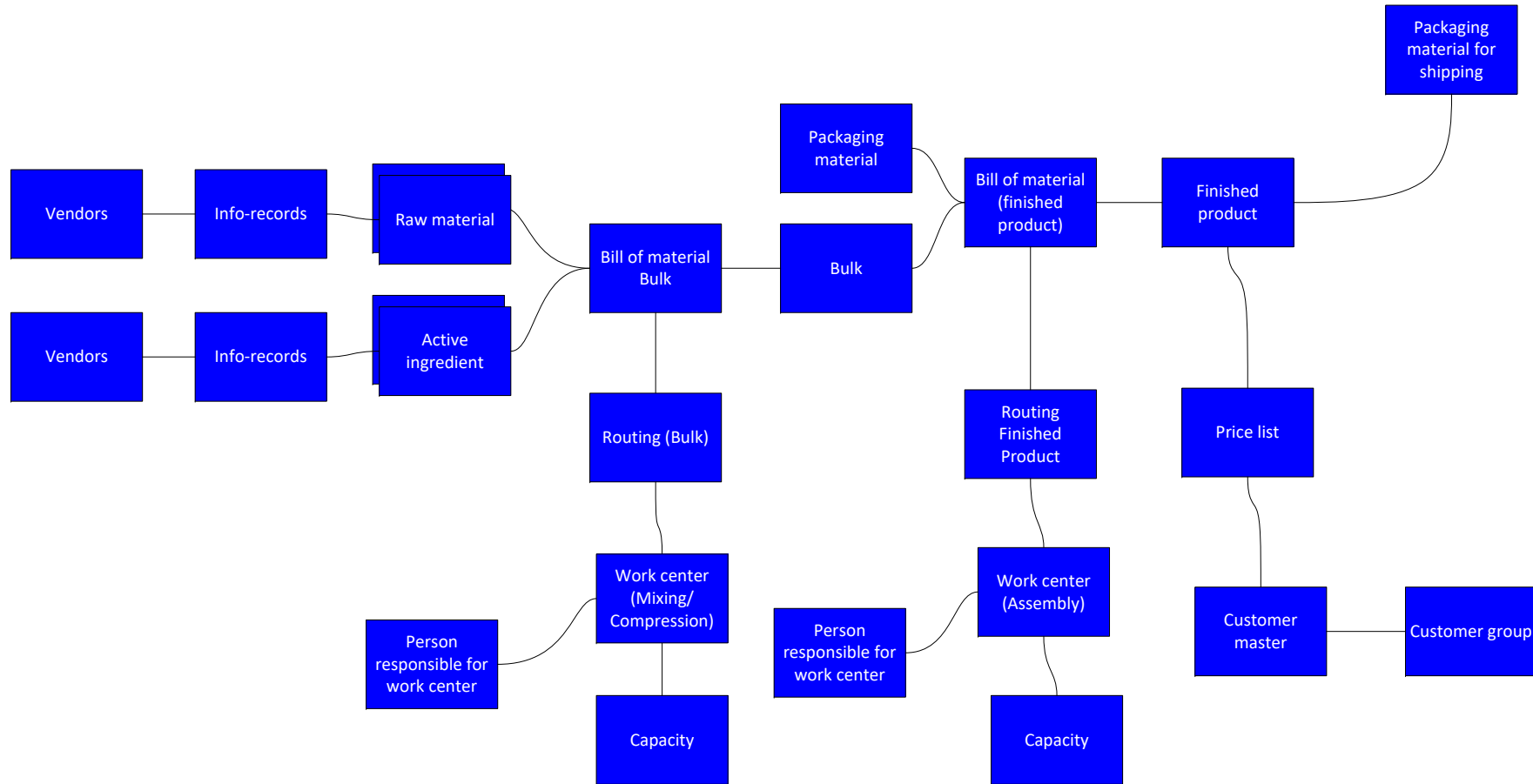


Modélisation des données maîtres

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LÉGENDE



MedBec

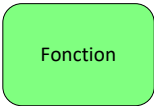
Modélisation des éléments organisationnels

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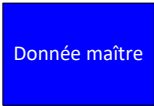
LÉGENDE



Événement



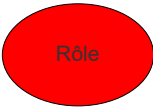
Fonction



Donnée maître



Unité organisationnelle



Rôle



OU



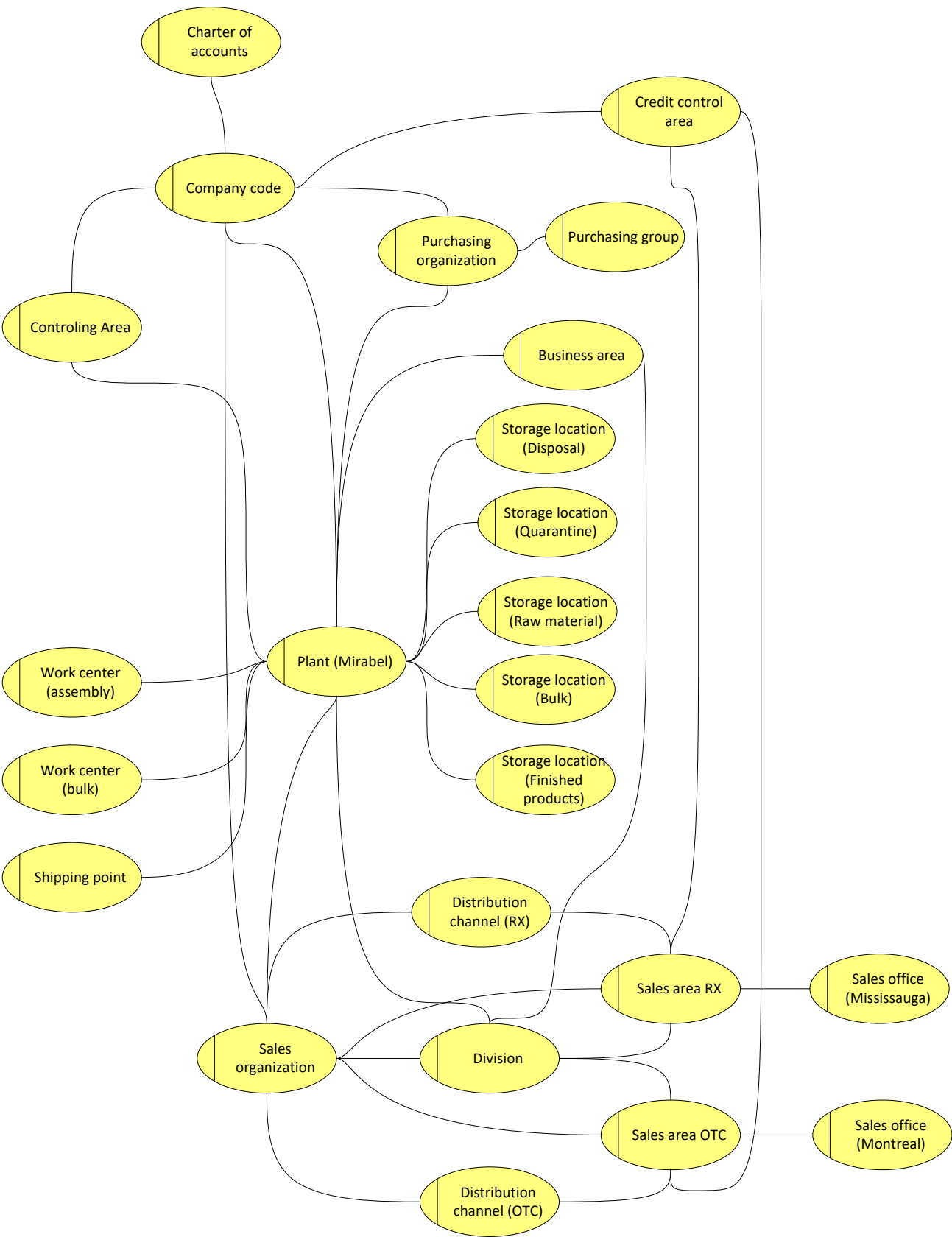
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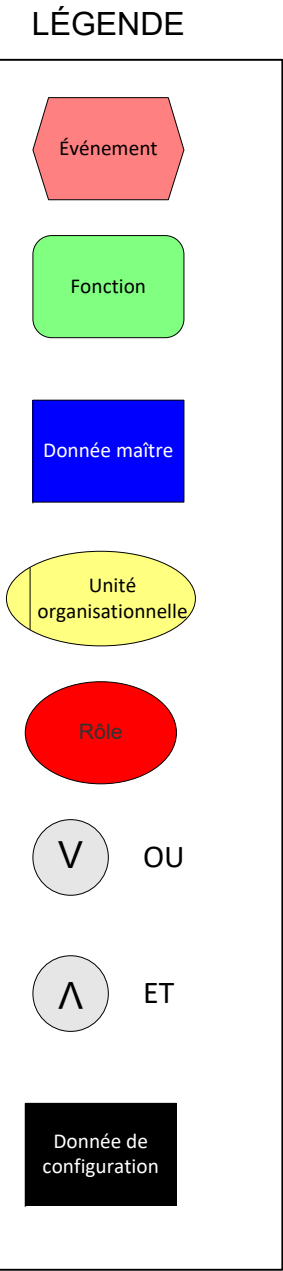


FLUX



Donnée de configuration



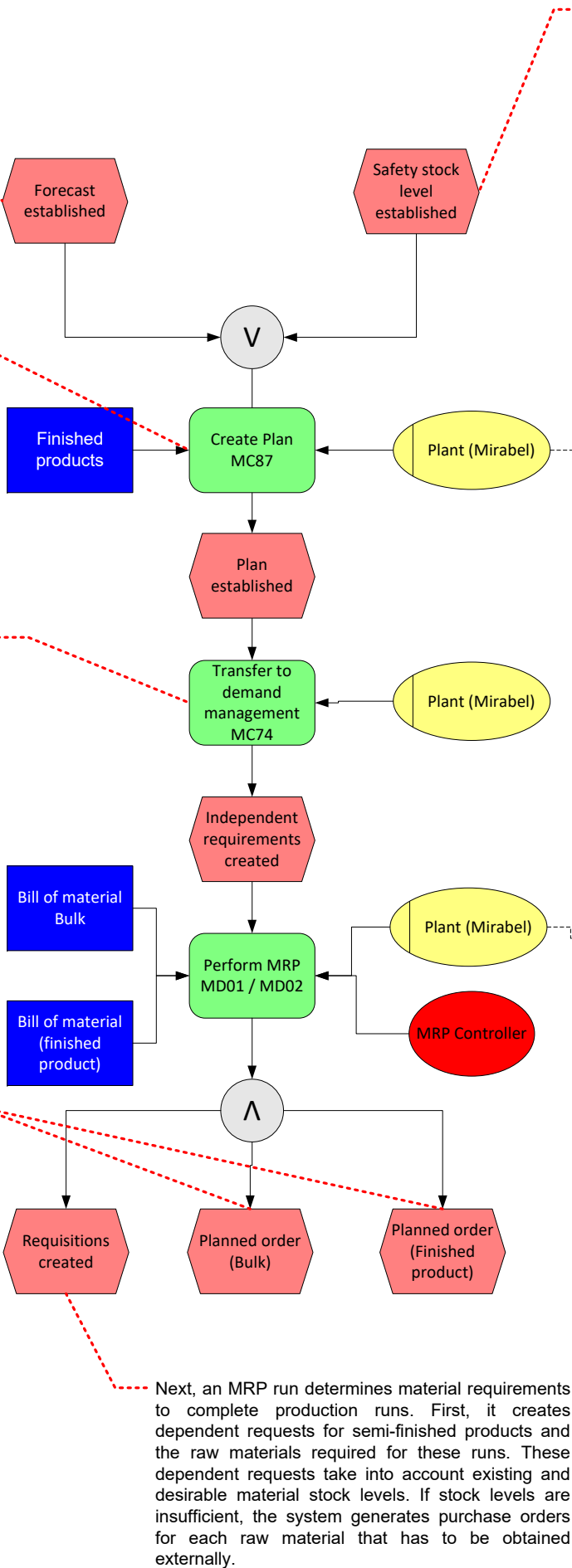


Sales contracts are used for quarterly sales planning. Planners base their forecasts on a product's sales history and on sales contracts when trying to foresee events that might influence supply and demand. Note that it is generally difficult to forecast the demand for new products – the sales history of similar products must be examined.

Production planners use quarterly sales forecasts prepared by the sales department as input.

Sales forecast data is transferred to production planning. Forecasts are converted into independent requests in the production plan.

Material Requirements Planning (MRP) balances data from independent requests with production runs that are already in the system. A run corresponds to the manufacturing of one or several batches of a fixed quantity of tablets. If forecast runs are insufficient, the system will suggest additional runs to strike a balance between independent requests and required safety stock. The system will also reduce or even eliminate production runs that are no longer needed.



Moreover, planners have to calculate safety stock levels for each product. As a rule, MedBec tries to keep the equivalent of three months' inventory to avoid shortages.

SOP must be activated at the plant level.

Because of long shipping times in the pharmaceutical industry, the planning horizon is also quite long – 100 working days in MedBec's case. Only elements that fall within this time horizon are considered in the MRP run.

Certain default values can be automatically generated by the MRP run with regard to purchase requisitions. In the MedBec case, values relating to forecast shipping times must come from customer info-records. The schedule line has to be generated in the planning horizon.

Parameters must be set to determine how the system schedules planned orders. For MedBec, scheduling of planned orders is carried out at a macro Level, which entails a backward planning approach. The system must thus be instructed that scheduling of all production orders is also backward.

During the MRP run, the system must identify valid bills of materials (BOM) and routing for each raw material. Parameters must be defined for this selection. In the case of BOM and multiple routings, MedBec uses the BOM and routing defined by production.

To ensure a normal MRP run, a report has to display at the end of each run.

The plant has to be activated in the system production planning. A rule for checking stock availability must be established for the plant (both at the production creation and release). PP Rules can be used as the basic template.

The Schedule Margin Key has to be defined to specify floats for scheduling planned orders. Four margins need to be defined: opening period, float before production, float after production, and release period. In MedBec's case, only minimal parameters for these fields need be selected.

Among the plant's parameters to be defined, it is important to determine document number intervals to be used in production planning. Documents to be defined include planned orders, dependent requirements, purchase requisitions, MRP lists, and Sim dependent requirements.

Products with the same characteristics in terms of planning material needs have to be grouped together. And product groups must be subject to a make-to-stock manufacturing strategy.

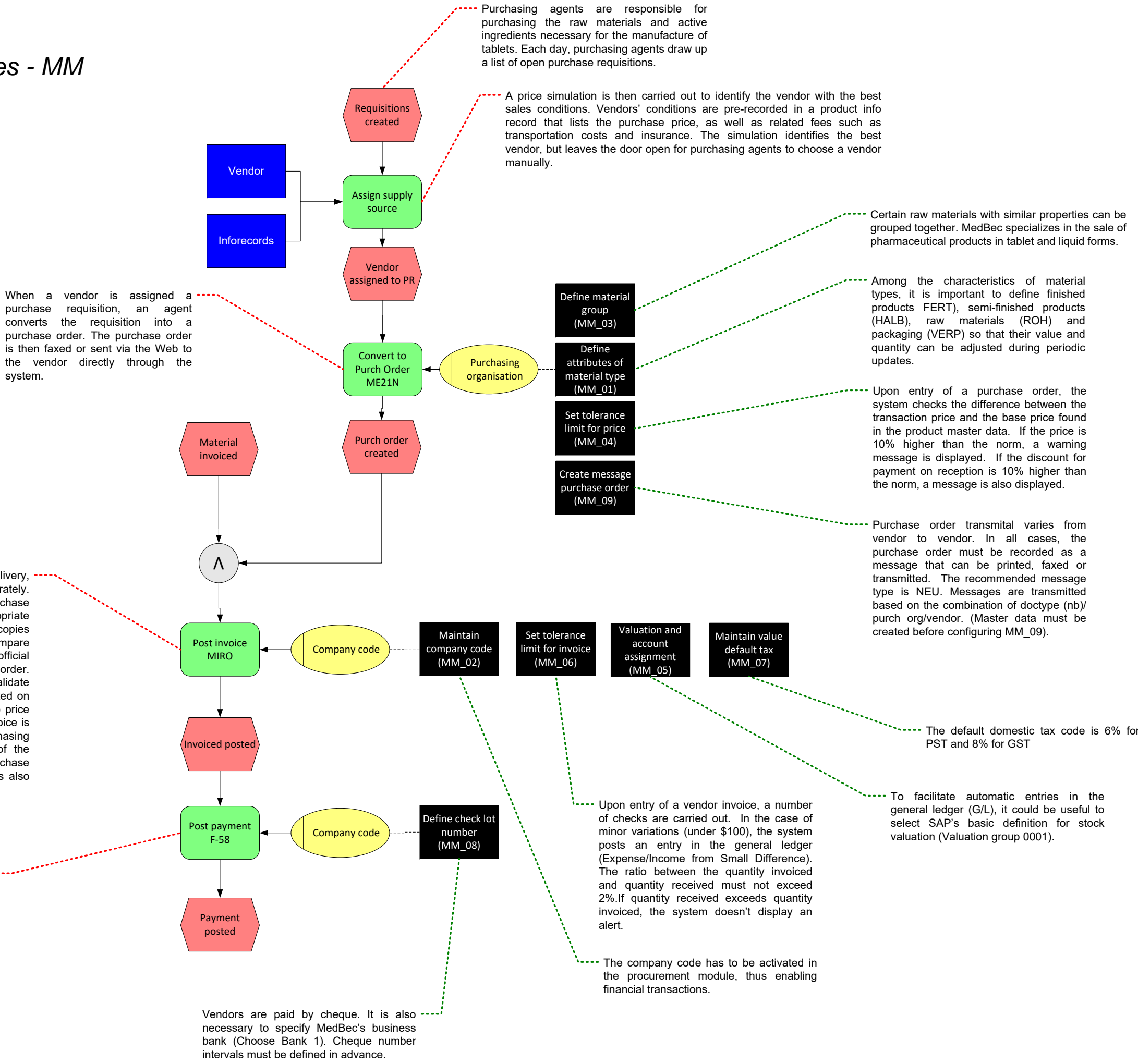
To use MRP functionality it is necessary to activate this function throughout the manufacturing plant.

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MedBec

Processus d'affaires - MM

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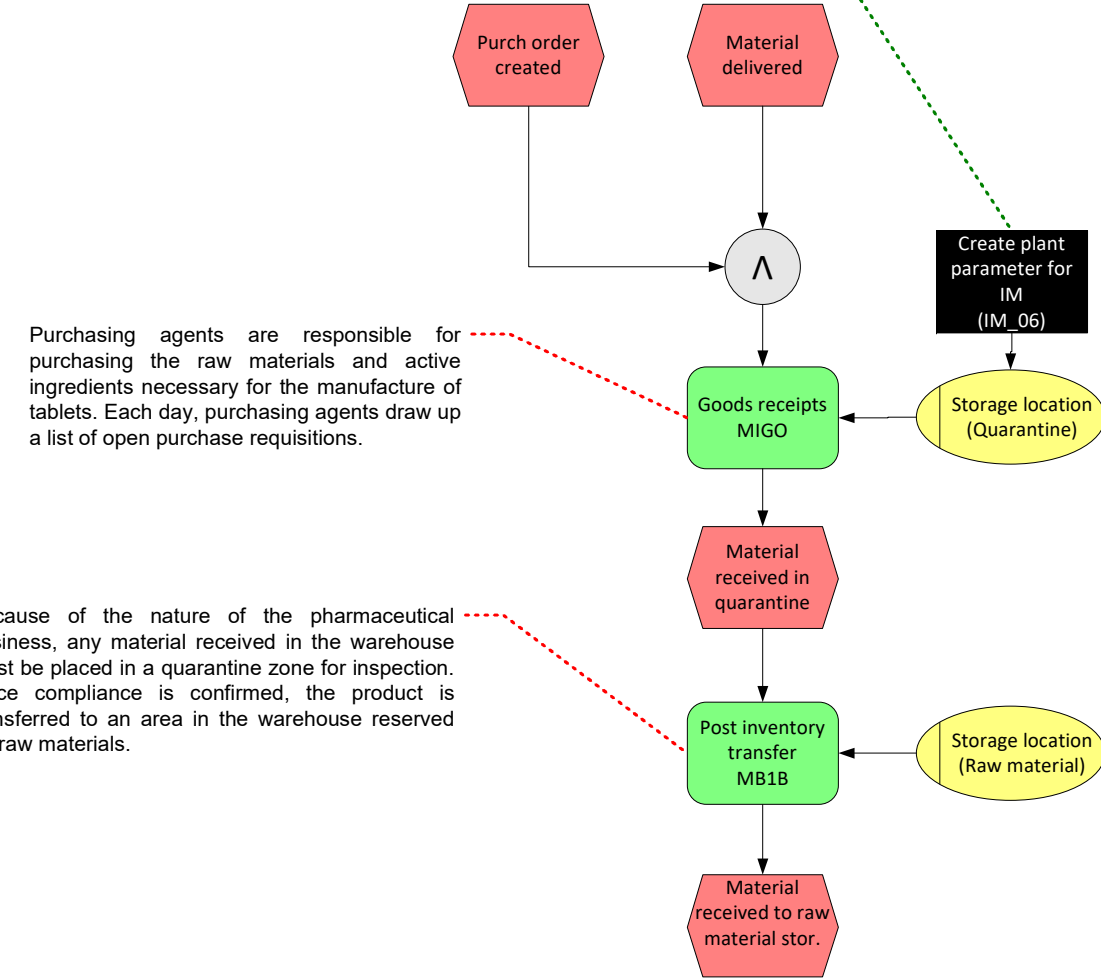


MedBec

Processus d'affaires - IM

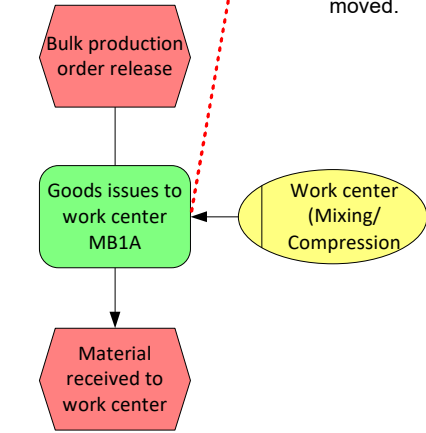
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Different parameters have to be defined to facilitate stock management in the plant. When merchandise is moved within the warehouse the system should suggest a destination. The system should always employ BOM usage.

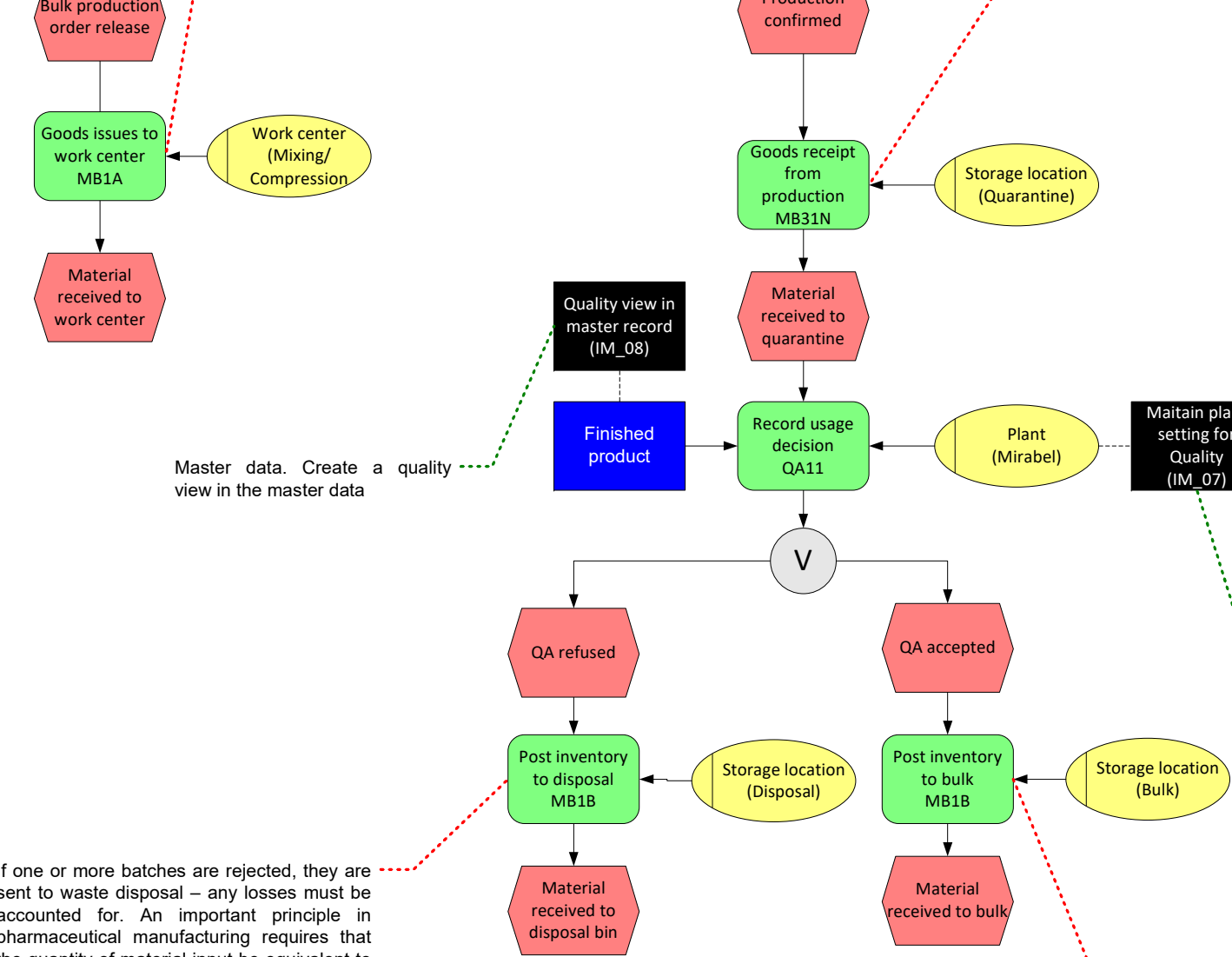


Purchasing agents are responsible for purchasing the raw materials and active ingredients necessary for the manufacture of tablets. Each day, purchasing agents draw up a list of open purchase requisitions.

Because of the nature of the pharmaceutical business, any material received in the warehouse must be placed in a quarantine zone for inspection. Once compliance is confirmed, the product is transferred to an area in the warehouse reserved for raw materials.

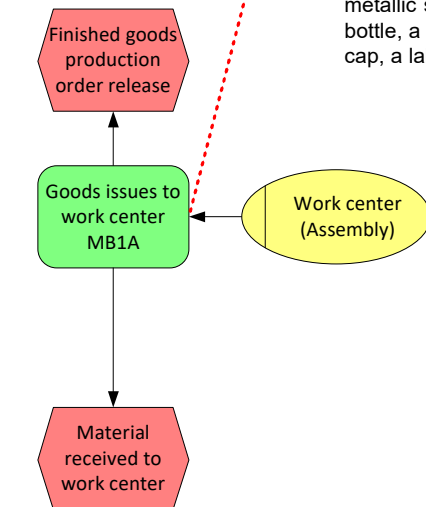


Once a production order is given, it becomes available to production and warehouse staff. During each shift, warehouse staff run a report that calls up all production orders to be carried out over the next 24 hours. The report indicates which raw materials are required. These reports are used by warehouse personnel to locate raw materials in the warehouse. When all materials have been located and transferred by forklift to the pre-manufacturing zone, a staff member indicates in the system that the materials have been moved.

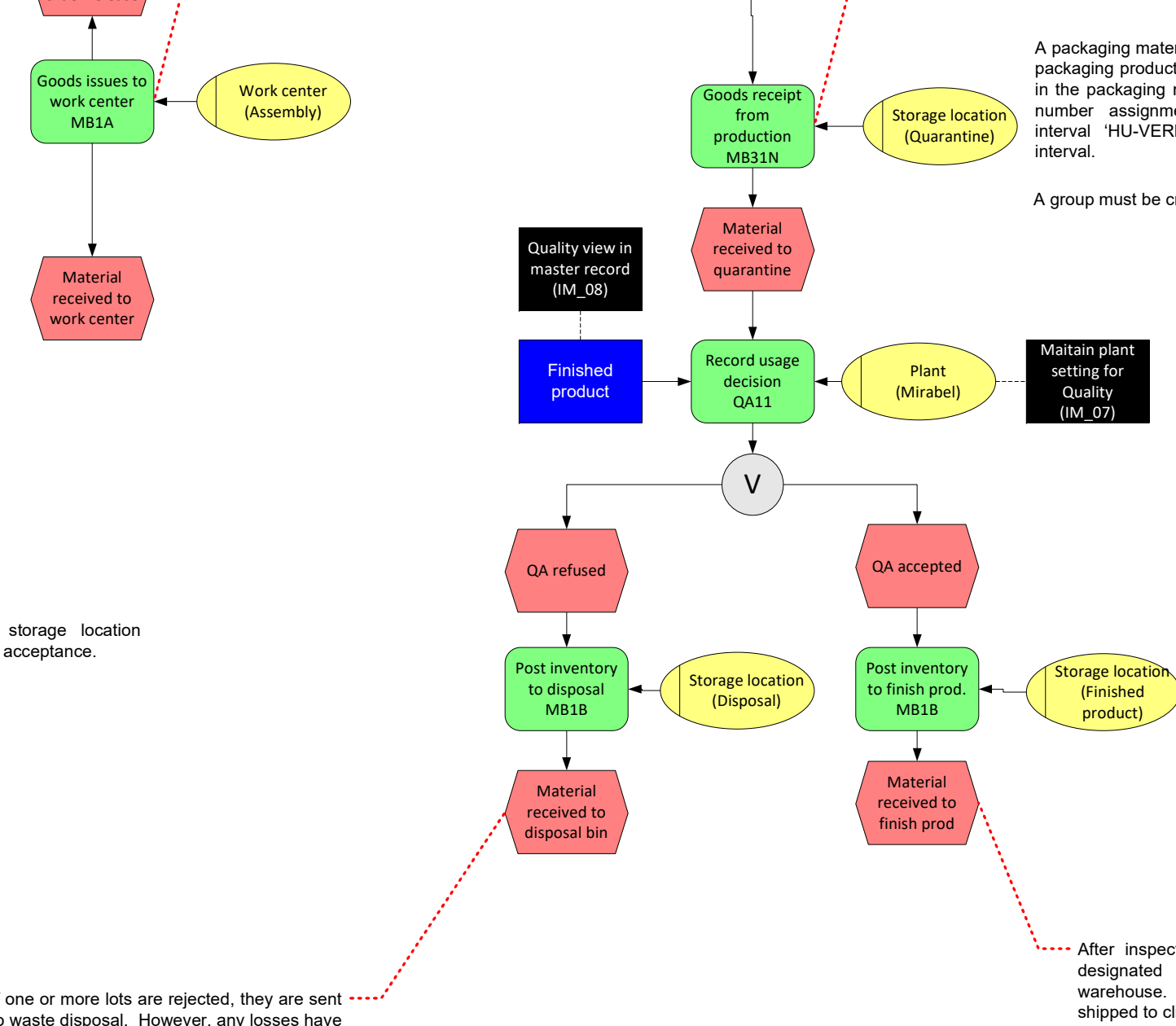


If one or more batches are rejected, they are sent to waste disposal – any losses must be accounted for. An important principle in pharmaceutical manufacturing requires that the quantity of material input be equivalent to the quantity output. Thus when materials are rejected, they must be transferred to a designated pharmaceutical waste zone in the warehouse, and the transfer must be duly recorded.

Once production is complete, semi-finished product batches are moved to the quarantine zone for inspection.

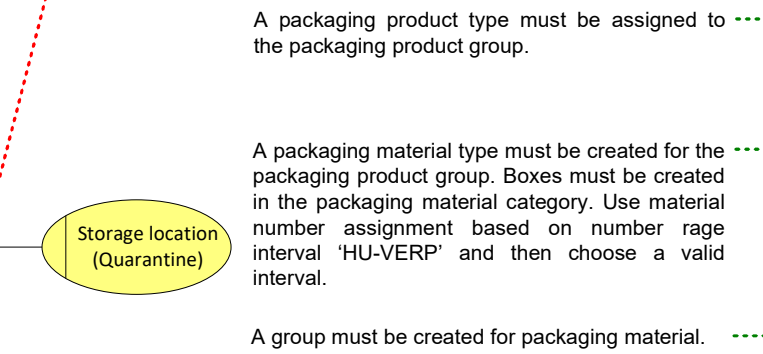


As with the manufacture of semi-finished products, warehouse staff calls up a report on each shift that indicates the products and packaging raw materials that have to be transferred from the warehouse to the pre-manufacturing zone. Generally speaking, a bottle of tablets is comprises the following: a cardboard box, a piece of cotton batting, a metallic safety seal to cover the mouth of the bottle, a cap, a plastic outer wrap to cover the cap, a label and tablets.



If one or more lots are rejected, they are sent to waste disposal. However, any losses have to be accounted for. An important principle in pharmaceutical manufacturing requires that the quantity of material input be equivalent to the quantity of material output. And so, in the case of rejection, it is necessary to record transfers to a zone of the warehouse secured for pharmaceutical waste.

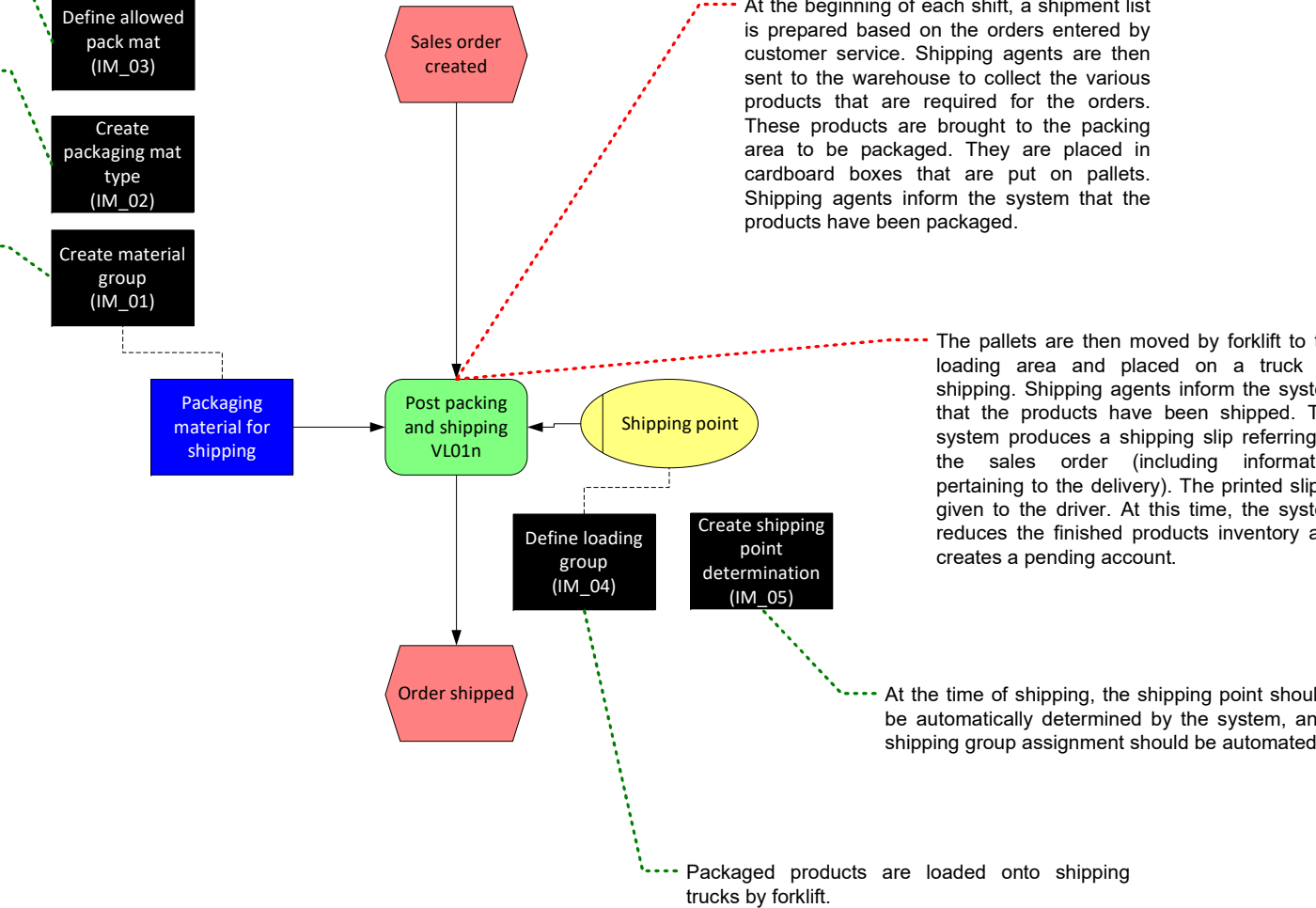
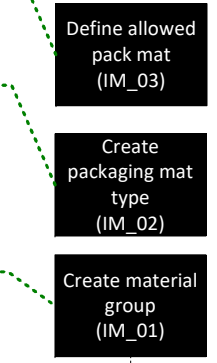
Once production is complete, finished products are moved to the quarantine zone for inspection. After inspection, products are moved to a designated finished product zone in the warehouse. They are now ready to be shipped to clients.



A packaging product type must be assigned to the packaging product group.

A packaging material type must be created for the packaging product group. Boxes must be created in the packaging material category. Use material number assignment based on number rage interval 'HU-VERP' and then choose a valid interval.

A group must be created for packaging material.



At the beginning of each shift, a shipment list is prepared based on the orders entered by customer service. Shipping agents are then sent to the warehouse to collect the various products that are required for the orders. These products are brought to the packing area to be packaged. They are placed in cardboard boxes that are put on pallets. Shipping agents inform the system that the products have been packaged.

The pallets are then moved by forklift to the loading area and placed on a truck for shipping. Shipping agents inform the system that the products have been shipped. The system produces a shipping slip referring to the sales order (including information pertaining to the delivery). The printed slip is given to the driver. At this time, the system reduces the finished products inventory and creates a pending account.

At the time of shipping, the shipping point should be automatically determined by the system, and shipping group assignment should be automated.

Packaged products are loaded onto shipping trucks by forklift.

MedBec

Processus d'affaires (ME)

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