



**A COMPREHENSIVE APPROACH.  
CAPABILITY DOWN TO THE  
LAST DETAIL.**

SAP Solutions by SSI SCHAEFER



## Your Objective: **Optimisation.** Our Path: **Holistic.**

Efficient logistics combine many highly complex operations resulting in a perfectly coordinated flow of data and materials.

Because we offer a full range of solutions to our customers and not just individual software products, we individually analyse and consult on the optimum integration of SAP systems and modules for intra-logistics processes.

### **Our strengths:**

- the ability to analyse the whole
- the means to develop individually
- the expertise to implement precisely – in SAP

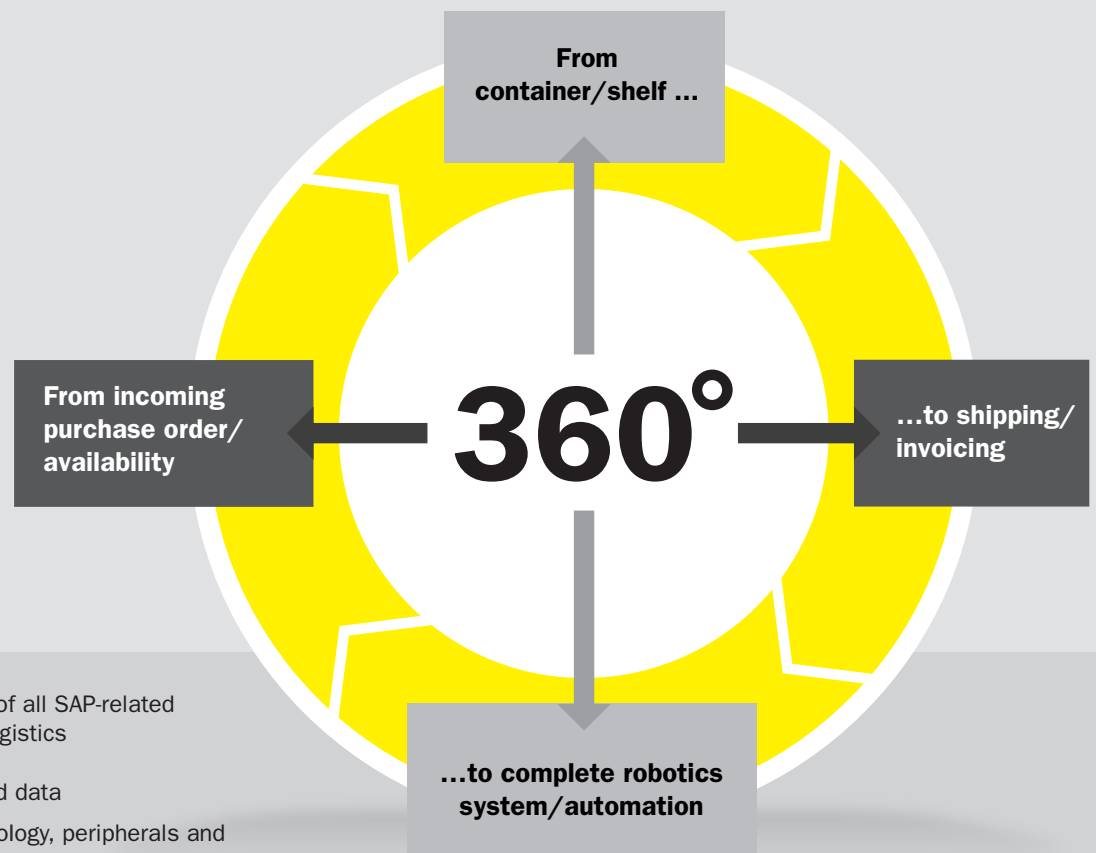
# A 360° View. A 100% Solution.

Within the framework of our value-added consulting service, we target logistic requirements and IT strategies, and assist you in selecting the most suitable software solution. We work with you to evaluate criteria and to make objective and sustainable decisions.

The structure and compatibility of the processes are vital parts of every project. We analyse and optimise your logistic functions with the objective of establishing sustainable SCM processes for you, your customers and suppliers through efficient vertical and horizontal integration, particularly when crossing system boundaries.

Value added is not achieved simply by linking different types of technologies and automation – only the specific design, technological integration and the compatibility of the functions to form consistent SAP ERP processes reflect our efforts to achieve the best solutions.

On request, we will handle complete implementation of the SAP solution, from initial system configuration including end-to-end customisation to the development of individual enhancements and the configuration of all system interfaces that are necessary for your project-specific requirements.



Implementation and control of all SAP-related processes in warehousing logistics

- ↔ Flow of material and data
- Warehousing technology, peripherals and automation



## Innovative & Fast = **Individual**

In our creative solutions, compatibility for the user has priority.

Years of experience in complex EWM projects in many different industries allow us to draw on a wealth of special and individual solutions: as a general contractor we have completed over 300 turnkey logistics systems worldwide.



# SAP WMS Scenarios and the Applicable Architecture

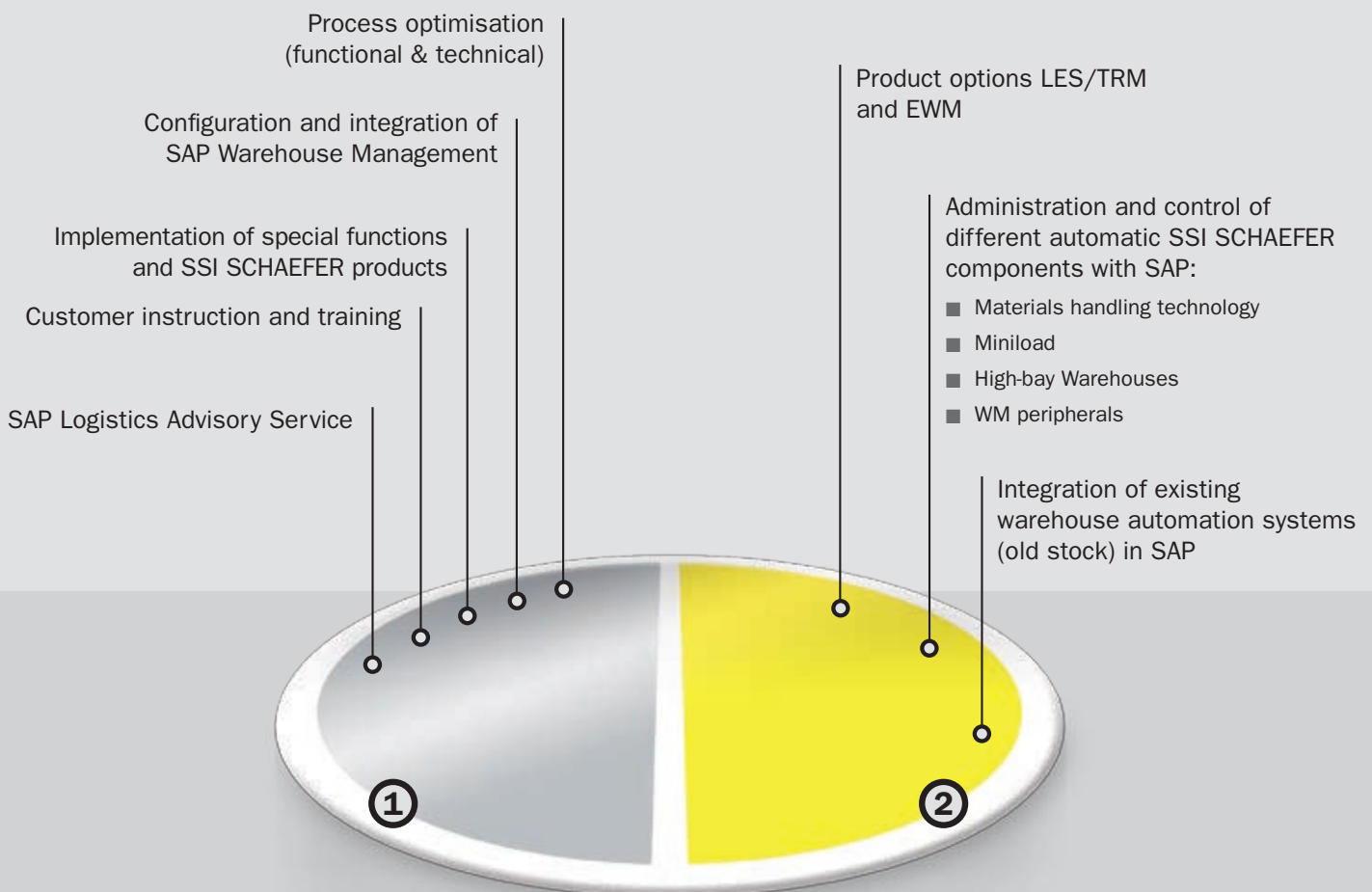
Your requirements define our services. Depending on your warehousing concept, we offer various services and solutions to meet your needs and successfully complete your project. Depending on the terms of reference, we rely on the SAP solutions SAP Extended Warehouse Management (EWM) or SAP LES/TRM.

## ① Manual warehousing and fork-lift control systems

Manual storage areas are characterised by many individual process sequences which we manage and implement with you. In order to give your staff the necessary training and knowledge of the new processes, we can work out the critical system dialogs and process sequences with you. Efficiency is in the processes, not in the software.

## ② Automatic warehousing and material flow control

In warehousing automation, the requirements to be met in terms of speed, reliability and flexibility are high. We help you to make optimum use of the applicable storage components with intelligently configured SAP systems and control them to guarantee smooth and rapid intra-logistics process sequences.



# Process Standards and Tried and Tested Tools

The portfolio and the experience of our group guarantees an increased efficiency from a single source.

For decades, our group has been an accepted partner when it comes to planning and implementing all inclusive logistics systems. A comprehensive product portfolio and the widest range of services in the field of intra-logistics assure the customer of highly efficient solutions from a single source.

As a system integrator and general contractor, SSI SCHAEFER implements efficient logistics solutions covering the whole spectrum of computer-controlled information and material flow technology. Using our own expertise in materials-handling technology, storage and retrieval machines, IT systems, automation as well as maintenance and service, we establish the basis for system performance and availability of your logistics system.

Together with powerful partners for components such as sorters, bin storage technology, special handling etc. we are in a position to implement cost-effective, complete solutions.

## Standardised procedure models and tried and tested tools

Beginning with preparation, through planning to implementation and control of the project – we can assist you in all phases to ensure that you never lose sight of your goal, namely consistently pursuing the objectives of your project.

Within the framework of your SAP projects, we support you not only in classical project management disciplines but also in defining your goals, in the planning of time and expenditure, as well as in the field of risk and change management.



... in the SAP  
**Solution  
Manager**



## SAP Solution Manager

We generally process our SAP projects using the SAP Solution Manager to guarantee the efficient and smooth operation of the project.

Our staff is familiar with the program and the functions of the Solution Manager, from collecting your requirements and drawing up the functional specifications to the implementation and test phase to rollout and user training. The Solution Manager assumes all important planning and documentation tasks as well as the control of the system configuration.



## All Over.

Our global presence guarantees proximity to customers and project responsibility in all places and at all times.

A worldwide sales and branch network as well as more than 50 subsidiaries on all continents stand for a global presence and proximity to customers. Support and services even after start-up are therefore standard components of our service culture.

### Service & Call Center

Service times that meet your requirements ensure real-time support. The SSI SCHAEFER call center is available 24 hours a day, 365 days a year.

### System Support

For SSI SCHAEFER, active system support covers not only the maintenance of the hardware and software components. With structured training for employees in the operations sector, user training courses during start-up, and training at a later point in time for new staff, we ensure that the potential of systems can be optimised and that systems can be used for years without risk.

### System Modernisation & Change Requests

The replacement of obsolete components and preventive maintenance increase operational safety and improve availability. Functional enhancements or adaptations of the current SAP system to new processes in the company ensure company success in the long term.

### Your Benefit

Logistics software has to provide high performance, typically around the clock. Downtimes mean risks and costs. Even after system start-up, SAP@SSI supports you with a large number of services. Experienced support teams combine the know-how of ERP systems, networks, databases and logistics solutions, thus allowing fast reaction and completion times. Depending on the service contract, we offer individual service with a growing range of functions.

- Safety and availability for your logistics system
- Tailor-made service packages, up to 24 hours, 365 days a year
- Guaranteed response times
- On-site support



# Excerpt from our References

## Ostermann, Bocholt, Germany: Control of all processes in a standardized SAP system landscape



Rudolf Ostermann GmbH, Bocholt, offers a full range of carpentry and interior fittings and is one of Europe's leading mail order supplier of profiles and fittings with around 27,000 different items on stock. In the course of a comprehensive re-structuring of Ostermann's European distribution center, processes previously carried out manually were to be optimized using an SAP wireless solution. A second project phase was aimed at automating the goods flows between incoming and outgoing goods with a comprehensive material flow concept and by setting up a new High-bay Warehouse, in addition to conveyor technology.

The SAP specialists from SSI SCHAEFER developed a solution within the existing SAP WM environment for Ostermann. For consistent process support, the Task & Resource Management (TRM) component was activated in the existing SAP WM, configured through customizing and tailored with a special extension for data exchange with secondary controls.

### Project Objectives:

- Complete integration into the existing SAP system without additional interfaces
- SAP wireless integration of warehouse processes into small parts, racking and pallet warehouse
- SAP material flow control of the HBW
- 2 aisle, double deep HBW with 2 SRMs and pallet conveying system



### Special feature of the project:

The activation of the standard SAP TRM component enables the processing of transport orders from SAP WM as individual tasks in the warehouse and the integration of further automatic system sections and the process control directly from the existing SAP WM.

### The result:

"A complete and seamless integration into our existing SAP system – with no intermediate components that always tend to be susceptible to interface conflicts. I'm impressed by the clear concept and the detailed, structured and on-time processing of this challenging integration project. The entire system and the system control from SAP are running without a hitch. The SAP team from SSI SCHAEFER did an excellent job."

**Johannes Teriete, Head of IT, Rudolf Ostermann GmbH**



## ebm-papst, Landshut, Germany: Implementation of SAP EWM MFS for the control of the central distribution center



ebm-papst is specialist and market leader in the development and manufacturing of fans, small motors and pumps for energy-efficient heating and household appliances. In Landshut, SSI SCHAEFER realized for ebm-papst a central distribution center with a High-bay Warehouse for the production supply of the 5 km away production and for supply of customer orders. The time-critical supply of the production positions in the factory and the processing of customer deliveries on time required the application of a high-capacity and a sophisticated software solution.

The SAP EWM solution with integrated MFS does not only control the processes in the High-bay Warehouse, but also controls the supplies of the production supply areas according to defined provision period via the internal shuttle transportation in the factory.

**Special feature of the project:** The first sample or routine test for items is done by using the QIE (Quality Inspection Engine) with integration in the existing ERP-system. Just after the utilization decision it is defined, if the pallets are directly stored or transported to a Q-work station first.

**The result:** A continuously secure quality check for all items in the warehouse. The retrieval of customer orders in the High-bay Warehouse is done after the transport planning, sequenced according to unloading positions, with fully-automated labeling via the conveying system directly connected to the High-bay Warehouse and the automatic shipping conveyors.



### Project Objectives:

- New construction of a 5-aisle High-bay Warehouse for production supply and removal
- 16 automatic shipping conveyors with sequenced loading series
- Implementation of the production supply via Kanban, picking parts and call-off parts
- Fully-automated goods receiving with routine test via QIE-integration with ERP
- Application of 10 different load carriers in the warehouse
- Implementation of automatic and manual picking positions

## ZAM ZAM Water, Mekka, Saudi Arabia: SAP EWM for Warehouse Management and Material Flow



SSI SCHAEFER implemented SAP EWM as a stand-alone solution for the material flow control. The existing bottling lines in the production facilities and the bottle separation at the output points in the distribution building were integrated.

An intelligent exception management system and very simple user dialogs played a very large part here, minimizing the necessary interaction with the system and guaranteeing maximum stability. In addition, dynamic insertion and removal strategies had to be developed in order to take into account considerable seasonal fluctuations in demand.

**Special feature of the project:** For Islamic pilgrims, Zam Zam Water is the purest water regarded as sacred. As a central material flow system, SSI SCHAEFER implemented the Extended Warehouse Management System SAP EWM to integrate the production lines and to control the intralogistics processes. During the customisation process, the logistics software was designed for the flexible storing and retrieving of bottles with direct distribution to the pilgrims.

**The result:** Thanks to the high level of standardisation of SAP EWM and the high degree of branch-specific expertise, SSI SCHAEFER was able to deliver the project in time and within the agreed budget. SAP EWM has been controlling all warehouse processes, material and information flows as a central logistics platform in the warehouse since January 2011. With this at their disposal, the customer now has a robust, easy-to-operate system configuration that meets the demand and high throughput level of peak production times during the pilgrimage period with ease.



### Project Objectives:

- Implementation of SAP EWM
- Automated HBW with 16,800 pallet storing positions
- 2 SRMs with 2 LHDs for eightfold deep storage
- Throughput of up to 16,200 bottles per hour
- Dynamic strategies for requirement-oriented, optimised storing and retrieving
- Integration of filling lines

## Sölen, Silivri, Turkey: Migration to SAP EWM as a customized solution



Within the construction of a modern new High-bay Warehouse, SSI SCHAEFER analysed and optimised existing manual storage processes.

The existing SAP LES solution was replaced by SAP EWM, a suitable migration strategy was developed, and customer-specific enhancements for reproducing batches were transferred to the SAP standard. At the same time, the manual processes were designed as templates for other locations and integrated into material flow planning.



**Special feature of the project:** In terms of functionality, the SAP warehouse software needed to take into account more than just the current processes and the Islamic rules for Halal-certified food producers. The SAP EWM customisation work by SSI SCHAEFER is also designed for a high level of flexibility to accommodate continued growth and enabling to future business processes.

**The result:** Automated planning, control, monitoring, and handling of all ongoing acquisition and dispatch processes in the company-wide network with a high level of performance as well as the real-time exchange of data and information.

### Project Objectives:

- Migration of SAP LES WM to SAP EWM
- Management and control of the automated High-bay Warehouse
- 3 aisles, 13,728 pallet storing positions, double and single deep storage
- Integrated production supply
- Integrated SAP Quality Management
- Mobile applications – via RF
- Implementation of batch management

## Harrods, Thatcham, Great Britain: Optimized logistics for luxury goods with SAP EWM

Harrods, the department store for luxury goods, has opened its brand new distribution center in Thatcham, Newbury. SSI SCHAEFER equipped the approximately 32,000 m<sup>2</sup> distribution center with the latest technology. The warehouse is now fully functional and handles the entire goods distribution for the Knightsbridge store and other Harrods outlets in the UK.



**Special feature of the project:** In addition, the distribution center has received an excellent rating from BREEAM, a British certification system for sustainability. The outstanding energy efficiency and waste sorting facilities were highlighted in particular.

**The result:** The new warehouse equipment allows for faster throughput of goods, with increased accuracy and frequency of replenishment, and a greater storage capacity.

With SAP EWM MFS, SSI SCHAEFER has delivered a warehouse management and material flow control system, which ensures greater transparency and efficient warehouse processes at Harrods – both for the manual and the automatic ones.

### Project Objectives:

- Implementation of SAP EWM MFS
- Narrow aisle pallet warehouse
- 4-aisle automated miniload
- Picking conveyor technology with automatic labelling system
- Goods-to-person work stations
- Forklift control system
- High rack for large items that is operated manually by a special man-up vehicle
- Work stations for processing incoming items and the dispatch area

# Find Out for Yourself.

## Competence up close

Find out and experience SAP solutions yourself in selected demonstration processes in our technology center. We would be pleased to show you the following scenarios on the basis of our SAP EWM demonstration system:

- Integration in SAP ERP
- Into-bin and from-bin transfer using RF applications (handheld and fork-lift terminal)
- Pick-to-tote/Pick-by-light
- Material flow for pallet and bin materials-handling technology
- Special solutions for multiple-depth storage with multiple load handling devices
- Typical storage processes
  - » Deconsolidation/packaging dialogs
  - » Work management
  - » Resource management
  - » Wave management
  - » Integrated quality inspections
  - » Pick-by-voice (voice-controlled picking processes)

