

Automated warehouse logistics

Swiss Automotive Group (SAG):

Optimized warehouse processes in the new national distribution center have led to an availability of goods of 98%.



SAG relies on future-proofed logistics in its new national warehouse. With expanded capacities, scalable automation and a flexible software platform from Infios.

During the relocation of the new national warehouse, it quickly became clear at the operational level that SAG Niederbipp would be relying on tried-and-tested solutions and partners. The long-standing collaboration with Infios therefore continued.

At that time, less than a decade has passed since the two long standing successful family businesses Derendinger AG and Métraux Services SA joined forces: The two leading suppliers of automotive spare parts in Switzerland merged their businesses to form Swiss Automotive Group AG. As part of the merger, the Swiss national warehouse was relocated within Switzerland from Oensingen to Niederbipp. SAG completed the move within three months, while ensuring that logistics operations remained fully operational throughout.

At a glance

Project goals

- Increased automation and goods availability
- Optimization of product line control
- Increased flexibility to handle incoming goods

Solution

- Infios Warehouse Management (WM)

Features and benefits

- Shifting the order load to the country warehouses
- Seamless integration of AutoStore, picking stations and the conveyor system
- Efficient picking strategies via Pick-by and put-to-light
- Standardized mobility

This was possible due to precise preparations by SAG and the adaptability of the Infios WM, their chosen Warehouse Management System (WMS). The goods to be moved were transported by shuttle from the previous warehouse to the new location; a total of 160,000 items on 12,000 pallets. At mobile workstations, so-called caddies, master data was held available that every movement was under control.

In addition, optimization measures were carried out at the new national warehouse. The areas were designed to meet the requirements of the various product lines, ranging from bulk goods (automotive glass, chassis parts) to tires and small parts. SAG manages a total of approximately 250,000 products in the new national warehouse with Infios WM. In goods receiving and goods issue, processes are mainly supported via mobile devices. The integrated dashboard provides the necessary transparency to optimally use the resources in the warehouse. However, the focus is on the provision of goods at 28 ramps, which are controlled and automatically distributed via the logic of the Warehouse Management System.

These things are immediately apparent when taking a first look at the new national warehouse: SAG places great importance on mobility. Industrial handhelds with 2D scanners and large displays are available in all warehouse areas. The mobile solution of the WMS ensures efficient distribution and picking of goods, which, in combination with finger scanners, considerably reduces errors during picking. However, that was not all. The caddies mentioned above are also used in the goods receiving area. Equipped with touch screens and label printers, SAG has established a high level of flexibility in goods receiving with these mobile workstations including direct quality assurance measures.

A special innovation in the new national warehouse is the automatic storage and retrieval system AutoStore®. In the fast moving small parts area for vehicle parts, the central supply concept with nationwide delivery capability places high expectations on fast and efficient picking. 168,000 stacked containers are handled by about 80 robots that transport the containers to the goods receiving and goods issue ports on a grid. This is how SAG has significantly reduced classic shelf structures in the new national warehouse.

The employees at the AutoStore® ports can communicate with it via WMS functions. The Autostore® system provides the containers for picking via the port. Infios WM determines the sequence of activities. The ports themselves have Pick-by-Light or Put-to-Light systems with PickTerm displays.

Thus, the pick-by or put-to-light processes are supported by light points that indicate to the employees the compartments of the Autostore® totes for picking or putting away the items. The PickTerm display in the goods issue area shows the employee which of up to 16 target locations to use after removing the item from the AutoStore® tote.



“Based on their experience from other projects, Infios convinced us in advance that they could implement automated warehouse solutions in a timely manner and in line with our requirements.”

Daniel Rölli
Head of Logistics, SAG Schweiz AG

When an order is completed or the target container is full, the system sends him a visual signal to move the container onto the conveyor system. The target container is transported fully automatically via the conveyor system controlled by the Infios WM solution until it is ready in front of the ramps. Source containers are placed back into the AutoStore®.

Fortunately, the relocation of the national warehouse is already paying off. The short order closing times could also be met with automation. The availability of articles has been increased to over 98% by centralizing the flow of goods. The new logistics complex in Niederbipp forms the heart of the logistics network, which comprises a total of 56 regional and branch warehouses in Switzerland. Sophisticated assortment control is used to optimally distribute the articles from Niederbipp to the storage locations. Efficient IT processes ensure that brakes, clutches, etc. of any vehicle brand can be handed out on time or delivered by tour.