



The Layher brand stands for security, efficiency and punctuality. Development, manufacturing, sales, distribution and maintenance are all concentrated at the company's Güglingen-Eibensbach location – providing the ideal formula for quality made by Layher. "More possibilities"- Layher's promise reflects a generations-long philosophy. The company develops tomorrow's products and services today, which gives Layher the cutting-edge advantage needed to develop new business potential for customers.

The challenge

Layher was looking for a SAP-integrated solution for both packing and loading optimization as part of their SAP roll-out. As a standardized user interface was required, it was necessary to replace Layher's previous Windows-based planning tool. A further IT objective was to clearly reduce, and ideally eliminate, the maintenance costs for the various interfaces.

The goal was to integrate the software into SAP to make the logistics planning more transparent by using standard SAP documents such as Sales Order and Stock Transfer Order.

In addition, the software should be capable of handling Layher specific document types such as the "rental contract". One of the key requirements from a logistics point of view was to have planning flexibility at the SAP line item level. It was critical for Layher to flexibly adapt amounts in the line or manually determine the stop sequence. The software should likewise be designed to support transport planners in their daily processes of generating transport orders, full capacity truck loads and optimized routes while featuring the capability to display planned and optimized loading graphics directly to the users.

Another prerequisite was the smooth transfer of planning results to the existing warehouse management system, along with interdepartmental viewing of optimization results in order to scale down on the elaborate internal communication schemes of the past.

Square one

At Layher, five dispatchers plan domestic and international transports at the central distribution location in Güglingen-Eibensbach. These transport planners are tasked with monitoring two shipping points. Up to 90 vehicles are loaded with Layher products on a daily basis delivering these goods to customers at building sites, building companies and warehouses. Forwarding agencies carry out the transport.

The solution

ORTEC for SAP ERP (O4S), a Certified add-on embedded in SAP ERP, providing load building capabilities for cartons, pallets, trucks and containers as well as optimal route scheduling. The O4S basic module Transport Load Optimizer (TLO), including optimization modules for packing and loading optimization (PPO and VSO), was implemented simultaneously with the SAP ERP roll-out at the Güglingen-Eibensbach site.



Industry:

Construction industry

About Layher:

Layher is a German, globally leading manufacturer of scaffolding systems, ladders, protective and event systems.





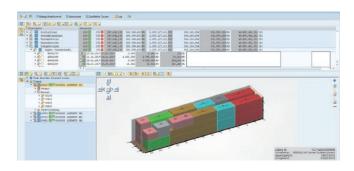
Layher.



Users work directly in the standard SAP ERP environment and plan daily transports with O4S. The results are optimized tours with vehicles and containers loaded to full capacity.

3D visualization allows planners to automatically create optimally loaded trucks with options for manual intervention.

The final optimized results are available immediately. O4S was able to fully meet the requirements of the scaffolding manufacturer using the intelligent ORTEC algorithms which are employed directly in SAP where the Sales Order, Stock Transfer Order and Rental Contract document data are found.



The benefit

ORTEC for SAP ERP is a solution for packing and loading optimization that is fully integrated into SAP. The SAP Sales Order, Stock Transfer Order and the Layher-specific Rental Contract are used as planning documents. The planning tool takes various customer-specific restrictions into account, such as vertical and horizontal divisions, consideration of rest quantity in various load carriers and packaging as a bundle. A central planning monitor reduces the previous need for coordination between the Sales, Distribution and Freight Purchasing departments while providing valuable information in the exchange with customers and forwarding companies.

The advantages

- No interfaces thanks to an SAP-integrated solution
- Efficient utilization of packaging material by taking specific packing rules into account
- Planning flexibility at line item level
- Reduced planning times
- Improvement of internal and external communication

In conclusion

The SAP-integrated solution supports Layher in its distribution planning by allowing for flexible planning at the line item level while taking Layher-specific loading rules into account. The result is heightened planning security. Transport planners can adjust the loading proposal by adding or removing line items where necessary and can decide to approve the planned tours on an individual basis.

"The implemented solution has increased delivery reliability and dependability, decreased transport and logistics costs and supports the dispatchers quickly and efficiently in their daily work," says Klaus Dommes, Senior Project Manager at ORTEC. "We collaborated with highly capable staff at all levels with a decidedly pragmatic approach, and we achieved our goals in good time," says Warangkana Jaturasitha, Senior Consultant at ORTEC.

"We were very enthusiastic about the software solution that ORTEC offers. The goals that we set were completely met and the collaboration was goal-oriented at all times. We look forward to further cooperation and the implementation of additional requirements," says Patrick Reiner, M.Sc. Dipl.-Ing. (FH) and Logistics Manager at Layher.