

Material Logistics



Manages shop-floor related warehouse management business processes. Supports material requests, material fulfillment and material movements.

Overview

The management of raw materials is important to ensure that the right materials are available in the right quantities at the right time. The Material Logistics module supports the business processes related with requesting materials, fulfilling those requests and moving material between locations.

Material Logistics manages:

- 1. Transfer Requirement** – specifies a list of material needs and quantities for products
- 2. Pick List** – defines a materials pick list to fulfill a Transfer Requirement
- 3. Transfer Order** – specifies materials to be moved between locations

The Material Logistics module specifies different material supply paths for different storage areas and production lines. The system supports three types of lifecycles (as shown in Figure 1): 1) starting with a Transfer Requirement, releasing it into a Pick List, and then transporting it with a Transfer Order; 2) create a Transfer Order for a Transfer Requirement; or 3) simply create a Transfer Order.

The Material Logistics module performs automatic replenishment based on user defined reorder points and target inventory levels and also provides the capability to take periodic inventories.

Material also provides support for multi-level packing, including product packing (primary packing or product packing) and packing of packages. Primary packing is typically a manufacturing process that involves a BOM for the formation of the product package while the subsequent packing processes consist of forming package hierarchies (logistic carton, pallets). The system provides specific GUIs and operations to guide the operator through the packing process and it automatically prints any necessary label and documents.



Figure 1 Material Logistics Lifecycle options



Key Features

- Define Material supply paths between Storage Areas and Production Lines
- Manage Transfer Requirements, Product and Quantity needs
- Approve and release (completely or partially) Transfer Requirements and automatically create a Pick List based on pre-defined sorting rules, both for material selection and picking sequencing
- Perform the picking of Pick Lists
- Create Transfer Orders for a Transfer Requirement, a Pick List or Ad-hoc
- Confirm the transport of Materials, with the option to create Materials that are received in bulk (e.g. if sent from the ERP)
- Track resource inventories and perform automatic replenishment based on pre-defined reorder points and target inventory levels
- Perform Periodic Inventories
- Support for multi-level packing

Benefits

- Improved visibility and tracking of material requests
- Reduction of material shortages
- Reduction of raw materials inventory and raw materials scrap
- Faster material requests fulfillments

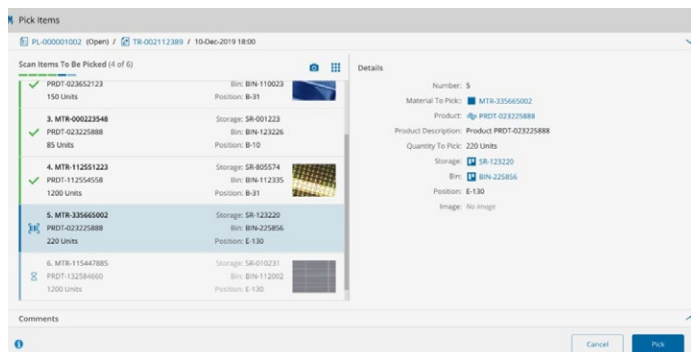


Figure 2 Picking wizard

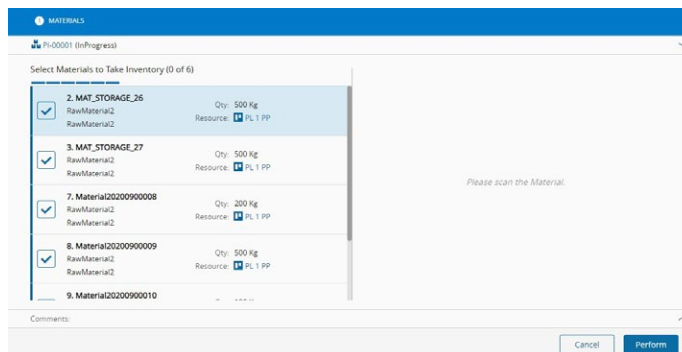


Figure 3 Material Logistics periodic inventory

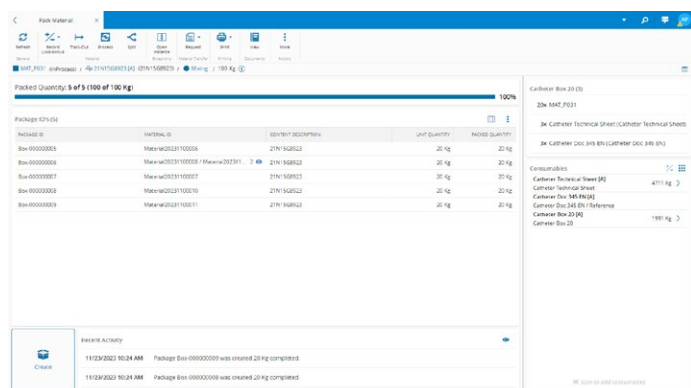


Figure 4 Multi-level packing