Case Study

Bulten streamlines shop floor processes for greater visibility and improved documentation

Implements Lighthouse Systems Shopfloor-Online across plants in Sweden and Poland

Lighthouse
SYSTEMS

Introduction

Bulten develop, manufacture and trade fasteners to the international automotive industry. In fact, it is one of the largest suppliers of fasteners to the European automotive market. With a customer list that includes many well-known automotive brands; Bulten must ensure that its production is consistent and regular. A keen eye must be kept on the quality of production lines, guaranteeing that high standards are achieved and maintained at all times. Documentation is a key part of that procedure and this requires a clear view of all processes and the resulting measurements. With this in mind, Bulten looked to its existing supplier, Lighthouse Systems, for software that would deliver the necessary functionality on the plant shop floor. They would start the implementation with a complete revision of how to control the manufacturing processes, devising new rules for standardised checks.

Lighthouse Systems Shopfloor-Online would play a significant role in this standardisation role, helping to make the new control structure visible to all levels of the shop floor staff.

Where it all began

In the mid 1990s Bulten implemented SPC-Light from Lighthouse Systems across three of its plants. This implementation worked well for over a decade but, as the demands on the company changed over the years, the software was no longer fulfilling all of the organisation's requirements. In 2006 the decision was made to move to a more modern and flexible software system that would cater more fully for the customer demands for documentation and visibility of the production process. Other drivers for the change were in efficiency gains and freeing up operator time to deliver greater value to the company. Lighthouse Systems Shopfloor-Online was chosen to provide the additional functionality, extending an already successful business relationship with the supplier, through its partner Quality Systems Scandinavia AB, and beginning the pilot phase of the project.

Looking for something new

Demands on the new system were wide ranging. Bulten was looking for software that would give quick responses to queries, deliver accurate data, reliable and safe information, yet is flexible and adaptable to new requirements. It also had to enable the operators to gather data from process gauges across the plant, monitor the process against control limits and produce useful and accurate reports on the production process.

Göran Johansson, Environment and Quality Managerat Bulten AB, comments, "We had worked with QSS and Lighthouse Systems for many years in both Sweden and Poland and were pleased to continue that relationship. Lighthouse Systems Shopfloor-Online promised many new features and the fact that it is web-based was a real bonus for us. Also, the ability to control the same feature on several items on the same chart meant much better clarity and visibility of the processes as well as improved reporting. Shopfloor-Online is an approved software system and used by many of our customers which is very positive."

Reaping the benefits

The new software replaced a paper-based system and the old SPC software in Sweden and Poland. Its initial implementation was for item control in its cold forging, threading and heat treatment processes. However, moving forward, this will be extended to the heat and surface treatment processes and for process control in all departments. This will improve the consistency, control and documentation of the Bulten operators. Also the advanced water cleaning process that extracts clean water from the oils and metals will be using Shopfloor-Online. The ultimate aim is to establish a similar process control system across each plant.

Johansson adds, "We needed to set up a more precise control plan for our operators that would enable them to produce useful documentation for our customers. We had always produced measurements but had struggled to document them before. Moving to Shopfloor-Online would solve that issue. And, the software makes it very obvious when something is out of specification so we now have the benefit of much better visibility of issues. This is a huge benefit as it means that our reports are more accurate and honest now."

Shopfloor-Online is configured to take measurements manually but directly connected to gauges to save time. This enables operators to see quickly if measurements are moving out of specification and alerts them to take action. The software also informs operators of their schedule for measurements, ensuring that all checks are carried out within the necessary time scales and that they are recorded for subsequent reports.

The implementation was "easy" and has been welcomed by Bulten's operators who recognise the benefits of using the software. It is now easier to collect, control and evaluate data and saves a great deal of operator time from data input. The net result is a better structure to the measuring and approving process, as well as a greatly improved level and standard of documentation and process control.

Conclusion

Johansson concludes, "We have already completed our initial implementations in Sweden and Poland but we expect to extend those into other areas of the plants in the near term. These successful implementations have benefited from a dedicated team that has a whole range of relevant skills and the fact that the lessons learned from the implementation in Sweden could be used to good effect in Poland. There were discussions about taking Shopfloor-Online into our plant in China but this has not happened yet. The software is already providing us with better visibility of the processes, accurate documentation, as well as useful reports and we expect to see more benefits emerging over time."

Lighthouse Systems is one of the world's leading developers of Manufacturing Execution Systems (MES) with offices in London, Singapore, Australia and Rochester, NY. Lighthouse Systems Shopfloor-Online is web based modular software that provides real time visibility of the entire manufacturing operations environment. Applications include Maintenance Management, Concern Management, Quality, SPC, Downtime, OEE, Spoilage and Inventory Traceability. Shopfloor-Online is being used in a wide range of industries with some of the biggest manufacturing companies; it is deployed in 15 languages in 28 countries.

For more information please call one of our offices or visit our web site www.lighthousesystems.com

UK Office
Lighthouse Systems Limited
Buchan Hill
Pease Pottage
Crawley
West Sussex
RH11 9AP
United Kingdom

Telephone +44 (0) 1293 605300
Email info@lighthousesystems.com

USA Office
Lighthouse Systems Incorporated
Building 3
6780 Pittsford-Palmyra Road
Fairport
NY 14450
USA

Telephone: +1 585 223 0600

Asia Office
Lighthouse Systems Pte Ltd
71 Bukit Batok Crescent
#07-10 Prestige Centre
Singapore 658071

Telephone: +65 6316 4370

Shopfloor-Online Case Study