PROCESS MINING SUCCESS STORY

BIG DATA-POWERED TUNING FOR FAST AND SECURE PROCESSES

Eissmann Group Automotive

100 %
TRANSPARENCY

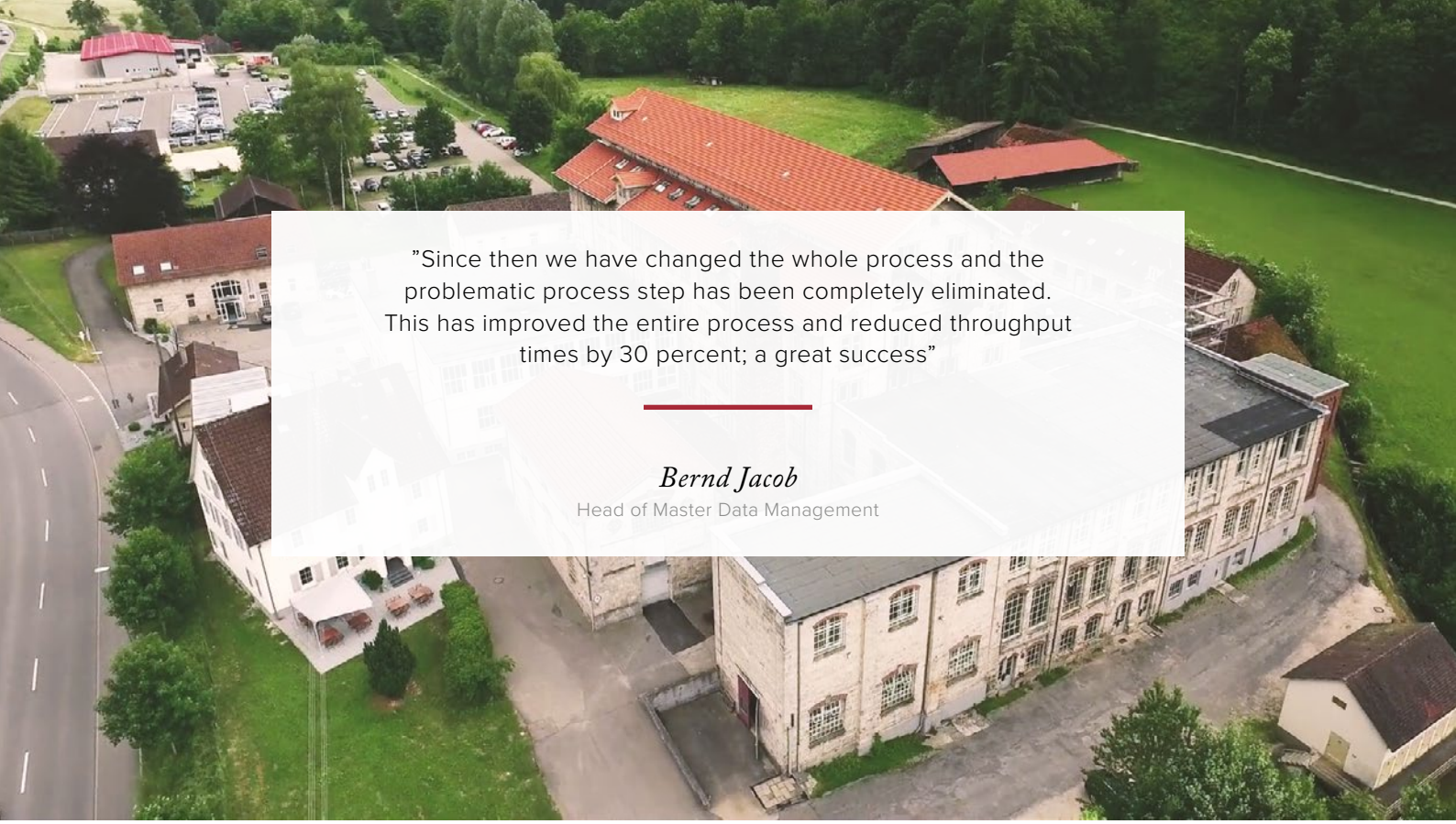
463 MIO
TURNOVER

> 5.000
EMPLOYEES

EISSMANN AUTOMOTIVE EQUIPS ITSELF WITH PROCESS MINING FOR THE FUTURE

Eissmann Automotive is the world's leading manufacturer of high-quality shifter modules, trim components, and complete car interiors. Founded in 1964, the globally active family business, headquartered in the Swabian town of Bad Urach, has more than 5,000 employees at 13 production sites in Hungary, the Czech Republic, Slovakia, the US, Mexico and China. The car interior manufacturer works together with nearly all the renowned manufacturers in the automotive industry and relies on a perfect synergy between traditional craftsmanship and state-of-the-art production processes. **As a manufacturer of high-quality products for car interiors, Eissmann Automotive uses the process mining technology from Celonis to monitor the Purchase-to-Pay process, master data management, production, manufacturing management and purchasing, enabling effective and profitable production**.

"IT has to be faster than business demand – and we're living that!" This maxim from Bodo Deutschmann, Head of IT, symbolizes Eissmann Automotive's quality standards. The company guarantees its corporate customers safe high-quality products that are produced in a complex production process, partly by machine, but in large part also by hand. **To remain competitive, despite this high-quality standard, and to monitor every single production step, Eissmann Automotive has digitized its entire process chain**. This is particularly important for safety-related products such as driver airbags. Each part that is processed has a unique serial number that is used throughout the entire production process. At each work stage, whether it is flaming, gluing, or cutting, the serial number is scanned, and the data is stored digitally. Each process step is clearly described, documented, and stored in corresponding work instructions. To achieve clear traceability of all work steps, all employees receive intensive training and the machines are equipped with appropriate interfaces. All data is archived for more than 20 years. "**Eissmann is at the forefront of digitalization,**



”Since then we have changed the whole process and the problematic process step has been completely eliminated. This has improved the entire process and reduced throughput times by 30 percent; a great success”

Bernd Jacob
Head of Master Data Management

and as a result the analysis and use of emerging data becomes more and more relevant – and Celonis Process Mining supports us in this,” says Deutschmann. The innovative Big Data technology is used at Eissmann in a wide range of business sectors: Purchase-to-Pay (P2P), a standard process in conjunction with SAP, followed by application in Master Data Management (MDM). Meanwhile, the Celonis software is also used throughout production, especially in the MES safety-related systems as well as within purchasing used for supplier evaluation.

ALWAYS KEEP AN EYE ON THE PROCESS FLOW

Bodo Deutschmann sees enormous benefit with the use of Celonis Process Mining in the process flow analysis. Since it is generally very difficult to deal with a natural product such as leather, a great deal of manual work is required in production and automation is only feasible in small steps. On the other hand, almost everything could be automated for the driver airbags. The machines used provide data for each individual production step – whether for pressing the leather, the duration of the cooling phase, or the amount of pressure used. This huge amount of data is easily evaluated with Celonis Process Mining. **By using Celonis, it is possible to track and visualize the production cycle in real time at any time: which steps were taken, how long did it take, where are bottlenecks, and where is optimization potential.**

PROCESS MINING IN MANUFACTURING

Udo Gegenheimer, Project Coordinator of the Manufacturing Execution System (MES) team, is also enthusiastic about the potential applications of Celonis. MES describes the acquisition, evaluation, and delivery of data that originates within the production as part of an ERP system. “**Previously, we evaluated most of our data with traditional methods, which was very prone to errors because data was often not treated equally and was therefore evaluated incorrectly**,” recalls Gegenheimer. “Today we have all safety-related lines, all components around our airbags, mapped in a ME system, and can therefore guarantee complete traceability. **Thanks to Celonis, we have been able to unify the whole process so that every user sees the same evaluation.**” This is possible by connecting the ME system to an AS-400 or SQL database, which transmits the data to the Celonis software. **This allows to track in real time how the production is running, whether the process is stalled somewhere, and**

where it needs to be corrected. Based on the findings, Eissmann Automotive was able to achieve enormous improvements. For example, individual product lines have been rebuilt, shorter production times have been realized and individual manual activities have been automated. In addition, a direct comparison of the production of similar parts at different plant locations is possible. “**I can see exactly where the weak point in plant A is compared to plant B, and vice versa, and identify ideal running times. This enables best practices to be developed and rolled out to other locations. As a result, the entire manufacturing process can be completed faster**,” says Gegenheimer. This is an enormous bonus, especially since the manufacturing complex is extremely sensitive and individual steps must be highly fine-tuned and timed: “The

adhesive used in leather processing, for example, lasts four hours; after which time the adhesive and the parts that have been glued may no longer be used. If such an adhesive-applied part waits four hours and one minute before further processing, it must then be discarded, and defined target cycle times cannot be met. With Celonis we can identify such sources of error very effectively and permanently avoid them." **This can also make for better calculations in the future. It allows clock rates that were originally calculated and presented to the customer to be corrected for future projects and orders to be kept profitable**. "I have worked with different models for analyzing and evaluating processes in my previous activities. However, what strikes me as very positive about Celonis Process Mining is the process representation. In contrast to other solutions, processes can be represented in exactly the same way as they actually run every day during operation. **Celonis is very easy and intuitive to use, allowing you to link and quickly analyze vast amounts of data. Our management also uses Celonis. The most convincing thing about it is: unlike working with traditional software, all users get the same result,**" says Udo Gegenheimer.

WITH PROCESS MINING FOR CORRECT MASTER DATA ALONG THE SUPPLY CHAIN

Another application of Celonis Process Mining at Eissmann Automotive is master data management. Master data is considered by Eissmann to be the "gold" of the company. Because it is used by very different areas, it is highly relevant to all business processes. Bernd Jacob, Head of Master Data Management, and his team are responsible for ensuring that the company's master data is properly prepared and available in the right place at the right time. The master data team provides the MES colleagues with the data for their analyses. Celonis Process Mining tracks the amount of time people spend in the company and how long each step takes. The powerful visual process representation of Celonis is important to Eissmann to understand the throughput rates and the times of the individual work stages. "**There was, in fact, a process step that took twice as long as all the other work stages. Since then we have changed the whole process and the problematic process step has been completely eliminated. This has improved the entire process and reduced throughput times by 30 percent; a great success,**" says Bernd Jacob. In addition, the MDM team uses the Celonis software for process mapping and reporting: "Representing serial processes with parallel processes as such is a key aspect for us. At the beginning this was not possible with Celonis, but the team gave us great support and programmed it to our needs so that we now have an ideal solution," says Jacob. He is also enthusiastic about the fast reporting options: "**Our goal in the master data field is to set up all workflows completely via Celonis, both the process reports and the reports for management**. These are very time-consuming and often take several days to create. Therefore, we are currently working on building a storyboard for Celonis, with the goal of achieving automatic distribution."

NEW TRANSPARENCY IN PURCHASING AND SUPPLIER MANAGEMENT

In purchasing, the biggest challenge is global activity, such as the realization of new businesses and projects in Mexico and the US. The priority was to make purchasing controlling more transparent across all locations and to re-establish reporting. Before using Celonis, Eissmann struggled with the lack of transparency and traceability of the purchasing process; categorizations were not clear and product groups were not presented in sufficient detail. Simple questions,

such as how much turnover a particular supplier achieves, could not be satisfactorily answered. Celonis has made an important disciplinary contribution. The software has detected deficiencies in a variety of data sets, such as large-scale input errors. For example, if the currency denomination is given in Czech crowns instead of euros, or if the weight is given instead of the number of pieces, the impact is enormous. "**Celonis also creates additional potential in our supplier relationships**," explains Rolf Niquet, Head of Materials Management at Eissmann Automotive. "Thanks to Celonis Process Mining, we were able to see that one and the same supplier was supplying our different locations on different terms, which was extremely surprising. There are also new potentials for strategic purchasing, especially if, on the basis of the analysis, I can see that we are somewhat stretched in one division with only two suppliers, while there are too many suppliers involved in another. All in all, we were able to gain a great deal of knowledge and correct our processes accordingly."

WELL-PREPARED FOR THE CHALLENGES OF THE FUTURE

The importance of Celonis Process Mining within the Eissmann Automotive Group will continue to grow over the next few years. "**All evaluations that we are currently conducting on pivot tables under the name 'Eisy' will be implemented in Celonis in the future**," points out Bodo Deutschmann. Celonis can also help with global expansion and the acquisition and implementation of new projects in Europe and the US. With full order books, optimized processes in purchasing and production as well as reliable master data and supplier relationships are a decisive competitive advantage. Bodo Deutschmann summarizes: "We can score points with quality, dependability and delivery reliability among our customers – we owe much of that to the application of Celonis."

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