

Case Study

LOREL: inconso WMS Automotive

Production-synchronous supply



Customer profile

Just six kilometers from the Daimler plant in Bremen, LOREL GmbH consolidates parts and modules from 270 suppliers in a 30,000 m² warehouse on behalf of the leading automotive manufacturer. Here the parts are stored, picked and production-synchronously sent to the production line. The processes are controlled with inconsoWMS Automotive. A central, unique selling point of the system: It enables LOREL to equip sets for production supply across suppliers.

The Project

In 1999, LOREL took over storage and just-in-time delivery tasks from Daimler AG. The vehicle manufacturer pursued the goal of bundling its supplier network in a supplier logistics center and thus increasing production efficiency.

In order to satisfy this demand, LOREL worked together with inconso to integrate the delivered parts just-in-time and just-in-sequence into the production processes. Since the warehouse location was already too small after only a few years, a new warehouse was built and inconsoWMS Automotive was implemented. After the new location opened in 2009, LOREL not only supplied the assembly line production-synchronously, but also delivered other goods to the plant. Today, regional carriers drop off all of their goods at LOREL. The goods are separated during Goods Receiving with system support. The

factory goods are cross-docked into the Goods Issue zone and immediately transported to the plant by shuttle truck. With this additional task, the center was given the status of plant consolidation center (PCC) and was the first of its kind to combine all functions at a single site.

The solution

Even the receiving control of the up to 160 trucks per day is influenced by the customer's pace. Time slots are allocated to the carriers and processing is assured within one hour. At the only „one entry point,“ the delivery notes of the trucks are compared with the advance ship notices and the load is simultaneously recorded in inconsoWMS Automotive and drivers assigned the unloading and loading points. While parts delivered by CEP services are repacked onto their own load carriers in Goods Receiving, employees accept the truck loads. The quality of the goods is checked, the barcode is scanned, internal package numbers are assigned and a label with the details for further processing is attached to the load unit. Approximately 6,700 containers are received every day. 1,700 leave the warehouse as soon as they are cross-docked and sorted into trips based on their unloading points in the plant. The remaining goods are stored according to a series of scaled criteria at the approximately 25,000 locations in the shelf and block storage areas.

Each shelf location is equipped with an RFID tag. The drivers of the reach trucks pick up the goods and receive the

target storage locations. During the store-in, the location is confirmed by reading the RFID and then uploaded to the online system.

inconso supplied the IT hardware required for the entire system and integrated the RFID technology. Store-out is also controlled by the inconso system, which provides a uniform order pool and picking replenishment. This increases the flexibility of the processes: Since the forklifts are controlled centrally, almost any forklift can be used for any job.

In order to guarantee the exact timing of the production supply (JIS), LOREL receives impulse call-offs for the individual vehicles based on production planning. They contain the product number, shift number and installation time. The system virtually builds the racks for the consumption types and triggers picking. The sizes and shapes as well as the assembly sequence are taken into account. Replenishment for picking is organized according to minimum quantities or on the basis of existing demand. All replenishment is paperless and occurs via the integrated transport control system. This makes 250,000 picks per month possible. LOREL has 90 minutes starting from the receipt of the impulse call-off until the goods have to be loaded.

To this end, the time of each movement is monitored during picking. inconsoWMS Automotive's dashboard is the heart of order monitoring: Here, call-offs are compared with available capacities in real time, trips, picking pools and processing times are monitored and urgent telephone orders accepted, which are prioritized through a special process and sent to the plant in express vehicles. However, regular traffic is also considerable. A shuttle transport departs from each of the five gates every 24 minutes, so that 155 tugger trains with about 5,000 load units leave the PCC every day. Each trip encompasses up to three unloading points, during which empties are picked up that are sorted separately and made available again.

At a glance

Customer

LOREL GmbH

Project Goals

Bundle the supplier network
Increase efficiency

Product and solutions

inconsoWMS Automotive

“With inconsoWMS Automotive, we have further increased our efficiency and performance and are able to control supplier-independent processes that others do not. We are even better able to meet the requirements of our very discerning customer to their complete satisfaction.”

Frank Boblat,
Director of Operations Management, LOREL GmbH

