PGB

About

PGB-Europe is a producer and distributor of fasteners- and fixings materials. The company, located in Belgium, Poland and Asia, wants to serve end-consumers and distributors in the most efficient way. On the base of the logistics concept and after an in-depth selection, the WMS-solution Dynaman was chosen with C&W logistics as preferred implementation partner.

The Project

IT Environment

- PGB uses the ERP solution SAP. A real-time integration between both systems was facilitated by means of the C&W Supply Connector tool.
- Next to integration with the ERP, integration with software of different forwarders (like DPD, Sobeltax, Dascher) was put in place by means of the C&W carrier integration platform.

Inventory and Environment Characteristics

- A wide range of products (80.000 SKU's) with a large diversity in terms of rotation.
- Different handlings units from the same SKU within different warehouse zones.
- Products occur in multiple handling units (piece/inner carton/outer carton/pallet).
- As a result, different kinds of storage methodologies and infrastructure are found within the PGB environment (shelving,pallet racking, Miniload, high bay).
- The complete tracking & tracing within the WMS to ensure that the lifecycle of every product on container, and lot-level be reconstructed.
- Complete support of multi-level container structures (Parent-Child) in inbound, storage, replenishment and outbound processes.

Warehouse Automation

Within the warehouse, a set of different automation methodologies are used.
The following automations were integrated with the WMS:
- Miniload Alvey for inbound and outbound
    1. 20.000 miniload movements per day
    2. 7.500 orderlines per day
- Outbound sorter for pallet building by Alvey
- High bay warehouse for bulk inventory by Dematic
- Pallet AGV's for internal pallet movements by Dematic

Processes

I. Reception, Conditioning and Storage

- Receipts are communicated by SAP through ASN information in the WMS.
- Determination of the destination of goods to the optimal warehouse zone by inbound routing in WMS.
- Splitting of amounts to the repacking location in response to the conditioning for the Miniload.
- Put away towards high bay or narrow aisles with split tasks (AGV/reachtruck till drop, afterwards AS/RS or narrow aisles truck).
- Inbound replenishment where pick-locations are replenished directly from reception.
- Forwarding of Cross docking tasks during reception on the base of allocations.
- Inbound Miniload through inbound conveyor.
- Conditioning of goods towards specific Miniload boxes of different formats.
- Put away Miniload based on:
    1. Balancing capacity of the cranes in the Miniload
    2. Scattering goods for redundancy in case of crane disruption
    3. Rotation classes of the goods
- Put away of pallets based on optimal pallet and location volume.

II. Picking and Replenishment

- Automatic determination on the base of picklists/outbound shipments:
    1. Type of shipment: Pallet or collie
    2. Courier service for collie shipment
- Automatic determination of the logistics flow:
    1. Pallet only
    2. Miniload only
    3. Mix estafette (in line consolidation => Miniload picking-drop down-rack picking)
    4. Mix separate (on the base of individual volumes, no need for estafette consolidation)
- Integration with carrier for printing of transport company -specific label
- Dynamic Picklocation in rack warehouse for A- movers
- B/C-movers through bulk picking
- Release picking on the base of:
    1. Due date / cut off time
    2. Workload of all warehouse zones
    3. Order volume
- Replenishment of:
    1. Rack location on the base of replenishment point (round up pallet)
    2. Miniload on the base of replenishment point (min-max)
    3. Automatic VAS for repack when shortage occurs

III. Consolidation and Packing

- In line consolidation of goods during the picking process (Miniload => Racking).
- Packing and detail packlist per pallet.

IV. Shipping

- Day shipments by courier service DPD.
- Pallet shipments by Sobeltax, Dascher.
- Pickups in the warehouse (counter orders).
- Printing of shipping documents.

V. Internal Logistics

- In and offline cycle counting on the base of configurable cycle counting groups.
- Task driven reshuffe.
- Dynamic ABC management.

VI. WMS@PGB Towards the Future

- WMS implementation of the production plant in Poland.

Contact

For further information, contact **Marc Pennoit** (Owner/Logistics Manager).