



ELRINGKLINGER

AUTOMOTIVE SUPPLIER SPEEDS UP TRANSPORTATION OF GOODS

“We’ve achieved ROI within a year of going live.”

Reinhard Blömeke, Head of Logistics,
ElringKlinger AG

QUICK FACTS

Company

- Name: ElringKlinger AG
- Location: Dettingen/Erms, Germany
- Industry: Automotive – supplier
- Products and services: Cylinder-head gaskets, specialty gaskets, cover modules, shielding parts
- Sales: €658 million (2008)
- Employees: More than 4,100
- Web site: www.elringklinger.de
- Implementation partner: SAP® Consulting organization, noFilis AutoID GmbH

Challenges and Opportunities

- Improve storage efficiency and speed delivery of increasing production quantities
- Improve real-time business process tracking

Objectives

- Introduce automated logistics processes between the production and storage locations
- Implement more powerful processes with greater stability and real-time control

SAP Solutions and Services

- SAP Auto-ID Infrastructure offering
- SAP ERP application

Implementation Highlights

- Scalable and extendable radio-frequency identification (RFID) platform that has sped up logistics processes
- Flexible RFID solution for identifying and tracking goods and tools in production
- Maximum visibility of logistics processes
- Elimination of 13 manual work steps in warehouse management

Why SAP

- Innovative RFID solution with high investment security
- Direct integration with the existing SAP software

Benefits

- Greater stability and a lower risk of errors in internal logistics
- Automatic goods-receipt and goods-issue postings
- Integration with in-house warehouse management system
- Delivery notes created and filled out automatically
- Automated production messages and warnings in real time
- ROI achieved within a year of implementation

Existing Environment

- SAP solutions on FlexFrame
- SUSE Linux Enterprise Server 9 operating system



ElringKlinger AG, based in Dettingen/Erms, Germany, is shifting up a gear. This midsize supplier of components to the international automotive industry is using the SAP® Auto-ID Infrastructure offering to increase the speed at which it transports goods from its production plant to its distribution warehouse. The company is now equipped to track many of its production and logistics processes in real time. It is also saving a great deal of time and effort because it no longer has to enter and check stock levels manually.

Almost every vehicle manufacturer buys cylinder-head gaskets, specialty gaskets, cover modules, and shielding parts for engines, transmissions, and exhaust systems from ElringKlinger. The company operates successfully all around the world in both the original equipment manufacturer and aftermarket segments. Some 2.5 million packaged gasket sets leave its factory in Ergenzingen, near Rottenburg in the south of Germany, every year – a figure that is steadily rising. Each gasket set contains all the parts that need to be replaced during maintenance or repair work on specific engine types. Car repair shops and retail partners rely on the quality of the ElringKlinger product range, which comprises more than 8,000 individual components.

RFID Triggers and Steers Logistics Processes

As with its products, ElringKlinger places maximum value on the quality of its business processes. The company was eager, therefore, to deploy radio-

frequency identification (RFID) technology to hone its logistics processes. Supported by the SAP Consulting organization and SAP partner noFilis AutoID GmbH, which provides the device management solution, the component supplier implemented SAP Auto-ID Infrastructure to provide maximum visibility of its logistics processes in real time. The application uses radio-frequency technology to identify and localize gasket sets as they make their 50-kilometer journey from the ElringKlinger factory to the warehouse at company headquarters, where the goods are stored ready for delivery to customers.

The application offers a high level of process stability; any environmental influences that might interfere with the reception of RFID signals were removed before implementation. “The solution lived up to our expectations right from the moment we went live,” says Reinhard Blömeke, head of logistics at ElringKlinger. In one RFID read operation, the solution captures data not just for a single part but for a variety of

objects. At ElringKlinger, these objects are cartons containing a specific number of identical gasket sets. Each carton has a radio-frequency identification tag attached to it. “We can enter up to 36 tags for a maximum of 36 different packages – that’s the entire contents of a pallet in just one second,” explains Blömeke.

Noticeable Reduction in Manual Effort

SAP Auto-ID Infrastructure is helping ElringKlinger achieve a lasting reduction in the amount of manual effort involved in its logistics processes through direct integration with the SAP ERP application. Initially, employees use conventional reading devices to scan bar codes for specific production orders and transfer the relevant data to the SAP solution. Once an order has been picked and packed, the application creates a tag containing the production order number and precise information about the product, quantity, and carton size.

When the carton has been shrink-wrapped and the ElringKlinger security hologram attached, the application automatically reports that the production process is complete and triggers all the remaining processes. Tight integration with SAP ERP and the direct link to the in-house warehouse management application have proven particularly valuable here.



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The RFID solution receives an automatic command to print delivery notes for the internal transportation of goods to ElringKlinger’s warehouse location; no manual input is required. RFID sensors check the goods as they are loaded onto the delivery truck and unloaded at their destination and thus confirm goods issue and goods receipt in real time. Each carton automatically receives a bar-coded label that enables the warehouse management system to assign it to an available storage bin in the high-rack storage area.

Routine Transactions Automated

Before the new RFID solution was implemented, the process of sorting and checking delivered cartons and then printing out and attaching labels to them was very time-consuming. So was the task of searching through piles

a delivery truck carries 300 cartons, ElringKlinger has succeeded in automating a massive 3,900 routine transactions per truckload.

And the benefits are easy to quantify. The same number of employees is now processing twice as many goods as before – without any loss of process stability. If the application detects discrepancies in the data it receives it immediately blocks any further process steps. The investment in the new solution is paying off very quickly, as Blömeke confirms: “We’ve achieved ROI within a year of going live.”

More RFID Applications

Another advantage of the SAP Auto-ID Infrastructure offering is that it can be adapted and extended to suit changing requirements. ElringKlinger has already

that both projects will be successful: “Our RFID solution will handle these new tasks reliably – without requiring any major adjustments or investments in hardware.”

“Aside from a host of other benefits, the RFID logistics solution saves us 13 manual work steps in warehouse management and has speeded up our processes significantly.”

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of stickers to find the right one. Moreover, all of these steps had to be reported back to the warehouse management system.

But this is now history. “Aside from a host of other benefits, the RFID logistics solution saves us 13 manual work steps in warehouse management and has speeded up our processes significantly,” reports Blömeke. Given that

decided to go ahead with two new RFID-based projects. The first involves leveraging radio-frequency technology to locate the hundreds of tools used to mold and stamp gaskets in order to ensure that they are utilized optimally in the production process. In its second project, the company plans to use the SAP solution to monitor the delivery and utilization of valuable raw materials such as steel coils. Blömeke is confident

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