

Use Case



PORTABLE DEVICES

Pick by Voice & Cognis

Optimum Material Supply in a Kanban Process Using Pick by Voice and Cognis®

Initial Situation

ACD Elektronik GmbH has relied on the kanban principle for in-plant material supply in production for years. The island manufacturing set up for all fast moving ACD products requires all material needs be present on the manufacturing island, while material availability must be ensured by the kanban principle. To ensure optimum stock of purchased parts and semi-finished goods, every article must be created and administered in the system.

To resupply the manufacturing islands as required, the empty kanban containers were collected several times a day from the manufacturing islands – in fixed routes – and filled with the required materials again in the warehouse. The article number of the empty kanban container was recorded with a mobile terminal to determine information such as the storage location and quantity to be removed. After confirmation on the M210SE mobile terminal, the quantity removed was directly closed out from the ERP system. Often this meant long and especially double walking distances, since the articles had to be order-picked little by little without an optimized route. It was a very time-consuming process. In addition, the mobile terminal always had to be set to the side while the containers were being filled.

Procedure

To further optimize material supply using the kanban principle, Pick by Voice was introduced with the help of Voxter® Elite. To adapt the voice solution as closely as possible to the specific kanban processes of the company, the entire procedure was analyzed in advance. The flowchart created on this basis then allowed for implementation in the development environment.

Result

After the empty kanban containers reach the warehouse, they are entered in the system in collecting containers by a fast one-time scan. Then the scanned data is transferred online to the system. This one-time scan process is still necessary to map out an optimized pick process for each collecting container for ACD's internal Cognis® voice solution.

The Cognis® voice solution, which is ideally suited for small and medium-size warehouses, allows the user to start the order picking process by saying the number of the collecting container. Cognis® receives all included kanban containers via the interface and determines the best order of picking to optimize total distance. The voice software reads out all the necessary information such as storage location, article number, quantity to be removed and check number. In addition to the very low error rate, the Pick by Voice approach also saves considerable time with plausibility checking. The employee always has both hands and eyes free.

The introduction of Pick by Voice within the kanban environment was a complete success at ACD. With Cognis® and Voxter® Elite, all the advantages of voice-based order picking now come into play: Significantly faster picking output, lower error rates, and time savings due to optimized distances. For production this means faster material supply of the manufacturing islands. Work safety of employees is also improved, since both eyes and hands are free.

