Produmex Weigh

Produmex Weigh is an extension of Produmex WMS that ensures the accurate weighing and dispensing of the materials used in production. The weighing is performed based on a weigh order that is linked to the production order.

The weighing process contains two steps:

1. A weighing order is created in the office environment.
2. After the order is created, the weighing can be executed on the shopfloor with the Weighing Flow. The Weighing Flow allows for weighing items whose primary UoM is the weight.

Installation

Produmex Weigh is installed as a part of Produmex WMS. See installation process here.

If the ScaleComm service is used for defining the scale, install the ScaleComm service component as well. For more information click here.

Configuration

> It is recommended to avoid the asterisk (*), pipe (|) and apostrophe (') characters in Produmex or SBO master data because these characters have a special role in Produmex products.
>
> 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. Organization Structure settings

1. Set up the weighing room in the Organizational Structure.

2. Define the scales under the weighing room. One scale can belong to only one weighing room.

3. You can set the default scales for users.

- Select the thin client in the warehouse where the weighing room is defined.
- On the Default Scales tab define the default scale in the drop-down menu. Make sure you select active scales that are defined under the selected weighing room.

2. Authorizations

Certain actions can only be performed if the user has authorization. Authorizations can be linked to a Produmex user group on the Link Usergroup to Authorization UDT. You can add the user to the user group on the User Group for PMX UDT of the Users-Setup screen.

The following actions require authorization in the Weighing flow:

Action	Authorization
Setting / unsetting default scale	Weigh order: overrule default scale
Switching the scale	Weigh order: Overrule switch scale
Weighing outside the tolerance range	Weigh order: Overrule weight

3. Weigh strategy for the product

Define the weighing strategy of the product on the Produmex Production tab of the Item Master Data. The weighing strategy assigned for the product defines which weighing rooms can be used for weighing the components of the product.

4. Components to be weighed

Configure the components to be weighed on the Bill of Materials or on the production order.

- Set the *'Weighing needed?'* value to Yes for components that needed to be weighed.
- To split the quantity to be weighed into multiple the weigh order lines, add the number of lines to the *Weigh order batch quantity* field.

Create weigh order in the office

Create a weight order from the production order by clicking the `Create weigh order` button. A weigh order will be created if the following verifies:

- The production order is released
- The product has a Weigh strategy defined on the Produmex Production tab of the Item Master Data
- There is at least one component with the *'Weighing needed?'* setting enabled on the production order line.

Every component that needs to be weighed will be added to the weigh order.

If the production order line has a *Weigh order batch quantity* value greater than 1, the production order line will be split into multiple weighing order lines. The number of lines is defined by the *Weigh*

order batch quantity value. The quantity to weigh will be split onto equal parts. The split quantities are rounded to the number of decimals specified for the product.

Weigh order
Header

- *Item code and description*: The item code and description of the product.
- *Weigh strategy*: The weigh strategy of the product.
- *Weighing room*: Assign the weighing room to the weigh order by selecting it from the dropdown list. Every weighing room from the warehouse of the production order that matches the weigh strategy of the product will be listed alphabetically. The default weighing room is the first room on the list.
- *Number*: The document number of the order.
- *Status*: The status of the order.
- *Priority*: The order The order priority.
- *Due date*: The due date of the weigh order. The due date of the weigh order is the same as the due date of the production order.
- *Production order*: The base production order.

Grid

- *Item code and description*: The item code and description of the material that has to be weighed.
- *Quantity to weigh*: The quantity that has to be weighed based on the planned quantity on the production order.
- *Picked quantity*: The quantity that is already weighed.
- *Open quantity*: the quantity that still needs to be weighed.
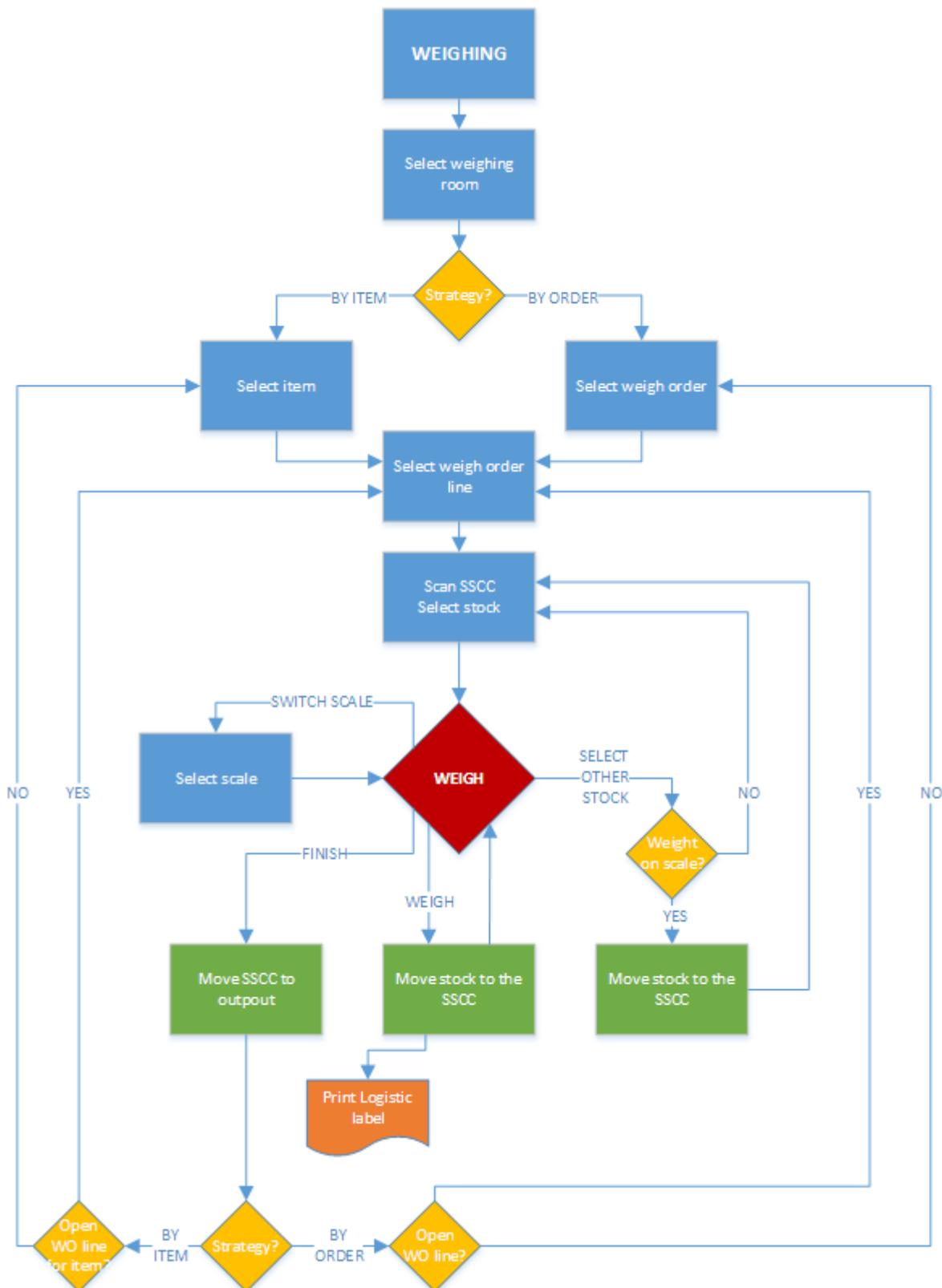- *UoM*: The unit of measurement of the item defined on the Produmex Inventory tab of the Item Master Data.

Weigh orders can be opened in the following ways:

- To see the open weigh order linked to the production order, click on the View > Open weigh order button on the production order.
- To see every open weigh order, go to the Weigh order screen of the Open Document Reports.

- Select Weigh orders from Produmex > Production to open the Weigh order form.

Click on the ☒ icon on the Menu Bar to refresh the screen.
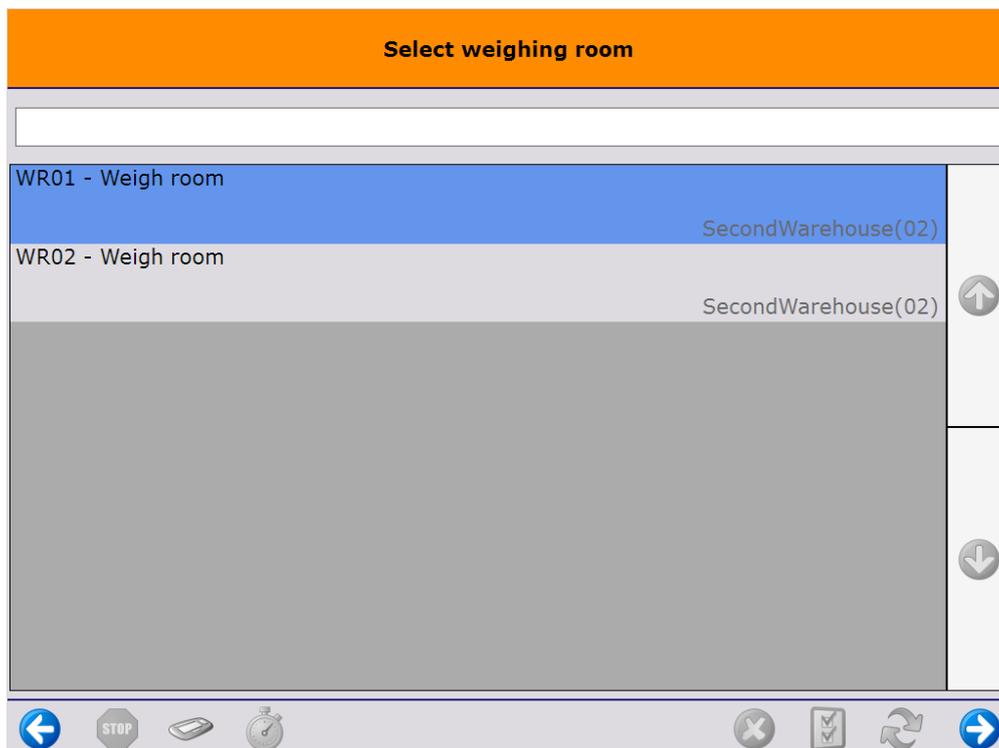
Weighing Flow

- [Select weighing room](#)
- [Identify component to weigh](#)
- [By order](#)
- [By item](#)
- [Select stock](#)
- [Weigh item](#)
- [Weight button](#)
- [Other stock button](#)
- [Finish button](#)
- [Switch Scale button](#)

1. Initiate flow

Tap the Weighing button on the touchscreen to initiate the Weighing Flow.

2. Select the weighing room

Select the weighing room from the list. Every active weighing room from the warehouses assigned to the touchscreen is listed. On the next screen(s) identify the stocks to weigh. The stock identification process differs based on the strategy of the selected weighing room.

3. Identify component to weigh

3.1. Weighing room strategy is By order

If the weigh strategy of the selected weighing room is *By order*, weigh orders assigned to the
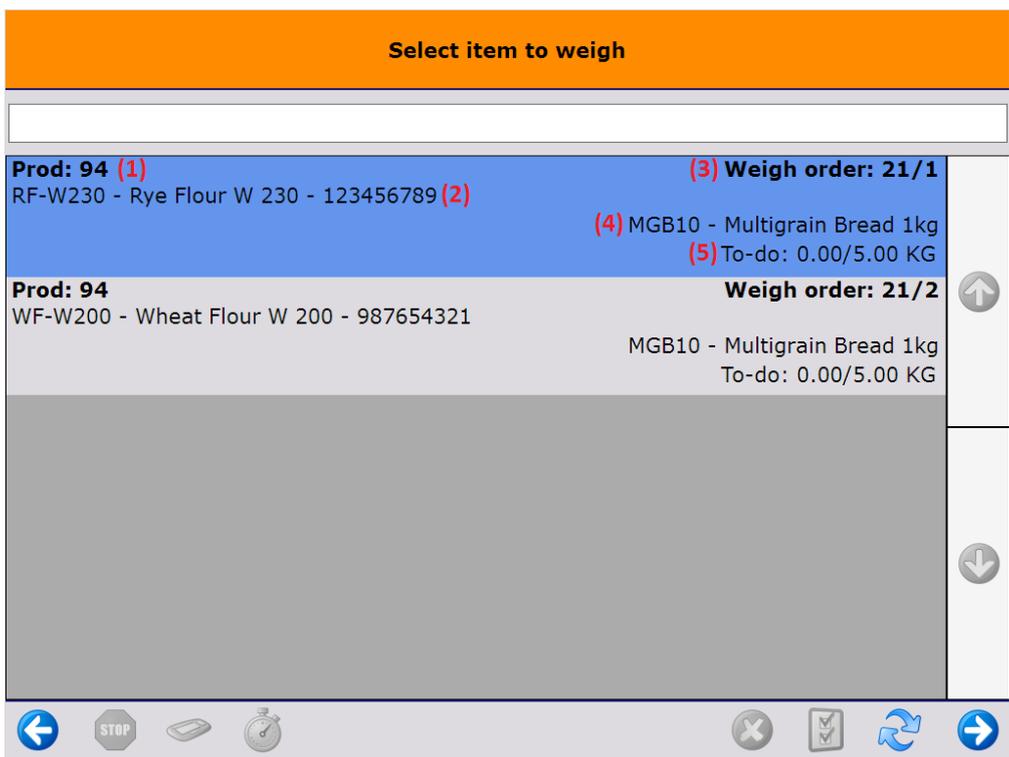
weighing room are listed.

Displayed information:

1. Weigh order number
2. Production order number
3. Product item code and description

Select the weigh order and tap the right arrow button to proceed.

On the next screen select the component to weigh. Every weigh order line from the selected weigh order is listed.
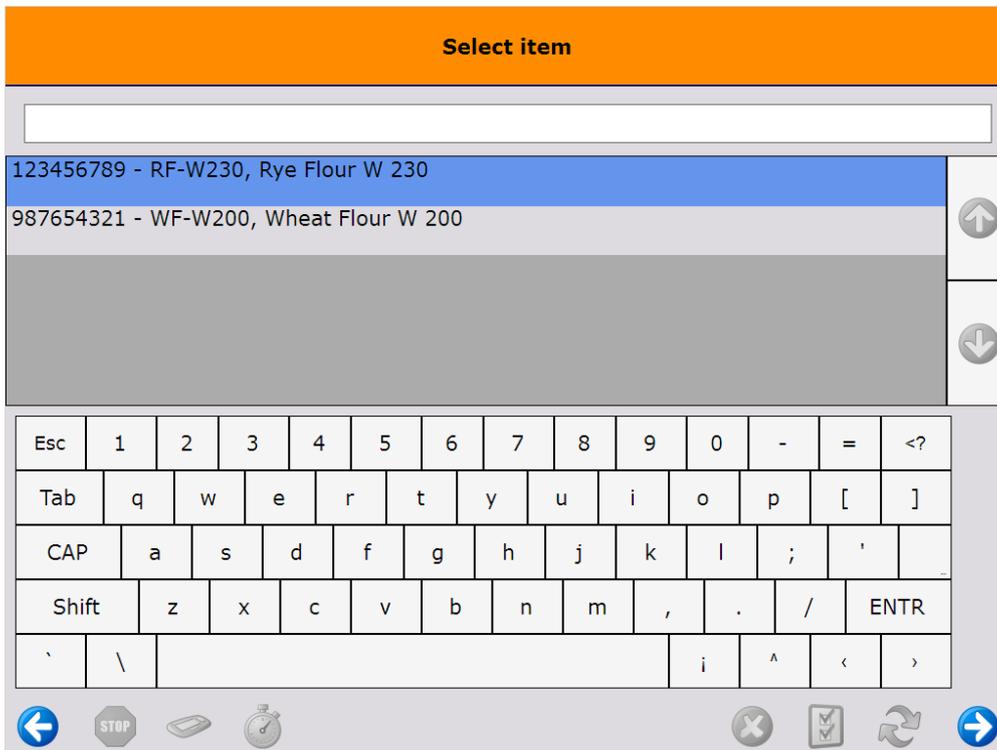
Displayed information:

1. Production order
2. Component item code - description - barcode
3. Weight order number/line
4. Product item code and description
5. Open quantity/Quantity to weigh

3.2. Weighing room strategy is By item

If the weigh strategy of the selected weighing room is *By item*, every item from weigh orders assigned to the weighing room is listed. Select the item and tap the right arrow button to proceed.

Displayed information: Barcode- Item code, Description

On the next screen every open weigh order line that contains the selected item is listed. Select the order line and tap the right arrow button to proceed.

For more information about the displayed information please see: *2.1. Weighing room strategy is By order*

4. Select item to weigh

On this screen the stock for the selected item available on the input location of the weighing room is listed. Goods stored on different SSCC's or goods with different batches are displayed on separate lines.

Select the stock from the list and tap the right arrow button to proceed.
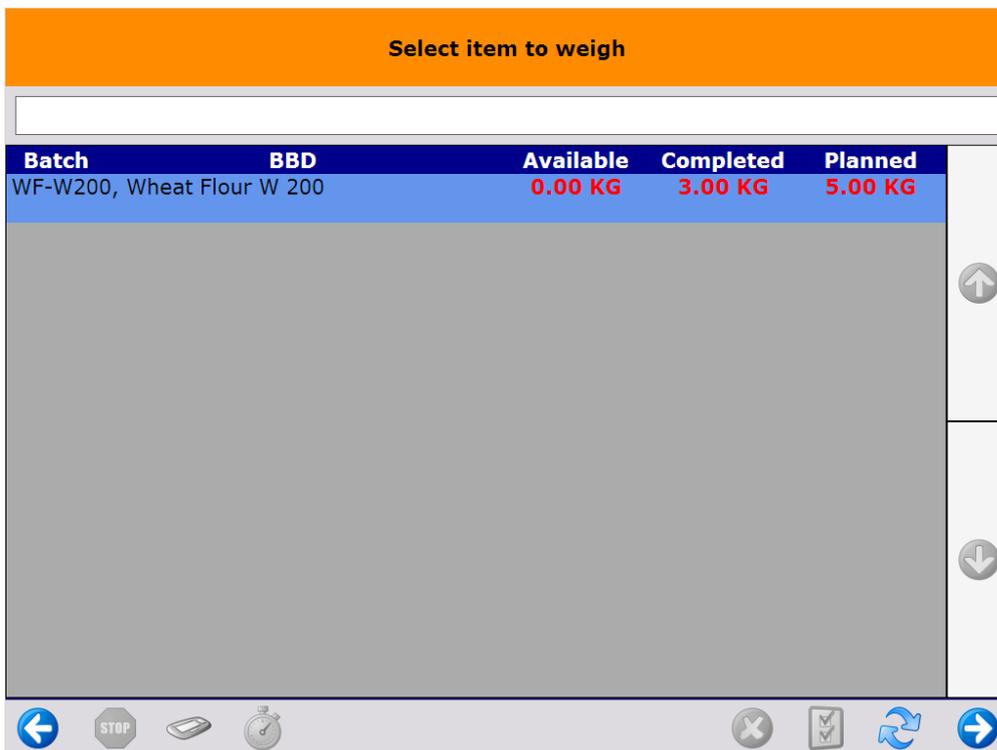
Displayed information:

1. Item code and description
2. Available quantity (on the SSCC)
3. Completed quantity
4. Planned quantity
5. Batch
6. BBD
7. SSCC

If the total quantity to weigh is weighed, the *Available*, the *Completed* and the *Planned* quantity is displayed in green.

If there is no stock available on the input location, a single line is shown on the screen. The *Available*,

the *Completed* and the *Planned* quantity is displayed in red.

Batch	BBD	Available	Completed	Planned
WF-W200, Wheat Flour W 200		0.00 KG	3.00 KG	5.00 KG

5. Weigh item

On this screen goods can be weighed.

The weight is displayed with red numbers on the screen. The weight is also shown on the indicator bar. The To-Do quantity is marked on the upper bar. If there is a quantity tolerance defined on the production order that is greater than zero, the tolerance range is also displayed.

- If the weighed quantity is within the tolerance range, the weight is displayed in green.
- If the weighed quantity is less than the minimum range, the weight is displayed in yellow.
- If the weighed quantity exceeds the maximum range, the weight is displayed in red.

Note: If the production order line has the *Component weighed* starting condition, the production order can be started after the total planned quantity is weighed. If the starting condition is *Component part. weighed'*, the production order can be started after there are weighed quantity lined to the production order line.

Displayed information:

1. Production order number, Product
2. Weigh order, The item code of the component to weigh
3. Batch number, Second batch number, Best before date of the component
4. SSCC where the stock to be weighed is located
5. Planned quantity: The planned quantity on the production order. The quantity is displayed in the UoM and accuracy of the scale in use.
6. To-do quantity: The quantity that still needs to be weighed. The quantity is converted to the UoM of the scale and are rounded up to the accuracy of the scale.
7. Available quantity: The available quantity on the logistic unit. The quantity is converted to the

UoM of the scale and are rounded up to the accuracy of the scale.

8. List of the target SSCC's. On this box every SSCC created for the producton order line is listed. To move the weighed stock to an existing SSCC, select the SSCC. To move the weighed stock to a new logistic unit, select the <new> line.
9. The weighed quantity. The quantity is converted to the UoM of the scale and are rounded up to the accuracy of the scale.
10. The name of the scale currently in use.

If a default scale is set for the user on the Default Scales tab of the Thin Client, the system uses this default scale.

If there is no default scale and there is one scale set up for the weighing room, the system uses this scale.

If there is no default scale and there is more than one scale set up for the weighing room, the system selects the scale to use based on the following logic:

- If the scales have identical parameters, the system uses the first scale in alphabetical order.
- If the scales have different parameters, the system selects a scale by evaluating the following:
  - The quantity to weigh extended with the tolerance falls within the Minimum weight and the Maximum weight of the scale
  - Scale with higher accuracy

> Regardless of the displayed UoM, the weighed quantity will be converted to the UoM of the item before the booking.

5.1. Tare button

If the *Tare* command is defined for the scale, an additional `Tare` button is displayed on the screen. Tap the `Tare` button to tare the scale.
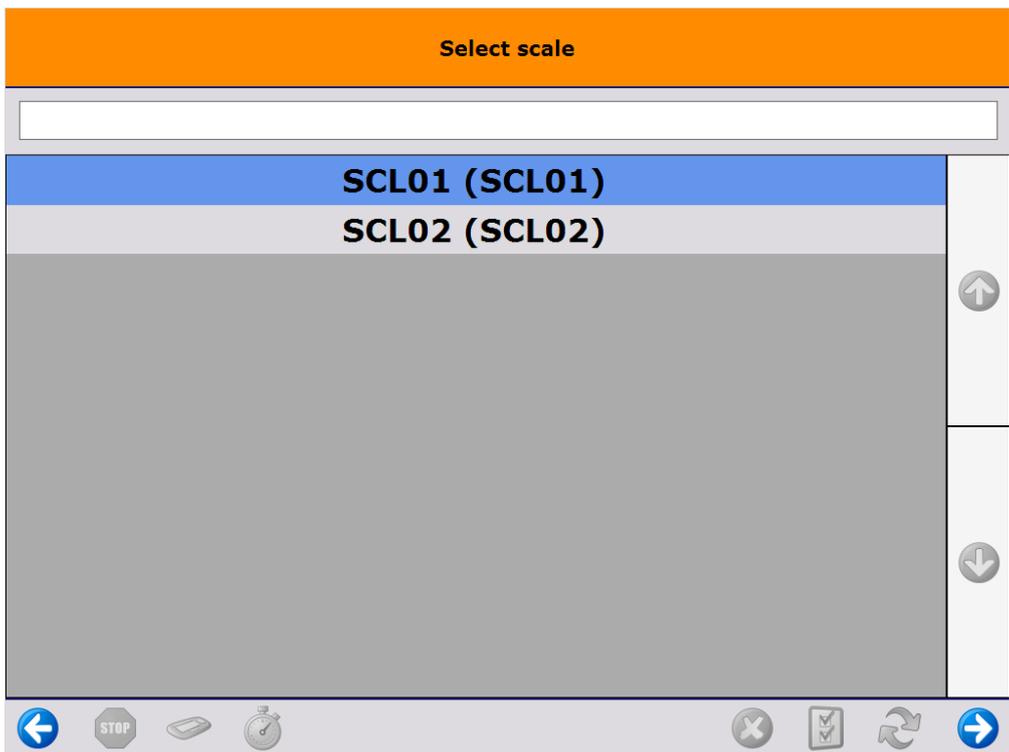
5.2. Zero button

If the *Zero* command is defined for the scale, an additional `Zero` button is displayed on the screen. Tap the `Zero` button to set the scale to zero.

5.3. Switch scale button

If there is more than one scale on the weighing room, an additional `Switch scale` button is displayed on the screen. Authorized users can change the scale during the weighing by tapping the button.

On the next screen select the scale form the list. Every active scale from the weighing room is listed.

If the user belongs to a PMX User group that is authorized for *Weigh order: overrule switch scale* on the Link usergroup to authorization UDT, the system changes the scale and returns to the weigh screen.

When the user is not authorized, the Login screen is displayed. The reason for requiring an authorized user is displayed on the title of the screen.

- If an authorized user logs in, the system changes the scale and returns to the Weighing screen.
- If an unauthorized user logs in, an error message is displayed and the system will not change the scale.

5.4. Set / Unset Default Scale button

After tapping `Switch Scale`, the system displays the `Set Default Scale` or `Unset Default Scale` buttons on the Select Scale screen if the user belongs to a PMX User group that has the following authorization on the Link Usergroup to Authorization UDT:

- Weigh order: overrule switch scale
- Weigh order: overrule default scale

If no default scale is set for the user on the Default Scales tab of the Thin Client, it is possible to set one with the `Set Default Scale` button.

If a default scale is set for the user on the Default Scales tab of the Thin Client, it is possible to unset it with the `Unset Default Scale` button and then set another one.

5.5. Weigh button

Tap the `Weigh` button to update the quantity on the selected SSCC with the weight.

The weighted stock is moved to the weighing room onto the selected SSCC. The *Warehouse: a new LU has been created (700)* print event is triggered and the logistic label is printed.

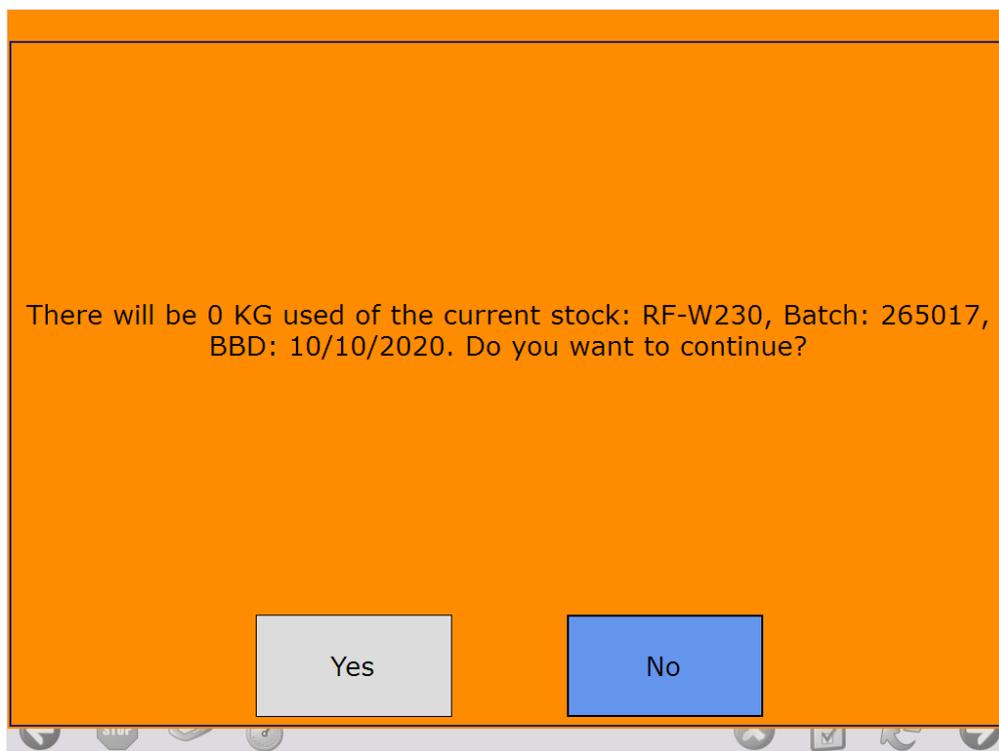After the label is printed, the system returns to the weighing screen.

It is possible that the weighed quantity exceeds the available quantity. In this case a Goods Receipt document will be created to correct the inventory. The stock on the Goods Receipt document will have the same attributes as the weighed stock.

If the weighed quantity is less than the quantity on the destination SSCC, the difference will be moved back to the source SSCC on the input location of the weighing room.

5.6. Other stock button

1. Tap the `Other stock` button to add the next SSCC to weigh.

2. On the next screen tap `Yes` confirm that a new stock will be selected for weighing.
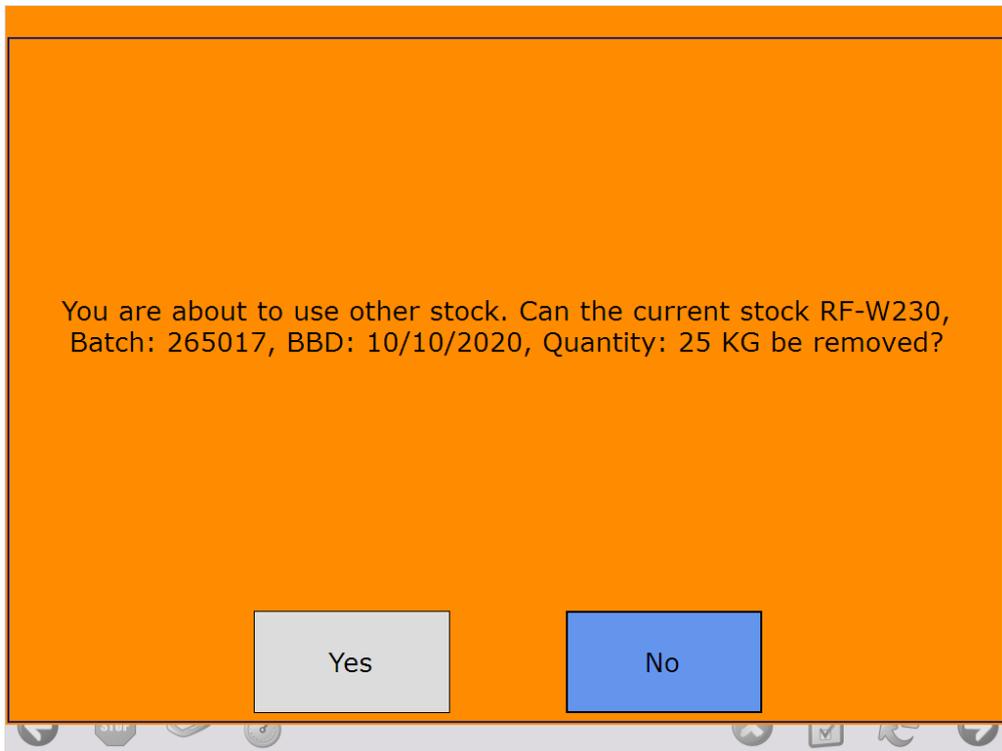
The message contains the details of the stock and the used quantity. If the measured weight in greater than zero, the weighed stock will be moved to the weighing room onto the selected SSCC.

If the weighed quantity exceeds the quantity on the SSCC, the system creates a Goods Receipt document to correct the inventory. The stock on the Goods Receipt document will have the same attributes as the weighed stock.

If the weighed quantity is less than the quantity on the SSCC, the system asks whether to remove the remaining stock or not.

- Tap Yes to remove the stock. The stock will be issued with a Goods Issue document.
- tap No to keep the remaining stock.

3. The system returns to the Select item to weigh screen. Select the next SSCC and tap the right arrow button.

4. The system returns to the Weigh item screen, the previous target SSCC is automatically selected.

5. Tap the `Other stock` button again. It is necessary to tap the button even if there is no other stock to weigh.

6. Tap `Finish`.

5.7. Finish button

Tap the Finish button to finish the weighing.

When the weighing is finished, the weighing order line is closed and the logistic units linked to the weighing order line are moved to the output location of the weighing room.

When every line of the weighing order is closed, the weighing order will be closed as well.

> If the weighed quantity is not within the tolerance range of the linked production order line, authorization is required to finish the weighing.

If the user belongs to a PMX user group that is authorized for 'Weigh order: overrule weight' on the Link usergroup to authorization UDT, the system books the weight and closes the weighing order line.

When the user is not authorized, the Login screen will be displayed. The reason for requiring an authorized user is displayed on the title of the screen.

- If an authorized user logs in, the booking is processed.
- If an unauthorized user logs in, an error message is displayed and the booking is not processed.

Print weigh report

To see the weighing results, print the weighing report. The weighing report contains the following:

- Weigh order details
- Weighed quantity, UoM and the user who performed the weighing
- Overrule task and the user who performed it

Go to the weighing order or select it on the Weighing reports tab of the Open documents report.

Press the `Print` button. On the opening screen select the report type and the printer. Only *Weigh order* type reports set for the company can be selected.

- To see the preview of the report, press the `Preview` button. The report preview is opened in SAP Business One.
- To print the report, press the `Print` button. The report is printed with the selected printer.
- To close the window, press the `Cancel` button.

The default report is *DefaultWeighOrder.rpt*.
The input parameter of the report is *@weighOrderDocEntry*.