



Reference report



Arvid Falkenberg

2 +49 371 2371-191 **E** +49 151 19492684

4 +49 371 2371-150

E-Mail: arvid.falkenberg@sigma-chemnitz.de **Internet:** www.sigma-chemnitz.de/en

About SIGMA

As a renowned system house group, the SIGMA Group acts as a system integrator and partner of renowned providers in the IT sector. The more than 80 employees of the group form a competent team at the locations Chemnitz and Dresden. With knowhow, competence and more than 30 years of experience we offer our customers reliable and powerful IT solutions.

About our AutoID and RFID solutions

AutoID and RFID solutions for production, logistics and supply chain. Our customers appreciate us as competent, innovative partner, to accompany them from the initial problem analysis until the goal with commitment. Many years of project experience of our employees form the foundation for effective Auto-ID and RFID solutions for production, logistics and supply chain.

About the customer

Carthago Reisemobilbau GmbH is a German manufacturer of high-quality motorhomes and camper vans based in Aulendorf. A second plant was opened in Odranci, Slovenia, in 2008. The company is characterized by its many years of experience and expertise in the field of mobile travel and is known for the production of premium motorhomes. These impress with their quality, innovation and sophisticated equipment and are manufactured using state-of-the-art production facilities.

Digitization of production - resource-oriented business information system (ROBI) from prototype to 120 digital workstations in 2 plants



www.carthago.com

Digital feedback system optimizes production at Carthago

In the joint digitalization project between Carthago Reisemobilbau GmbH and SIGMA Chemnitz GmbH, the production of assemblies for motorhomes was considerably simplified and accelerated thanks to digital feedback. The workstations were equipped with tablets that immediately display the project overviews and corresponding production orders clearly for each worker.

The extensive design drawings and article images from the customer's document management system are automatically selected and provided so that they can be displayed and enlarged on large screens in the production hall via the tablets. From the overview to the parts list and individual item level, all data is available in digital form (Fig. 1).





Figure 1

Process optimization through innovative features

The implemented key functions - completion notification, connection agent, MDM system and language selection - support and accelerate the processes:

- The interface to the ERP system, implemented using INFOR webservices, guarantees the smooth retrieval of current data, completion notifications and repeat orders a crucial component for efficient production feedback and evaluation.
- The "Connection Agent" enables all stations to work in parallel, both online and offline, with automatic switching between modes for a smooth and synchronized production process and maximum efficiency.
- App integration into Mobile Device Management ensures that updates and settings are imported centrally without any manual adjustments to individual devices.
- Intelligent localization and language selection further optimize user-friendliness and enable even more intuitive use.
- The local version management system for the design drawings informs the worker immediately about updates to the documents used and provides a direct information path from design to production.

Successful implementation in 3 integration stages

It took just 9 months from the idea to implementation in 3 integration stages, from prototype to ROBI Light to ROBI Heavy. Close teamwork, simultaneous live conferences, video-supported coordination and flexible reactions to changing framework and delivery conditions were the key to the success of the commissioning.

The implementation eliminated the team leaders' booking work and the printing of parts lists and plans. This led to considerable cost and time savings.

This is what the customer says...

"Avoiding paper and moving towards digitalization - that was our challenge.

Our intention was to abolish the printing of production papers in production. The worker can now call up data individually for each motorhome. The resulting reduction in costs and the advantage of always being able to provide the worker with up-to-date data, such as assembly instructions, drawings, parts lists or graphical representations of articles, online, have led to a significant increase in productivity and a further improvement in quality.

Together with SIGMA, it was possible to set up our ROBI information system. Knowledge sharing and good mutual cooperation led to the successful integration of the system into production.

This enables Carthago to continue to stand uncompromisingly for the highest quality, ideas and innovation."

Technical management, Carthago d.o.o.