9. Packing flows

Because the packing station is a fixed location, most of the packing flows run on a fixed touchscreen terminal. The flows on the touchscreen terminal vary in the inputs used for identifying the items to be packed.

- Packing flow: the flow uses movable location(s) as input
- Consolidated packing flow: the flow uses pick list(s) and logistic unit(s) as input.
- Item packing flow: the flow uses a moveable location as an input, but the pick list can be identified by scanning an item.
- Cash register packing: the flow uses a pick list as an input. The user can perform the picking and packing in one step.

Produmex also provides a packing flow called Mobile packing flow which runs on a scanner. Because the flow does not need a fixed touchscreen, there are less constraints for the packing process with respect to the available packing stations.

Creating button specific barcodes

During the packing flows running on a fixed touchscreen terminal, different buttons will be enabled for you on the screen. **There are six buttons, which you do not necessarily have to press on the screen:**

1. **Add SSCC**
2. **Enter cart manually**
3. **Add items**
4. **Finish logistic unit**
5. **Select all**
6. **Skip items**

Instead, you have the option to create barcodes which you can scan. The barcode needs to start with '<BUTTON>' and then you need to add the translation key of the given button.

Button	Examples for barcodes
1.Add SSCC	<BUTTON>MSG_BUTTON_PACKING_ADD_SSCC
2.Enter cart manually	<BUTTON>MSG_BUTTON_PACKING_IDENTIFY_CART
3.Add items	<BUTTON>MSG_BUTTON_PACKING_ADD_ITEMS
4.Finish logistic unit	<BUTTON>MSG_BUTTON_PACKING_FINISH_PALLET
5.Select all	<BUTTON>MSG_BUTTON_SELECT_ALL
6.Skip items	<BUTTON>MSG_BUTTON_PACKING_SKIP_ITEMS

Example
On the first screen below you have the option to press the button Add items manually. **Instead of pressing the button, you can scan your barcode** and the system will press the button automatically.
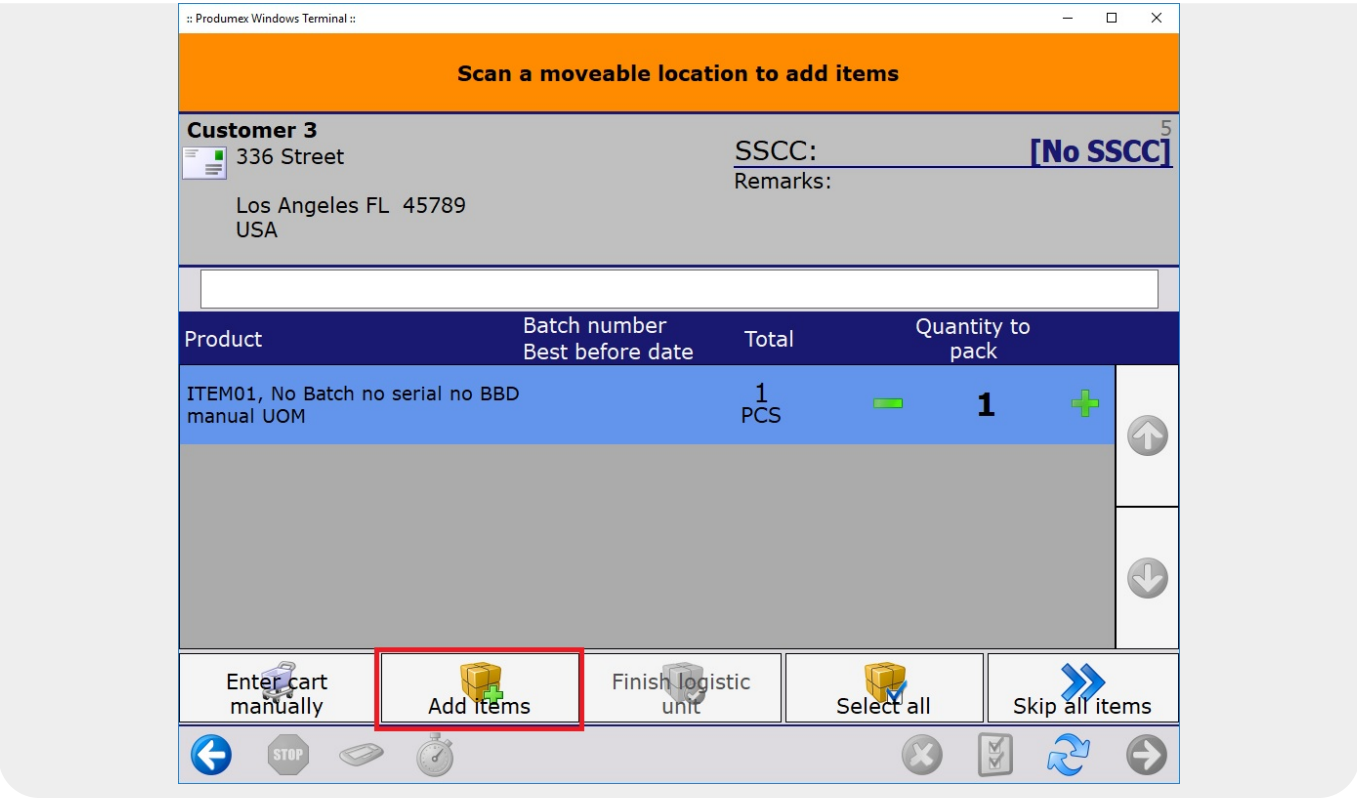
Both actions will navigate you to the next screen where you can proceed with the Finish logistic unit button.
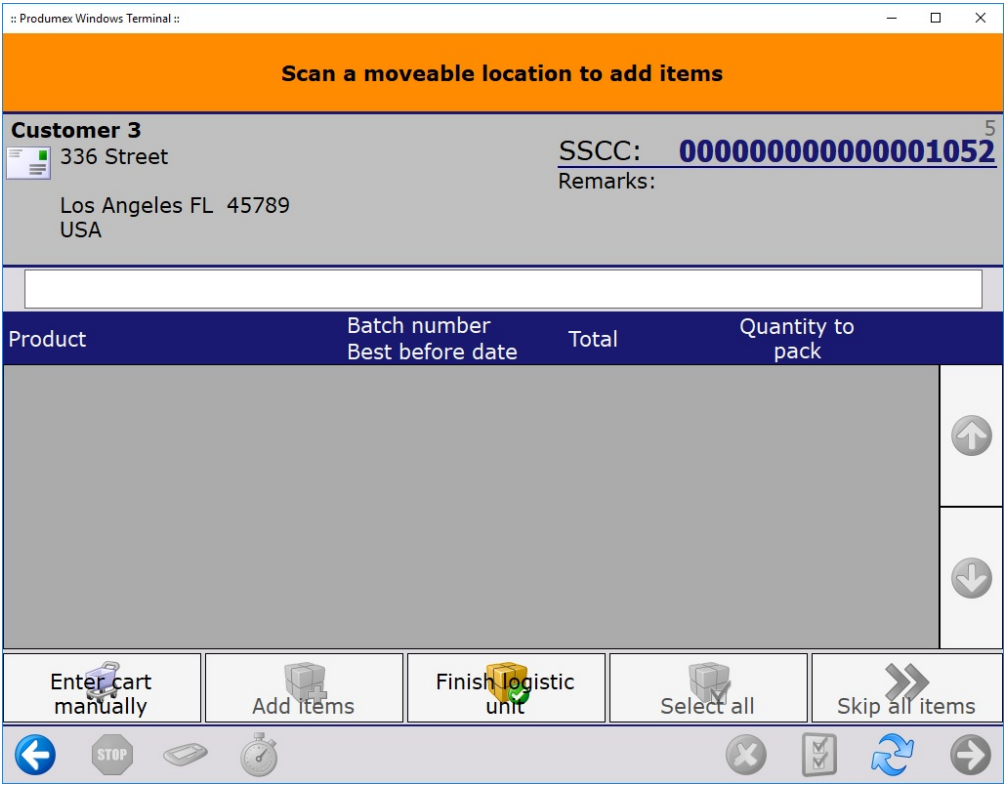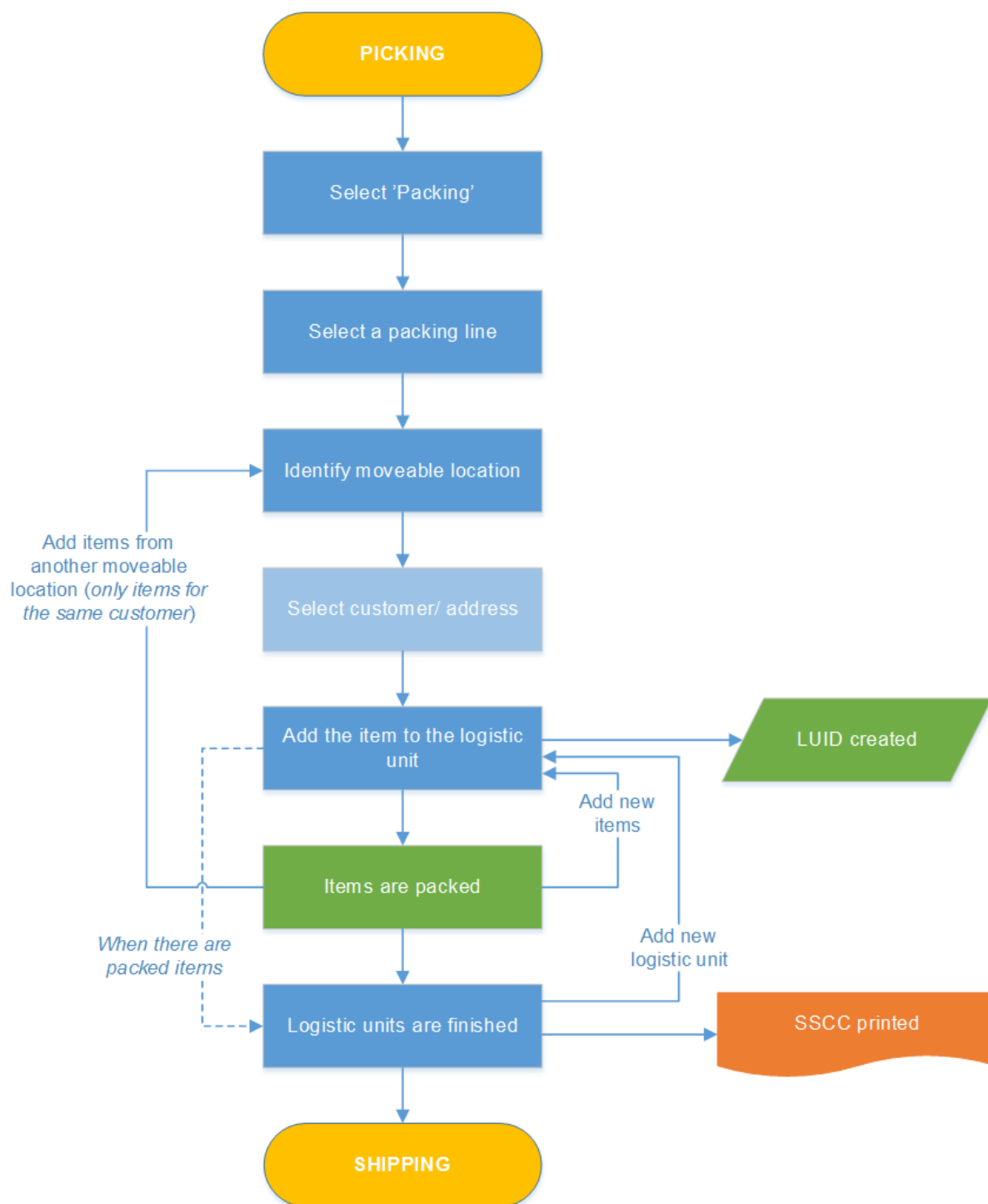

In the next sections you will have several opportunities to use the six buttons. Whenever any of them

is mentioned, please keep in mind that you can scan your own button specific barcode instead.

9.1. Packing

Workflow

- Select a packing line
- Identify moveable location
- Add items
- Finish logistic unit

Note: It is possible to set the touchscreen to be only used for the Packing flow: In the Organizational Structure select the *MainTouchPackingFlow* for the thin client. For more information about the thin client settings see: 5.2.10. Thin client settings.

Packing Flow steps

1. Select a packing line

Select a packing line where the items that have to be packed are located.

2. Identify moveable location

After selecting a packing line, scan the moveable location on which the items currently are or tap the `Enter cart manually` button and enter the code of the moveable location by using the keyboard.

When there are items picked for multiple customers onto that moveable location, the system displays a list of these customers. Select a customer/address and proceed by tapping the right arrow button. When there are items for only one customer on the moveable location, the system automatically proceeds with that customer.

3. Select a task

When the *Allow to create master SSCC* option is enabled on the Pick list controller, it is possible to create a master SSCC during the packing. On the Select a task screen tap the `Create master SSCC` button to pack onto a master SSCC. Tap the `Create normal SSCC` button to pick onto a normal SSCC.

When the *Use pallet packing type from customer master data* option is enabled on the on the Packing controller and the Pallet packing type is *Multiple Pallet*, *Pallet –multiple carton* or *Ask user*, add the number of identical logistic units as well.

Enter number of identical logistic units to pack

	2	
—		**+**

7	8	9	<?
4	5	6	-
1	2	3	ENTR
0	.		

In the case of working with master SSCCs, first add the number of the identical master SSCCs and then add the number of identical sub SSCCs on a single master SSCC.

4. Adjust quantity and select items

On the next screen the system displays the list of the items picked into the movable location. You can use the input field to filter the list.

Displayed information:
At the top left corner the system shows the name of the customer and the shipping address.

At the top right corner the system displays the picklist number(s), the SSCC number and the pick and pack remarks.

Note: When packing on multiple SSCCs, the system displays the text *Multiple SSCCs*.

Additional information displayed on the screen: barcode, item code, item description, batch number, best before date and total quantity.

The total quantity marks the open quantity on the moveable location.

- When packing on multiple SSCCs, the total quantity marks the total quantity on the moveable location / the number of identical SSCCs.
- When packing on multiple identical master and sub SSCC, the total quantity marks the total quantity on the moveable location / (the number of identical master SSCCs * number of identical sub SSCCs)

Grouped items

By default, the system groups the items that have the same identical item number, batch1 number and best before date. You can ungroup and then regroup the items by clicking the ☰ button.
If the grouped lines have items managed by serial numbers, the system asks you to scan the serial numbers by picklist lines as a next step in the flow.

Adjust quantity

By default, the system displays the total quantity in the Quantity to pack section. The maximum quantity that can be packed is the total quantity on the line.

Adjust the quantity by tapping + or - in the Quantity to pack section. The quantity can also be entered by using a keyboard. Click on the quantity field and enter the quantity on the keyboard. Press `Enter` to close the keyboard.

Select items

Select the items to be packed by clicking on the line or use the `Select all` button to select all the items on the list.

5. Add items

If at least one item is selected, the `Add items` button becomes active. Tap the button and the selected items are moved onto the logistic unit.

The items that have already been packed are not displayed on the list. Packed items cannot be removed from the logistic unit.

When at least one item is packed onto the logistic unit, the system creates a LUID for it. After the LUID is generated, it is displayed on the screen.

Changing Shipping Type
When 'Allow changing shipping type for Logistic unit' has been enabled on the Packing Controller, a 'Shipping Type' drop-down menu is activated on this window.

Note: At this point, only the sub-variants of Manual or Auto shipping types can be selected (based on the specifics of the Sales Order header). If the Shipping Types are mixed on the lines, the request will be blocked.

The shipping type also stored/saved on the PMX_LUID table in the 'ShippingType' column.

Note: The default 'Shipping type' displayed in the field on the packing screen corresponds to the one set in the 'Sales Order' line.

Logistic carrier

If you have logistic carriers enabled, the system asks which one you want to use. If the *Ask logistic unit when LUID is finished* setting is enabled on the packing controller, the Packing Flow does not ask for the logistic carrier when a new LUID is started, but only when you indicate that the logistic unit is full.

Scanning an external SSCC
If the *Allow the input of an external SSCC?* and *Force user to rescan SSCC* settings are enabled on the Packing Controller, the system displays the Scan an SSCC screen when the first item is added and allows for scanning an external SSCC instead of generating a new SSCC automatically.

After scanning an SSCC, each time you add a new item to the logistic unit, you must rescan the SSCC to ensure that the item is added to the appropriate logistic unit. If the wrong SSCC is scanned, the system displays an error message and does not allow the item to be added to the logistic unit. You must scan the appropriate SSCC (or select a different item and then scan the appropriate SSCC) to proceed with the flow.

6. Add cart

New items for the same customer can be added to the list of possible items to pack. For adding items from another moveable location, scan the barcode or tap the `Enter cart manually` button and enter the code.

7. Finish Logistic Unit

If there is at least one item packed into the Logistic Unit, the `Finish Logistic Unit` button becomes active.

If changing Shipping Type for Logistic Unit has been enabled, the Shipping Type for each added item can be changed here, too, before finishing the Logistic Unit. Note that only variants of Auto or Manual Shipping Type can be selected based on the Sales Order header of the added item.

Tap the `Finish Logistic Unit` button and the system prints the SSCC label. *(Packing: finished*

logistic unit event (500) print event) After finishing a Logistic Unit, the system displays the shipping dock where to logistic unit has to be moved.
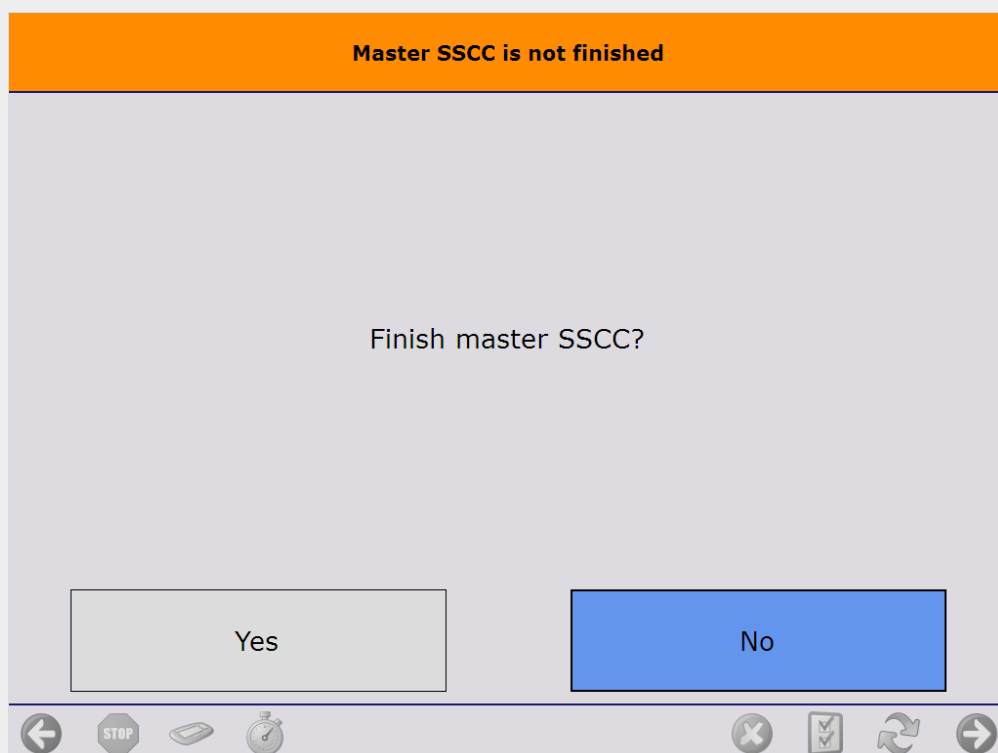

When creating a master SSCC during the picking and tapping the `Finish Logistic Unit` button, the system asks whether you wish to finish the master SSCC or the sub SSCC.

Tap the `Master SSCC is full` button to finish the master SSCC. After finishing the master logistic unit, the system prints the labels for the master and the sub logistic units and displays the dock where the master logistic unit has to be moved. On the next screen declare whether you would like to start a master or a sub SSCC.

Tap the `Sub SSCC is full` button to finish the sub SSCC. The picking will be continued onto a new sub SSCC, but onto the same master SSCC.

If every item is packed and 'Automatic shipping' is enabled for the [shipping type](#) of the base document, the *Master SSCC is not finished screen* is opened. Tap the `Yes` button to finish the master SSCC as well.

On the next screen the select a logistic unit to pack on or tap the `Start new logistic unit` button to create a new logistic unit.

7.1. Capture weight

If the *'Ask weight?'* or *'Ask weight Sub SSCC?'* option is set to true on the Produmex pick list types user table for the pick list, and there is a scale defined under the shipping dock/packing line, the weight of the logistic unit can be measured on the connected scale after the logistic unit is finished.

> Make sure that conversions between the units of measurements are set up correctly on the Units of Measure - Setup (OUOM) and Weight - Setup (OWGT) SBO standard tables.
>
>

1. The measured weight. The UoM is the UoM defined for the scale. The number of decimals displayed depends on the scale accuracy.
   This field is automatically filled with the weight measured on the connected scale. It is possible to manually overwrite the measured weight.
   If the weight is manually added or the connection to the scale is lost, the value starts flickering

in red.

2. If the scale has a defined zero command, the *'Zero'* button is displayed.
3. If the scale has a defined tare command, the *'Tare'* button is displayed.
4. The code of the connected scale.
5. If there are more than one scales defined under the dock/packing line, an additional `Switch scale` button is displayed on the screen. Tap this button to change the scale.
   On the next screen select the scale from the list. Every scale defined under the dock/packing line is listed. After switching the scale, the screen will use the chosen scale. After proceeding with the flow, and a new weight needs to be captured, the standard logic to choose a scale is used. This means that switching scale only switches the scale for the current weighing.
6. SSCC number of the logistic unit.
7. *Theoretical weight*: The *theoretical weight* is the sum of the weight of the items on the logistic unit. The item weight can be defined on the Sales tab of the Item Master Data.
8. In the case of master SSCC's, an additional *Sub SSCC's weight* value is shown. The value is calculated as the sum of the measured weight of the Sub SSCC's.

7.2. Enter dimensions

If the *Ask weight?/ Ask weight Sub SSCC?* option is enabled for the pick list type, and there is no scale defined under the shipping dock/packing line, the user has to enter the weight of the (sub) logistic unit after it is finished. The data will be stored on the PMX_LUID table. The unit of measure is the *Default Weight UoM* set on the Display tab of General Settings.

Based on the pick list type settings, the user might have to enter the dimension(s) of the (sub) logistic unit after it is finished.

When there are package dimensions defined on the Package Dimensions table, the user can select a predefined dimension instead of entering the length, the width and the height manually. The 'Select a package' screen opens. On this screen every package dimension that is not cancelled is listed. Select a dimension from the list or tap the `Enter dimensions manually` button.

When the `Enter dimensions manually` button is tapped or there are no package dimensions defined, the user has to enter the dimensions manually.

- If the *Ask length?/ Ask length Sub SSCC?* option is enabled for the pick list type, the user has to enter the length of the (sub) logistic unit after the it is finished.
- If the *Ask width?/ Ask width Sub SSCC?* option is enabled for the pick list type, the user has to enter the width of the (sub) logistic unit after the it is finished.
- If the *Ask height?/ Ask height Sub SSCC?* option is enabled for the pick list type, the user has to enter the height of the (sub) logistic unit after the it is finished.

The data will be stored on the PMX_LUID table. The unit of measure is the Default Length UoM set on the Display tab of General Settings.
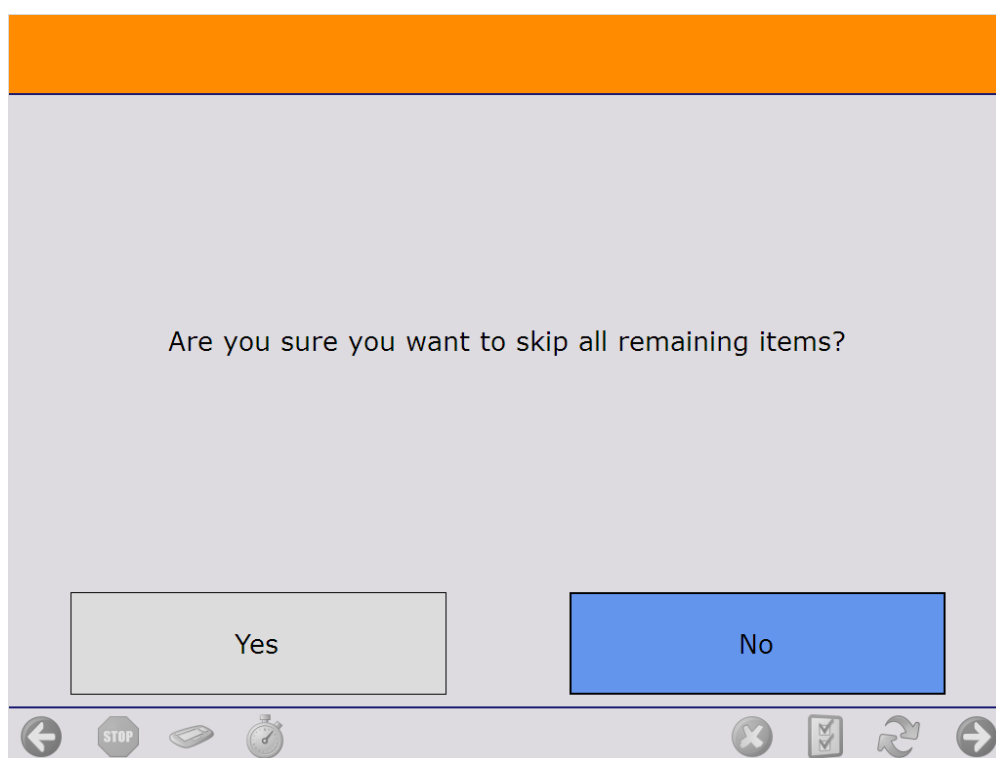
8. Skip items

It is possible that there are goods that cannot be packed. Produmex WMS offers two possibilities to skip these goods:

- Operators can skip remaining stock on the *Main Packing* screen for every item type
- Operators can skip serial numbers on the *Scan a Serial Number* screen for items managed by serial numbers

8.1. Skip items on the Main Screen

Continue the packing until only products that cannot be packed are listed on the screen.
On the main Packing screen tap the `Skip all items` button to skip every remaining item.

On the next screen confirm that you would like to skip the remaining items.

The system proceeds to the *Select a reason* screen.
Select a reason from the list. Every reason that can be used for picking is listed.

On the next screen define where the skipped items should be moved.

- To move the items onto an SSCC, scan the SSCC. If the scanned SSCC is not in stock, identify the destination location as described below.
- To create a new SSCC, tap the `New SSCC button` then identify the destination location as described below. If configured, the *700 - WHS: created LU* print event is triggered and the logistic label is printed.

- Scan the destination location or select it from a list.
  - Tap the `Select location` button to list every active location from the warehouse.
  - Tap the `Select empty location` button to list every empty active location from the warehouse.

Please note: If no SSCC is created or selected, the items will be moved without a linked logistic unit.

After the destination location is defined, the system removes the locking from the skipped products and updates the pick list.

- If the total quantity on the pick list line is skipped, the system adds the selected reason to the pick list line and closes it.
- If the pick list line is partially skipped, the 'Open' and 'Picked' quantity of the pick list line is updated with the packed quantity. A closed line will be added with the quantity and the details of the skipped product and the selected reason.

After the lockings are removed, the skipped products are moved onto the selected logistic unit or destination location. Then the system returns to the *Select moveable location* screen where the user can continue the packing.

8.2. Skip serial numbers

It is possible to skip items that cannot be packed while scanning the serial numbers. Please note that operators cannot skip serial numbers if they use the scan a serial number range feature.

Start the scanning on the *Scan a Serial Number* screen.

- To skip a single serial number, tap the `Skip(1)` button. The number of items to pack(4) is

lowered by one. The serial number scanning can be continued.

- To skip all remaining serial numbers, tap the `Skip all`(2) button. The serial number scanning is finished and only items with serial numbers scanned are packed.


Use the *8.1. Skip items on Main Screen* function to move the damaged goods from the Packing station.

9. Restarting the flow

The flow can be continued after it has been stopped. Restart the flow and select the packing location. If there are a moveable location, scan the moveable location as well. Then the system will offer the option to choose from the existing logistic units or to start a new one.
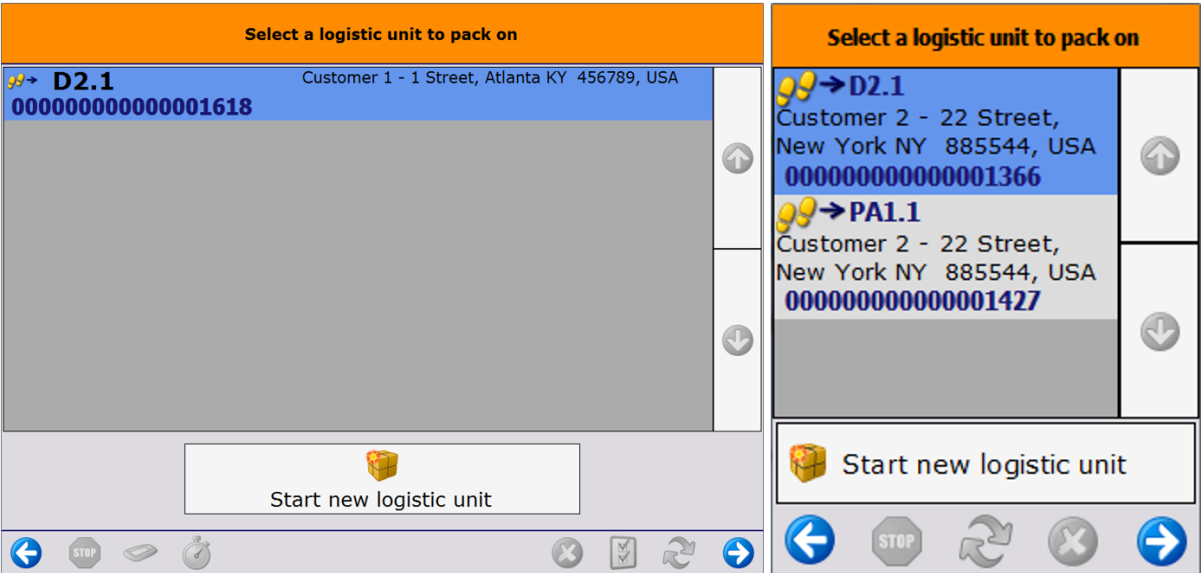
After selecting the logistic unit, scan the SSCC barcode on the logistic unit.
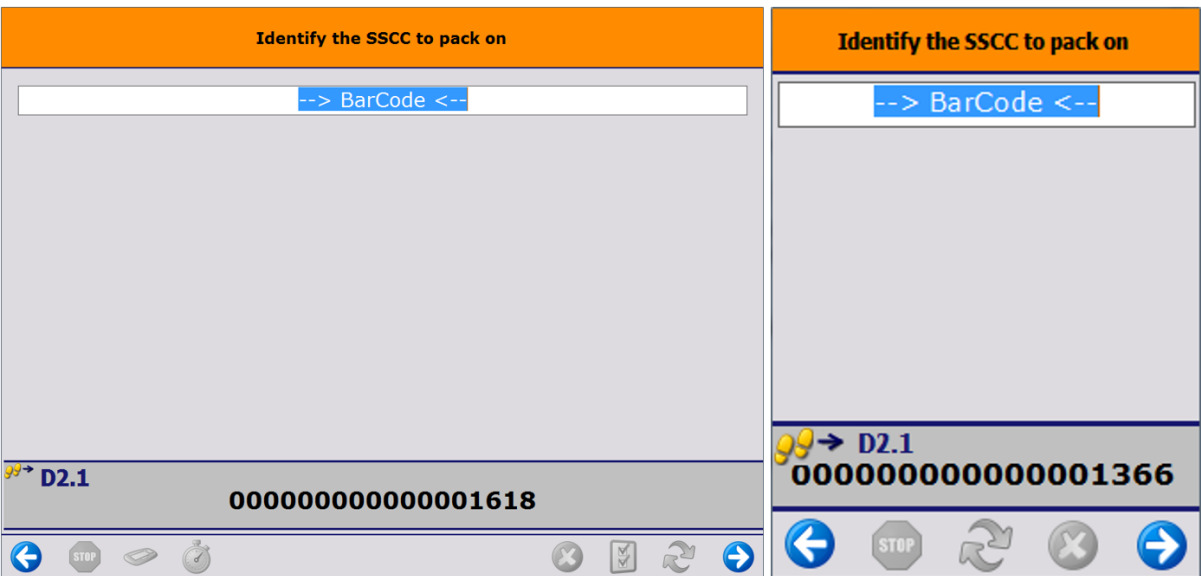
10. Continue the packing onto an already packed logistic unit

When there are already packed logistic unit(s) for the selected customer or shipping address, the system will offer the option to choose from the existing logistic unit(s) or to start a new one. After selecting a logistic unit, scan the SSCC barcode on it.

9.2. Consolidated packing

Consolidated Packing Flow - creating SSCC number

This flow takes place when logistic units were used instead of movable locations during the picking. The flow uses the logistic unit(s) as an input and an SSCC number is created.

Configuration

Before starting the picking flow, set the following configurations:

- Check the 'Always status picked' box at the 'Produmex pick list types' window. For more information see: 3.2.3.2. Produmex pick list types (PMX_PLTY)
- Link the packing line to the zone where the picking takes place at the 'Link pack line to zone' window. For more information see: 3.2.3.9. Link pack line to zone (PMX_LPLZ)

Workflow
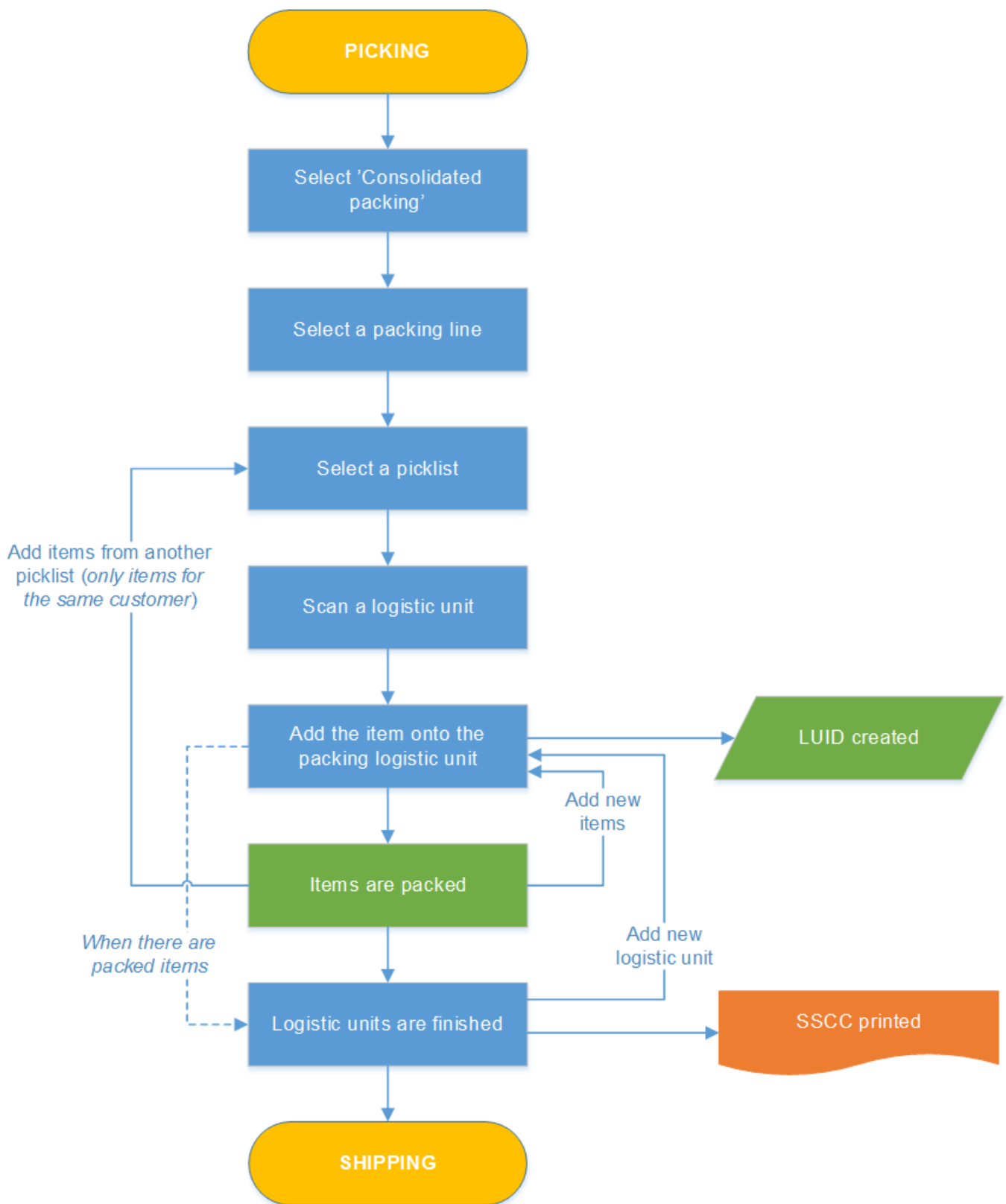
- Select a packing line
- Select a picklist#select_a_picklist
- Scan an SSCC
- Pack and add items
- Add SSCC
- Finish SSCC

1. Select a packing line

Select a packing line where the items that have to be packed are located.

2. Select a picklist

After selecting a packing location, the system will display the list of the pick lists which have been picked to the zone linked to the packing location.

Select a pick list from the list and proceed by tapping the right arrow.

3. Scan an SSCC

Scan the SSCC barcode on the logistic unit. *(Logistic units cannot be selected from the list.)*

4. Select a task

If the *Allow to create master SSCC* option is enabled on the Pick list controller, it is possible to create a master SSCC during the packing. On the Select a task screen tap the 'Create master SSCC' button to pack onto a master SSCC. Tap the `Create normal` SSCC button to pick onto a normal SSCC.

When the 'Use pallet packing type from customer master data' option is enabled on the on the Packing controller and the Pallet packing type is 'Multiple Pallet', 'Pallet –multiple carton' or 'Ask user', add the number of identical logistic units as well.

In the case of working with master SSCC's, first add the number of the identical master SSCC's, then add the number of identical sub SSCC's on a single master SSCC.

5. Adjust quantity and select items

On the next screen the system displays the list of the items picked into the movable location. You can use the input field to filter the list.

Displayed information:
At the top left corner the system shows the name of the customer and the shipping address.

At the top right corner the system displays the picklist number(s) and the pick and pack remarks.

Additional information displayed on the screen: barcode, item code, item description, batch number, best before date and total quantity.

The total quantity marks the open quantity on the moveable location.

- When packing on multiple SSCCs, the total quantity marks the total quantity on the moveable location / the number of identical SSCCs.
- When packing on multiple identical master and sub SSCC, the total quantity marks the total quantity on the moveable location / (the number of identical master SSCCs * number of identical sub SSCCs)

Grouped items
By default, the system groups the items that have the same identical item number, batch1 number and best before date. You can ungroup and then regroup the items by clicking the ▤ button.
If the grouped lines have items managed by serial numbers, the system asks you to scan the serial

numbers by picklist lines as a next step in the flow.

Adjust quantity

By default, the system displays the total quantity in the Quantity to pack section. The maximum quantity that can be packed is the total quantity on the line.

Adjust the quantity by tapping + or - in the Quantity to pack section. The quantity can also be entered by using a keyboard. Click on the quantity field and enter the quantity on the keyboard. Press Enter to close the keyboard.

Select items

Select the items to be packed by clicking on the line or use the `Select all` button to select all the items on the list.

6. Add items

If at least one item is selected, the `Add items` button becomes active. Tap the button and the selected items are moved onto the logistic unit.

The items that have already been packed are not displayed on the list. Packed items cannot be removed from the logistic unit.

When at least one item is packed onto the logistic unit, the system creates a LUID for it. After the LUID is generated, it is displayed on the screen.

When changing shipping type for Logistic unit has been enabled on the Packing Controller, a 'Shipping Type' drop-down menu is activated on this window. Select between different types of manual and auto shipping. The shipping type also appears on the LUID table in the 'Shipping Type' column.

Note: At this point, only the sub-variants of manual or auto shipping types can be selected (based on the specifics of the Sales Order header). If the shipping types differ on the lines, the request will be blocked.

7. Add SSCC

New items for the same customer can be added to the list of possible items to pack. For adding items from another moveable location, scan the barcode or tap the Add SSCC button and enter the code.

8. Finish SSCC

If there is at least one item packed into the logistic unit, the 'Finish logistic unit' button will be active.

If changing shipping type for logistic unit has been enabled, the shipping type for each added item can be changed here, too, before finishing the logistic unit. Note that only variants of auto or manual shipping type can be selected based on the Sales Order header of the added item.

After tapping the `Finish logistic unit` button, the system prints the SSCC label. *(Packing: finished logistic unit event (500) print event)* After finishing a logistic unit, the system displays the shipping dock where to logistic unit has to be moved.
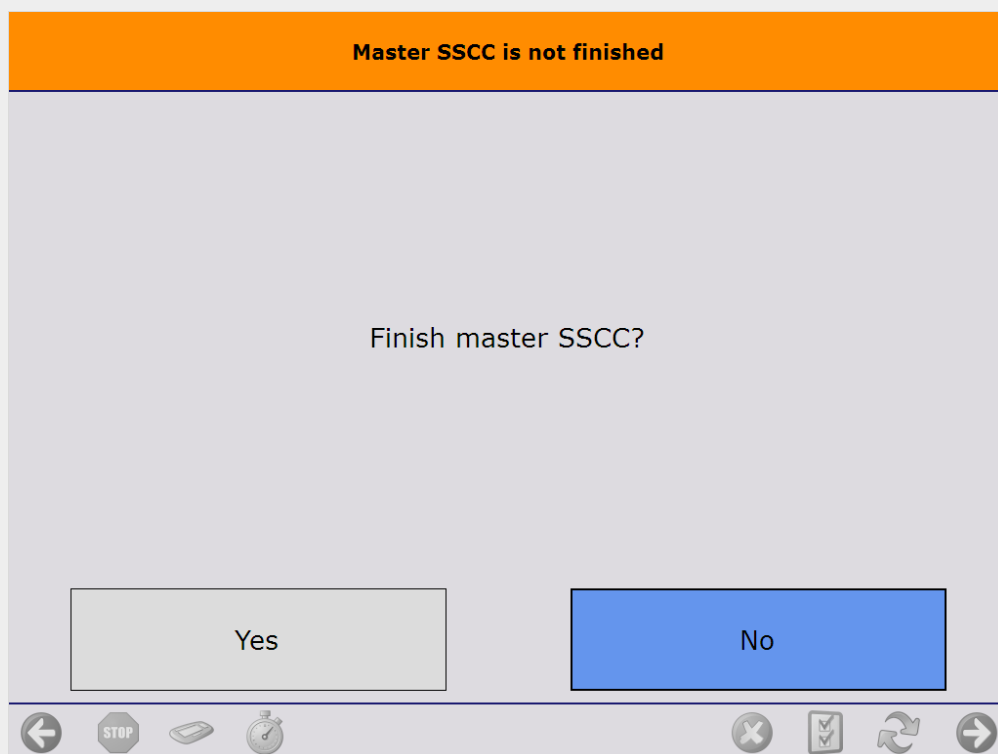

When creating a master SSCC during the picking, after the `Finish logistic unit` button has been tapped, the system asks whether to finish the master SSCC or the sub SSCC.

Tap the `Master SSCC is full` button to finish the master SSCC. After finishing the master logistic unit, the system prints the labels for the master and the sub logistic units and displays the dock where the master logistic unit has to be moved. On the next screen declare whether you would like to start a master or a sub SSCC.

Tap the `Sub SSCC is full` button to finish the sub SSCC. The picking will be continued onto a new sub SSCC, but onto the same master SSCC.

If every item is packed and *Automatic shipping* is enabled for the [shipping type](#) of the base document, the *Master SSCC is not finished screen* is opened. Tap the `Yes` button to finish the master SSCC as well.

On the next screen the select a logistic unit to pack on or tap the `Start new logistic unit` button to create a new logistic unit.

9. Finish SSCC / Capture weight

If the *Ask weight?* or *Ask weight Sub SSCC?* option is set to true on the Produmex pick list types user table for the picklist, and there is a scale defined under the shipping dock/packing line, the weight of the logistic unit can be measured on the connected scale after the logistic unit is finished.

Make sure that conversions between the units of measurements are set up correctly on the Units of Measure - Setup (OUOM) and Weight - Setup (OWGT) SBO standard tables.

1. The measured weight. The UoM is the UoM defined for the scale. The number of decimals displayed depends on the scale accuracy.
   This field is automatically filled with the weight measured on the connected scale. It is possible to manually overwrite the measured weight.
   If the weight is manually added or the connection to the scale is lost, the value starts flickering

in red.

2. If the scale has a defined zero command, the `Zero` button is displayed.
3. If the scale has a defined tare command, the `Tare` button is displayed.
4. The code of the connected scale.
5. If there are more than one scales defined under the dock/packing line, an additional `Switch scale` button is displayed on the screen. Tap this button to change the scale.
   On the next screen select the scale from the list. Every scale defined under the dock/packing line is listed. After switching the scale, the screen will use the chosen scale. After proceeding with the flow, and a new weight needs to be captured, the standard logic to choose a scale is used. This means that switching scale only switches the scale for the current weighing.
6. SSCC number of the logistic unit.
7. *Theoretical weight*: The *theoretical weight* is the sum of the weight of the items on the logistic unit. The item weight can be defined on the Sales tab of the Item Master Data.
8. In the case of master SSCC's, an additional *Sub SSCC's weight* value is shown. The value is calculated as the sum of the measured weight of the Sub SSCC's.

10. Finish SSCC / Enter dimensions

If the *Ask weight?/ Ask weight Sub SSCC?* option is enabled for the pick list type, and there is no scale defined under the shipping dock/packing line, the user has to enter the weight of the (sub) logistic unit after it is finished. The data will be stored on the PMX_LUID table. The unit of measure is the *Default Weight UoM* set on the Display tab of General Settings.

Based on the pick list type settings, the user might have to enter the dimension(s) of the (sub) logistic unit after it is finished.

When there are package dimensions defined on the Package Dimensions table, the user can select a predefined dimension instead of entering the length, the width and the height manually. The 'Select a package' screen opens. On this screen every package dimension that is not cancelled is listed. Select a dimension from the list or tap the `Enter dimensions manually` button.

When the `Enter dimensions manually` button is tapped or there are no package dimensions defined, the user has to enter the dimensions manually.

- If the *Ask length?/ Ask length Sub SSCC?* option is enabled for the pick list type, the user has to enter the length of the (sub) logistic unit after the it is finished.
- If the *Ask width?/ Ask width Sub SSCC?* option is enabled for the pick list type, the user has to enter the width of the (sub) logistic unit after the it is finished.
- If the *Ask height?/ Ask height Sub SSCC?* option is enabled for the pick list type, the user has to enter the height of the (sub) logistic unit after the it is finished.

The data will be stored on the PMX_LUID table. The unit of measure is the Default Length UoM set on the Display tab of General Settings.
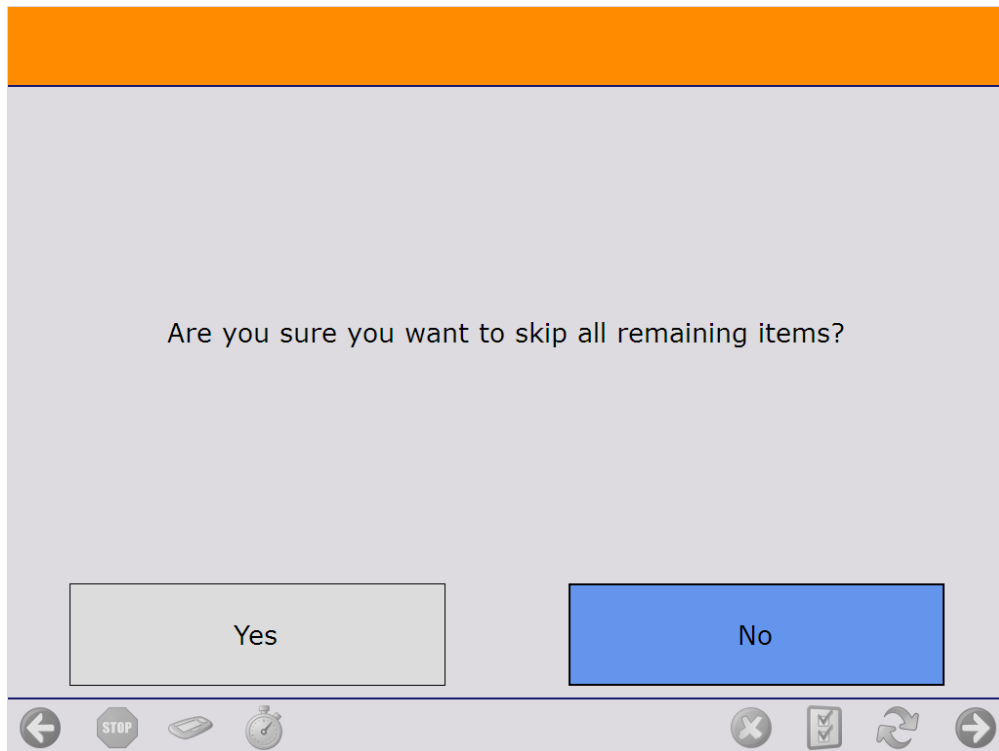
11. Skip items

It is possible that there are goods that cannot be packed. Continue the packing until only products that cannot be packed are listed on the screen.
Tap the `Skip all items` button to skip every remaining item.

On the next screen confirm that you would like to skip the remaining items.

The system proceeds to the *Select a reason* screen.
Select a reason from the list. Every reason that can be used for picking is listed.

On the next screen define where the skipped items should be moved.

- To move the items onto an SSCC, scan the SSCC. If the scanned SSCC is not in stock, identify the destination location as described below.
- To create a new SSCC, tap the `New SSCC button` then identify the destination location as described below. If configured, the *700 - WHS: created LU* print event is triggered and the logistic label is printed.
- Scan the destination location or select it from a list.
  - Tap the `Select location` button to list every active location from the warehouse.
  - Tap the `Select empty location` button to list every empty active location from the warehouse.

Please note: If no SSCC is created or selected, the items will be moved without a linked logistic unit.

Scan destination location or SSCC

Destination location:

Select location

Select empty location

New SSCC

After the destination location is defined, the system removes the locking from the skipped products and updates the pick list.

- If the total quantity on the pick list line is skipped, the system adds the selected reason to the pick list line and closes it.
- If the pick list line is partially skipped, the 'Open' and 'Picked' quantity of the pick list line is updated with the packed quantity. A closed line will be added with the quantity and the details of the skipped product and the selected reason.

After the lockings are removed, the skipped products are moved onto the selected logistic unit or destination location. Then the system returns to the *Select moveable location* screen where the user can continue the packing.

12. Restarting the flow

The flow can be continued after it has been stopped. Restart the flow and select the packing location. If there are a moveable location, scan the moveable location as well. Then the system will offer the option to choose from the existing logistic units or to start a new one.
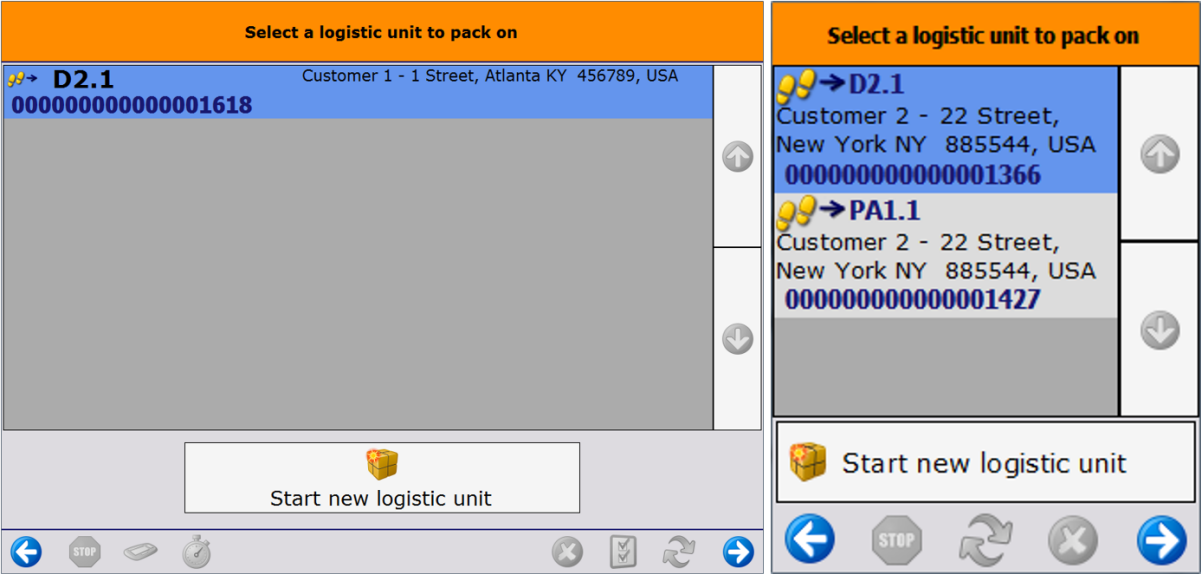
After selecting the logistic unit, scan the SSCC barcode on the logistic unit.
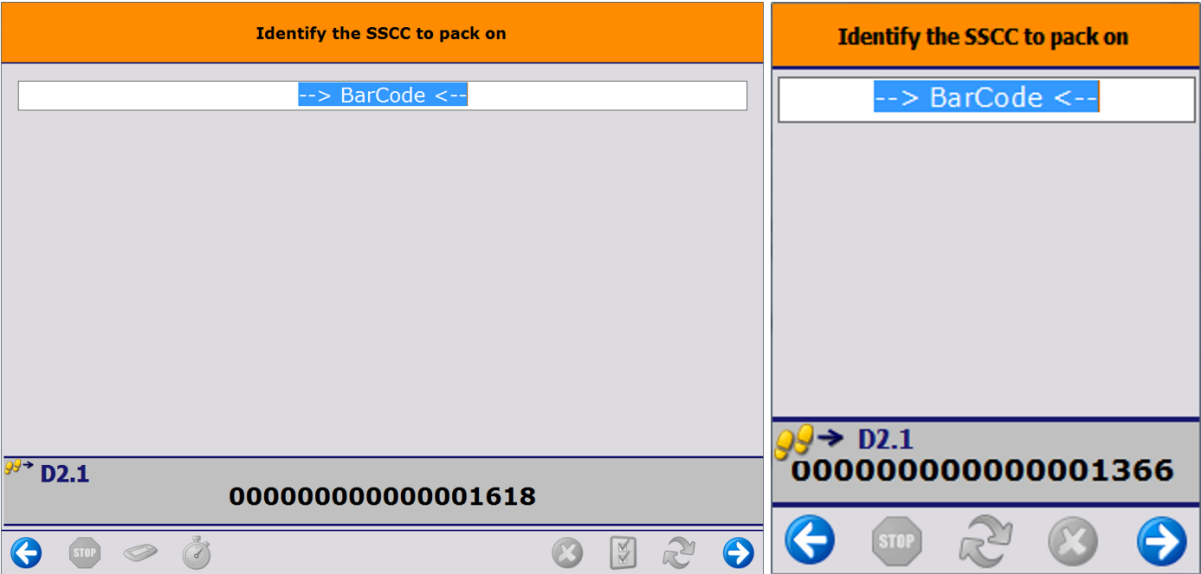
13. Continue the packing onto an already packed logistic unit

When there are already packed logistic unit(s) for the selected customer or shipping address, the system will offer the option to choose from the existing logistic unit(s) or to start a new one. After selecting a logistic unit, scan the SSCC barcode on it.

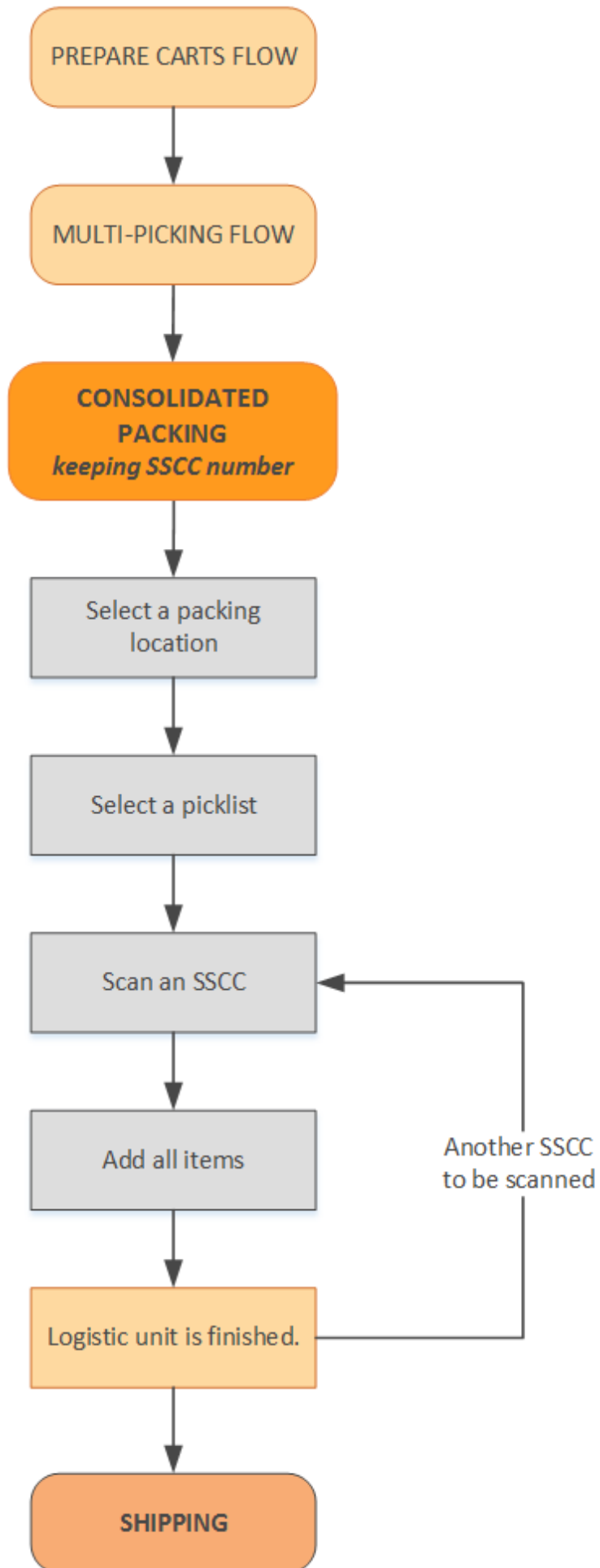# Consolidated Packing Flow - keeping SSCC number

Overview

This flow can be used to double check the content of the carton boxes/logistic units prepared during the Prepare carts and Multi-picking flows. The flow keeps the SSCC number added to the carton boxes during the Prepare carts flow and it will only fully confirm or reject the content.

Configuration

Before starting the picking flow, set the following configurations:

- Check the 'Always status picked' box at the 'Produmex pick list types' window. For more information see: 3.2.3.2. Produmex pick list types (PMX_PLTY)
- Link the packing line to the zone where the picking takes place at the 'Link pack line to zone' window. For more information see: 3.2.3.9. Link pack line to zone (PMX_LPLZ).

Workflow

```
┌──────────────────────────┐
│   PREPARE CARTS FLOW     │
└──────────────────────────┘
             │
             ▼
┌──────────────────────────┐
│   MULTI-PICKING FLOW     │
└──────────────────────────┘
             │
             ▼
┌──────────────────────────┐
│     CONSOLIDATED         │
│       PACKING            │
│  keeping SSCC number     │
└──────────────────────────┘
             │
             ▼
┌──────────────────────────┐
│    Select a packing      │
│       location           │
└──────────────────────────┘
             │
             ▼
┌──────────────────────────┐
│    Select a picklist     │
└──────────────────────────┘
             │
             ▼
┌──────────────────────────┐        ◄───────────────┐
│    Scan an SSCC          │                        │
└──────────────────────────┘                        │
             │                          Another SSCC │
             ▼                          to be scanned│
┌──────────────────────────┐                        │
│    Add all items         │                        │
└──────────────────────────┘                        │
             │                                       │
             ▼                                       │
┌──────────────────────────┐                        │
│ Logistic unit is finished.│──────────────────────┘
└──────────────────────────┘
             │
             ▼
┌──────────────────────────┐
│        SHIPPING          │
└──────────────────────────┘
```

- Prepare carts
- Multi-picking
- Select a packing location
- Select a picklist
- Scan an SSCC
- Add items
- Logistic unit is finished.
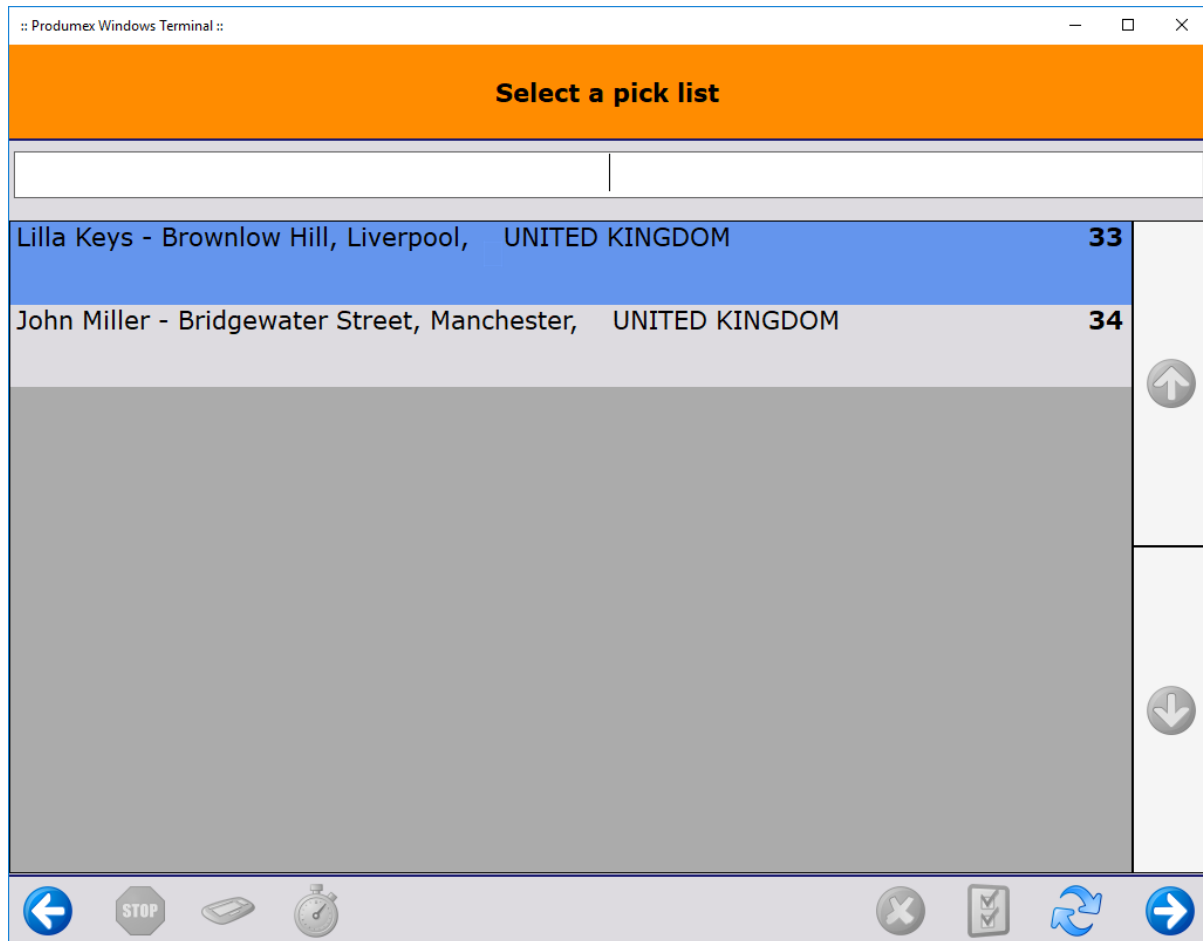- Shipping flow

1. Select a packing location

Select a packing line where the logistic units to be checked are located.
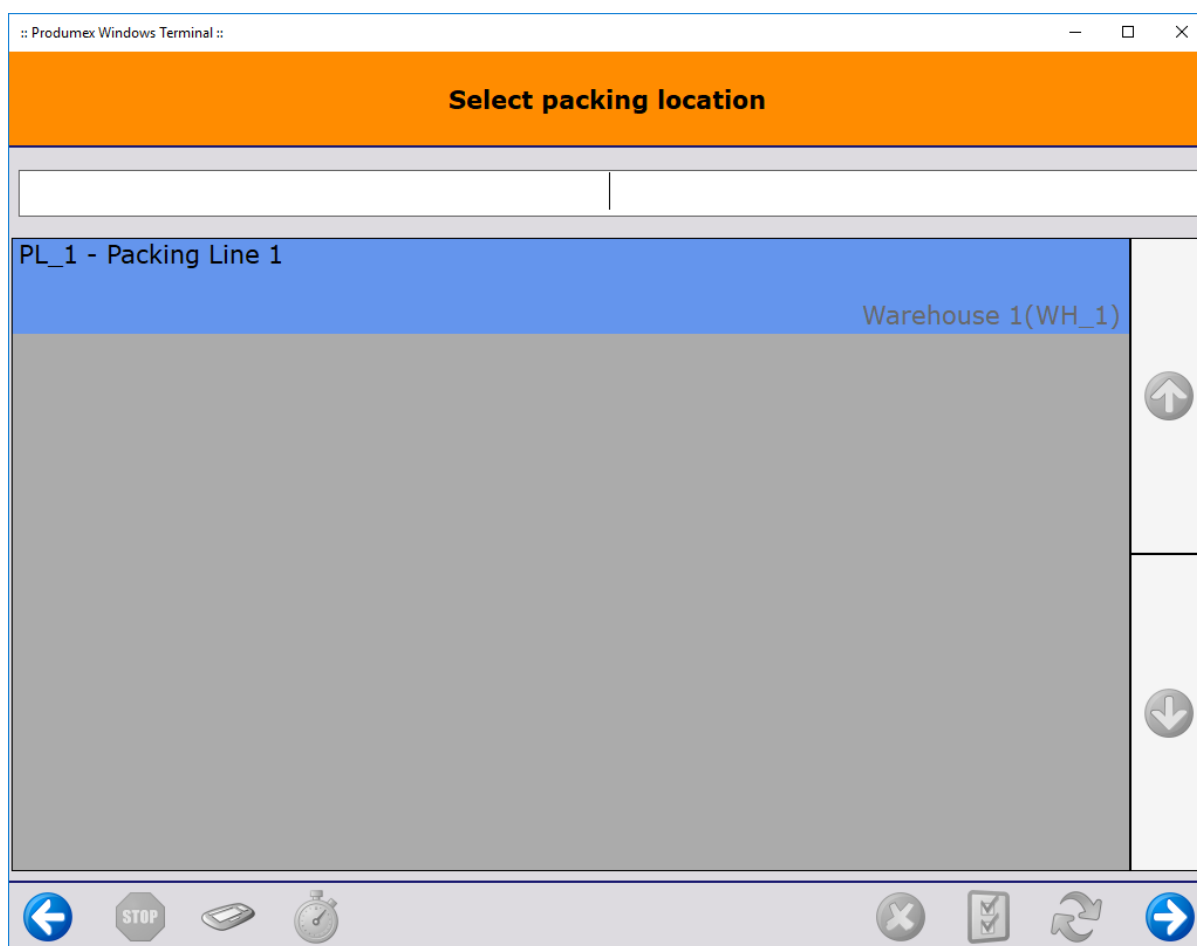
2. Select a picklist

After selecting a packing location, the system will display the list of the picklists which have been picked to the zone linked to the packing location.

Select a picklist from the list and proceed by pressing the right arrow.

3. Scan an SSCC

Scan the SSCC barcode of the logistic unit.
Even if multiple SSCC's are available to be scanned, only one SSCC can be scanned at a time.

Please note that logistic units cannot be selected from the list.

:: Produmex Windows Terminal ::   — □ ✕

Scan an SSCC

PB_2   Warehouse 1(WH_1)
1234567890000000418
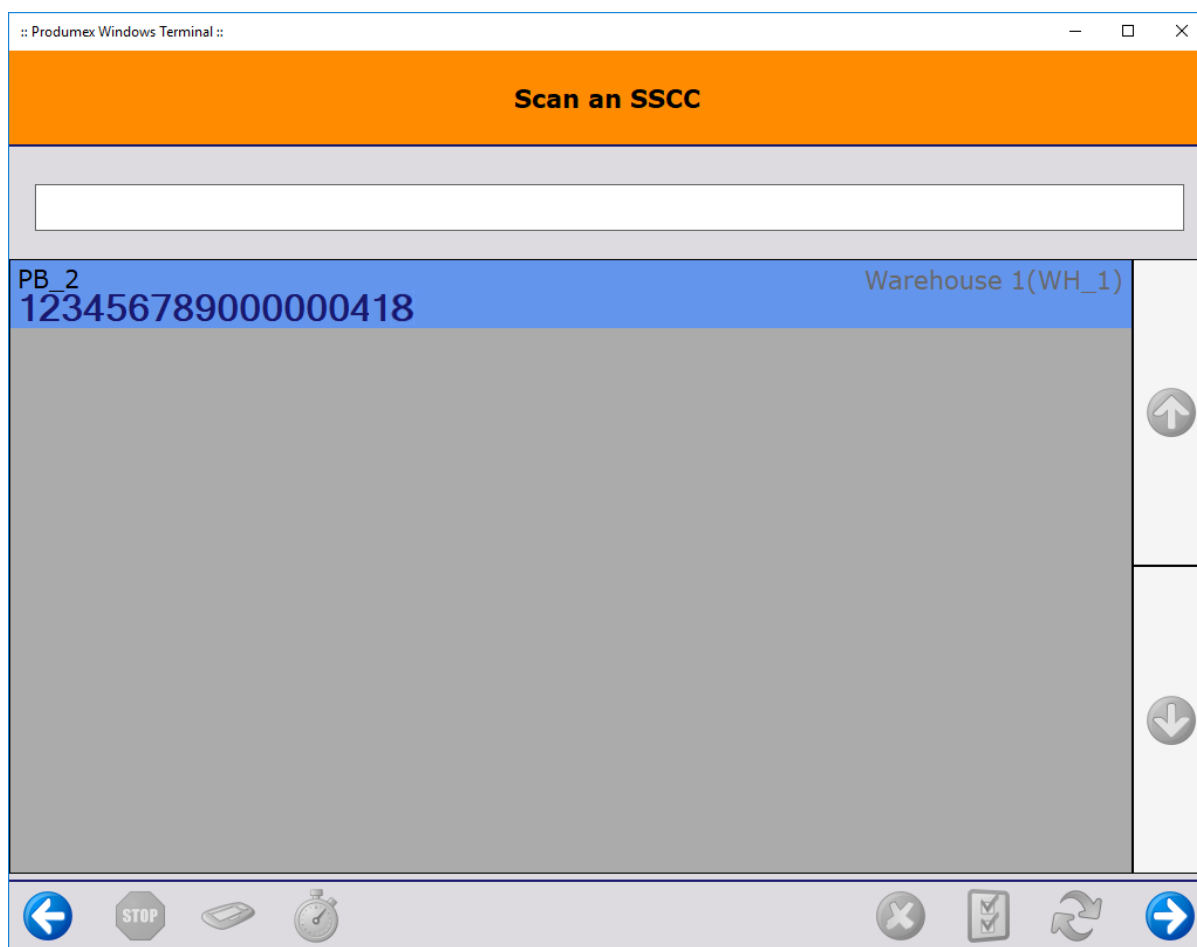
4. Add items

On the next screen you can see that the flow keeps the SSCC number and displays it on the upper right corner of the screen. Click Add items.

Please note that **in this scenario all items need to be packed at the same time.** It is not possible to partially pack because the goods are stored in the same SSCC. All the goods that are on the SSCC will be displayed and automatically selected. It is not possible to adjust the quantity or de-select a line.

When changing shipping type for Logistic unit has been enabled on the Packing Controller, a 'Shipping Type' drop-down menu is activated on this window. Select between different types of manual and auto shipping. The shipping type also appears on the LUID table in the 'Shipping Type' column.

Note: At this point, only the sub-variants of manual or auto shipping types can be selected (based on the specifics of the Sales Order header). If the shipping types differ on the lines, the request will be blocked.

5. Logistic unit is finished

After tapping the Add items button, the system automatically performs the *Finish logistic unit* functionality. The packed SSCC is ready for shipping and moved to the destination location defined in the picklist.

6. Skip all items

In this process it is not possible to partially pack, therefore the goods in the box are either complete and can be packed, or there is something wrong (for example items missing, there are more items than necessary in the box, etc.), in which case all items need to be skipped.

Tap the Skip all items button and on the next screen confirm that you wish to skip all the items.
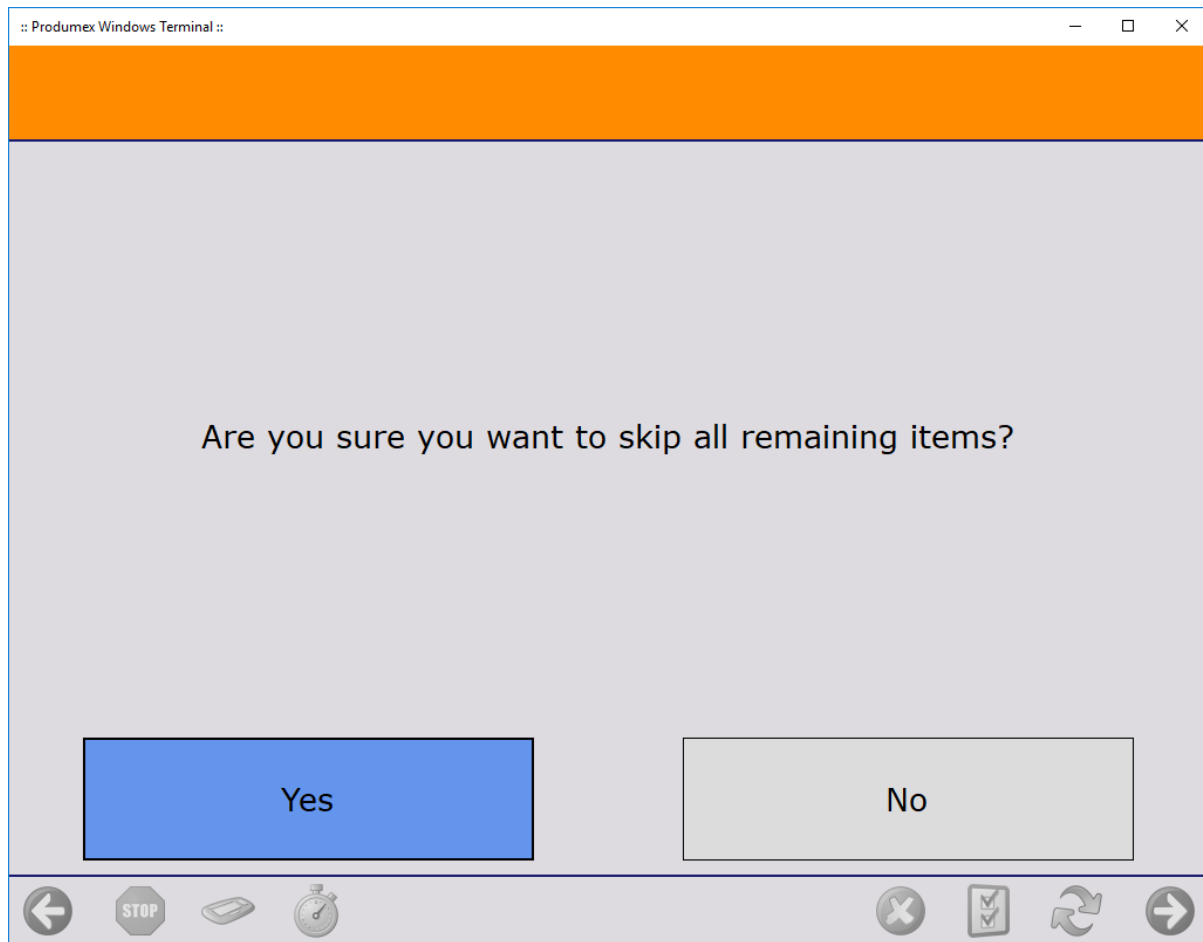
The system proceeds to the *Select a reason* screen.
Select a reason from the list. Every reason that can be used for picking is listed.

On the next screen define where the skipped items should be moved.

- To move the items onto an SSCC, scan the SSCC. If the scanned SSCC is not in stock, identify the destination location as described below.
- To create a new SSCC, press the `New SSCC button` then identify the destination location as described below. If configured, the *700 - WHS: created LU* print event is triggered and the logistic label is printed.
- Scan the destination location or select it from a list.
  - Press the `Select location` button to list every active location from the warehouse.
  - Press the `Select empty location` button to list every empty active location from the warehouse.

Please note: If no SSCC is created or selected, the items will be moved without a linked logistic unit.

Scan destination location or SSCC

Destination location:

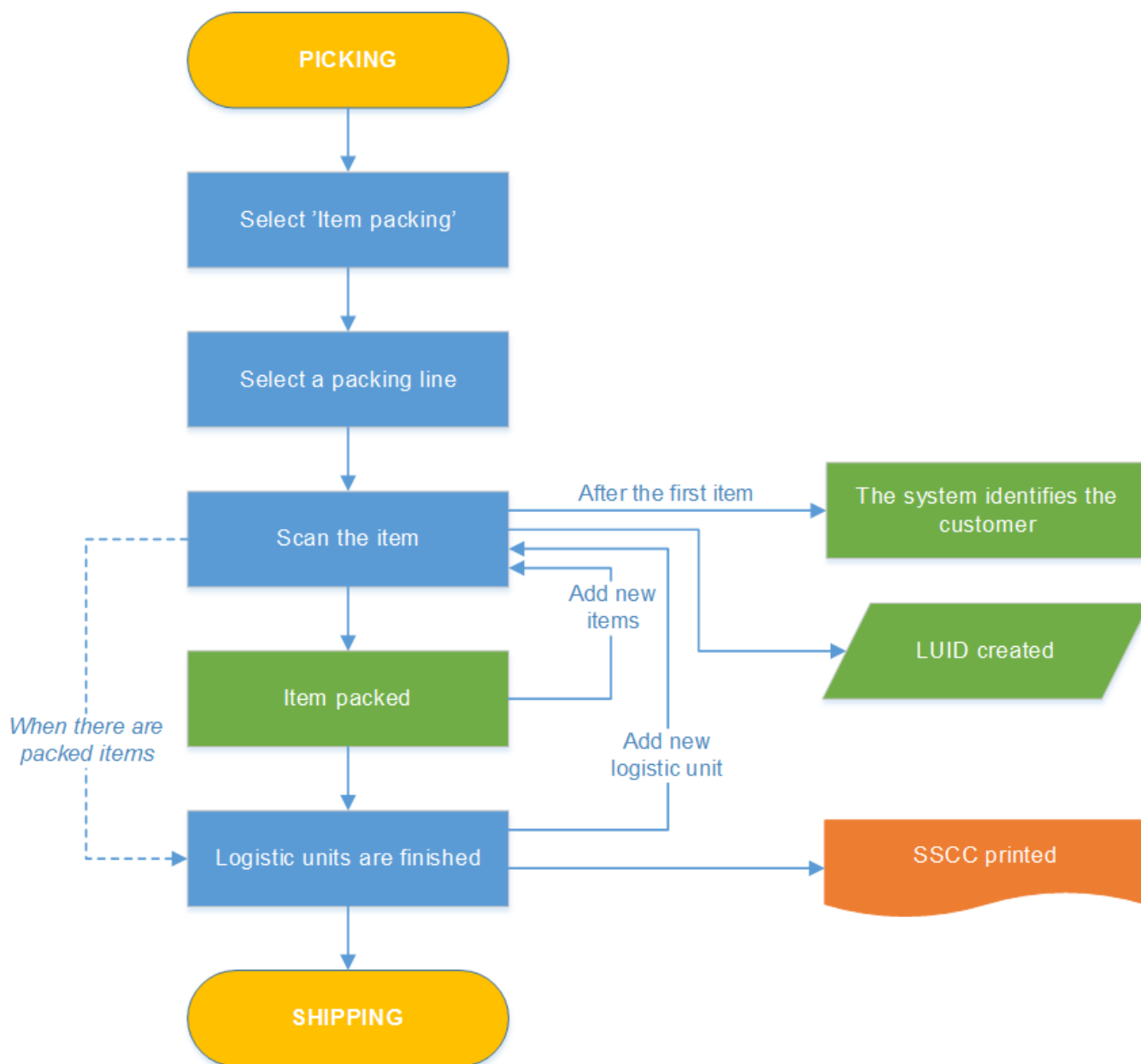Select location

Select empty location

New SSCC

After the destination location is defined, the system removes the locking from the skipped products and updates the picklist. The system adds the selected reason to the pick list line and closes it.

After the locking is removed, the skipped products are moved onto the selected logistic unit or destination location. Then the system returns to the Select a picklist screen where the user can continue the packing.

9.3. Item packing

Workflow

- Item packing flow
- Packing line
- Scan item
- Pack item
- Add items
- Add SSCC
- Finish SSCC

Item Packing Flow steps

1. Select a packing line

Select a packing line where the items that have to be packed are located.

2. Identify moveable location

After selecting a packing location, scan the moveable location on which the items currently are or tap the `Enter cart manually` button and enter the code of the moveable location.

3. Select task

If the *Allow to create master SSCC* option is enabled on the [Pick list controller](#), it is possible to create a master SSCC during the packing. On the Select a task screen tap the `Create master SSCC` button to pack onto a master SSCC. Tap the `Create normal SSCC` button to pick onto a normal SSCC.

If the *Use pallet packing type from customer master data* option is enabled on the on the [Packing controller](#) and the [Pallet packing type](#) is *Multiple Pallet*, *Pallet –multiple carton* or *Ask user*, add the number of identical logistic units as well.

Enter number of identical logistic units to pack

−	**2**	+

7	8	9	<?
4	5	6	-
1	2	3	
0		.	ENTR

When working with master SSCCs, first add the number of the identical master SSCCs and then add the number of identical sub SSCCs on a single master SSCC.

4. Scan items

The next screen shows the list of items that have been picked onto the moveable location.

By default, the item quantity is 0 because the flow allows to define the quantity by scanning. The item

quantity cannot exceed the total quantity. Only items on the list can be scanned, otherwise an error
message is displayed.

Grouped items
By default, the system groups the items that have the same identical item number, batch1 number
and best before date. You can ungroup and then regroup the items by clicking the ▤ button.
If the grouped lines have items managed by serial numbers, the system asks you to scan the serial
numbers by picklist lines as a next step in the flow.

Scan item barcodes
Start scanning the item barcodes. After scanning the first item, the system automatically selects a
customer and the address based on which customer ordered the least amount of the scanned item.
The system shows the name of the customer, the shipping address and the picklist number(s).

After scanning the first item, only those items are displayed on the list that have been picked for the
customer. The system selects scanned items.

Note: When using only the touchscreen, select an item by tapping on the line. After selecting the first
item, the system automatically identifies the customer. After the first selection, only those items are

displayed that have been picked for the customer.

Scanning items with "Unit of Measure" Barcodes
Select the preferable UoM Group with the predefined UoM barcodes for an Item/Items on the Item Master Data window. Define a unique barcode for each UoM.

On the Packing Flow the UoM barcodes can be scanned at the *"Scan a Movable location to Add items"* screen. Start scanning the items with the unique UoM barcodes. When scanning an UoM barcode, the system will automatically read it and recognize the number of the base UoM contained in the barcode (quantity and unit).

Useability Improvement: For a pallet of 1.000 pieces the users do not have to scan 1.000 times the barcode or press the '+' button 1.000 times. Only scan the predefined UoM barcode to shorten the time of the scanning.

Note: This function is applied to **GTIN14** and **Free Barcode types** (VGTIN Barcode type is not included yet).

Example:

UoM Name	Quantity	Barcode
Each	1 (Each)	100
Outer Box	6 (Each)	102
Mega Box	2 (Outer Box)	106

Scanning limitation:

Limitation: Important to be aware about rounding issues during the scanning process. In the Item Packing line on the "Scan a Movable location to Add items" screen the scanning can cause

rounding problems. If you scan an unsuitable UoM barcode for the wrong item quantity the result will be a fraction number. To avoid this issue pay attention to always scan the proper UoM barcode to the right item quantity.

Let's use this example for creating a limitation:

UoM Name	Quantity	Barcode
Each	1 (Each)	100
Outer Box	6 (Each)	102
Mega Box	2 (Outer Box)	106

Example: The user filled the quantity in the first row using the "Outer Box" UoM barcode twice. For the second row the user scanned the "Outer Box" UoM barcode once then used the "Each" UoM barcode what caused a rounding problem in the flow. To summarize what happened the user tried to add 1/6 "Outer Box" with the scanning action of the "Each" UoM barcode and that caused a fraction number in the "Quantity to Pack" column. Modify the fraction number manually with the numberpad.

Limitation on the "Scan a Movable location to Add items" screen:

5. Adjust quantity and select items

On the next screen the system displays the list of the items picked into the movable location. You can use the input field to filter the list.

Displayed information:

At the top left corner the system shows the name of the customer and the shipping address.

At the top right corner the system displays the picklist number(s), the SSCC number and the pick and pack remarks.

Note: When packing on multiple SSCCs, the system displays the text *Multiple SSCCs*.

Additional information displayed on the screen: barcode, item code, item description, batch number, best before date and total quantity.

The total quantity marks the open quantity on the moveable location.

- When packing on multiple SSCCs, the total quantity marks the total quantity on the moveable location / the number of identical SSCCs.
- When packing on multiple identical master and sub SSCC, the total quantity marks the total quantity on the moveable location / (the number of identical master SSCCs * number of identical sub SSCCs)

Adjust quantity

By default, the system displays the total quantity in the Quantity to pack section. The maximum quantity that can be packed is the total quantity on the line.

Adjust the quantity by tapping + or - in the Quantity to pack section. The quantity can also be entered by using a keyboard. Click on the quantity field and enter the quantity on the keyboard. Press Enter to close the keyboard.

Select items

Select the items to be packed by clicking on the line or use the Select all button to select all the items on the list.

6. Add items

If at least one item is selected, the Add items button becomes active. Tap the button and the selected items are moved onto the logistic unit.

The items that have already been packed are not displayed on the list. Packed items cannot be removed from the logistic unit.

When 'Allow changing shipping type for Logistic unit' has been enabled on the Packing Controller, a 'Shipping Type' drop-down menu is activated on this window.

On this display, you can no longer choose between Auto shipping and Manual shipping, only the sub-variants of Manual or Auto shipping types can be selected. The shipping type also stored/saved on the PMX_LUID table in the 'ShippingType' column.

Last
update:
2018/12/06
10:14   implementation:wms:flows_packing https://wiki.produmex.name/doku.php?id=implementation:wms:flows_packing&rev=1544091268

Note: The default 'Shipping type' displayed in the field on the packing screen corresponds to the one set in the 'Sales Order' line.

Scanning an external SSCC

If the *Allow the input of an external SSCC?* and *Force user to rescan SSCC* settings are enabled on the Packing Controller, the system displays the Scan an SSCC screen when the first item is added and allows for scanning an external SSCC instead of generating a new SSCC automatically.

After scanning an SSCC, each time you add a new item to the logistic unit, you must rescan the SSCC to ensure that the item is added to the appropriate logistic unit. If the wrong SSCC is scanned, the system displays an error message and does not allow the item to be added to the logistic unit. You must scan the appropriate SSCC (or select a different item and then scan the appropriate SSCC) to proceed with the flow.

7. Add cart

New items for the same customer can be added to the list of possible items to pack. For adding items from another moveable location, scan the barcode or tap the `Enter cart manually` button and enter the code.

8. Finish logistic unit

If there is at least one item packed into the logistic unit, the `Finish logistic unit` button becomes active.

If changing shipping type for logistic unit has been enabled, the shipping type for each added item can be changed here, too, before finishing the logistic unit. Note that only variants of auto or manual shipping type can be selected based on the Sales Order header of the added item.

Tap the `Finish logistic unit` button and the system prints the SSCC label (Packing: finished logistic unit event (500) print event).

After finishing a logistic unit, the system displays the shipping dock where to logistic unit has to be moved.

When creating a master SSCC during the picking, after the `Finish logistic unit` button has been tapped, the system asks whether you want to finish the master SSCC or the sub SSCC.

Tap the `Master SSCC is full` button to finish the master SSCC. After finishing the master logistic unit, the system prints the labels for the master and the sub logistic units and displays the dock where the master logistic unit has to be moved. On the next screen declare whether you would like to start a master or a sub SSCC.

Tap the `Sub SSCC is full` button to finish the sub SSCC. The picking is continued onto a new sub SSCC, but onto the same master SSCC.

If every item is packed and *Automatic shipping* is enabled for the shipping type of the base document, the *Master SSCC is not finished screen* is opened. Tap the `Yes` button to finish the master SSCC as well.

On the next screen the select a logistic unit to pack on or tap the `Start new logistic unit` button to create a new logistic unit.

8.1. Capture weight

If the *'Ask weight?'* or *'Ask weight Sub SSCC?'* option is set to true on the Produmex pick list types user table for the pick list, and there is a scale defined under the shipping dock/packing line, the weight of the logistic unit can be measured on the connected scale after the logistic unit is finished.

> Make sure that conversions between the units of measurements are set up correctly on the Units of Measure - Setup (OUOM) and Weight - Setup (OWGT) SBO standard tables.
>
>

1. The measured weight. The UoM is the UoM defined for the scale. The number of decimals displayed depends on the scale accuracy.
   This field is automatically filled with the weight measured on the connected scale. It is possible to manually overwrite the measured weight.
   If the weight is manually added or the connection to the scale is lost, the value starts flickering in red.
2. If the scale has a defined zero command, the `Zero` button is displayed.

3. If the scale has a defined tare command, the `Tare` button is displayed.
4. The code of the connected scale.
5. If there are more than one scales defined under the dock/packing line, an additional `Switch scale` button is displayed on the screen. Tap this button to change the scale.
   On the next screen select the scale from the list. Every scale defined under the dock/packing line is listed. After switching the scale, the screen will use the chosen scale. After proceeding with the flow, and a new weight needs to be captured, the standard logic to choose a scale is used. This means that switching scale only switches the scale for the current weighing.
6. SSCC number of the logistic unit.
7. *Theoretical weight*: The *theoretical weight* is the sum of the weight of the items on the logistic unit. The item weight can be defined on the Sales tab of the Item Master Data.
8. In the case of master SSCC's, an additional *Sub SSCC's weight* value is shown. The value is calculated as the sum of the measured weight of the Sub SSCC's.

8.2. Enter dimensions

If the *Ask weight?/ Ask weight Sub SSCC?* option is enabled for the pick list type, and there is no scale defined under the shipping dock/packing line, the user has to enter the weight of the (sub) logistic unit after it is finished. The data will be stored on the PMX_LUID table. The unit of measure is the *Default Weight UoM* set on the Display tab of General Settings.
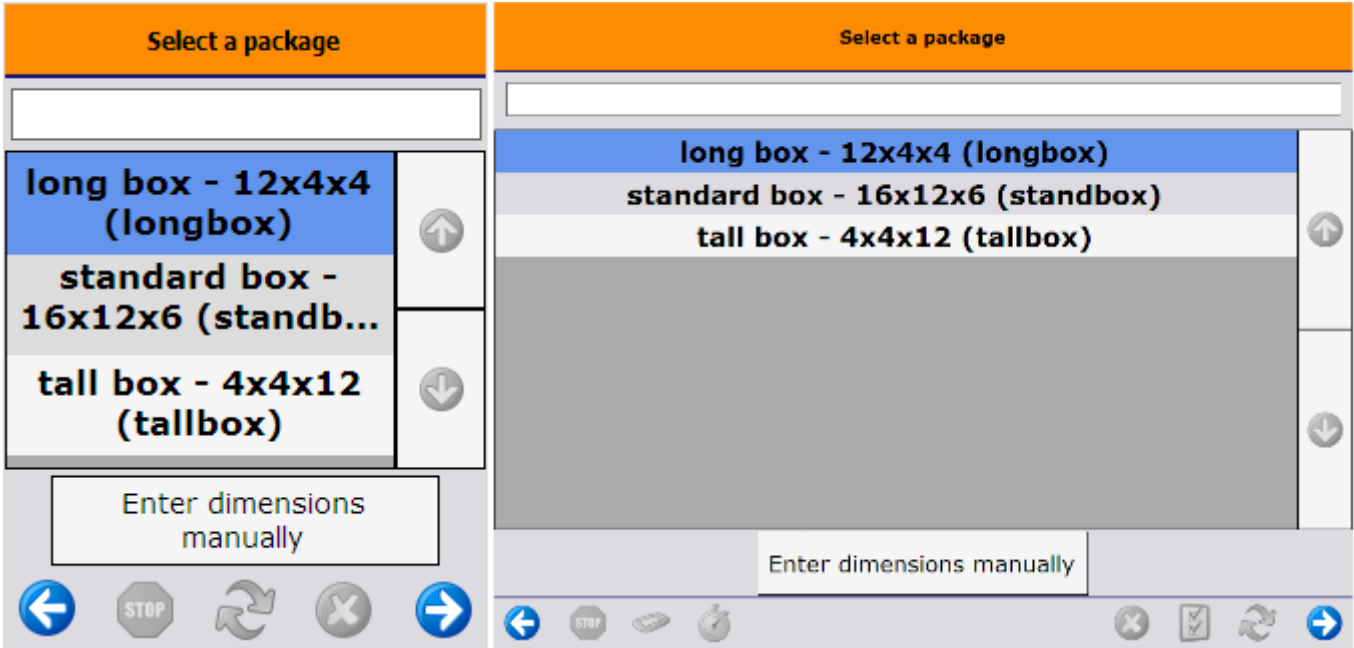

Based on the pick list type settings, the user might have to enter the dimension(s) of the (sub) logistic unit after it is finished.
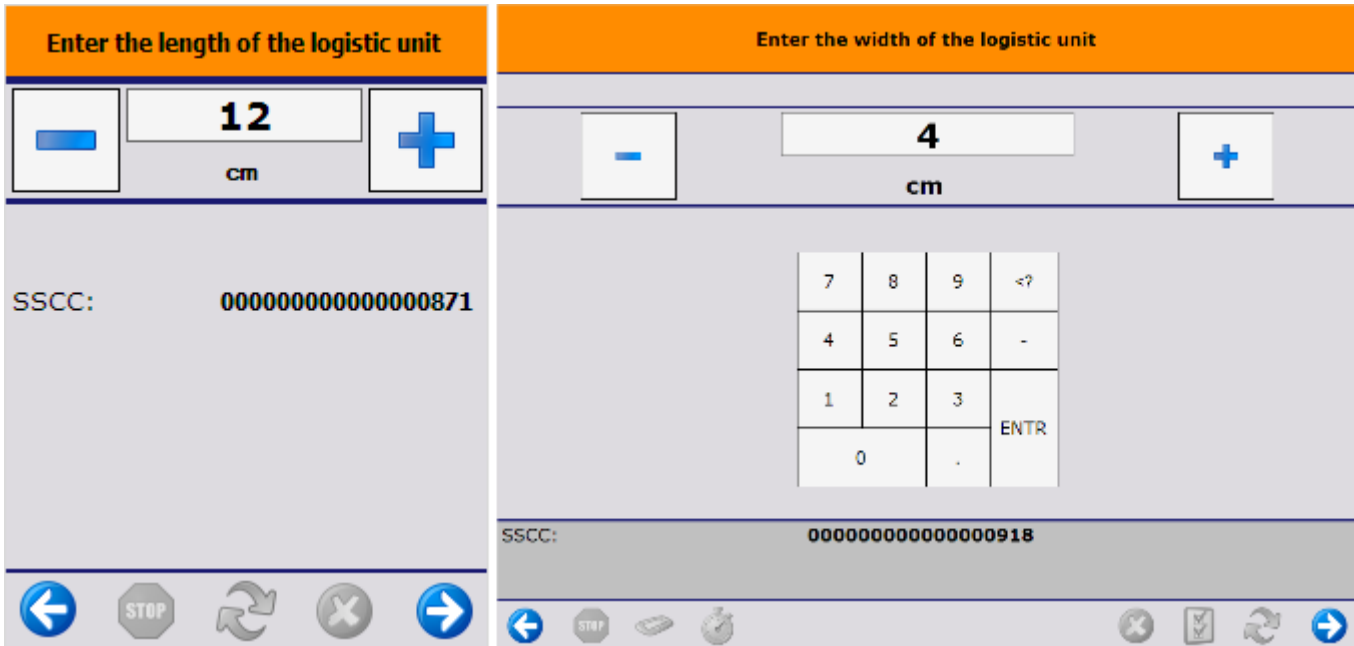
When there are package dimensions defined on the Package Dimensions table, the user can select a predefined dimension instead of entering the length, the width and the height manually. The 'Select a package' screen opens. On this screen every package dimension that is not cancelled is listed. Select a dimension from the list or tap the `Enter dimensions manually` button.

When the `Enter dimensions manually` button is tapped or there are no package dimensions defined, the user has to enter the dimensions manually.

- If the *Ask length?/ Ask length Sub SSCC?* option is enabled for the pick list type, the user has to enter the length of the (sub) logistic unit after the it is finished.
- If the *Ask width?/ Ask width Sub SSCC?* option is enabled for the pick list type, the user has to enter the width of the (sub) logistic unit after the it is finished.
- If the *Ask height?/ Ask height Sub SSCC?* option is enabled for the pick list type, the user has to enter the height of the (sub) logistic unit after the it is finished.

The data will be stored on the PMX_LUID table. The unit of measure is the Default Length UoM set on the Display tab of General Settings.
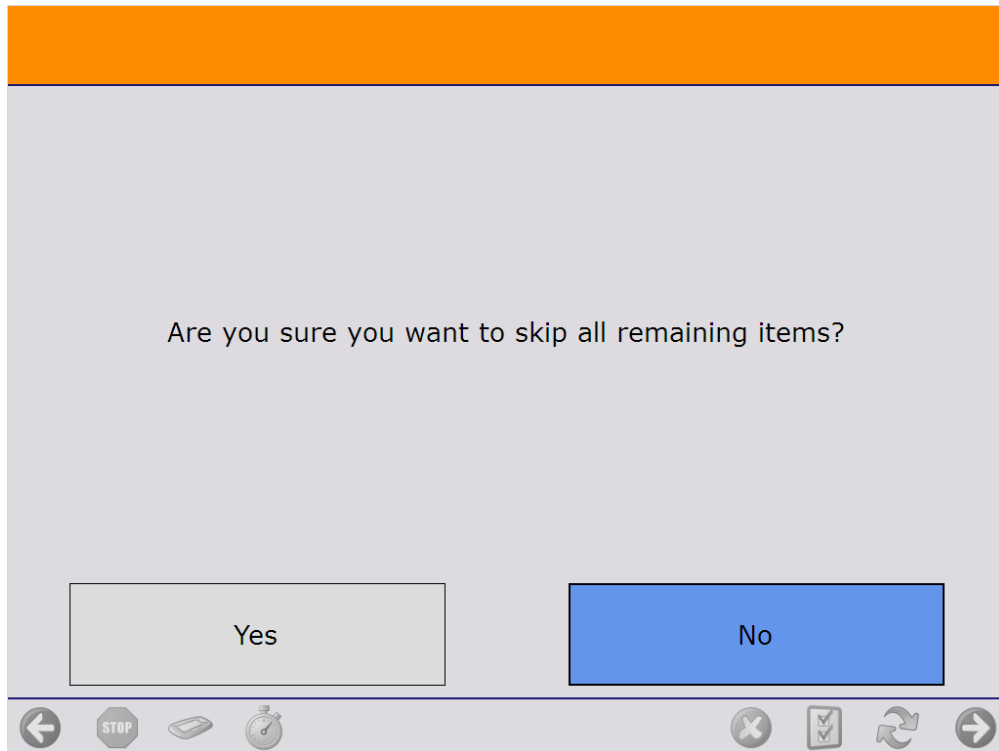
9. Skip items

It is possible that there are goods that cannot be packed. Continue the packing until only products that cannot be packed are listed on the screen.
Tap the `Skip all items` button to skip every remaining item.

On the next screen confirm that you would like to skip the remaining items.

Are you sure you want to skip all remaining items?

Yes   No

The system proceeds to the *Select a reason* screen.
Select a reason from the list. Every reason that can be used for picking is listed.

On the next screen define where the skipped items should be moved.

- To move the items onto an SSCC, scan the SSCC. If the scanned SSCC is not in stock, identify the destination location as described below.
- To create a new SSCC, tap the `New SSCC button` then identify the destination location as described below. If configured, the *700 - WHS: created LU* print event is triggered and the logistic label is printed.
- Scan the destination location or select it from a list.
  - Tap the `Select location` button to list every active location from the warehouse.
  - Tap the `Select empty location` button to list every empty active location from the warehouse.

Please note: If no SSCC is created or selected, the items will be moved without a linked logistic unit.

After the destination location is defined, the system removes the locking from the skipped products and updates the pick list.

- If the total quantity on the pick list line is skipped, the system adds the selected reason to the pick list line and closes it.
- If the pick list line is partially skipped, the 'Open' and 'Picked' quantity of the pick list line is updated with the packed quantity. A closed line will be added with the quantity and the details of the skipped product and the selected reason.

After the lockings are removed, the skipped products are moved onto the selected logistic unit or destination location. Then the system returns to the *Select moveable location* screen where the user can continue the packing.

10. Restarting the flow

The flow can be continued after it has been stopped. Restart the flow and select the packing location. If there are a moveable location, scan the moveable location as well. Then the system will offer the option to choose from the existing logistic units or to start a new one.
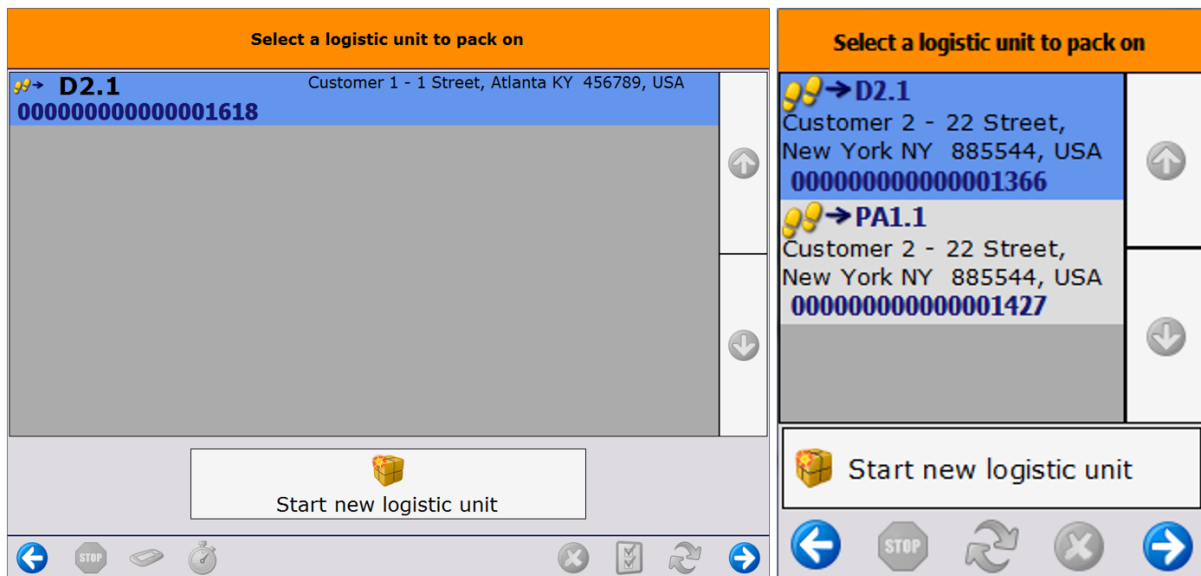
After selecting the logistic unit, scan the SSCC barcode on the logistic unit.
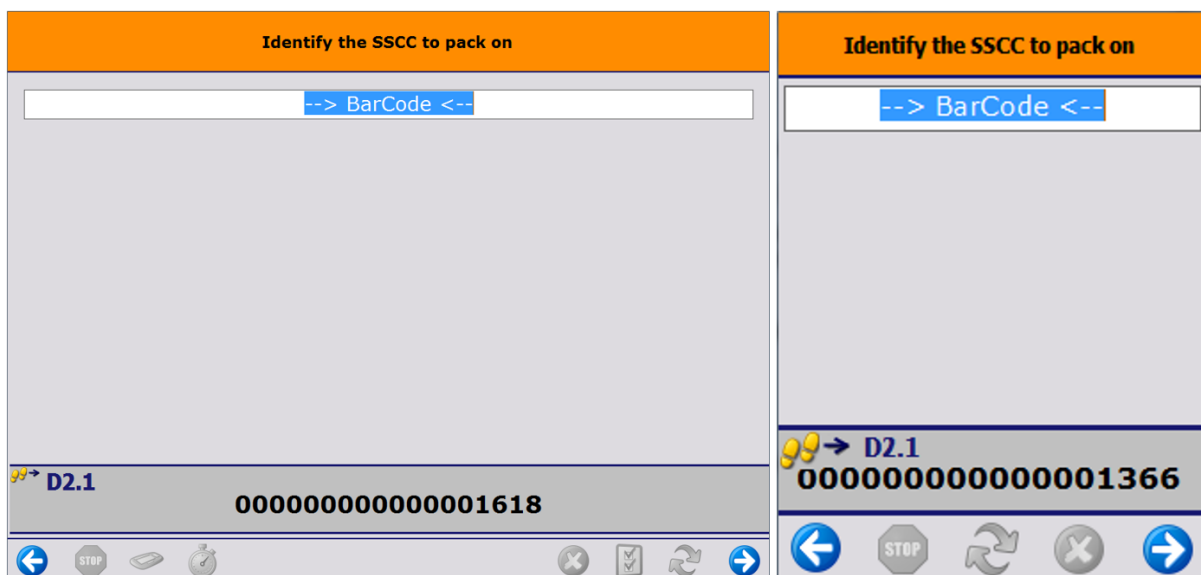
11. Continue the packing onto an already packed logistic unit

When there are already packed logistic unit(s) for the selected customer or shipping address, the system will offer the option to choose from the existing logistic unit(s) or to start a new one. After selecting a logistic unit, scan the SSCC barcode on it.
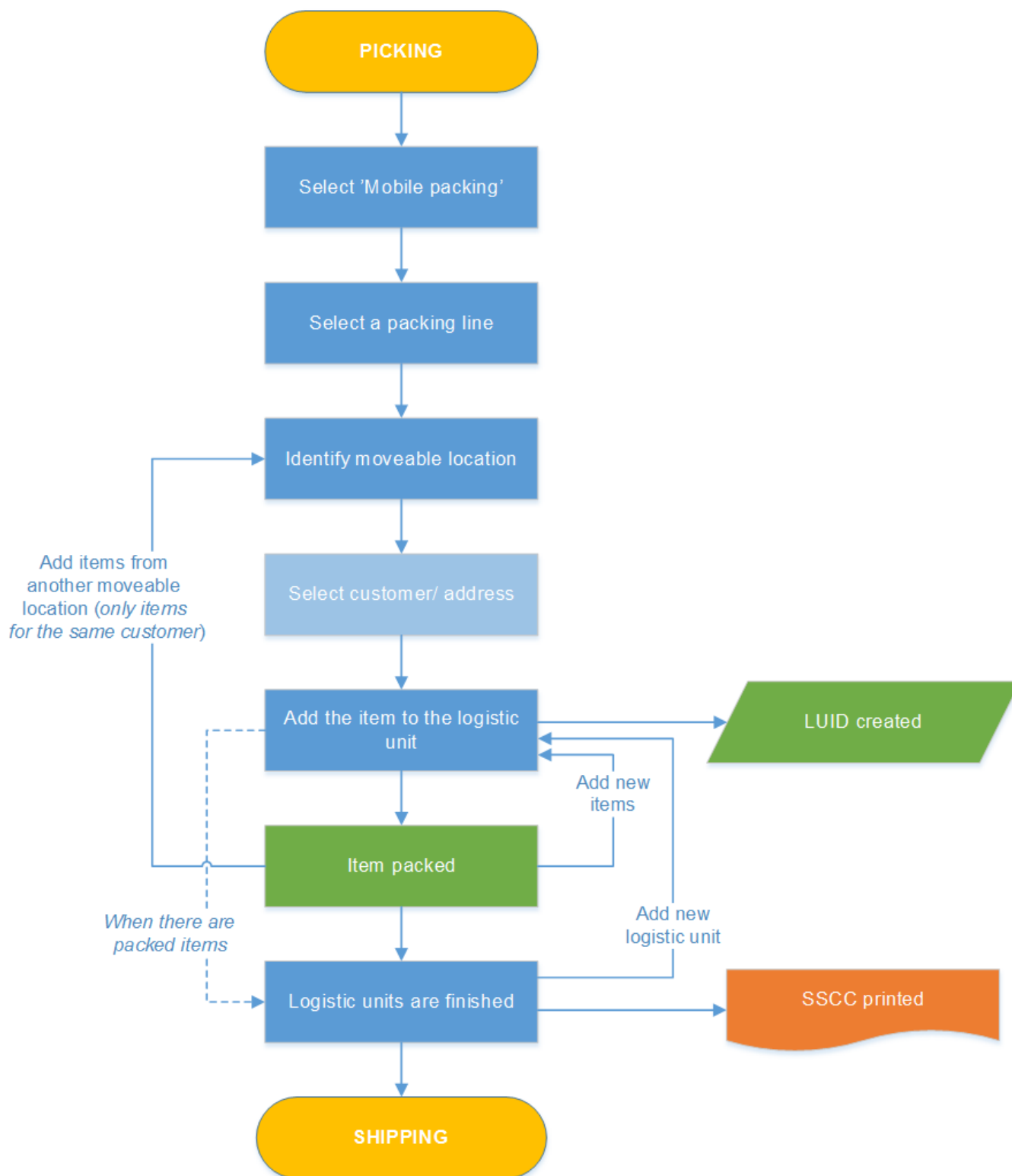
9.4. Mobile packing

Overview

This flow is available in the scanner mode. In the mobile packing flow the system do not display the

maximum quantity to pack. The flow is used for a second verification whether the picked quantities are correct.

Workflow

- Select a packing line
- Identify moveable location
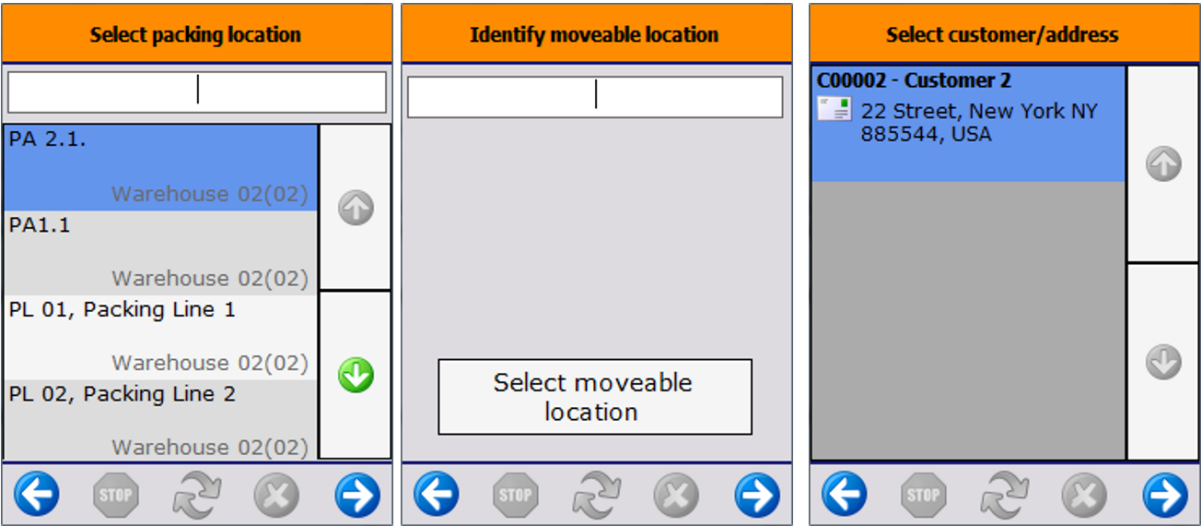- Pack item

- Add chart
- Finish SSCC

Mobile Packing Flow steps

1. Initiate the flow

Select the Mobile Packing function in the Sales menu of the Mobile Client.

2. Select a packing line

Select a packing line where the items that have to be packed are located.

3. Identify moveable location

Scan the moveable location on which the items currently are or press the 'Select moveable location' button and select it from the list.

After identifying the moveable location, select a customer/ address from the list.

4. Pack item

Then identify items by scanning or selecting from a list (press the 'Select a product' button.) Add the quantity with the + / - buttons. There is no limit to the entered quantity, but the system will display an error message if the entered quantity exceeds the picked quantity still available on the moveable location. Press the right arrow to proceed. After the first item is packed onto the logistic unit, the system creates a LUID for it.

Scan a product	Enter the number of items	Logistic unit finished
--> BarCode <--	**0** KG	**D2.1** 000000000000001366 C00002 - Customer 2
Select a product		
Finish logistic unit	ITEM01 - normal test - 12345678901248 Batch number	
Other mov. loc.		OK
	SSCC to pack: 000000000000001427	

5. Add chart

It is possible to add items from another moveable location, if the items were picked for the selected customer. Select the 'Other moveable location' button.

6. Finish SSCC

If there are at least one item packed onto the logistic unit, the 'Finish logistic unit' button will be available. When pressing this button, the packing onto the logistic unit is finished. The system prints the SSCC label *(Packing: finished logistic unit event (500) print event)* and displays the shipping dock where to logistic unit has to be moved.

When there are still picked items on the moveable location, the packing can be continued onto another logistic unit.

After packing all the picked items for the customer from the moveable location, the system will ask whether to finish the SSCC or proceed with the packing from another moveable location.

6.1. Capture weight

If the *'Ask weight?'* or *'Ask weight Sub SSCC?'* option is set to true on the Produmex pick list types user table for the pick list, and there is a scale defined under the shipping dock/packing line, the weight of the logistic unit can be measured on the connected scale after the logistic unit is finished.

> Make sure that conversions between the units of measurements are set up correctly on the Units of Measure - Setup (OUOM) and Weight - Setup (OWGT) SBO standard tables.

1. The measured weight. The UoM is the UoM defined for the scale. The number of decimals displayed depends on the scale accuracy.
   This field is automatically filled with the weight measured on the connected scale. It is possible to manually overwrite the measured weight.
   If the weight is manually added or the connection to the scale is lost, the value starts flickering in red.
2. If the scale has a defined zero command, the *'Zero'* button is displayed.
3. If the scale has a defined tare command, the *'Tare'* button is displayed.
4. The code of the connected scale.
5. If there are more than one scales defined under the dock/packing line, an additional `Switch scale` button is displayed on the screen. Tap this button to change the scale.
   On the next screen select the scale from the list. Every scale defined under the dock/packing line is listed. After switching the scale, the screen will use the chosen scale. After proceeding with the flow, and a new weight needs to be captured, the standard logic to choose a scale is used. This means that switching scale only switches the scale for the current weighing.
6. SSCC number of the logistic unit.
7. *Theoretical weight*: The *theoretical weight* is the sum of the weight of the items on the logistic unit. The item weight can be defined on the Sales tab of the Item Master Data.

8. In the case of master SSCC's, an additional *Sub SSCC's weight* value is shown. The value is calculated as the sum of the measured weight of the Sub SSCC's.

6.2. Enter dimensions

If the *Ask weight?/ Ask weight Sub SSCC?* option is enabled for the pick list type, and there is no scale defined under the shipping dock/packing line, the user has to enter the weight of the (sub) logistic unit after it is finished. The data will be stored on the PMX_LUID table. The unit of measure is the *Default Weight UoM* set on the Display tab of General Settings.

Based on the pick list type settings, the user might have to enter the dimension(s) of the (sub) logistic unit after it is finished.

When there are package dimensions defined on the Package Dimensions table, the user can select a predefined dimension instead of entering the length, the width and the height manually. The 'Select a package' screen opens. On this screen every package dimension that is not cancelled is listed. Select a dimension from the list or tap the `Enter dimensions manually` button.

When the `Enter dimensions manually` button is tapped or there are no package dimensions defined, the user has to enter the dimensions manually.

- If the *Ask length?/ Ask length Sub SSCC?* option is enabled for the pick list type, the user has to enter the length of the (sub) logistic unit after the it is finished.
- If the *Ask width?/ Ask width Sub SSCC?* option is enabled for the pick list type, the user has to enter the width of the (sub) logistic unit after the it is finished.
- If the *Ask height?/ Ask height Sub SSCC?* option is enabled for the pick list type, the user has to enter the height of the (sub) logistic unit after the it is finished.

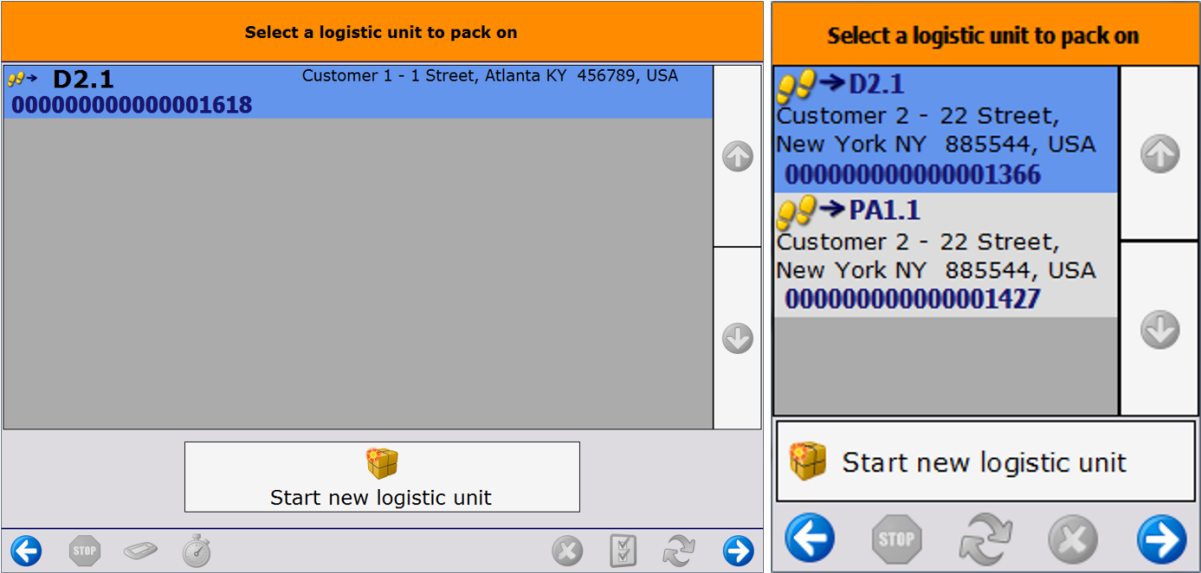The data will be stored on the PMX_LUID table. The unit of measure is the Default Length UoM set on the Display tab of General Settings.
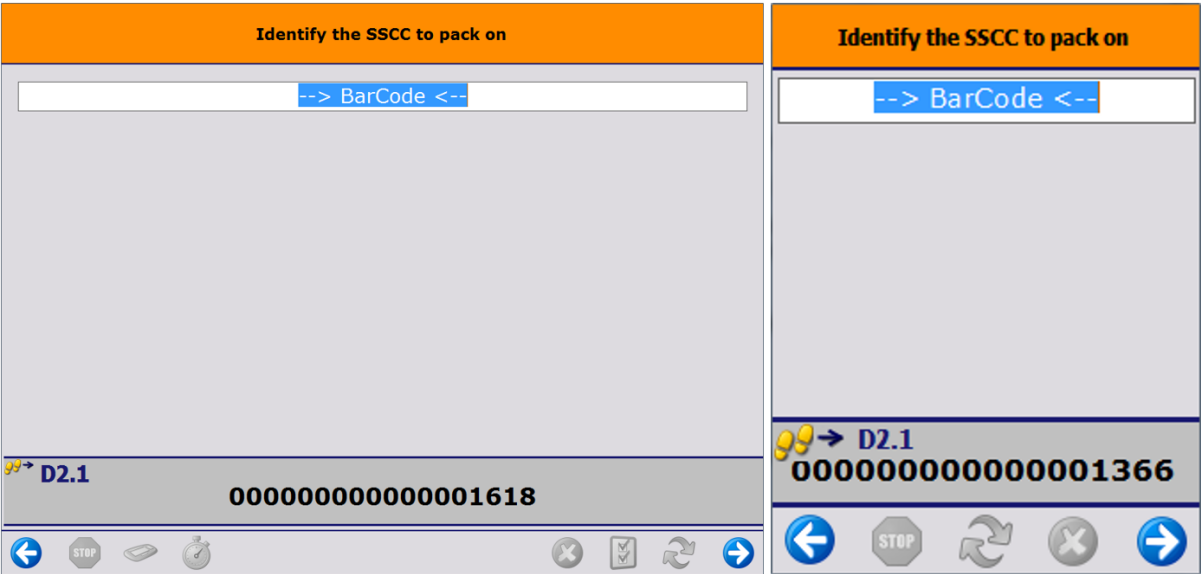
7. Restarting the flow

The flow can be continued after it has been stopped. Restart the flow and select the packing location. If there are a moveable location, scan the moveable location as well. Then the system will offer the option to choose from the existing logistic units or to start a new one.

After selecting the logistic unit, scan the SSCC barcode on the logistic unit.

8. Continue the packing onto an already packed logistic unit

When there are already packed logistic unit(s) for the selected customer or shipping address, the system will offer the option to choose from the existing logistic unit(s) or to start a new one. After selecting a logistic unit, scan the SSCC barcode on it.
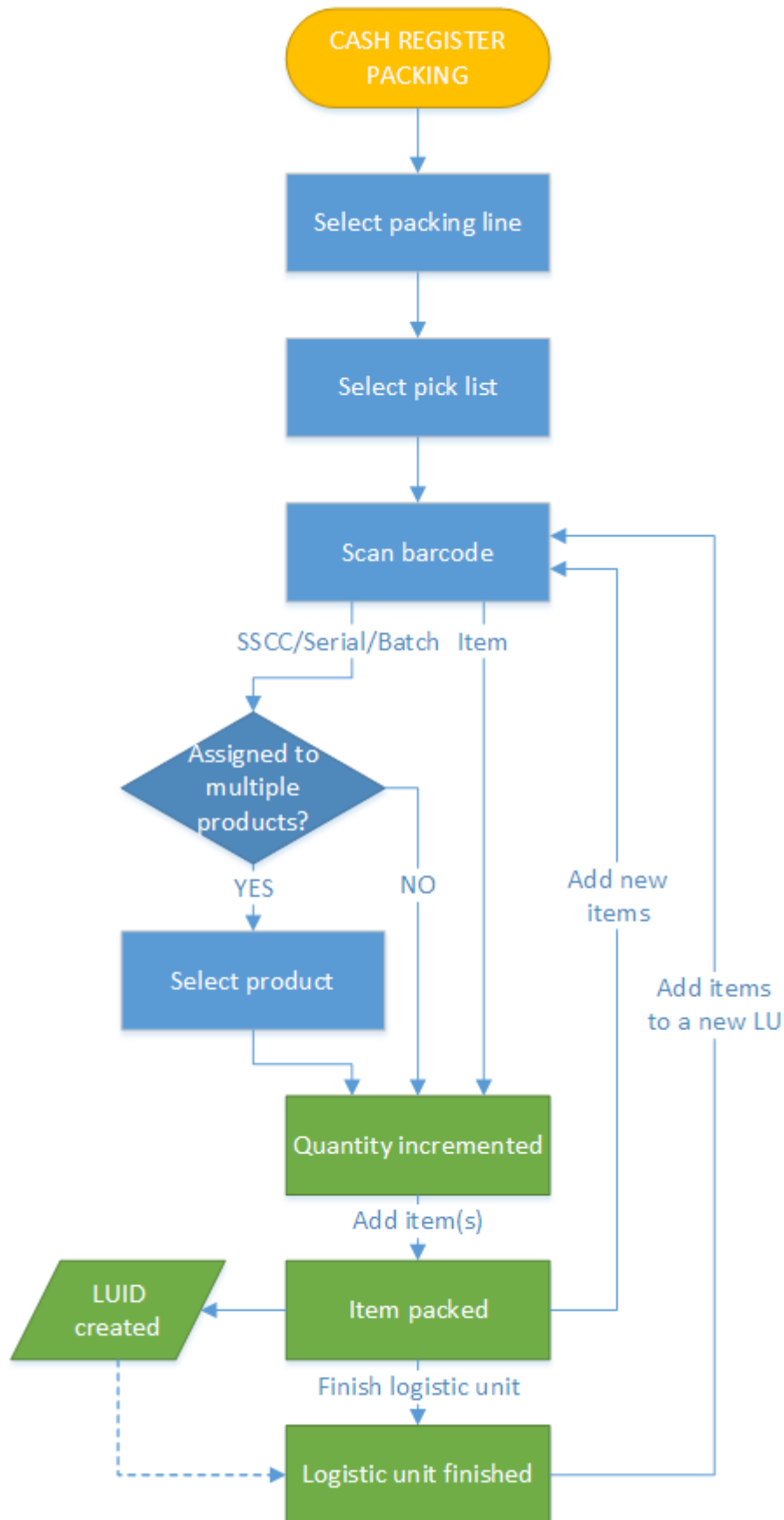
9.5. Cash register packing

Overview

The Cash Register Packing flow uses a picklist as an input. In this flow users can perform picking and packing in one step, therefore the input picklist does not have to be picked.
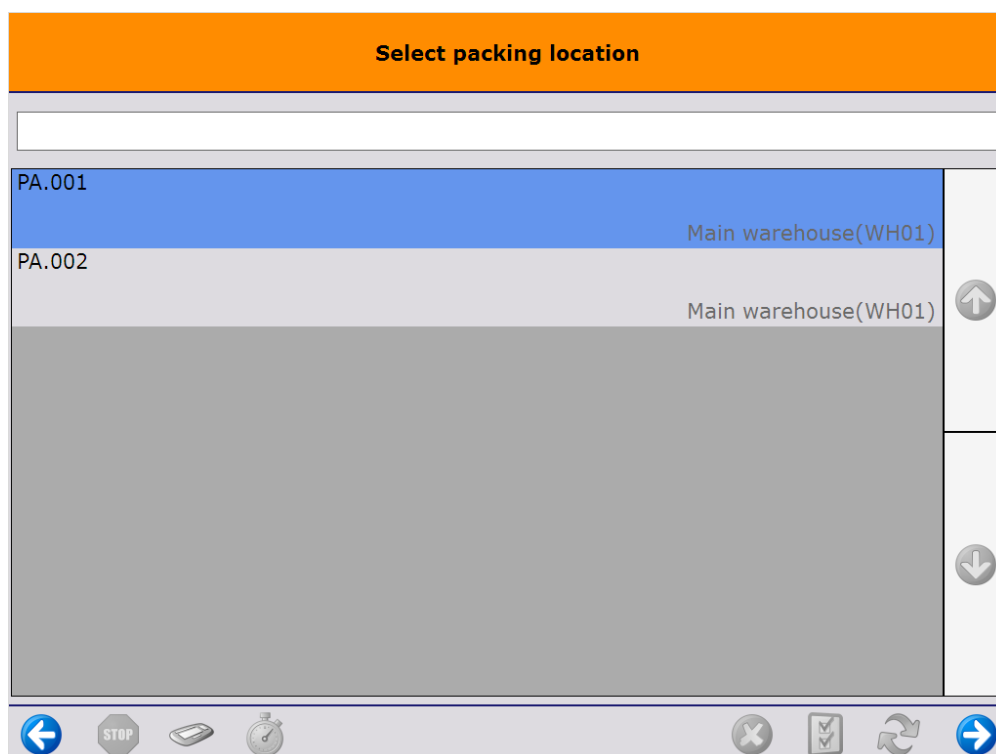
Workflow

- Select packing line
- Select picklist
- Scan barcode
- add_items

- finish_logistic_unit

Cash Register Packing Flow steps

1. Select a packing location

Select a packing line from the list. Every active packing line from the warehouses assigned to the thin client are listed.


If there are already started logistic units on the packing line, the 'Select a logistic unit to pack on' screen is displayed. On this screen every packed logistic unit, which is not yet shipped, is listed. The customer name and address is displayed for each logistic unit. To continue packing onto a logistic unit, select the logistic unit and press the right key button. To start a new logistic unit, press the 'Start new logistic unit' button.

2. Select picklist

On the next screen select a picklist. Every picklist that meets the following conditions is displayed:

- The 'Use for Cash register packing?' option enabled for the picklist type.
- The status is 'Not Ready', 'Partially Ready', 'Ready', 'Partially Picked', 'Picked' or 'Partially Packed'.
- The picklist is assigned to the warehouse of the selected packing line.

Select a pick list	
Bakery Co - 38th Street, Minneapolis MN MN 55407, USA	**8**
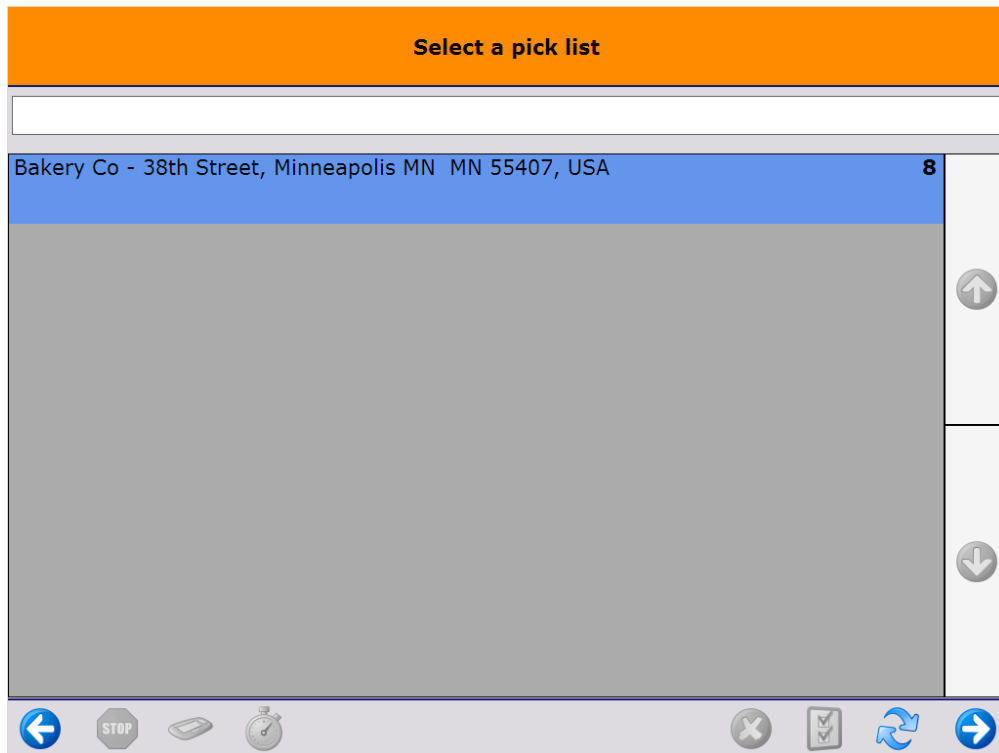
3. Scan barcode

On the next screen the items to pack are listed.

- Product: The barcode, item code and description of the item to pack.
- Batch number, Best before date: The batch number, the second batch number and the best before date of the allocated stock. The stock to be packed is allocated from pick locations based on the stock details available on the picklist and based on the FEFO rule. Only stock details that are available on the sales order are enforced.
- Total: The open quantity on the picklist. Items with no open quantity are not listed.
- Quantity to pack: The quantity to pack. If the *'Force user to only scan items?'* option is enabled on the Packing controller, then the quantity to pack can only be added by scanning the barcode, otherwise the quantity can be adjusted with the + - buttons.

The following barcodes can be scanned on this screen:

- EAN number of the item.
- GS1 128 barcode. It is possible to pack stock with different details than the allocated stock, except if the stock detail was set on the sales order.
- Batch number. If the batch number belongs to multiple items, select the item to pack on the opening screen. (Batch with multiple BBD on stock?)
- Serial number. If the serial number belongs to multiple items, select the item to pack on the opening screen.
- SSCC number. In the case of a mixed pallet, select the item to pack on the opening screen.

Each scanned barcode increases the quantity by one if valid stock can be found. Over picking is not allowed.

4. Add items

If there is at least one item where the 'Quantity to pack' is not zero, the 'Add items' button becomes active. Press this button to pack the 'Quantity to pack' amount of the selected items.

If there is a stated logistic unit for the picklist, the system adds the packed items to that logistic unit. If there is no stated logistic unit for the picklist, then the system checks whether there are started logistic units for the customer. If there are, then the user can continue the packing onto one of those logistic units or create a new one. If there are no started logistic units for the customer, the system automatically creates a new one.
The started logistic unit is displayed on the top right corner of the screen.

When changing shipping type for Logistic unit has been enabled on the Packing Controller, a 'Shipping Type' drop-down menu is activated on this window. Select between different types of manual and auto shipping. The shipping type also appears on the LUID table in the 'Shipping Type' column.

Note: At this point, only the sub-variants of manual or auto shipping types can be selected (based on the specifics of the Sales Order header). If the shipping types differ on the lines, the request will be blocked.

If the item to add is managed by serial numbers and not all serial number were scanned, then the serial numbers has to be scanned before packing the item. On the next screen indicate whether you would like to scan the serial numbers one by one or you would like to scan the starting and ending serial number only. For more information about adding the quantity by scanning the serial numbers please see: Screens for entering additional information

5. Finish logistic unit

If there is at least one product packed onto the logistic unit, the 'Finish logistic unit' button becomes active.

If changing shipping type for logistic unit has been enabled, the shipping type for each added item can be changed here, too, before finishing the logistic unit. Note that only variants of auto or manual shipping type can be selected based on the Sales Order header of the added item.

Press 'Finish logistic unit' button to finish the logistic unit.

If configured, the *Packing: finished logistic unit event (500)* print event is triggered and the SSCC label is printed. After finishing a logistic unit, the system displays the shipping dock where the logistic unit has to be moved.

5.1. Capture weight

If the *'Ask weight?'* or *'Ask weight Sub SSCC?'* option is set to true on the Produmex pick list types user table for the pick list, and there is a scale defined under the shipping dock/packing line, the weight of the logistic unit can be measured on the connected scale after the logistic unit is finished.

> Make sure that conversions between the units of measurements are set up correctly on the Units of Measure - Setup (OUOM) and Weight - Setup (OWGT) SBO standard tables.

1. The measured weight. The UoM is the UoM defined for the scale. The number of decimals displayed depends on the scale accuracy.
   This field is automatically filled with the weight measured on the connected scale. It is possible to manually overwrite the measured weight.
   If the weight is manually added or the connection to the scale is lost, the value starts flickering in red.
2. If the scale has a defined zero command, the 'Zero' button is displayed.
3. If the scale has a defined tare command, the 'Tare' button is displayed.
4. The code of the connected scale.
5. If there are more than one scales defined under the dock/packing line, an additional `Switch scale` button is displayed on the screen. Tap this button to change the scale.
   On the next screen select the scale from the list. Every scale defined under the dock/packing line is listed. After switching the scale, the screen will use the chosen scale. After proceeding with the flow, and a new weight needs to be captured, the standard logic to choose a scale is used. This means that switching scale only switches the scale for the current weighing.
6. SSCC number of the logistic unit.
7. *Theoretical weight*: The *theoretical weight* is the sum of the weight of the items on the logistic unit. The item weight can be defined on the Sales tab of the Item Master Data.
8. In the case of master SSCC's, an additional *Sub SSCC's weight* value is shown. The value is calculated as the sum of the measured weight of the Sub SSCC's.
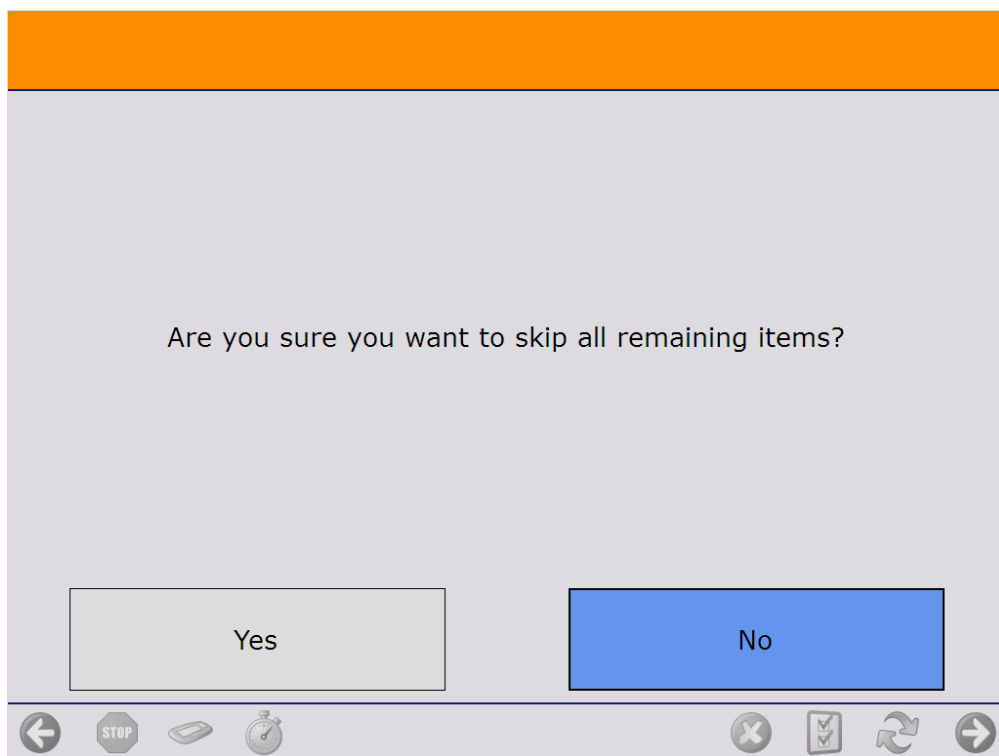
6. Skip items

It is possible that there are goods that cannot be packed. Produmex WMS offers two possibilities to skip these goods:

- Operators can skip remaining stock on the *Main Packing* screen for every item type
- Operators can skip serial numbers on the *Scan a Serial Number* screen for items managed by serial numbers

8.1. Skip items on the Main Screen

Continue the packing until only products that cannot be packed are listed on the screen.
On the main Packing screen tap the `Skip all items` button to skip every remaining item.

On the next screen confirm that you would like to skip the remaining items.

The system proceeds to the *Select a reason* screen.
Select a reason from the list. Every reason that can be used for picking is listed.

On the next screen define where the skipped items should be moved.

- To move the items onto an SSCC, scan the SSCC. If the scanned SSCC is not in stock, identify the destination location as described below.

- To create a new SSCC, tap the `New SSCC button` then identify the destination location as described below. If configured, the *700 - WHS: created LU* print event is triggered and the logistic label is printed.
- Scan the destination location or select it from a list.
    - Tap the `Select location` button to list every active location from the warehouse.
    - Tap the `Select empty location` button to list every empty active location from the warehouse.

Please note: If no SSCC is created or selected, the items will be moved without a linked logistic unit.

After the destination location is defined, the system removes the locking from the skipped products and updates the pick list.

- If the total quantity on the pick list line is skipped, the system adds the selected reason to the pick list line and closes it.
- If the pick list line is partially skipped, the 'Open' and 'Picked' quantity of the pick list line is updated with the packed quantity. A closed line will be added with the quantity and the details of the skipped product and the selected reason.

After the lockings are removed, the skipped products are moved onto the selected logistic unit or destination location. Then the system returns to the *Select moveable location* screen where the user can continue the packing.

8.2. Skip serial numbers

It is possible to skip items that cannot be packed while scanning the serial numbers. Please note that operators cannot skip serial numbers if they use the scan a serial number range feature.

Start the scanning on the *Scan a Serial Number* screen.

- To skip a single serial number, tap the Skip(1) button. The number of items to pack(4) is lowered by one. The serial number scanning can be continued.
- To skip all remaining serial numbers, tap the Skip all(2) button. The serial number scanning is finished and only items with serial numbers scanned are packed.

Use the *8.1. Skip items on Main Screen* function to move the damaged goods from the Packing station.

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