use of the solution, enabling it to develop the technology further. The company is currently working on the integration of data from a structure-borne sound and vibration analysis of motors in a machine for predictive maintenance. SYS TEC electronic aims to use the experience of the integration business to establish the technology as a standard solution with application-specific modules. The connection of TeamViewer IoT to other device management tools from SYS TEC electronic is also being considered. In short: SYS TEC electronic and TeamViewer are currently paving the way for many medium-sized mechanical engineering companies to get started with networked factories and IoT-driven predictive maintenance. Quick, easy, cost-effective: This is how Industry 4.0 is developed in medium-sized businesses.