

WMS AND PICK-BY SOLUTIONS ACCELERATE LOGISTICS PROCESSES AT NIPRO

**„NOW, WE ARE IDEALLY POSITIONED FOR FUTURE GROWTH“**



#### Customer

- Nipro PharmaPackaging Germany GmbH (part of Nipro Corporation Japan, over 35,000 employees worldwide)
- Year of foundation: 1920
- Employees: 500 (Münnerstadt)
- Industry: medical technology, pharmaceutical and pharmaceutical packaging industry
- Annual production of over 200 million glass syringes and bottles

#### Challenge

- Manual warehouse without Warehouse Management system
- Picking on the basis of person-based knowledge and paper lists
- Inventory management with ERP system (SAP MM-IM)
- Limited warehouse capacities

#### Solution

- SAP Warehouse Management (SAP WM) for warehouse management
- Picking via hand-held scanners: use of the UI5 Creator for optimized and responsive screen dialogs
- Consulting and Customizing

#### Benefits

- Structured warehouse management accelerates internal logistics processes
- Hand-held scanners easy to operate facilitate work and satisfy employees
- Possible increase in sales through efficient warehouse working

Companies with very large annual production quantities have particular demands on warehouse management processes. Nipro PharmaPackaging Germany GmbH, a Bavarian supplier of pharmaceutical products, has digitized its supply chain to optimize the internal material flow. A specific innovation the warehouse workers now use is an innovative solution for mobile terminals that designs the work with hand-held scanners ergonomically and is easy to operate.

Nipro PharmaPackaging Germany GmbH headquartered in the Lower Franconian town of Münnerstadt is part of Nipro Corporation Japan, which is one of the world's leading companies in the field of healthcare. In Münnerstadt, approximately 500 employees work in two plants. Here, Nipro manufactures more than 200 million glass syringes and glass bottles for the pharmaceutical industry every year. The ambitious growth plans include a doubling of these production quantities by 2030.

*„Limited warehouse capacities as well as more and more complex production processes forced us to optimize our warehouse processes to guarantee this planned company growth,“*

Jens Niebling,  
supply chain specialist at Nipro PharmaPackaging Germany GmbH

#### Aim: optimization and digitization of material flow

One obstacle for the intended growth was that the warehouse stocks were not managed by means of a Warehouse Management system in the past. The stocks were not stored in storage bins with defined storage bin numbers or coordinates. The trained warehouse workers only knew the hall where the goods were stocked before they started their time-consuming search. It was also a problem that they could not withdraw older stocks close to the expiry dates first because they were not informed on the storage locations of these stocks. Therefore, Nipro's reorganization aimed at digitally supporting and optimizing the material flow and, as a consequence, the internal supply chain.



Due to the positive experiences with the SAP retailing software in the past, Nipro decided to also use the SAP warehouse management software (SAP WM or SAP Warehouse Management). For this purpose, Nipro invited FIS Informationssysteme und Consulting GmbH, a long-standing partner of SAP, to assist them.

In 2020, Nipro and FIS started a shared project to digitize warehouse management and design a more efficient material flow.

„Since we had to implement the new system during running production, we did not want to plan too much and split the project into two subprojects,“ explains Martin Ochs, senior solution architect at FIS. The first step was the implementation of coordinated storage bins in the warehouse and SAP WM as a tool for organized and software-based warehouse management. The previous paper-based work was switched to hand-held scanners and radio data transmission. Once the digitized stockholding for finished products had been implemented in the first subproject, the second step is now being prepared: automated production supply. This means the provision of intelligent replenishment transactions for the production as well as new smart withdrawal strategies for optimum use of space.

### Automated material flow without manual postings

The implementation of the logistics software has considerably improved the efficiency of the supply chain. „If today a production order is released, SAP WM automatically determines where in the warehouse the goods or materials can be found and what should be used first and it communicates this information to the mobile terminals by means of a transfer order,“ as Ochs describes the individual steps of the new software solution. Manual postings by employees therefore become unnecessary. By scanning the bar codes, the withdrawal and issue quantities of the goods at each storage bin are verified and updated in the ERP system. Then, the warehouse workers pick the goods and take them to the intended bin. Here as well, SAP WM automatically determines the appropriate storage bin and displays it on the terminals of the employees.

The putaway process is executed in a similar way. The employees scan the goods received, which will directly be updated in the ERP system. Next, SAP WM determines the ideal storage bin for the goods and displays it on the terminals of the warehouse workers. This is where another FIS development comes in avoiding that new materials will directly be placed in front of older ones in the bulk storage. Consequently, the new products are put away in a different shelf space. This ensures that the older materials and goods can be picked first during the next withdrawal of goods.

*„In this way, we created an automated material flow without manual postings and with a complete real-time communication between all employees and systems“*

Martin Ochs,  
FIS Informationssysteme und Consulting GmbH

### User-friendly working with mobile terminals

The new UI5 Creator developed by FIS for mobile terminals was a special highlight of the shared supply chain project. This innovative FIS product enormously facilitates the workflow of the warehouse workers. The Creator converts the ITS-mobile HTML application into a user-friendly HTML5 (SAPUI5) application. „The UI5 Creator makes our employees benefit from a flexible and responsive display of dialogs on the terminals. They can adjust the display on the hand-held scanner ergonomically, zooming is much easier for them or they can select different color settings according to the lighting conditions in the warehouse. This considerably facilitates the daily work in the warehouse,“ explains Niebling.

Another advantage of the FIS solution is that the hand-held device will not display an error page if the WLAN connection is

broken, for instance, due to an employee working in a remote warehouse area without sufficient WLAN coverage. Instead, the device automatically reconnects to the Internet again via “Reconnect” and the employee can continue working without interruption.

The digitization of stockholding was very well accepted by the employees all the more so as they were integrated into the project at an early stage. Nipro is completely satisfied with the new gain in efficiency. „The holistic logistics consulting by FIS is the best preparation for our targeted growth,“ Niebling sums up.

### Further shared supply chain projects planned

Efficient and digital processes within the supply chain are the basis for sustainable growth and increased competitiveness. With the IT solutions and SAP consulting by FIS, the Bavarian Nipro PharmaPackaging Germany GmbH has structured and organized its internal corporate logistics in such a way that the processes are now largely automated. In the future, both companies continue their cooperation for further logistics optimizations, such as a digitally-supported production supply at Nipro. This makes the company ideally positioned for the implementation of its ambitious expansion strategy.





## Nipro PharmaPackaging Germany GmbH

Nipro Europe Group Companies is part of Nipro Corporation Japan, which was founded in 1954 and is one of the world's leading companies in the field of healthcare. With over 35,000 employees worldwide, Nipro operates in the field of medical technology and pharmaceutical and pharmaceutical packaging industry.

Nipro PharmaPackaging Germany GmbH is headquartered in Münnernstadt and manufactures high-quality glass syringes and glass bottles for the pharmaceutical industry in two plants with approximately 500 employees. The production facilities provide state-of-the-art technologies as well as manifold packaging options both in bulk and direct-to-fill design.



## FIS Informationssysteme und Consulting GmbH

FIS Informationssysteme und Consulting GmbH is an expanding and independent enterprise and the roof of the FIS Group, which employs more than 800 persons making companies more modern, economic and competitive every day. FIS focuses on SAP projects and the development of efficient solutions promoting digitization within companies. As one of the leading value-added SAP resellers in Germany, Austria and Switzerland, FIS is the market leader in technical wholesale with the all-in-one FIS/wws solution.

Together with its Medienwerft subsidiary, FIS covers the complete range of SAP topics in the field of Customer Experience (CX). More than 100 specialists operate and administer the customers' SAP systems in the FIS-ASP subsidiary data centers in Southern Germany.



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