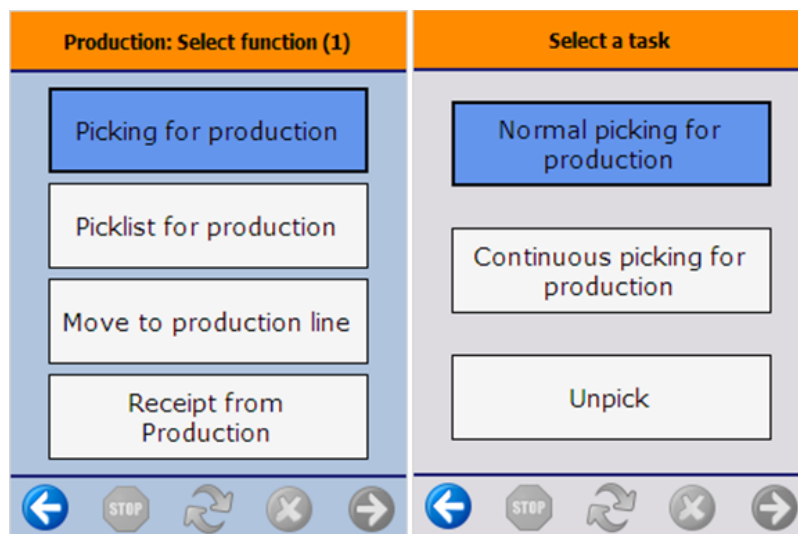# 5. Production picking

In the picking step collect the needed components for the production. Based on the Production line settings, the destination of the picking can be the input location or the pick to location.

Produmex offers two flows for picking the components of a production. The 'Picking for production' flows uses the production order as an input. Because the picking is performed without a pick list, the stock to be picked is not locked in the inventory. The picked quantity can exceed the planned quantity in the production order.

The 'Pick list for production' flow uses a pick list generated from the production order as an input. The system will lock the stock when creating the proposal and the pick list. Pick lists can only be generated from a production order when the 'Create proposal for picking' option is set to true in the Picking for production controller. The picked quantity cannot exceed the proposed quantity in the pick list.
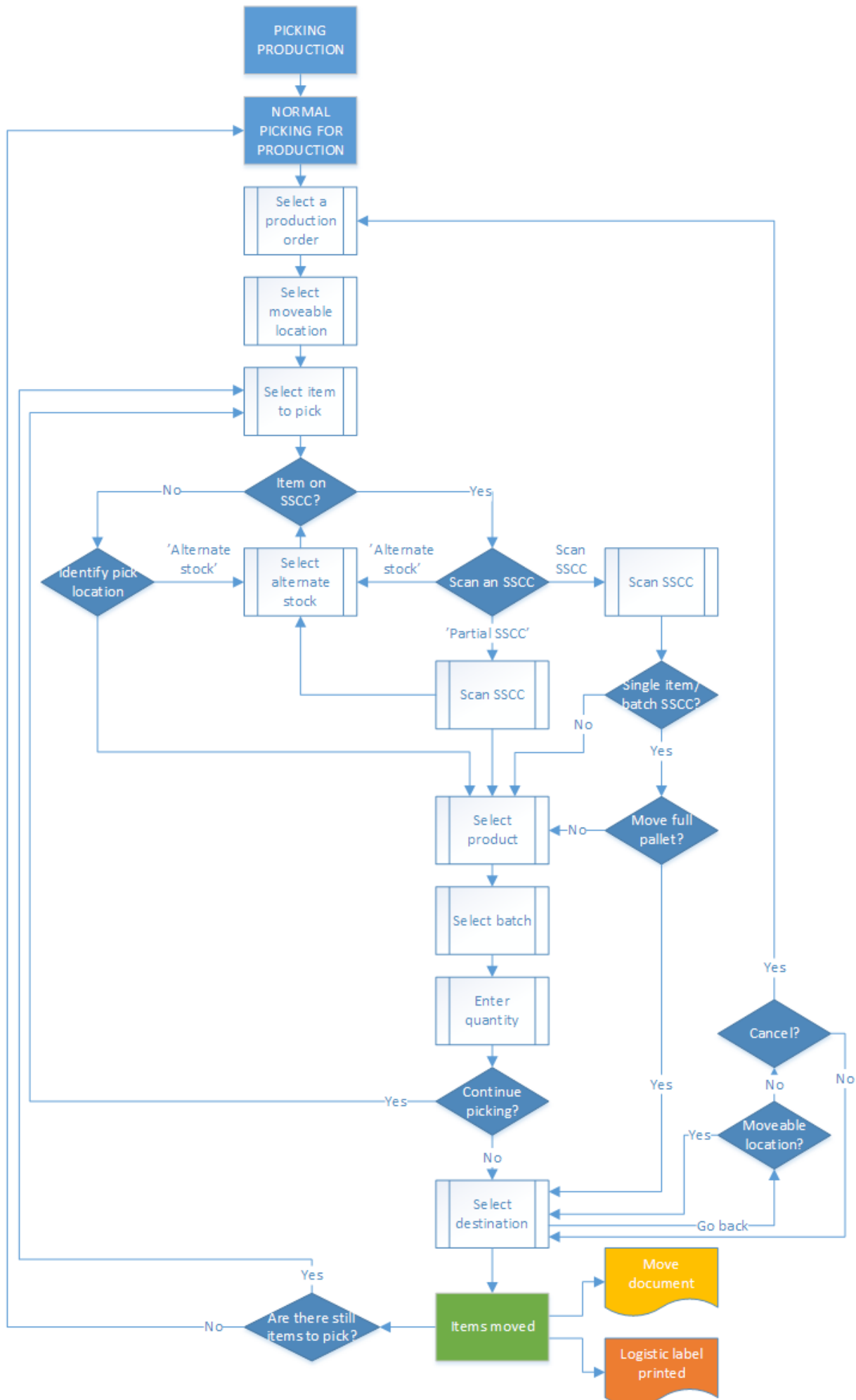
5.1. Picking for production

Press the 'Picking for production' button. On the next screen select a task.
Press the 'Normal picking for production' button to pick for the production.
Press the 'Unpick' button to remove previously picked stock from the pick/input location.

When the 'Allow continuous picking for production' option is enabled on the Picking for production controller, an additional 'Continuous picking for production' button is displayed on the screen. When performing the picking with this flow, the system will allow to pick production order lines whose full quantity has been picked.

```
                    PICKING
                   PRODUCTION
                       │
                       ▼
                    NORMAL
                 PICKING FOR
                 PRODUCTION
                       │
                       ▼
                   Select a
                  production
                    order
                       │
                       ▼
                   Select
                  moveable
                   location
                       │
                       ▼
                 Select item
                   to pick
                       │
                       ▼
      No ◄──── Item on SSCC? ────► Yes
         │                              │
         ▼                              ▼
  Identify pick   'Alternate    Select    'Alternate  Scan an SSCC  ──Scan SSCC──►  Scan SSCC
   location  ──── stock' ────► alternate ◄── stock' ────                               │
                               stock                                                    ▼
                                 ▲         'Partial SSCC'                         Single item/
                                 │              │                                batch SSCC?
                                 │              ▼                                 No      Yes
                                 └──────── Scan SSCC                              │        │
                                              │                                   ▼        ▼
                                              ▼                               Select  ──No── Move full
                                          Select product ◄──────────────────  product         pallet?
                                              │
                                              ▼
                                         Select batch
                                              │
                                              ▼
                                          Enter
                                         quantity
                                              │
                                              ▼
      Yes ◄──── Continue picking?                          Cancel?
                   │ No                                   Yes   No    No
                   ▼                                       │     │     │
                Select                                     ▼     ▼     ▼
               destination ◄── Yes ── Moveable location?
                   │         Go back
                   ▼
       Yes                  Items moved ──► Move document
                                │
      No ◄── Are there still ◄──┘      ──► Logistic label printed
             items to pick?
```

- Normal picking for production
- Select moveable location
- Select a product to pick
- Select alternate stock
- Identify SSCC/ pick location
- Identify SSCC/ pick location
- Identify SSCC/ pick location
- Identify product
- Select destination location

5.1.1. Normal picking for production

5.1.1.1. Select production order

Select a production order to pick from the list. Only production orders with an assigned production line and 'Released' or 'Started' status are displayed in the list. Proceed with the right arrow button. The following information is shown on the list:
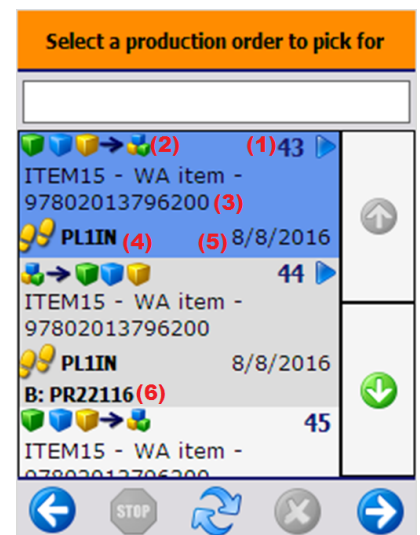
1. The production order number. Started production orders are indicated with an [x] icon.
2. The order type. It is possible to pick for 'Standard', 'Special' and 'Disassembly' type of production orders too with this flow. 'Standard' and 'Special' production orders are indicated with an [x] icon and 'Disassembly' production orders are indicated with an [x] icon.
3. The code, description and barcode of the item to produce.
4. The destination location of the picking. Depending on the Production line settings, the input or the pick to location of the production line is assigned to the production order.
5. The due date of the production order.
6. The batch number of the product.

5.1.1.2. Select moveable location

Press the 'No moveable location' button or select a moveable location from a list to move the picked items with a moveable location. *The steps for picking with or without a moveable location are*

identical except for the cancellation. When picking onto a moveable location, the list of the already picked items cannot be cleared.

5.1.1.3. Select a product to pick

Select a production order line to pick from the list. Proceed with the right arrow button. The following information is shown on the list:

1. The code, description and barcode of the item to pick.
2. The quantity that still needs to be picked. It is calculated by: {Already picked quantity - Planned quantity}. When picking with the 'Normal picking for production' flow, the production order lines whose full quantity has been picked are not displayed on the list. When picking with the 'Continuous picking for production' flow, those order lines are displayed too.
3. The available quantity on the input location of the assigned production line.
4. Optional components are indicated with an icon.
5. Lined up and time registry components are not listed.

5.1.1.4. Identify SSCC/ pick location

Identify the SSCC or location to pick from. The system sorts the proposed stock based on the option selected as 'Picking order by' in the Picking for production controller. The details of the first proposed stock will be displayed on the bottom of the screen.
When the proposed stock to pick has a linked SSCC, the 'Scan an SSCC' screen is displayed. On the bottom of the screen the pick location and the SSCC is shown. Scan the SSCC.
In case of the scanned SSCC was linked to a single item or batch pallet, the system asks whether to move the full pallet or not. Press the 'Yes' button to move the full logistic unit. Press 'No' to move only a partial unit.
To pick only a partial pallet, press the 'Pick partial logistic unit' button. On the next screen scan the SSCC. When moving only a partial logistic unit, identify the products to move.

When the proposed stock to pick has no linked SSCC, identify the pick location. Scan the location or select it from the list after pressing the 'Select location' button. Only the location that is displayed on the bottom of the screen can be scanned or selected.

5.1.1.5. Select alternate stock

 To pick from another SSCC or location, press the 'Alternate stock' button and select a production line from the list and proceed with the right arrow button. The following information is shown on the list:

1. Pick location
2. Quantity to pick
3. Code, description, barcode of the item to pick
4. Batch number
5. Best before date
6. SSCC

On the next screen scan the SSCC or the pick location.

5.1.1.6. Identify product

Identify the product to pick. In case a full logistic unit is moved, the system automatically skips the following screens.
Scan the product or select it from a list after pressing the 'Select a product' button. Only items stored on the selected logistic unit or pick location are displayed on the list.

Select the batch from the list. The following information is shown on the list:

1. Batch number
2. Second batch number
3. Best before date
4. Quality status

When there is only one batch on the location or the logistic unit for the item, then the system automatically proceeds with that batch.

Enter the quantity to pick. The picked quantity can exceed the quantity in the production order, but is limited by the available quantity on the logistic unit or pick location. For more information about quantity entering methods see: 4.3.4. Screens for entering additional information

5.1.1.7. Select destination location

After the product has been identified, scan the destination location or select it after pressing the 'Select location' button. Only the default location can be selected as the destination location. The default location is the input location of the production line. *When a pick to location is set for the production line, it is the default location.*
To continue the picking, press the 'Continue picking' button. The system will go back to the 'Select product to pick' screen. The button is only displayed when there are still components to pick.
When all the components have been picked, and the destination location has been identified, the system shows the 'There are no more items to pick' message.
After the picked items have been moved to the destination location, the system generates a 'Move' document in the Produmex office module to register the movement.
When the *Picking for production: (After picking 401)* print event is set in the Organizational Structure, the system asks whether to print the pick list for production. Press the 'Yes' button to print the pick list.
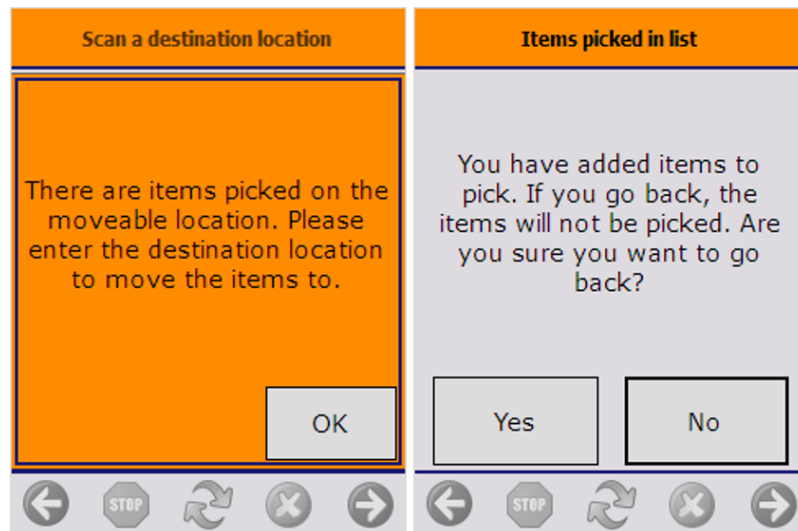

5.1.1.8. Cancellation

To cancel the picking, press the left arrow button. When nothing was picked, the system will go back to the 'Select a task' screen.
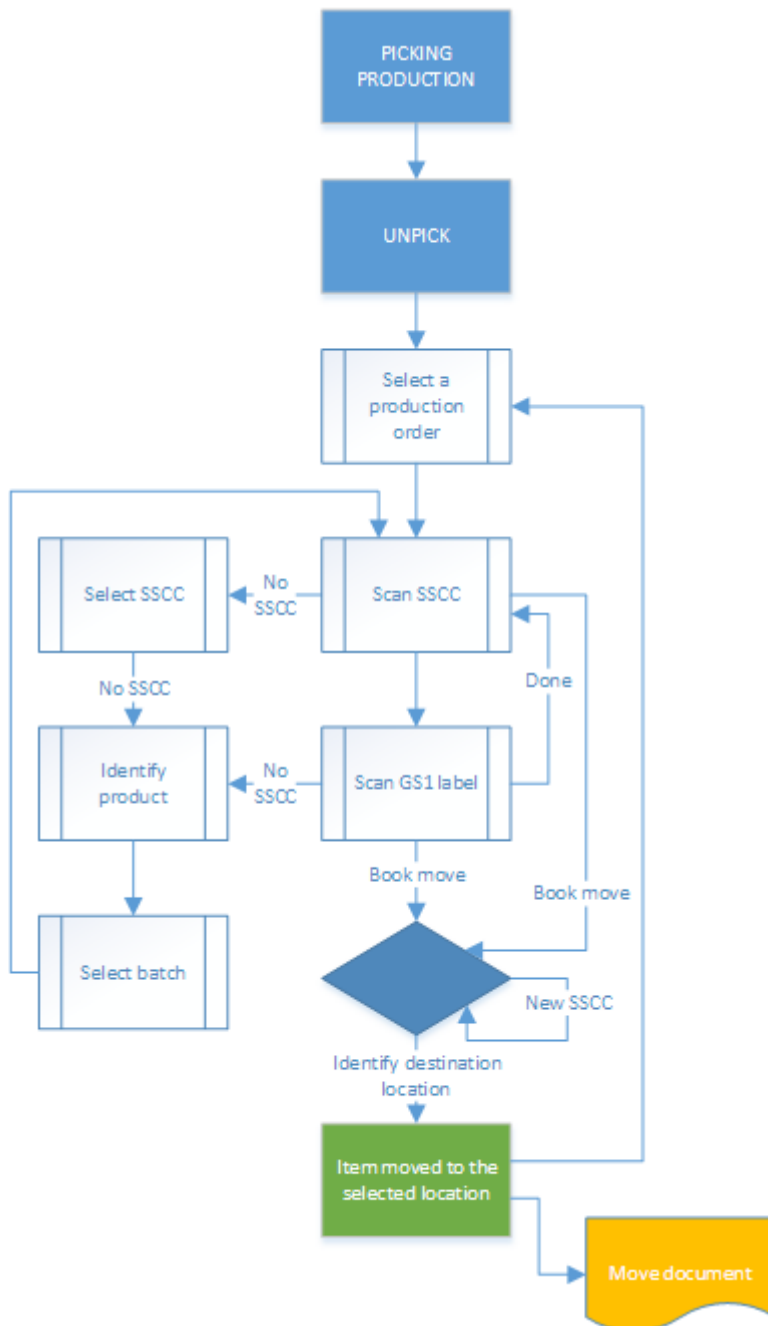In case of picking onto a moveable location, the system will ask for identifying the destination location for the already picked products.
In case of picking without a moveable location, the system will ask for confirmation. To cancel the process, press 'Yes'. The list of the picked items will be cleared. To proceed with the already picked items press 'No'.

Scan a destination location	Items picked in list
There are items picked on the moveable location. Please enter the destination location to move the items to. OK	You have added items to pick. If you go back, the items will not be picked. Are you sure you want to go back? Yes No

5.1.1. Unpick

- Select production order
- Identify SSCC
- Identify product
- Select destination location

5.1.2.1. Select a production order

Select a production order from the list. Every production order with at least one picked component is displayed in the list, regardless of the flow the picking was performed.

5.1.2.2. Identify SSCC

Scan the SSCC. To select the SSCC from a list, press the 'No SSCC' button. Only SSCC's stored on the pick location of the assigned production line can be scanned or selected.
When there is no SSCC present, press the 'No SSCC' button. On the next screen press again the 'No SSCC' button.

After an SSCC was identified, scan the GS1 label or press the 'Done' button to proceed with the unpicking.

5.1.2.3. Identify product

When unpicking only a partial logistic unit, identify the product. Scan the product or select it from a list after pressing the 'Select a product' button. Every item that can be found on the pick to or input location will be listed, but only items linked to the production order can be scanned or selected. When the item is managed by batches and there are more than one batch on the logistic unit or pick location, select the batch as well.

After a product has been identified, the system goes back to the 'Scan an SSCC' screen. An extra 'Book move' button is displayed. Press this button to finish the unpicking.

5.1.2.4. Identify destination location

After the 'Book move' button was pressed, identify the destination location.

A default location is displayed on the screen.

When the location suggestion is enabled for the warehouse, the *Default location* is the first suggested location calculated based on the logic described in Location suggestions.

Note: When we use the suggested location functionality in the reception flow (receiving items to a location instead of a dock) and the system cannot find a suitable location for the item, it automatically receives the item to the dock.

When the location suggestion is not enabled for the warehouse, the *Default location* is the standard location set for the given warehouse on the Produmex Inventory tab of the Item Master Data of the item. If the items to move have different standard location set for the warehouse, no default location is displayed.

Scan an SSCC to unpick the product to that SSCC. If the scanned SSCC is not in stock, identify the destination location on the next screen.

Scan a location to unpick the products to that location or press the 'Select other location' to select it from a list.

Press the 'New SSCC' button to unpick to a new SSCC. On the next screen scan a location or select it from a list after pressing the 'Select other location' button.

After the unpicked items have been moved to the selected location, the system generates a 'Move' document in the Produmex office module to register the movement.

After a component was unpicked, it can be picked again with the 'Normal picking for production' flow.

5.1.2.5. Cancellation

To cancel the unpicking, press the left arrow button. When there are already unpicked products the system will ask whether to process with the unpick or not. Press the 'Process unpick' button to book the unpick. Press the 'Cancel unpick' button to clear the list of unpicked products.
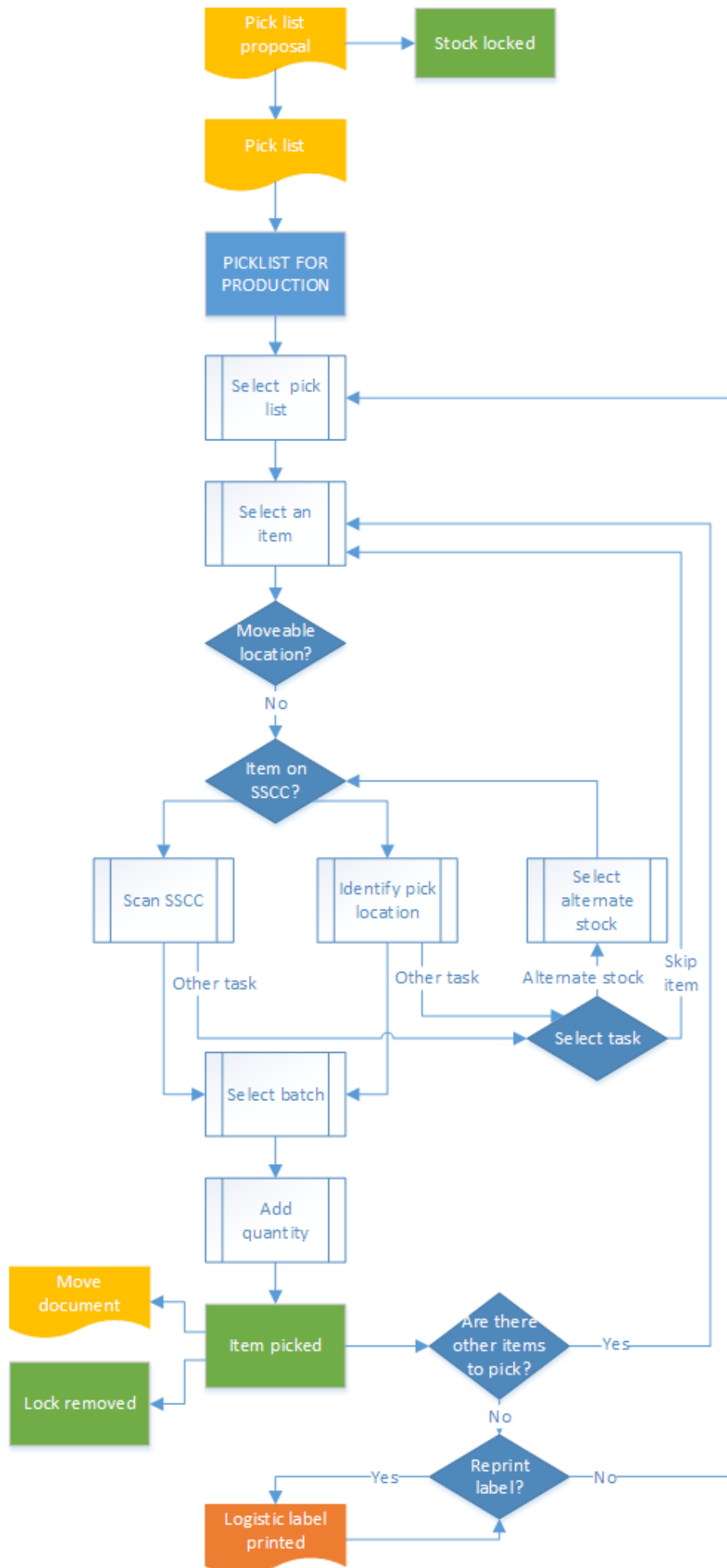

5.2. Pick list for production

5.2.1. Office

Before picking with the 'Pick list for production' flow, create a pick list in the office environment.
On the production order click on the 'Create pick list proposal' button. The button is only displayed if the 'Create proposal for picking' option is set to true in the Picking for production controller. A pick list proposal will be generated and the stock to be picked will be locked. It is only possible to create a pick list proposal for a production order with an assigned production line.
It is also possible to create pick lists for production via the Pick list proposal manager.
Then click on the 'Gen. pick list' button on the pick list proposal window to create the pick list. It is only possible to generate a pick list for released production orders.

- Pick list for production
- Select a pick list
- Select an item
- Identify moveable location
- Identify the SSCC or pick location
- Select batch
- Other tasks
- Enter quantity
- Picked pallet

5.2.2. Shopfloor

5.2.2.1. Initiate the flow

To initiate the flow, press the 'Pick list for production' button on the scanner.

5.2.2.2. Select a pick list

Select a pick list from the list. Only active pick lists for a production order will be displayed. The following information is shown on the list:

1. Production order number
2. Destination location of the picking. Depending on the settings of the production line, the destination location is the input location or the pick to location of the production line.
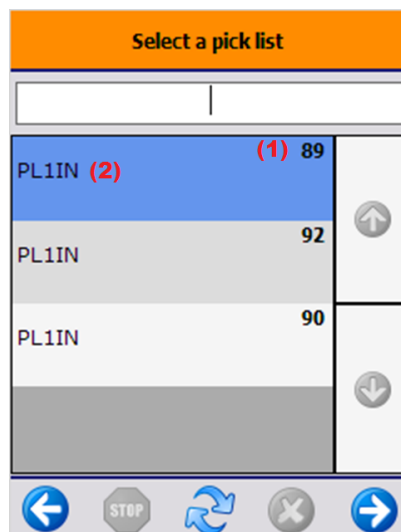
5.2.2.3. Select an item

Select a pick list line to pick. Press the right arrow button to proceed.

5.2.2.4. Identify moveable location

Press the 'No moveable location' button to pick the components directly to the destination location. During this flow it is not recommended to pick onto a moveable location.

5.2.2.5. Identify the SSCC or pick location

Scan the SSCC or the pick location. To select the pick location from a list, press the 'Select location' button.

1. Pick location
2. Quantity to pick from the item
3. Item to pick
4. Storage logistic unit
5. Total quantity of the pick list

5.2.2.6. Select batch

When the item is managed by batches and there are more than one batch on the logistic unit or pick location, select the batch as well. Only the batch defined in the pick list can be selected.

5.2.2.7. Other tasks

Press the 'Other task' button to reach the following tasks:

- Alternate stock
- Skip item

Press the 'Alternate stock' button to select alternate stock. On the next screen select the alternate stock from the list. After the alternate stock has been selected, identify it as described above.
Press the 'Skip item' button to skip the item. The system will go back to the 'Items still to pick' screen. (5.2.2.3.)

5.2.2.8. Enter quantity

After the SSCC or pick location was identified, enter the quantity to pick. The picked quantity cannot exceed the quantity in the pick list.

5.2.2.9. Picked pallet

After the quantity has been added, the locking is removed for the product. The product is moved to the destination location. The movement is registered in the Produmex office module in a 'Move' document. Proceed with the next line of the pick list. After every component has been picked, the system displays information about the picked pallet.

1. Name of the production line
2. SSCC of the new logistic unit

Note:

- NEW If the full quantity of the selected item is picked and the *204 - Picking: after item is picked print event* is set for the pick list type on the Print Events tab of the Organizational Structure, the system asks if you want to print a label. To proceed with the printing click OK.
- When the 'Picking for production: new LU full event (201)' print event is set in the Organizational Structure, the print event is triggered and the logistic label is printed. The default report for this print event is the *DefaultLogisticsLabel.rpt*.