

# SUCCESS STORY



Formwork, scaffolding, engineering | ORBIS TSS and mobile application | PERI GmbH



## Targeted staff scheduling: PERI optimizes open storage processes with ORBIS TSS and mobile solutions

PERI GmbH uses SAP-based solution ORBIS TSS and a mobile application to create a prompted data and document flow with seamless processes in its open-air storage facility. This has allowed the formwork and scaffolding manufacturer to boost transparency in its storage management, to ensure the optimum utilization of forklift capacity, to improve transport distances and to deploy its storage facility team efficiently. In particular, the time taken for new employee orientation has reduced, and the logistics output in the warehouse/storage facility can be increased at short notice as needed.



# Targeted staff scheduling: PERI optimizes open storage processes with ORBIS TSS and mobile solutions

Whether the 412-meter-high Al Hamra Tower in Kuwait or the world's highest cable-stayed bridge, the Puente Balaarte in Mexico: when it comes to demanding construction projects – and more – the innovative, flexible, and high-quality scaffolding and formwork systems and engineering and service expertise of PERI GmbH are first choice for project supervisors. With around 7,000 employees and 50 subsidiaries, the family company from Weißenhorn bei Ulm generated sales of more than 1.14 billion euros in 2014 alone.

## PERI GmbH

Head office: Weißenhorn in Germany

Products: formwork and scaffolding manufacturer – engineering from a single source

Group companies: main plant in Weißenhorn, 64 subsidiaries and more than 120 logistics sites worldwide

Employees: more than 7,700 worldwide (2015)

Sales: 1.3 bn (2015)

[www.peri.com](http://www.peri.com)

## 100,000 square meters of open-air storage

One factor which is critical to the success of construction projects is that the transportation of the scaffolding and formwork systems be tailored to the requirements of the customer and the circumstances in-situ. PERI meets the requirements for this using efficient processes in its production planning and management and intralogistics, mapping these with the integrated features in business software SAP ERP. The stock held in the giant open-air storage facility at the head office in Weißenhorn which, with space of around 100,000 square meters, is roughly equal to the size of 15 football fields and houses 1,500 to 2,000 items, is managed in a SAP warehouse management system (SAP WM).

*“The open-air storage facility acts as a buffer in between production, where the scaffolding and formwork are manufactured, and the dispatch of the finished goods,”* says Jürgen Nübling, Head of Operational Logistics in Weißenhorn. On leaving the production plant, the goods produced are first transported to the designated location in the open-air storage facility with forklifts. Then they make their way to a repacking station or else straight to an outgoing goods buffer zone where they are readied for shipping. Depending on the volume of orders, the storage facility operates on a two or three-shift basis, with up to 30 front and side loaders with a payload of up to 4.5 tons on the move simultaneously during each shift.

## Optimum capacity utilization for staff and forklifts

With the ORBIS transport management system (ORBIS TSS), which is seamlessly integrated in the SAP warehouse management system, and a mobile solution, PERI has brought a high degree of transparency to the open-air storage facility. Prompted mobile data entry with a paperless flow of information ensures that all goods movements – whether incoming, transfers or outgoing – are automatically transmitted to SAP online where they are booked virtually in real-time as these materials are being routed.

The significant improvement in the orientation of new members of staff in particular is testament to how easy the transport management system is to use and how fast new users can get to grips with it. For instance, a rush of orders saw roughly 40 new members of staff deployed to warehousing within the space of a few weeks, increasing transshipment capacity considerably at short notice.

The comparison is stark: *“Before, a new employee had to memorize the various storage locations and countless different items first,”* remembers Jürgen Nübling. Since individual containers frequently have to be reshuffled due to space requirements and production volumes, each forklift driver also needed to know the exact storage location of the required items.



*PERI systems ensured that the exterior facades of the 412-meter-high Al Hamra Tower in Kuwait were protected during the manufacture of the floor slabs.*

## Automatic assignment of transport orders

Now all the driver needs to do at the start of their shift is to log into ORBIS TSS on their forklift-mounted touchscreen terminal; from there they have access to the number of the current transport order at the tap of a finger. Since the storage location as well as the shipping quantity is displayed for every order, the employee can proceed directly to the location and pick up the clearly

identifiable containers (storage units). Those may be partial quantities or complete packages. The scanner, which is also mounted on the forklift, is used to scan the barcode attached to the container. The scanned data is then immediately compared with the data stored in SAP WM regarding current storage location, available quantity, and current status, ensuring that any mix-ups or incorrect shipment is effectively eliminated.



*PERI holds between 1,500 and 2,000 items in the 100,000 square meter open-air storage facility at its head office in Weißenhorn. The processes there are optimized by a transport management system (ORBIS TSS).*

Once the packages have been set down at their destination storage location, this movement is confirmed and concluded by entering a check digit for the corresponding target location. ORBIS TSS then determines the next order based on requirement dates determined on the basis of load scheduling, and subject to operational urgency, and assigns this to the driver. The running order is calculated based on parameters such as the capacity utilization of the workplace, the set distance and/or defined priorities and weightings. What's more, like GPS, the transport management system automatically calculates the shortest distance in each case, thereby optimizing the route.

### Quick orientation and new storage structure

*Jürgen Nübling sums up a positive experience: "Many of PERI's requirements were covered by the standard features alone. Thanks to the outstanding collaboration and the great commitment on the part of all those involved, the launch was possible in just eight months."*

That included the integration of the hardware components for the mobile application and the set-up of an in-house network infrastructure for mobile processes.

What's more, PERI used the launch as an opportunity to reorganize the open-air storage facility and refresh the markings for all of its storage locations. All stock is now mapped in SAP WM right down to the individual storage location, and each material container is classed as a storage unit in its own right and therefore uniquely identifiable. This has enabled flexible mixed product group storage where the fast-movers, i.e. products that sell out fast, are now stored in the central area, and slow-movers are stored in the fringe areas. This saw roughly 25,000 packages relocated and labeled with barcodes.

The plan is now to gradually improve processes in the open-air storage facility and to integrate even more workflows in the transport management system in the



*Jürgen Nübling, Head of Operational Logistics, PERI GmbH*

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## More Information



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