

# GREATER TRANSPARENCY AND EFFICIENCY THROUGH SAP ERP AND MES CAT

Cardboard producing company Buchmann optimizes processes and manages growth efficiently with SAP ERP and MES CAT

The introduction of SAP ERP and the seamless integration of T.CON's MES CAT Suite into SAP software increases the transparency of business processes at the cardboard producing company Kartonfabrik Buchmann. The manufacturer of folding cardboard thus benefits from greater efficiency in business planning and smooth data exchange between ERP and MES. Production orders are now sent directly to the shop floor. In return, data from the production process flows into SAP ERP, which creates a clear view of the manufacturing processes. Losses can be better identified and reduced immediately.

Tissues, perfumes or food of all kinds: thousands of products are nowadays packed in recyclable, environmentally friendly cardboard folding boxes. The folding box's popularity isn't just owed to its environmental compatibility, it is also an ideal advertising medium for marketing the products of companies in the food and consumer goods industries. The design of the boxes is correspondingly complex in terms of shape, colour, font and graphics.

The 'Kartonfabrik Buchmann GmbH' from Annweiler am Trifels in Germany, manufacturers folding cardboard of the highest quality. The owner-managed company's customers include print shops as well as food and consumer goods manufacturers. With the introduction of SAP ERP and T.CON's MES CAT Suite, seamlessly integrated into the SAP software, Kartonfabrik Buchmann increases the transparency of its business processes.

## T.CON INTRODUCED THE FOLLOWING MODULES AT BUCHMANN:

Financials  
Controlling  
Sales  
Inventory Management  
Logistics and Shipping  
Purchasing  
Production Planning  
Maintenance  
Business Warehouse  
SAP Basis  
Authorisations

### FOLDING CARDBOARD OF THE HIGHEST QUALITY

The immense importance of folding cardboards as a packaging and advertising media gives Kartonfabrik Buchmann GmbH from Annweiler am Trifels in Germany the opportunity for further economic growth. The owner-managed company, which employs around 320 people and generates annual sales of 120 million euros, produces folding cardboard paper of the highest quality.

At its Annweiler plant, the company produces folding cardboard from recycled paper and virgin pulp with a surface weight of 210 to 500 grams per square meter on two cardboard machines with an annual capacity of 240,000 tons. The cardboard is cut into rolls and sheets and delivered in the desired format for further processing to customers such as printing houses or food and consumer goods manufacturers.



### READY FOR THE FUTURE WITH SAP ERP AND MES CAT

But competition is fierce. To grow sustainably and profitably, the manufacturer of folding cardboard is therefore making many adjustments. Product quality and hygiene are constantly optimised, production is made as energy-efficient and sustainable as possible and logistics are made more efficient. 'However, the consistency, transparency and efficiency of business processes is also becoming increasingly relevant to competition,' says Armin Lehmann, Head of Technology at

Kartonfabrik Buchmann GmbH. 'A clear view of business processes and events in production provides important starting points for process optimization.'

With the introduction of the SAP ERP business application and the MES CAT suite from SAP Gold partner T.CON, Kartonfabrik Buchmann has come a good deal closer to achieving this goal. Several reasons were decisive for the IT modernization: The IT solutions used to date - an in-house tool based on IBM AS/400 and software packages from various manufacturers - were outdated and not future-proof. A new development of the 'old' IT system landscape proved too expensive and was out of the question due to the limited personnel capacity in internal IT. On top of that, IT know-how was lost when the former IT manager retired.

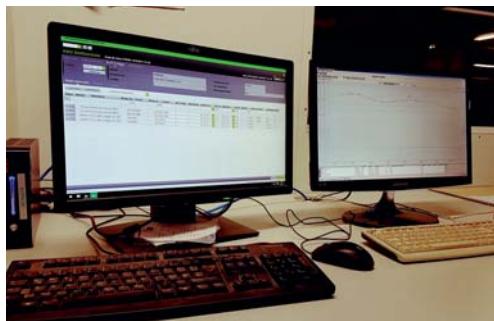


### PLANNING IN GREAT DETAIL

All that remained was the implementation of a standard ERP solution. The folding cardboard manufacturer commissioned an external consulting firm to evaluate it. It concluded that SAP ERP in combination with the MES CAT Suite best meets the company's requirements. The seamless integration between the SAP software and T.CON's Manufacturing Execution System (MES), which is based exclusively on SAP

NetWeaver technology, was particularly convincing.

First improvements became apparent soon after the successful commissioning of the new solution at the beginning of 2016, for example in production planning. As part of the monthly profitability analysis (CO-PA) in SAP ERP, the data required for planning is now determined by target/actual comparisons of costs and revenues, broken down in detail by product, product category, customer, sales area or material. Previously this had not been possible.



## LESS WASTE ON THE SHOP FLOOR

As a central hub, the MES CAT suite combines data and processes from inventory management with those from the shop floor. The MES is connected via Buchmann specific, standardized interfaces to the controls of the board machine units and the quality control system for the reel spool. This is exactly the bidirectional vertical integration between production and ERP that the Kartonfabrik expects to

benefit from in the future.

Technical information from production now flows automatically into the MES, which transfers the recorded data and key figures directly into the SAP ERP solution, where they are processed immediately and made available with ERP data for evaluation. This way, losses in the production process can be precisely identified and reduced by taking suitable measures. „Even a three percent reduction in waste leads to considerable cost savings in production,“ explains Armin Lehmann.

## BUCHMANN WILL BENEFIT FROM:

Planning in great detail

Detailed target/actual comparisons

Complete product traceability

Automatic knife positions/settings

Identification of losses in the production process

## AUTOMATED KNIFE ADJUSTMENTS

In return, approved SAP production orders are immediately available in MES CAT and thus in production. With the order, knife positions are directly transferred to the control system of a sheet or roll cutter, therefore the correct cutting settings are made automatically.

Since the sheets or rolls produced within the framework of an order are determined with the help of the system, feedback on the SAP production order or knife position can be carried out simply at the touch of a button. „Manual operator input is only required for corrections, for example when sheets have been removed from the press due to a production malfunction,“ says Armin Lehmann.



*‘What we need is a clear view on the company’s business and production processes in real time so that we can interfere and optimise at any time if needed.’*

**Mr. Armin Lehmann**

Head of Engineering, Kartonfabrik Buchmann GmbH

After cutting, the sheets - provided with a barcode - are palletized, packaged, labelled and transferred to the warehouse. Each work step is recorded via hand scanner in MES CAT and transmitted to the ERP back end. The processing status of each sheet can be tracked completely so that customer inquiries can be answered quickly.



## IMPLEMENTATION WITH A COMPETENT PARTNER

Those responsible at Kartonfabrik Buchmann counted on the competence of T.CON for the implementation of the new IT solutions. The cooperative partnership of all parties involved and the personal commitment of the T.CON consultants were decisive for the success of this project.

SAP ERP and the MES CAT suite are operated at T.CON's data center in Plattling. The SAP partner also provides all support services, which guarantees the availability and security of applications and data. Since the SAP software and MES are installed on the SAP Sybase Adaptive Server Enterprise (ASE) database management system, you can easily switch to the SAP HANA in-memory database later.

## NEW UI FOR STREAMLINED PROCESSES

But that's not all: SAP Enterprise Asset Management (SAP EAM) maintenance software is currently being introduced to efficiently control maintenance processes in SAP ERP. At the same time, those responsible at Buchmann are examining how SAP transactions could in future be brought together on a user-friendly interface using modern SAP user interface (UI) technologies and how workflows could be simplified and streamlined.

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Images provided by Kartonfabrik Buchmann GmbH

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