+ Production Logistics

MV WERFTEN Wismar GmbH

The MV WERFTEN Group, based in the German state of Mecklenburg-Western Pomerania, operates three shipyards. The company is part of the "Genting Hong Kong" (Genting HK) Group. Genting HK has been building cruise ships for the shipping companies belonging to its group at the three traditional shipyard locations of Wismar, Rostock and Stralsund since 2016. More than 2,900 employees and a total of approx. 1,750,000 square meters of area of shipyard are available for this purpose.

The challenge

While the company once built civilian ships of all types, today its three shipyards build luxurious expedition mega-yachts and the world's most technologically advanced cruise ships. This not only increased the dimensions of the ships, but also the number of employees, the amount of material and the construction time by a multiple. Materials management,

Information

+

Industry: Shipbuilding
Warehouse locations: Wismar, Rostock, Stralsund (Germany)
Employees: > 2.900

Deployed software: PSIwms
Implemented interfaces:
+   ERP-System (V10 Projector)
+   Material flow computer (U.C.S. Industrie-elektronik)

+ Reference project

> *The project was realized on time and on budget. The cooperation with the project participants was smooth and solution-oriented. We enjoyed realizing the project with PSI.*
>
> *Head of Team Storage MV WERFTEN Wismar GmbH*

which had previously been managed with a lot of employee knowledge, was no longer sufficient to cover the complex requirements. MV WERFTEN was therefore looking for a WMS solution that would meet the new demands in production logistics and ensure transparency and timely delivery to the construction crews.

The solution

After a classic selection process, the decision was made to implement PSIwms, among other things, due to the verifiable references. The project was divided into several subsections. In the first phase, the warehouse in Wismar was integrated, processes defined and the required interfaces to the ERP were programmed. In the further subsections, the experience gained and developments made served as a blueprint, which was adapted as needed to site-specific peculiarities.

Today, PSIwms controls the goods receipt, storage and order picking as well as the goods issue of the ships' equipment material for all three locations. In addition, it regulates the exchange of information on inventory across locations, and the necessary information is synchronized with the ERP system via an interface.

Deliveries are recorded as Colli-TE based on the specific delivery notes before unloading and routed to the correct goods receipt location when PSIwms starts processing the shipping notification. In addition to the batch and serial numbers recorded in PSIwms, each article is also assigned a component number. It is later used to document which article was installed at which location. This results in various use cases, which are considered in the goods receipt and order picking process. The material supply between logistics halls and production is carried out with route trains via collective transports. Order prioritization stored in PSIwms based on remaining lead times ensures the necessary adherence to schedules.

Third-party manufacturers notify their own handling units to logistics via web access. The delivery documents and package labels are sent to the third-party manufacturer by e-mail. After the packages have been unloaded and identified by the system, they are pre-sorted according to the time slot and stored temporarily until they are loaded and made available on the ship under the correct crane. On-time quarter-hourly provision is achieved through an enhanced cross-docking approach. The capacities of the crane lifts for transfer to the ship are controlled via the PSIwms slot management system. The third-party manufacturers receive a status message at various points in the process chain so that the construction crews are informed at all times about the expected material delivery.

Fact sheet

Users:
+ 60

Language:
+ German

Warehouse characteristics:
+ a total of 75,000 square meters of warehouse area, 18 incoming and outgoing goods, 74,108 SKUs, 55,177 managed positions
+ Managed types of stored goods: long goods, material in cardboard boxes or on pallets, pallet cages, hoses, cables, rolled goods
+ Warehouse and conveyor technology: Automatic high-bay warehouse with storage and retrieval system, block warehouse (e.g., floor block, drive-in rack), cantilever warehouse, manual container/small parts warehouse, manual shelf warehouse, paternoster, carousel warehouse, warehouse over 3 floors (lift/elevator) with automatic pallet racking system, incl. integrated conveyor system

PSIwms function in use (extract):
+ Batches
+ Cross-docking
+ Handling units management
+ Best before dates
+ Serial numbers
+ Forklift guidance system
+ Event management
+ Image capture
+ Warehouse visualization
+ PSI-Click-Design
+ Time slot control/ Slot management

PSI