



Error-free and guided: How CAPRON controls transport and picking processes with Smart Watches

USE CASE

CAPRON GmbH, part of the Erwin Hymer Group, produces Sunlight and Carado motorhomes and camper vans in Neustadt in Saxony. CAPRON relies on NIMMSTA Smart Watches to efficiently control increasing production volumes and complex internal material flows, and the combination of transport control and digital picking has modernised internal production logistics, reduced errors and created real-time transparency.

Particularly strong: direct integration into the MES via Orchestra - without media discontinuity, with continuous data flow.

CAPRON

INDUSTRY
Motorhomes & camper vans

RESULTS

- Real-time transparency: clear overview of material flows, transport processes and current location data
- Controlled production flow: Automated control takes account of workstation occupancy and machine statuses
- Error minimisation & traceability: Visual and acoustic feedback reduces errors, all material movements are fully traceable

FIELD OF APPLICATION

Smart Watches are used for transport control and order picking in furniture prefabrication

PARTNER





About CAPRON GmbH

CAPRON GmbH, founded in 2005, is a development and production site of the Erwin Hymer Group, Europe's largest manufacturer of leisure vehicles. CAPRON manufactures Sunlight and Carado motorhomes and camper vans in Neustadt in Saxony.

Challenge

As production volumes increased, so did the complexity of the internal material supply. Transport control was carried out manually using material slips and target workstations were controlled based on empirical values. There was a lack of real-time transparency, structured control and feedback. In order picking, it remained unclear whether scans were recorded correctly - a risk factor for quality and efficiency.

Processes with Smart Watches

CAPRON decided to use NIMMSTA Smart Watches in furniture prefabrication. The focus was on two central use cases: digital transport control and optimised order picking.

Today, the transport control system uses the Smart Watch to link the transport unit and material slip directly. The material slip is scanned, the subsequent target workstation is shown directly on the display and the appropriate transport unit is then scanned. Successful assignment is immediately signalled to the user by visual and acoustic signals. The data is transmitted in real time to the Manufacturing Service Bus (MSB), where it is processed and displayed on the worker terminal. The result is a stable, continuous material flow with complete transparency.

The Smart Watches also ensure a significant improvement in **order picking**. When scanning components, employees receive immediate feedback: a short acoustic signal and a green light indicate a successful scan, while a red light and an error message indicate incorrect entries. This feedback allows errors to be recognised and corrected immediately without having to go through the ERP system. This reduces incorrect deliveries, saves time and increases security.

Integration with soffico and Industrie Informatik

The connection to the MES system cronetwork from Industrie Informatik was realised via the Orchestra integration platform from soffico. A specially developed channel enables communication between NIMMSTA and the MES via Web-Socket. Data processing takes place via a Juno instance on the terminal computer, with the booking logic being outsourced centrally to the MSB. The visual interface of the Smart Watch can be flexibly customised and thus forms the basis for needs-based control directly at the workplace. The entire

system architecture was implemented in a stable, modular way and without media discontinuity.

"By implementing the NIMMSTA Smart Watch, we were able to optimise our production logistics and raise them to a new technical level. We now benefit from high real-time transparency, a reduced error rate and controlled production flows."

Joane Winkler, Project Manager at CAPRON GmbH

Measurable optimisations

Since the introduction of the NIMMSTA Smart Watches, CA-PRON has been able to achieve measurable improvements in daily production. The significantly increased transparency of material flows and processing statuses has had a particularly positive effect. Material movements are now fully traceable and controllable, an important prerequisite for stable production processes.

The error rate in order picking has been reduced by around 5%, which has a direct impact on the quality and reliability of the processes. At the same time, digital control ensures more even utilisation of workstations and reduces bottlenecks. Employees benefit from fewer queries, less searching and clear instructions directly on the Smart Watch display.

The direct feedback from the workforce is also overwhelmingly positive: Ease of use is rated 9 out of 10 points, with hands-free working even receiving the highest score of 10. The ease of use, visual feedback and seamless access to information in the work process are particularly appreciated.

Outlook

Its successful use in furniture prefabrication forms the basis for further applications. There are plans to extend it to other prefabrication areas and possibly to logistics processes and, in future, directly to the assembly line. The scalable solution offers CAPRON the flexibility to grow dynamically with future requirements.



Über NIMMSTA

NIMMSTA ermöglicht High Performance Picking mit der weltweit ersten Industrial Smart Watch, wodurch die Intralogistik grundlegend revolutioniert wird. Die optimierten Picking Workflows werden auf der innovativen Smart Watch dargestellt. Durch die bidirektionale Interaktion zwischen Werker und WMS laufen die Picking Prozesse bis zu 50 % effizienter ab. Zudem wird dadurch eine Null-Fehlerquote erreicht. Der hohe Tragekomfort durch die ergonomisch individuelle Platzierung begeistert die Logistiker.