



ela[container]

More productivity:

full transparency in real-time - no need to scan!

For a complete overview, ELA Container trusts the Warehouse Execution System (WES) software solution from identpro to reliably localise and identify its containers to the nearest second and centimetre.

The northern German company ELA Container from Haren (Ems) produces and configures mobile room and building solutions from containers. As a globally active company with 21 locations and more than 60,000 containers in its rental park, ELA was looking for smart digitalisation to minimise time-consuming search processes and increase productivity. The aim was to optimise the use of resources and the transparency of container stocks and storage processes.

INITIAL SITUATION

Until now, container management was carried out manually and without systemic support, which resulted in a high search and administration effort. In addition, the large number of containers and their wide range of variants made fast workflows difficult. The consequences included long search times for container solutions and waiting times for the trucks to be loaded.

REQUIREMENTS

- 100% overview of the entire container rental park
- Elimination of search times & manual inventory monitoring
- Intelligent distribution of transport orders
- Optimise truck loading
- Scan-free processes: no manual bookings
- Centralisation of process knowledge in the software
- Automation of bookings using real-time localisation (3D position data)

THE GOAL

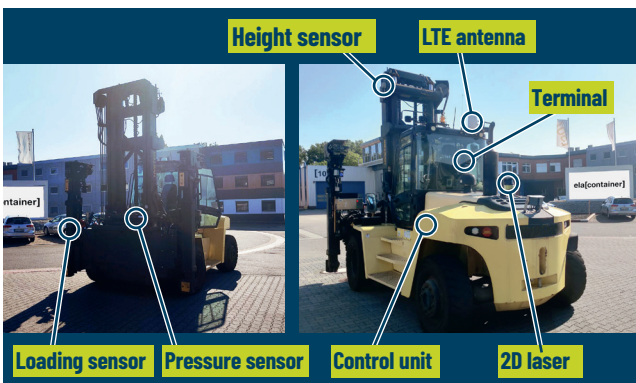
In order to meet increasing customer requirements and maximise process efficiency, the goal was clear: to achieve 100% transparency across all container stocks in order to increase the overall performance of the processes. For this reason, ELA opted for identpro's Warehouse Execution System to optimise the existing processes and thus significantly improve productivity.



Driver's view of the forklift terminal

MODERN LTE TECHNOLOGY

To ensure that all warehouse processes are tracked in real-time, a stable network is important for the software solution. For this reason, the first phase involved switching from WLAN to future-proof LTE technology. The number of containers in the rental park increased over the course of the project, so that the stacking of the space solutions was increased from two to three times. The switch to LTE technology was the right step, as the containers in the new stacking system reach a height of 9.0 metres and the robust container walls would no longer have allowed WLAN signal to be transmitted.



100 % TRANSPARENCY: SEARCH-FREE WAREHOUSE WITH RTLS

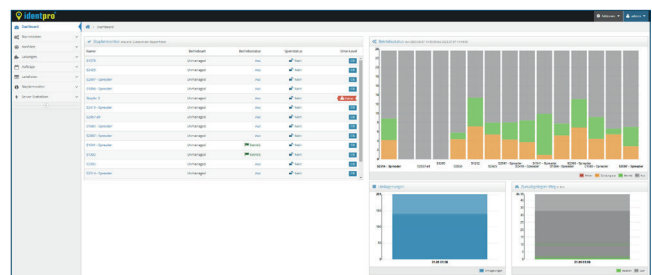
In the following phases, the industrial trucks were equipped with robust LiDAR sensors to record the surroundings and all movements to the accuracy of centimetres and seconds. In addition, the containers were linked to the WES and software modules were set up to create the digital twin in real-time, visualisation and a 3D forklift guidance system, among other things. At the same time, the employees were trained and enthused about the topic of real-time data from the warehouse. Malte Andresen (ELA) explains: „It was very important to us that knowledge about our warehouse is available to all employees at all times. This is only possible if all processes are recorded immediately. The benefits of this real-time data were quickly recognised and internalised by everyone, both inside and outside the project. It simply makes all processes much easier.“

QUICKFACTS

- > 10 Spreader & forklift trucks
- Rooms & buildings made from containers
- 50,000 containers in the rental park
- Loading time optimised from 2 h to 10 min
- 100% stock reliability, error-free shipping of goods
- ROI under 15 months

REAL-TIME DATA AS A GAME CHANGER

Since September 2022, the stock of containers has been systematically recorded. Evaluations of warehouse data (forklifts, containers, routes, etc.) help to optimise overall planning. Data bases for future decisions, such as further warehouse optimisation or route optimisation, are now possible. If a forklift picks up containers at the transfer point, the information is automatically displayed on the forklift terminal without the need for manual scanning. The next step will be to roll out the innovative warehouse execution system at other locations.



STATEMENT

Michael Gerdes from ELA Container on the success of the project: „ Prior to identpro, we didn't know exactly how many containers would actually be moved, where they would be located and when they could actually be loaded. Searching was a huge time consumer for us. Our specialised staff can now concentrate on the essentials and no longer waste time searching!“

