

Hettich Logistics Centre, Bünde - Logistics perfectly planned, tracked and implemented



*Fully-automated
warehouse and
case calculation for
optimal efficiency*

Hettich International, one of the world-leading furniture fittings manufacturers, manages its new central logistics centre at the Bünde site using PSIwms – software which not only controls the highly mechanised fully-automated warehouse, but also calculates the optimal handling unit and the picking start date for a just-in-time staging of the orders.

The logistics centre which went into operation in 2006 essentially consists of an automatic high rack storage area with 20,000 pallet bays. It is operated with 8 pieces of shelf access equipment, which are equipped with a double fork in each

case. The picking area consists of 14 picking bins, of which there is a special long goods location and a special packing location. Another location is specially provided to process small quantity orders and essentially handles the shipping orders which were sent using the Express Shipping Interface service provider using an add-on tool connected to the WMS (Warehouse Management System). The main workload for picking on average 120 handling units/hour is carried by 11 large quantity picking bins.

The processes

Goods receipt, picking, packaging and loading are managed entirely without any papers. The transfer orders are dynamically navigated using the forklift control system to supply and dispose of approximately 20 staging areas for shipping. Using Yard Management in PSIwms, incoming freight vehicles are assigned to the pending deliveries. The driver takes his destination from a special outdoor display panel at one of the 15 loading doors.

Every process in the logistics centre is managed by the central material planning, which compiles the optimal volume and weight for the freight vehicle deliveries using the planning control station and the case calculation. Thereby, the expected number of handling units is already calculated at an early stage from the sales orders. In this case, the case calculation takes the weight and volume of the articles into account, identifies partial pallet quantities, article combinations which cannot be packed together and those which must be packed together. The weight, stackability and additional handling units to be loaded externally are also included in the calculation. With the resulting precise knowledge of the time and size of the required freight vehicle, Hettich could decrease the transportation costs and increase the planning reliability.

With the start of the picking, the case calculation is even more precise. It takes the actual stock situation into account and ensures that the handling units from the warehouse provided for shipping, which are preferred for the fulfilment of the

delivery must no longer be picked. Even the required load security is identified and either outwardly transferred directly or the load is also secured using pick/pack bins, therefore the stretchers are automatically triggered by the WMS (Warehouse Management system), the strapping and even the strapping specification is provided.

For the remaining handling units, the picking bins are supplied with the necessary source pallets, whereby they are offered to the employee in the correct sequence.

Dynamic assignment of tasks

At the heart of the logistics centre is the central management. Here employees identify the current status of the installation at any time using figures and visualisation and can predict the short-term status on the basis of the pick progress and the order status. The response to this is letting the picking bins breathe dynamically. In addition to the integrated automatic load distribution of the orders on the picking bins, dynamic functions, such as packing, inventories and small and large quantity picking can be activated or cancelled by the picking bins.

Dynamic task assignment to the bins according to the load

PSI Logistics GmbH
Dircksenstraße 42-44
D-10178 Berlin
phone +49 / 30 / 28 01-28 50
fax +49 / 30 / 28 01-28 51
www.psilogistics.com
info@psilogistics.com