WHAT GETS MEASURED, GETS DONE.

RED LION®

Connecting You to Your Data

Red Lion's FlexEdge®, powered by Crimson®, captures and converts all industry-standard protocols for connectivity to SCADA and ERP systems, as well as for logging data into a database. A pre-figured MQTT makes connecting to the most common cloud providers simple and easy.

CUSTOMER

Global supplier of the medical and life sciences industry

LOCATION

United Kingdom

CHALLENGE

Automated production data acquisition of a production plant for viral transport media

On-site visualization and remote access to the production data

RESULTS

- ◢ Automated production data acquisition and storage
- ◢ Calculation of relevant key figures (OEE/KPI) for production
- ◢ Visualization of the key figures on site and via remote access

DEFINITION OF
PROBLEM

Make the difference: Live production data tracking inside and outside the factory

As the demand for viral transport media and so-called agar plates increased worldwide, the company expanded its production capacities at their site in the UK, eleven new production lines were built for this purpose. To monitor these individual lines, all operating data was to be recorded, evaluated, and visualized. Live production data is displayed clearly on a large screen for all employees. Simultaneously, this operating data can be viewed and accessed remotely by both the plant management at the site and the headquarters located in the USA.

THE
SOLUTION

Monitoring production data in real time

The Headquarters is already successfully using Red Lion's ProducTVity Station (PTV for short) as a data visualization system at its USA site. The ProducTVity Station displays KPI (Key Performance Indicator) data and Andon messages in real time on large televisions.

The decision to assign Red Lion Controls as the automation specialist for the expanded production site was, therefore, a quick one.

This time, instead of PTV, the company decided to use Red Lion's DA50A Advanced IIoT Gateway. The gateway is part of the intelligent edge automation platform FlexEdge, which offers many flexible functions for the acquisition and digitization of plant and machine data. Among its many features for implementing OT/IT convergence in smart factories, FlexEdge offers easy adaptation to changing environments and new technologies. The Sled architecture offers a fast exchange of communication modules (e.g., 4G to 5G on site) without interrupting production. The hardware is also ATEX and IECEx certified.

At the heart of the FlexEdge platform is the powerful automation software Crimson, developed and owned by Red Lion. Crimson captures and converts all industry-standard protocols for connectivity to SCADA and ERP systems, as well as for logging data into a database. A pre-figured MQTT makes connecting to the most common cloud providers simple and easy.

THE **RESULT**

At the production site, the DA50A Advanced IIOT Gateways connected to Siemens and Alan Bradley PLCs on the production lines. As the Crimson software is manufacturer-independent and configures more than 300 protocols via point-and-click configuration, the machine I/O's can be queried directly. The production figures, OEE data, and error data are clearly visualized on the production lines via the integrated web server and displayed on a smart TV in the hall.

However, the FlexEdge solution also realizes the exchange of information across locations via remote access. The headquarters uses the integrated FlexEdge remote viewer to visualize the production data provided by the integrated webserver on a local PC or TV. This allows them to monitor data in real time.

Another highlight is the Wi-Fi connectivity provided by the FlexEdge. It enables the user to remotely monitor and track the number and production history of mobile vats within the plant. The mobile vats are seeded bacterial colonies produced for life science research projects.

A key factor in the success of this project was the local support provided by LC Automation, the local Red Lion distributor, who visited the site and offered system set-up, staff training, and technical support, all in conjunction with Red Lion's own support team.
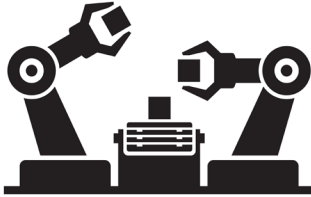
COMMENT BY
LC AUTOMATION

"The solution recommended by us and Red Lion engineers convinced the customer technically. They were surprised how easy it was to use. The feedback was correspondingly positive. Another plus point was the quick and uncomplicated installation and commissioning. They were able to benefit from the know-how of the automation specialists and now have a fantastic solution for data acquisition, data analysis and visualization on the new production lines. Further DA50A Advanced IIOT Gateways are purchased to start installing on the other production lines."

THE APPLICATION

Local production

Convert and Digitalize Data

Control & Analyze

Visualize

FLEXEDGE®
CRIMSON® 3.2

Headquarters

Remote Access & Monitoring

RL
RED LION®
CONNECTING YOU TO YOUR DATA

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