

Mission: Successful!

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OSCo introduced innovative development on the basis of SAP R/3 at three further Johns Manville sites.

Background

A logistics software that was no longer able to fulfill the progressive integrated requirements within the Johns Manville Europe Organization with its complex company code procedures characterized the situation at the Johns Manville Concern Schuller GmbH shortly before the start of the project.

Johns Manville is the worldwide market leader for high tech glass fibre and polyester products in the building materials sector.

Particularly in the marketing sector, it was the intention to integrate the JM-Schuller sales organisation by implementing SAP R/3. The strong customer-oriented handling of orders, leading to close functional integration of production, invoicing and sales distribution indicated that SAP R/3 provides the ideal solution.

The almost inevitable functional coverage gaps entailed by standard software were thereby designated to be closed by dedicated utilization of release-capable supplementary developments.

Particularly in this field OSCo Olbricht, Seehaus & Co. Consulting GmbH are experts in complex material flow organisation through its highly competent experience in process and product structuring, in the design of logistic action sequences and in deriving meaningful characteristic corporate figures through integration of logistics and the invoice accounting system. This ambitious SAP R/3 introduction was supported by OSCo's immense experience in data migration as well as by the SAP R/3 development tools.

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Task definition

JM-Schuller therefore decided in favour of full penetration of its production areas on the basis of SAP R/3 with functional extension by OSCo supplementary developments, because only the comprehensive integration of all business processes makes all-important corporate data directly accessible.

The result of this SAP R/3 introduction in co-operation with OSCo has brought JM-Schuller a significant competitive lead through the more effective utilisation of the SAP solution.

The project requirement was complex. The Mannheim, Germany-based SAP Service Partner OSCo was guided by the dedicated goal of significantly minimising the required manual and administrative effort with the help of strategic supplementary developments for the SAP solution, at the same time tailoring the new logistics software to fulfill the special requirements of the production level sector.

In view of the high degree of automation, the major challenge that this entailed was chiefly concerned with production and material flow.

The achieved success speaks for itself. In the meantime all production sectors of the JM-Schuller GmbH have been equipped with SAP solutions. SAP has already been successfully introduced at the production sites at Bobingen near Augsburg and Berlin. The sites Wertheim/Main, Steinach and Karlstein as well are equipped with the technical innovations since July 2001.



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Procedure

OSCo was fully able to extend its comprehensive know-how of SAP technologies and SAP development tools for the benefit of this custom project. Within the scope of the entire project OSCo also profited through its extensive experience with branches involving large numbers of product variants.

The implementation of the multi-variant configuration constituted another major challenge for OSCo. The configuration was devised such that production can be carried out with strong customer orientation, without having to give up costs control on the basis of standards. Missing production specifications, whether concerning the desired production technology or specific customer requests, can be integrated directly in the manual system design.

A further kernel item is the packing unit handling system developed by OSCo taking into account the SAP batch administration. This makes it possible to combine several packing units as a higher-level unit while retaining the backward batch tracing features.

The self-developed rolls file, which mutually links the packing unit and the batch, contains numerous items of information that efficiently support the logistic processes in production, quality control and right down to dispatch execution. This not only preserved and ensured the existing degree of automation in production, but also significantly improved it. Through the flexibility of the OSCo developments within the SAP standard, these functional extensions can also be utilised very effectively in other production branches with high variance and complexity, such as the paper, timber, plastics, glass and metal industries.

A further central component of the production control is a special campaign production as found in fleece production as well as in analogous production technologies such as paper manufacturing in rolls, coil production in rolling mills or package manufacturing in the fibres industry.

The multitasking functionality adopted by OSCo turned out to be a genuine added value feature. Several process jobs with different material numbers can thereby be planned and produced concurrently on a single machine. Special attention was given in the course of the development to the optimised production sequence, in order to reduce conversion times on one hand and for ensuring maximised width exploitation of the plants on the other hand.



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Operating data acquisition in the SAP system is independent of interfaces, i.e. the information concerning production performance, goods arrivals and consumption of precursor products is synchronously put as information directly in the SAP system.

Furthermore, with the help of the quality management system it is possible to generate certificates automatically from the individual verifications of each production acquisition.

The finished fleece rolls are identified in the production via barcode at the production message points and then - depending on the identification - either further processed or placed in a storage with SAP Warehouse Management.

In the dispatch, packages can be selected and placed ready according to the quality and technical characteristics for the particular customer.

In stores without Warehouse Management, specifications of the goods can be taken over into the delivery note by scanning with direct SAP link, whereby all plausibility checks are made interactively in the SAP system. For this purpose OSCo has developed a bi-directional ALE/IDOC especially for JM-Schuller.

For strategic reasons OSCo has - as in the polyester production of the Bobingen and Berlin sites of Johns Manville - developed a method of generating the master data in glass fleece production too, such as material master data, work plans and parts lists. Above all this relieves the specialist departments and reduces the number of data acquisition errors.

Apart from unencumbered implementation of the logistic processes, OSCo attached particular importance to the provision of contemporary and decision-relevant characteristic corporate figures.

This was achieved by linking the SAP R/3 module CO-PA profitability analysis, as central corporate database for marketing and results figures, with a self-developed solution for reporting characteristic production figures (KOI). This combination permits depiction of all-important planning and actual characteristic figures in suitable reduction. At the same time, the full integration with the operative SAP modules also permits complex ad-hoc analyses at any time.

Furthermore, within the scope of future further developments it is possible without any problems to link mySAP.com products such as Strategic Enterprise Management (SEM) or the Business Information Warehouse (BW) with little effort involved.



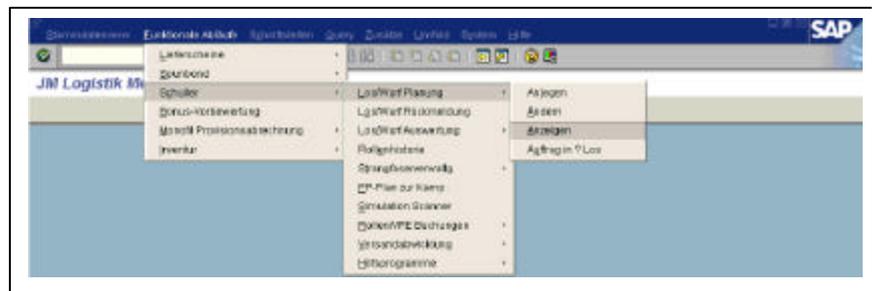
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Overview of the functionality of the OSCo supplementary developments

a) Basic data generation

- Ensuring error-free data contents in the individual views of all participating organizational units including multiple task action sequences
- Reducing administrative effort by generating the data
- Participation, classification and preparation of the variants configuration by providing the required product feature descriptions
- Integration of parts lists, planning recipes and testing plans



The screenshot shows the SAP 'Wurf/Losplanung' (Production Planning) interface. The title bar reads 'Wurf/Losplanung Kampagne ändern'. Below the title bar, there are various control buttons and a data entry area. The main part of the screen is a table with columns for 'K', 'x/Sort', 'L', 'Wurf', 's/W', 'Binder', 'Fertig', 'r/km', 'Type', 'Bahn 1', '1 Br. 1', 'Bahn 2', '2 Br. 2', 'Ba.', '2 Br. 3'. The table contains several rows of data, including material numbers, quantities, and dates. The status bar at the bottom shows 'Datum: 14.07.2001', 'Woche: 200128', and 'Zeit: 14:18:18'.

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b) Variants configuration on the basis of product group specific control documents.

- Calculation of the parts lists components, their utilised quantities and further attributes
- Dialogues in individual calculation and process job execution for including user decisions
- Preparation and compiling of technical descriptions for the SAP planning board

c) Campaign planning according to project-specific sorting and grouping rules.

- Preparation for common production of several jobs simultaneously, as customary in the cut-to-size industry

d) BDE functions

- Reporting of the production quantities with calculations for good and rejected lots
- Derivation of the performance reports
- Distribution of the material consumptions
- Area and other quantity adjustments.
- Regulation-based generation of test lots

e) Label generation according to systematic rules for subsequent error-free identification

- Serialised batch execution
- Synchronisation of batch and packing unit terms

f) Material flow for error-free material movements

g) Dispatch action sequences

- Selection possibilities
- Scanning with validation in SAP