

News Release

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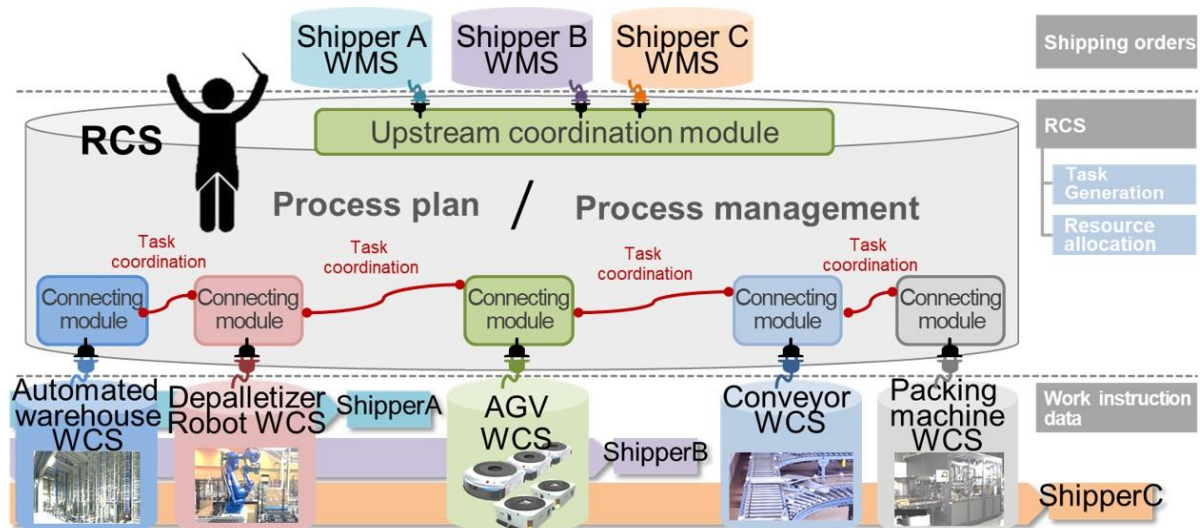
Acquisition of Patent for “Resource Control System (RCS)” to Achieve Highly Automated Command Functions in Logistics Centers

Hitachi Transport System, Ltd. (HTS) has acquired a patent for “Resource Control System (RCS),” an integrated control system to enable optimal logistics center operation. The detail is as follows:

1. Summary of the Patent

Name of invention	Work planning system and work planning method
Patent number	Patent No. 6876108
Date of registration	April 27, 2021
Patent holder	Hitachi Transport System, Ltd.
Description of invention	<p>Based on the information of multiple shipping orders and the necessary work processes as well as multiple material handling equipment that can be used for works and resources such as workers, it is classified into several tasks according to prescribed conditions, and that generates and outputs the process plan for each resource.</p> <p>It also collects information on operation results of each resource, provides feedback to the process plan, and repeats scheduling to optimize the process management automatically.</p>

System Diagram



2. About “Resource Control System (RCS)”

Previously, the work instruction data for each facility in logistics centers was independent. In order to avoid line stagnation caused by excessive concentration of work in certain equipment, Manager was required to monitor the operation status of each facility and adjust resources in consideration of work priorities.

RCS developed by HTS is an integrated control system equipped with work execution function that gives instructions to each facility and worker based on the information on the operation status of the automated equipment and the work results of workers within the logistics center. It optimizes the productivity of the entire logistics center by integrating receiving/shipping data and resource information on material handling equipment and workers to allocate works in a way that they can be performed most efficiently. With this, the command functions within the logistics center which used to be manually handled can be highly automated.

Features

- (1) Work instruction data for each process is generated by the function to create a process plan which added data of workload, work network, productivity of each process, overall resources (including personnel) with restrictions, priorities, and smoothing method, etc., and Task Generation, a function which efficiently groups receive/shipment information from multiple Warehouse Management System (WMS).
- (2) It collects information on operation results of each material handling equipment, provides feedback to the process plan, and repeats scheduling to actively create an optimal process management plan.

3. Logistics centers currently using RCS

RCS has already been installed in EC Platform Center (Kasukabe City, Saitama Prefecture) and is scheduled to be installed* in East Japan II Medical DC (Kazo City, Saitama Prefecture).

*Scheduled to start operation in September 2021

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