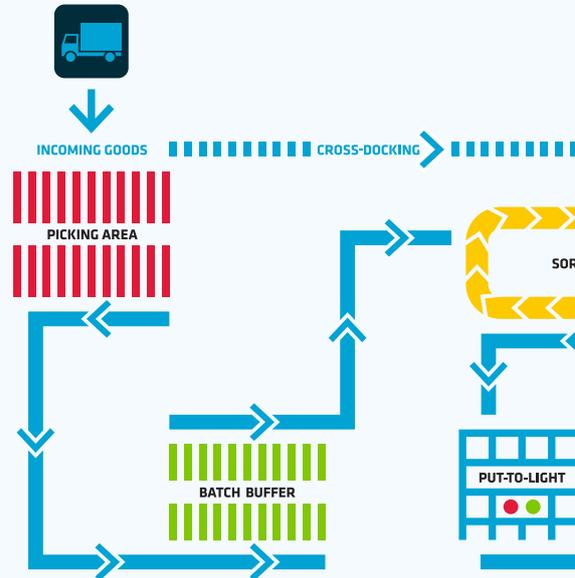


# **WAREHOUSE CONTROL SYSTEM WCS – RELIABLE MATERIAL FLOW MANAGEMENT**

# REAL-TIME CONTROL OF MATERIAL FLOW WITH WCS

To make sure that the goods in a distribution centre get to the right place at the right time, the BEUMER Warehouse Control System (WCS) provides centralised control of the various systems, machines and equipment depending on the respective capacities. This means that picking, packing and dispatch processes are coordinated with one another, throughput is optimised and costs are reduced. The BEUMER Warehouse Control System controls the material flow in the logistics centre in real time. It also supports processes such as returns handling, quality management and inventory.

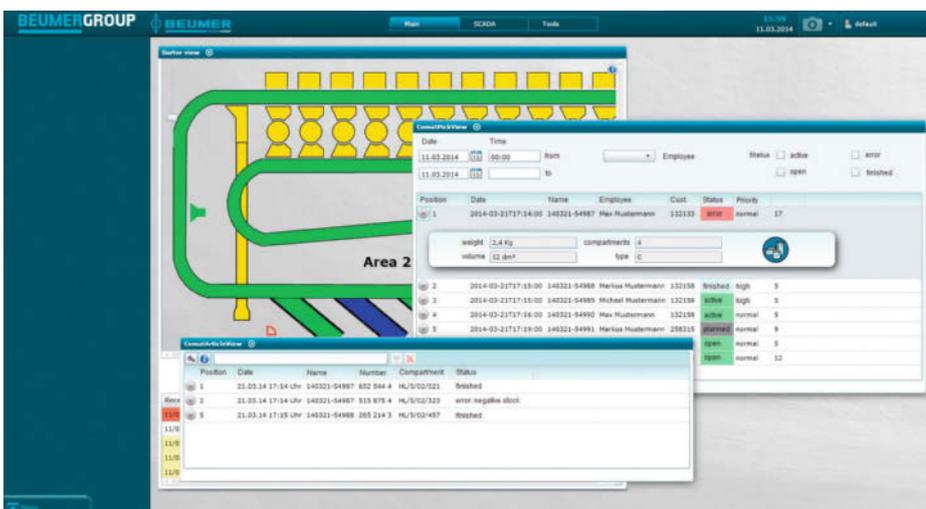
## WAREHOUSE CONTROL SYSTEM WCS



## UNIFORM VISUALISATION

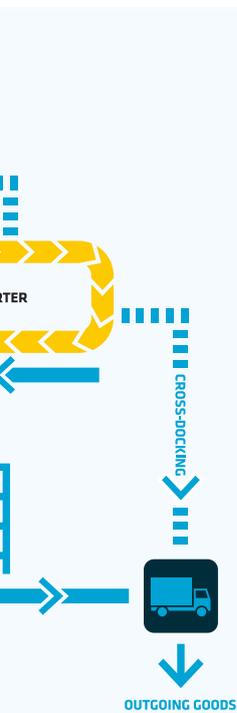
BG Fusion Visualisation provides a web-based user interface for the entire system for configuration, monitoring and reporting, allowing plant data like alarms to be represented uniformly at a central location.

The entire plant status can be centrally visualised and controlled via the interface to the machine control function. The visualisation combines machine and order data so that the current order status can be tracked in real time.



## CUSTOMER BENEFITS

- Low number of interfaces
- Extensive interface expertise
- Fast implementation
- Cost savings
- Error reduction and risk minimisation
- Product-specific software
- Single point of contact
- Optimised throughput
- Integration of third-party components
- Simulation/emulation and realisation from a single source



### Incoming goods

Various customer-specific processes can be implemented in a distribution centre's incoming goods area, where quality control and returns handling, for example, differ from the handling of the normal material flows in the warehouse. Speed and efficiency are extremely important to minimise costs and throughput times. The WCS creates the ideal basis for efficiently meeting these requirements.

### Creating picking and sorting orders

Ready-to-process picking and sorting orders are created from the total volume of article orders. The WCS optimises the orders for the respective plant.

### Picking

In the picking area the orders from the warehouse are made available. The WCS supports various picking methods.

### Value-added services

Additional services like customer-specific labelling can be integrated into the WCS.

### Pre-sorting

Pre-sorting the items received from the picking process allows a batch-overlapping picking method to be used. For further order-specific sorting the articles are pre-sorted.

### Batch buffer (sorting buffer)

The batch buffer separates the picking and sorting processes which can therefore be efficiently executed regardless of current capacity and can be controlled via the WCS.

### Routing

The routing of the individual articles on the conveyor sections can be individually adapted based on the current capacity or article type, e.g. non-sortable. The routing function enables the WCS to determine the most efficient route for the article and ensures good load balancing.

### Sorting

Depending on current sorting data such as capacity, status and order details the WCS can be used to control e.g. the picking area, infeed and discharge conveyors and dispatch area (e.g. for providing special packing material).

### Put-to-light

Put-to-light solutions are used particularly in the case of smaller customer orders. Downstream sorting of smaller order volumes enhances sorting performance, as one chute is used for several customers. The WCS integrates these solutions into the overall process chain.

### Print/Apply

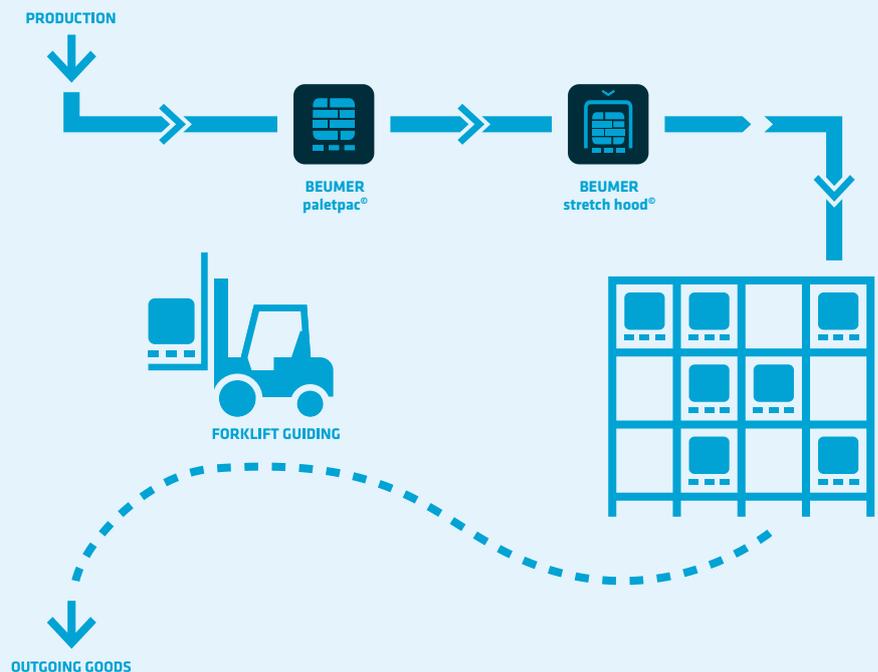
The WCS can also be used to control and coordinate the automatic provision and application of the shipping labels needed for dispatching the goods.

### Adaptive Order Selection (AOS)

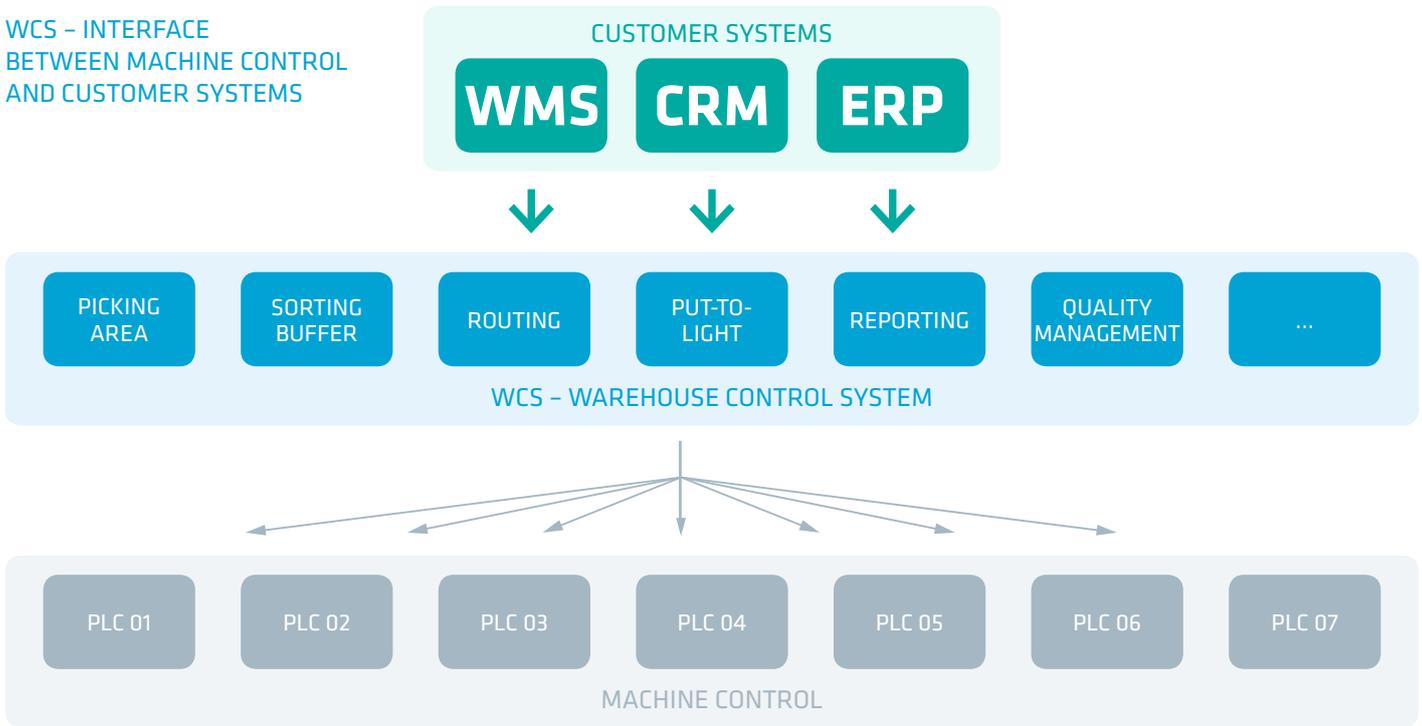
The AOS controls the optimum interaction between sorting and conveying technologies. Thanks to the AOS throughput increases can be achieved by using data from conveying systems and buffer.

The modular structure of the software allows customer-specific processes to be integrated. These are not just limited to the logistics area but allow other functions like production and dispatch to be integrated as well.

## EFFICIENT PROCESS CONTROL



WCS – INTERFACE  
BETWEEN MACHINE CONTROL  
AND CUSTOMER SYSTEMS



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