



CASE STUDY

Smart Press Shop

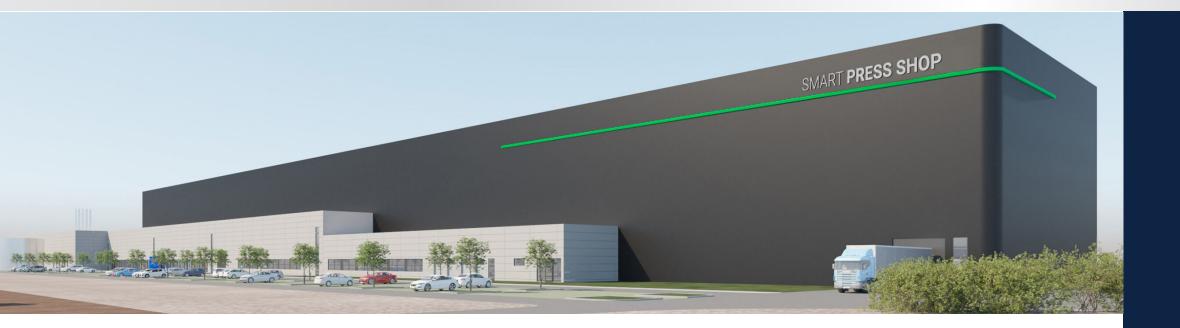
Smart Press Shop GmbH & Co. KG is a joint venture between Porsche AG and Schuler AG, a subsidiary of the Andritz Group. Together, they have built up a body parts manufacturing company in Halle, Germany. Efficient, innovative, and flexible, the press shop of the future will be a reliable partner for all car manufacturers.

CHALLENGE

To build a new and modern plant with maximum transparency in all operational processes and traceability of every product. This required a suitable partner who could consult and implement ERP and Manufacturing Execution Systems (MES) and a partner who could take over operations

OUTCOME

Impressive results that demonstrate digitization is not an end but follows tangible economic indicators. 60% speed increase in production preparation. Storage cost savings. Reduction in time to market by up to 15%.



Digitalized, Automated, and Paperless

Innovative business models deserve practical implementation. Against this background, Smart Press Shop wanted to build a new and modern plant.

"Our production is fully digitized, networked, and automated. We are paperless. We work exclusively with smartphones, tablets, and computers," says Hendrik Rothe, managing director of the Smart Press Shop GmbH & Co. KG. "Even things like access control and colleague time recording are done via a smartphone."

Maximum transparency in all operational processes and the traceability of every product—from raw materials to production data to delivery—were also part of the requirements. The enterprise resource planning (ERP) systems and production control were also designed to be modern and flexible.

"We wanted to go as far as possible into the cloud. Adaptability and scalability. The ability to access data anytime and anywhere. Not having to operate IT products such as software as a service, network as a service, or platform as a service were appealing ideas."

Dr. Timo BöhmProject Manager

Smart Press Shop

Software Systems and IT Service Providers Put to the Test

When selecting suitable systems, however, on-premises systems were also initially shortlisted. "It was not clear from the outset whether there were any cloud solutions that could really meet our requirements," recalls Dr. Timo Böhm.

In addition, Smart Press Shop started looking for a suitable partner who could consult and implement ERP and Manufacturing Execution Systems (MES) and a partner who could take over operations. After an intensive selection process, the decision was made for SAP and cloud specialist Syntax, which brought three core competencies to the table that Smart Press Shop was looking for: industry, cloud, and ERP experience.

"Syntax won us over thanks to its expertise in the automotive supply industry. Syntax provided us with a clear, end-to-end, and integrated concept without any IT hardware at all in the factory, including operations of the SAP systems as software as a service," emphasizes Hendrik Rothe. "Right from the start, Syntax experts made an excellent impression. We quickly realized that their proposals were exactly what we needed."

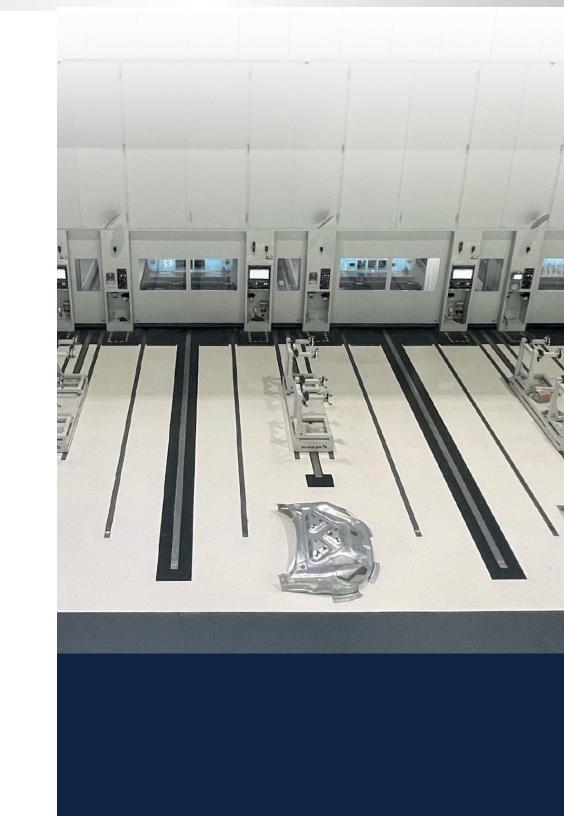
Syntax Does the Convincing

The exciting thing was that the proposals by Syntax did not actually correspond to the preferred solution of Dr. Timo Böhm and his team. "We were of the opinion that SAP ERP was not really an option for such a small, midsize company. When it came to MES, we hadn't even considered the SAP Digital Manufacturing Cloud," the project manager recalls with a smile. "But the consultants from Syntax and SAP convinced us that the best solution would be a combination of SAP S/4HANA in the cloud and SAP Digital Manufacturing Cloud for execution."

Once the fundamental decisions had been made, Smart Press Shop and Syntax set to work together at the beginning of 2020. At that moment, no one knew that this would not be like any other project.

The two project partners were in the middle of initial detail workshops when the first pandemic lockdown set the course for "remote" collaboration. Using Microsoft Teams as the most critical communication and collaboration channel, one of the world's most modern factory control systems was created from nothing.

"Syntax captured our vision of end-to-end horizontal and vertical networking. They understood what we wanted and implemented it excellently," says Dr. Timo Böhm. "Commercial processes, logistics, quality management, maintenance, and production. Everything is directly connected."





Automation and the Digital Twin

The tools and machines are fully automated as soon as a new order for body parts are ready for production.

For Smart Press Shop, this is a strategic factor.

Smart Press Shop takes just-in-time production to a new level and strengthens the company's own competitiveness.

For product traceability, the solution developed by Syntax relies on the principle of the digital twin. All material and process values generated during the laser cutting and pressing of car body parts are recorded and stored in a multi-dimensional model using the Schuler Track & Trace system.

Those responsible always know from which batch the raw materials originated. They know the details of production, right down to times and process parameters such as temperatures or machine settings, and draw the appropriate conclusions if, for example, they observe quality fluctuations. Thanks to this data, it is also possible to control the production in real-time and adjust the production speed or optimize the order sequence efficiently.

"By equipping the production line with the new molds within the shortest possible time and with no manual effort, the interruption in production between two jobs of less than five minutes, even small batches are worthwhile."

Hendrik Rothe
Managing Director
Smart Press Shop

Tangible Key Figures that Convince

The press store in Halle, Germany, is now up and running. The factory and control systems have undergone their baptism of fire. The results are impressive and demonstrate that digitization is not an end but follows tangible economic indicators.

"We are faster. We are better. We are cheaper. And we are made in Germany," Hendrik Rothe sums up it in a nutshell. "We are 60% faster in production preparation than conventional systems. We produce up to 25% faster. We can produce 60% smaller batch sizes economically. This saves us storage costs. We reduce time to market by up to 15%."

These figures reflect the many individual measures and factors that Smart Press Shop has implemented based on the data landscape generated by the SAP systems. For example, the company makes optimum use of bottleneck capacities and can react quickly to unexpected events. Activities that are not value-adding are eliminated with the help of Robotic Process Automation (RPA), which optimizes production throughput in production.

In addition, digital operator guidance ensures that operator errors are a thing of the past. Thanks to a continuous process, machine, and monitoring, Smart Press Shop achieves significantly higher productivity.

"This list is even longer," says Dr. Timo Böhm. "And our capabilities with Syntax and SAP will certainly continue to develop them in the future."

60% faster in production preparation than conventional systems. Produce up to **25%** faster.

15% reduction in time to market.

- Hendrik Rothe



"With Syntax, we have a partner at our side who knows how industrial companies tick, who knows the processes and special features. Therefore, they also understand which impulses are needed to rethink existing processes in terms of digitization. Together with the profound SAP and cloud knowhow, the result is a unique mix. Industry, SAP, and Syntax belong together for me."

Hendrik Rothe
Managing Director
Smart Press Shop

Syntax as a Partner for All IT Needs

Syntax has taken over support of the SAP systems and network infrastructure so that Smart Press Shop does not need to employ an on-site IT team but can get by with a single IT coordinator.

Smart Press Shop can also dispense with its own IT hardware, saving on acquisition and system maintenance costs. With cloud-based software and hardware as a service from Syntax, the company is flexible, regardless of where the journey takes it, when and how Smart Press Shop scales, and where data needs to be displayed or feedback provided.

"Syntax has evolved throughout the project into a partner that handles all IT needs for us – from consulting and system customization to electronic data interchange (EDI) and Active Directory issues," emphasizes Hendrik Rothe. "This is an enormous relief because we can concentrate on our core issues."

The bottom line is that the project has been a complete success, with important course-setting and professional implementation.

"The decision to go with Syntax has proven to be spot on," sums up Hendrik Rothe. "We have implemented many things in the Smart Press Shop for which there were previously no role models. That was certainly a venture, but it was also the only way to implement our idea of modern, largely automated, and networked production. With Syntax at our side, we felt in good hands and safe at all times."

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Hendrik Rothe *Managing Director*Smart Press Shop



WHY SYNTAX

Since 1972, Syntax has been providing comprehensive technology solutions to businesses of all sizes with thousands of customers trusting Syntax with their IT services and ERP needs. Today, Syntax is a leading Managed Cloud Provider for Mission Critical Enterprise Applications. Syntax has undisputed strength to implement and manage ERP deployments (SAP and Oracle) in a secure, resilient, private, public or hybrid cloud. With strong technical and functional consulting services, and world class monitoring and automation, Syntax serves corporations across a diverse range of industries and markets. Syntax has offices worldwide, and partners with Oracle, SAP, AWS, Microsoft, IBM, HPE, Cisco, CrowdStrike and other global technology leaders.

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