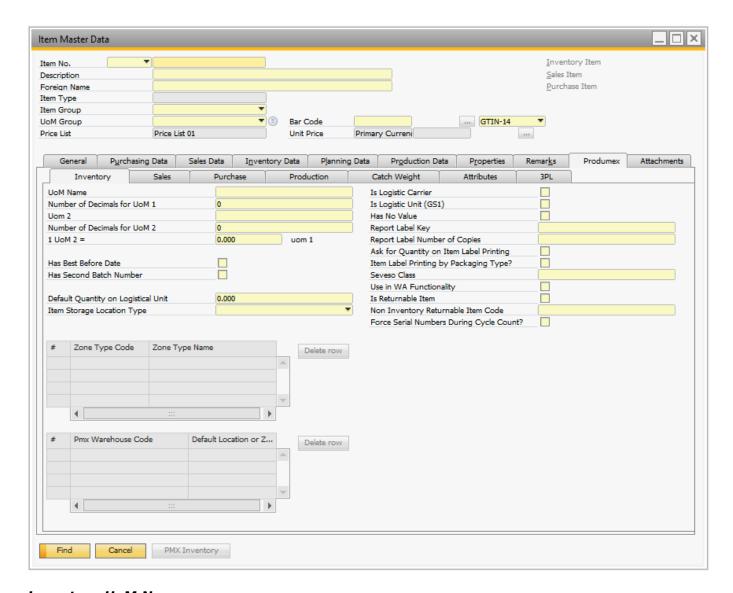## 3.1.3. Produmex Item Master Data Tabs

Under the Inventory function → Item Master Data, a special Produmex tab has been added which contains a number of fields that are not available in standard SAP Business One.

1.3.1. Inventory

Inventory UoM Name

Inventory UoM is an existing SAP Business One field, with a formatted search on the SAP OUOM table. This table contains all the defined UoMs.

> Set the inventory UoM to the lowest sellable unit (for example pieces, cases) to avoid rounding issues. For further information please visit Inventory UoM site.

Number of Decimals for uom1

This field indicates the number of decimals for the first UoM. This is used in flows when entering a

quantity.

Uom 2
Uom2 identifies the second UoM for the item.

1 uom 2 =
If a second UoM is defined, the conversion rate between the two UoM's is entered in this field.

Has best before date
If the item has a best before date, this field has to be ticked.

Has second batch number
Defines whether the item has a second batch number.

Default quantity on logistic unit
Defines whether the item has a default quantity on a logistic unit.
Is used for:

- Splitting a proposal in full pallets/item picking
- Cycle count flows: When configured to propose default quantity, this field is used
- Bulk receiving
- Bulk shipping
- Production: Splitting produced quantity
- Reception: Default quantity when entering quantity
- Reception: When configured to split quantity into multiple logistic units, this is the quantity of a logistic unit

Item storage location type
It defines the item storage location type.
The list is retrieved from the Item Storage Location Type (PMX_ISLT) UDT.
This is used in the Location Suggestions functionality and the item location type can be set for bin locations.

Is logistic carrier
This field has to be ticked if the item in question is a logistic carrier (pallet, europallet, container, …).
An item can be a logistic carrier as well as a returnable item, e.g a europallet.

Is logistic unit (GS1)
A logistic unit is an individual unit that has been composed for transport and/or storage and have to be manageable throughout the supply chain. These items are identified by means of the Application Identifier 01 in the GS1 standard.

Has no value
Only applies to logistic carriers. If this is checked, the system will allow to deliver the logistic carrier free of charge to the customer during ad hoc picking – customer collect.

Report label key
The identification of the label that belongs to a specific item.

Report label number of copies
The number of labels that have to be printed for a specific item.

Ask for quantity on item label printing

If checked the system will ask to enter a quantity. This entered quantity is passed to the label. This can be used for instance to put the weight on the label.

Item label printing by packaging type

If checked the system will print item labels based on packaging types. When item labels need to be printed, the user can enter the number of labels by each packaging type + inventory uom. On the Produmex Attributes tab it is possible to set a specific report for each packaging type. Also the number of copies can be set there.
If the global option on Company for automatic printing of item labels during goods receipt is set to true, and the option for printing item labels by packaging type is set to true, the system will print the label for the packaging type linked to the purchase order, of purchase uom in case of receiving without PO.

Seveso class (Hazmat in North America)

With the setting it is possible to define the seveso class the item belongs to. The configuration is available with the PMX_SEVE UDT.

When a purchase order is created for an item, the system checks the current inventory for that item. If the current inventory exceeds the maximum inventory set on the PMX_SEVE table, a warning is shown. Still, the order can be added and the stock can be received on the Mobile Client without any further warning.

Use in WA functionality

Enable this option to use this item for the WA functionality.

Is returnable item

This field is checked if the item in question is a "returnable item" ("empties").

Non-inventory returnable item code

This field contains the item code of the non-inventory returnable item. This code is used for the delivery and receipt of returnable items ("empties") and is one-to-one coupled with the inventory item code of the same returnable item. (This is configurable on the organizational structure on the 'General' tab of the company)

Force serial numbers during cycle count?

When this option enabled for an item with PMX serial numbers and track location enabled, then serial numbers must be entered during cycle counting operations. Otherwise, it's also possible to just enter the counted quantity.
Note: This option has no effect on SAP serial numbered items.

Zone type code

Apart from indicating a standard location or zone, the user can also specify the zone type code. If such a code is entered, the system verifies upon storing an item whether it can be stored in this zone and prevents the item from being stored in a different zone. This can be used for instance if a product needs to be 'cooled'. If the product has this zone type, it can only be stored on location within a zone that is also 'cooled'.

> **Note:** Items with assigned Zone Types during a duplication action will carry over the defined Zone Type to the duplicated Item as well.

Default location or zone code

On this grid a default location or zone can be specified for each warehouse for the item. The default location/zone is shown as information on the handheld.
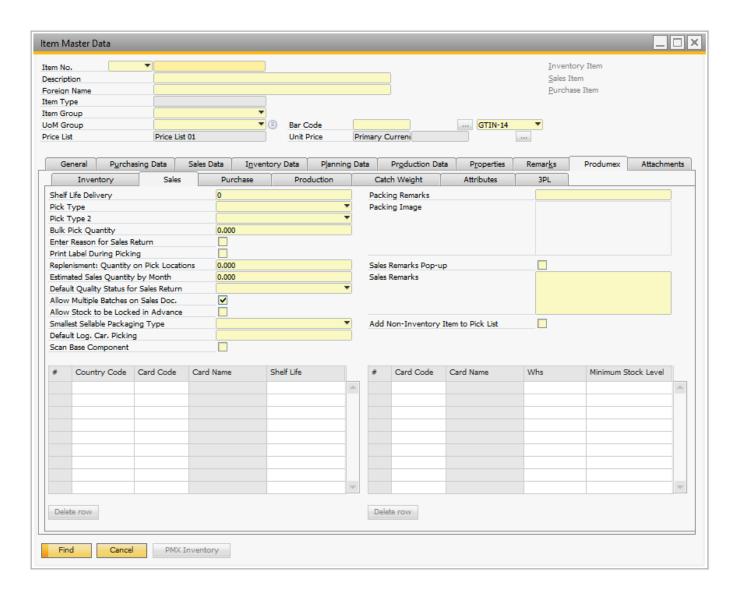
Select the warehouse from the drop-down list on the *Pmx Warehouse Code* field. Every warehouse that is managed by Produmex can be selected.
Add the code of the location or the zone on the *Default location or zone code* field. Only locations or zones that belong to the selected warehouse can be added.

To remove a line, select the line and click on the `Delete row` button.

Note: Produmex WMS ignores the option if the Use Location Suggestion? setting is enabled on a warehouse level.

1.3.2. Sales

Shelf life delivery

This field specifies the minimum remaining shelf life in days of an item (article) from the moment it is outside the responsibility of the manufacturer/distributor (external shelf life), i.e. the actual period that the product is physically present at the customer and can be sold to the end customer. The external shelf life is defined by the Best Before Date and means that the product will need to stay good at the retailer for at least a specified number of days before the "Best Before Date". To guarantee that a product can be sold long enough, the retailer usually requires a minimal external shelf life from the manufacturer/distributor of the product.

Pick type

Will define how an item will be handled during pick list generation and picking. The list of item pick types is defined on the User Defined table "PMX_IPIT". If an item is a of a certain pick type (e.g. 'Handle with care') and it is indicated on the Produmex Pick List Type (User Defined Table "PMX_PITY") that a pick list should be split based on the item pick type, this item will not be added to pick list with items of another pick type (e.g. slow mover). In this case two pick lists will be generated. On the UDT "PMX_UIPT" users can be linked to certain item pick types. If such a configuration exists, the system will only allow the user to pick items that he is allowed to pick. This option is used in the 'Zone picking' option on the scanner.

Pick type 2

Apart from the primary pick type, an item can also have a second pick type. The list of item pick types is defined on the User Defined table "PMX_IPIT". If it is indicated on the Produmex Pick List Type (User Defined Table "PMX_PITY") that a pick list should be split based on item "pick type 2" the system will generate separate pick lists based on this criterion, if applicable in combination with the first pick type. The configuration for linking it to a user is also available for item pick type 2.

Bulk pick quantity

The quantity (lower or equal than a full logistic unit) for which the system will also allow to pick from a bulk location. This is used on stock allocation to a pick list, when it is selected on the scanner. Configuration on the Picklist Controller needs to allow picking from bulk, see description of Can the user pick bulk quantity from bulk location? setting. Example: If bulk quantity = 10 and on the sales order you need 24 items, 20 pieces can be picked from bulk, and 4 from pick location.

Enter reason for sales return

Indicates whether a reason has to be specified when a sold item is returned.

Print label during picking

Set whether item labels need to be printed during picking for this item.

Replenishment: quantity on pick locations

The quantity of that item that should be available on pick locations. Based on the parameters that are set in the "Item-based replenishment generator" the system will check whether there are pick locations with this item where there is a lower quantity than the needed quantity and will replenish these. In the "item-based replenishment generator" it can be specified whether or not the system has to take into account open pick lists, pick lists for a specific due date range, or required quantities for a specific stock coverage period (based on the estimated sales quantity by month)

Estimated sales quantity by month

Estimated sales quantity to be sold by month *(1 month = 30 days)*, to be used for stock coverage calculations. Used by the "Item-based replenishment generator".

Default quality status for sales return

Indicates the default quality status of a sold item that is returned. The standard possibilities are:

blocked, quarantine, released, rejected, returned. This overrides the general definition of the quality status for sales return.

Allow multiple batches on sales doc.

Indicates whether it is allowed on a sales document to have multiple batches of an item in one line (e.g. ordered quantity cannot be fulfilled by a single batch of a product). This is for information only.

Allow stock to be locked in advance

When this option is set to true, this item can be used for locking in advance. This means it will be possible to lock the stock for certain customer(s) at the moment the stock is received. *(Purchase/production/inventory receipt, warehouse transfer)*

Smallest sellable packaging type

Indicates the smallest packaging type of the item that can be sold. This is for information only.

Default log. car. picking

The default logistic carrier that is used for the product (e.g. a CHEP or a EURO pallet, …) on the picking process. This is for information only.

Scan base component

In case items are shipped in a special container *(e.g. a crate)*, it can be indicated that the base component needs to be scanned, instead of scanning the container with the items *(the crate as a whole)*. So a single item in the crate has to be scanned to make sure that the crate is sent containing the right items.
This is used in the Picking flow on the scanner. It uses a BOM to check the base component.

Packing remarks

Specific remarks for packing the item in question which is shown on the RF terminal or touchscreen when handling the item.

Packing image

Image of the specific packing of the item in question (e.g. picture of the kit). This image is shown during Packing and Consolidated packing flow.

Sales remarks pop-up

If checked, the system will show the sales remarks that are specified for the product when selecting the product on a sales document.

Sales remarks

Specific remarks that are shown in SAP Business One when creating a sales order for this item.

Add non-inventory item to pick list

If some non-inventory items need to be on the pick list, this option can be checked. When creating a pick list/proposal, the system will add this item to the pick list/proposal.
This option can only be set for items that are configured to be non-inventory items.
This item can be picked/packed on the scanner/touchscreen. Only the quantity will be asked as this is a non-inventory item.
When the pick list has 10 pieces to pick, and the user only enters 8, the system will register this 8 pieces, but the 2 additional pieces will automatically be skipped, so they will not be picked.

Grid 1: Shelf life by customer and country

Produmex also offers the possibility to define a shelf life per individual customer and/or countries,

apart from the general shelf life. This is then taken into account when picking goods *(i.e. some goods may still be picked for certain customers or countries, but not for others)*.
You can enter a shelf life for either just a customer, or just a country, or a combination of both a customer and a country.

Grid 2: Minimum reserved stock per customer

This function makes it possible to reserve a minimum stock quantity of an item for customers.
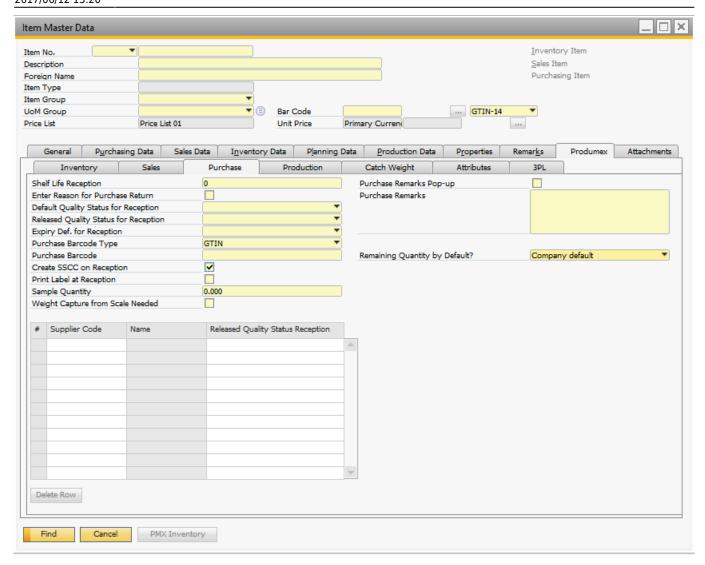
The following pieces of information are mandatory in the grid:

1. Column *Card code*: The card code of the customer for whom you want to reserve a minimum stock quantity. It can be added manually or selected from the list of Business Partners.
2. Column *Card name*: The field cannot be edited, it is automatically filled in after providing the card code.
3. Column *Whs*: The warehouse where the item is located. it can be added manually or selected from the list of Warehouses.
4. Column *Minimum stock level*: The minimum stock quantity of the given item to be reserved for the customer. Its value can only be numeric and can be added manually or entered with the on-screen keyboard.

- If the item is managed in batch, the locking level is in batch.
- If the item is managed in item, the locking level is *item*.

When the necessary data is provided, the stock quantity is reserved for the given customer and picklist proposals cannot be created from the reserved stock for a different customer.

The reservation is based on the item/quality level, that is, this functionality does not block a batch from being used. When a proposal is being created, a batch gets locked.

1.3.3. Purchase

Shelf life reception
The minimum number of days a product will have to remain sellable from the moment the system receives the product into inventory *(prior to the product's expiry date)*.

Enter reason for purchase return
Indicates whether a reason has to be specified when returning a purchased item.

Default quality status for reception
This is the default quality status when receiving the item in question.

Released quality status for reception
The released quality status for reception. This is only used for the *Quality status for reception by batch* extension of the QS Reception Contr. on Company controller. When the system receives a quantity of this item of a certain batch, the system will check whether there is already a specific quantity of the same batch available with the "released quality status". If there is such a quantity available, the system will overrule the default quality status and assign the released quality status to the received item.

Expiry def. for reception
Allows to specify the expiry definition for reception as defined in the User Defined Table "PMX_EXDE" – Expiry Definitions

Purchase barcode type

If the purchase barcode differs from the main barcode, the type of this barcode can be filled in. The possible values are: GTIN-14 *(GS1 Global Trade Item Number)* or a free code. If the user enters a GTIN-14 code, the system verifies whether this is a correct barcode *(according to the GS1 rules)*.

Purchase barcode
Contains the purchase barcode if it is different from the main barcode.

Create SSCC on reception
If checked the system will automatically generate an SSCC on reception if no SSCC was scanned. If unchecked, no SSCC will be created and stock can be manipulated without reference to the SSCC.
If multiple items are received, and at least one of them requires an SSCC, the system will create one.
If no SSCC is created at reception, no put away order will be generated. Items need to be moved through ad hoc movement.
If the items is configured as a serial number, with track location on, this setting needs to be ticked.

Print label at reception
Set whether item labels need to be printed at reception for this item.

Sample quantity
Defines the quantity *(in inventory uom)* of the sample that should be sent back for inspection. The sample generator will use this quantity to generate the sample order *(Sales order)*. The generation of the actual sample order is done through the SboNotificationListener.

Weight capture from scale needed
If the setting is enabled, the item must be weighed during the Reception Flow.

Purchase remarks pop-up
Is set to true, the text in the purchase remarks is shown as a pop-up when using this item in a purchase document in SAP.

Purchase remarks
The purchase remarks to be shown when selecting the item in a purchase document in SAP.

Grid: Released quality status reception by supplier
Produmex offers the possibility to define a default quality status on reception per supplier. Enter the supplier card code and select the quality status from the dropdown list.

This option is used in the *'Reception'* and the *'Receive from WHS'* flows if the QS reception controller on company is set to the 'Gets the quality status for reception' extension.

Remaining Quantity by Default?
The number of items to be shown on the mobile client when scanning the product (remaining based on PO, barcode, etc. or not) can be predefined when the option is selected on the Purchase Delivery Generator. Options are:

- (Y)es
- (N)o
- (C)ompany Default

1.3.4. Production

Default quality status for production
This is the quality status that the stock gets when producing new stock. The setting overrules the general setting.

Default log. car. Production
This is the default logistic carrier for production. If this is set, the system automatically uses that logistic carrier to put the stock on.

Expiry def for production
It allows for specifying the expiry definition for production as defined in the Expiry Definitions UDT.

Auto line up selection
If the setting is enabled, the system automatically lines up the location and does not allow the user to select it.

- This option is used in combination with the production manager.
- Lined-up locations are sorted by location name.

Additional pick for production (%)
When picking for production without a picklist, the system proposes to pick more than the theoretically needed quantity for the production order. ***Allowed production deviation (%)***

The allowed deviation of the produced quantity. This is used in combination with the **Confirm produced quantity after production** and **Default production quantity** setting on the production controller. It checks if the deviation is allowed based on the default quantity to produce.

> **Deviation from the allowed quantity:**
> If the deviation from the default quantity exceeds by a specified percentage, only then a warning message will be triggered.

Default production quantity (%)
This is the default quantity on a produced logistic unit. This setting is used in combination with the *Split produced quantity into logistic units of default size* setting on the production controller.

> The **Allowed production deviation (%)** setting is taken into account during the **Confirm produced quantity after production**.

Use for time registration
It indicates if the item is used as a time registration type that can be added to a Bill of Material and a production order. The quantity is in hours.

Weigh Strategy

Before starting the Weigh flow you need to create a weigh order for the given item. The Weigh Order window displays the weight strategy that is defined for the item by the Weight Strategy setting. The weigh strategy can be By order or By item. The weighing room drop-down menu of the Weigh order window displays those weighing rooms that have got the same strategy as the item. (The weigh strategy of the weighing room can be set in the Organizational Stucture.)

During the Weigh Flow, you select a weighing room and then the flow continues based on the strategy of the weighing room. For more information click here.

Weight Capture needed during Production

If the setting is enabled, the product / by-product must be weighed with a scale during production.

- The setting applies to the Receipt from Production Flow, Production Flow, Disassembly Flow, and Disassembly - Weight Flow.
- If the setting is enabled, the system displays the *Enter the weight* screen during the flows.
- If the setting is disabled, the system displays the normal *Enter the weight produced* screen.
- The setting applies to items that are not managed by serial numbers.
- If the item is a catch weight item, you can weigh the item after the first quantity has been added.
- Prerequisites: There is a scale defined for the production line in the Organizational Structure.
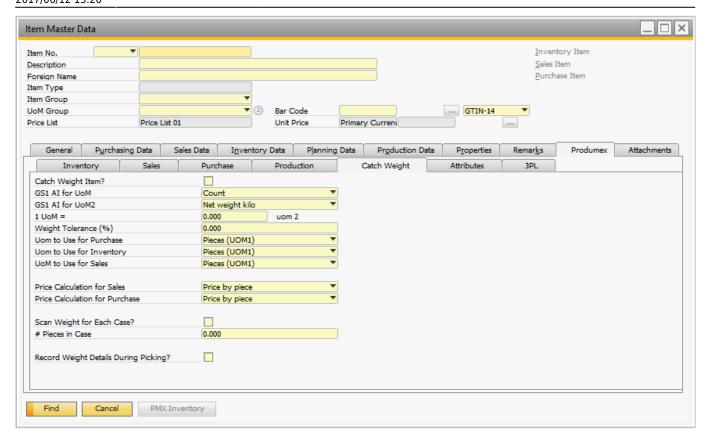

Production remarks

You can add production remarks for the item. This is for information only.

1.3.5. Catch Weight

The weight of catch weight items can be added in two ways:

1. Weighing in one step by adding the total weight of the items
2. Adding the weight by pieces:
    - If the **Scan weight** for each case setting **is disabled**, then the system calculates the number of measured pieces based on the measured weight, the UoM conversion and the tolerance. For example Uom conversion is 1pcs = 15kg. When measuring 30, the system automatically calculates that we measured 2 pcs. When receiving 10 pcs, it is possible to add the weight by a single piece or multiple pieces measured together.
    - If the **Scan weight** for each case setting **is enabled**, then it is possible to weigh by a case. The number of pieces in a case can be set on the # pieces in case field.
    Note: It is still possible to add the total weigh.

Catch weight item?
Indicates if the item is a catch weight item.

GS1 AI for uom
The GS1 application identifier to capture the quantity for pieces. Possible values:

- 37 (Count)
- 31 (Net weight Kilo)
- 32 (Net weight Pound)

GS1 AI for uom2
The GS1 application identifier to capture the quantity for the weight. Possible values:

- 37 (Count)
- 31 (Net weight Kilo)
- 32 (Net weight Pound)

1 uom = xxx uom 2
The weight of 1 piece.

Weight tolerance (%)
The weight tolerance in percentage. Here it can be defined what the allowed tolerance for the weight is. If the tolerance >= 100, no tolerance check will be done. This check will be used for all documents except: goods issue and goods receipts. Calculation:
(Pieces * Default weight of 1 piece) -
(Pieces * Default weight of 1 piece) * Weight tolerance/100
< **Allowed weight** <
(Pieces * Default weight of 1 piece) +
(Pieces * Default weight of 1 piece) * Weight tolerance/100

Uom to use for purchase
The uom that should be asked when receiving items.
Possible values:

- Pieces (UOM1): The weight is calculated based on the weight of 1 piece.
- Weight (UOM2): The number of pieces are calculated based on the weight of 1 piece.
- Pieces and weight

Example:
If the "Uom to Use for Purchase" or "Uom to Use for Sales" is the weight:
It is possible to weigh the individual pieces one-by-one after each other (or multiple pieces measured together) without the need to add the item code again and again. In order to continue, users have to weigh zero.

Example steps for **ITEM03 catch weigh item, 1 pcs=15 kg**

1. Select **ITEM03** as item
2. **Enter weight:** weigh 15.1
3. Enter weight screen is displayed again, weigh 14.9
4. Enter weight screen is displayed again, weigh 0.0
5. System proceeds to Add more item screen

On the GRPO, 2 pcs is taken into stock for ITEM03. You can also receive 2 pcs of **ITEM03** by first measuring 30.0 then weighing 0.0-

If the **"UOM to Use for Purchase"** or **"UOM to Use for Sales"** is pieces and weight, then users should first add the pieces on the **Enter Quantity screen** and then the weight on the **Enter Weight screen**, using the scale. In this case, it is also possible to measure by pieces or measure the total weight. If the products are weighed by pieces, the system proceeds to the next step after each piece is weighed.

Uom to use for inventory
The uom that should be asked when moving items.
Possible values:

- Pieces (UOM1): The weight is calculated based on the weight of 1 piece.
- Weight (UOM2): The number of pieces are calculated based on the weight of 1 piece.
- Pieces and weight

Uom to use for sales
The uom that should be asked when delivering items.
Possible values:

- Pieces (UOM1): The weight is calculated based on the weight of 1 piece.
- Weight (UOM2): The number of pieces are calculated based on the weight of 1 piece.
- Pieces and weight

For a detailed example, please read the shared example under **Uom to use for purchase.**

Price calculation for sales

The calculation of the price for creating a sales delivery.
Possible values:

- Price by piece: This option is the default option. In this case no price calculation is done because the price from SAP is already by piece
- Price by weight: The calculation of the price is done by weight.

Price by weight

When a sales delivery/reserve invoice is generated, the price will need to be set when:

- The item is a catch weight item
- The option for price calculation is set to 'Price by weight'
- The base document is NOT an invoice
- Delivery is made through Produmex functionality

The unit price before discount will be adjusted. The default unit price is based on the default weight of a catch weight item. So a recalculation based on the actual delivered weight needs to be done.

The calculation formula is: Unit price before discount = (Unit price before discount sales order / Default weight by piece) * Actual weight) / Quantity

Database columns: DLN1.PriceBefDi = (RDR1.PriceBefDi / OITM.U_PMX_DQUM) * DLN1.U_PMX_QTY2) + DLN1.Quantity

---

Example:

ItemA
* Inventory uom = Case
* Weight uom = Pounds
* 1 Case = 24 pounds (U_PMX_DQUM = 24)
* Price per case = 48$ (= 2$ / pound)

Sales order
* 20 cases
* Unit price = 48$
* Total price = 960$

When we deliver the 20 cases the actual weight = 500 pound (Nominal weight was 480 pound)
The calculation is as follows:

(Unit price sales order / Default weight by piece) * Actual weight) / Quantity = Unit price

(48$/24 pounds) * 500 pounds) / 20 cases = 50$

Total price of the delivery line will be 1000$
This means if you deliver 500 pounds, this is 2$ by pound.

Scan weight for each case

When this is enabled, when scanning/entering the weight in the device, the system will not automatically calculate the number of pieces that would be associated with the weight, but it will use the # pieces in a case.

So on the first entry of the weight, the user can either enter the total weight for all pieces.
Flow:

- Check if scanned weight is within tolerance of the # pieces in case
- Yes: Use the pieces and weight, and ask for next weight
- No:
    - Check if the scanned weight is within tolerance of the needed number of pieces
    - Yes: Use the needed number of pieces, and total weight
    - No: Error is shown that weight is not within tolerance

pieces in case

This is used in combination with the setting 'Scan weight for each case'. It stored the number of pieces in a case.
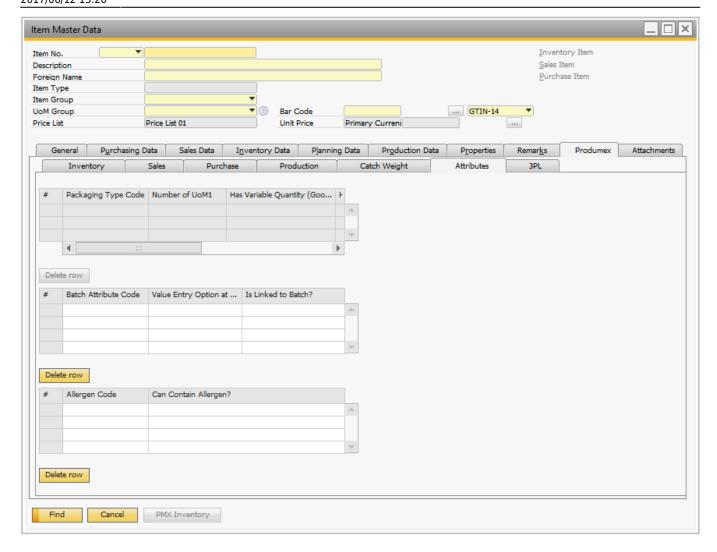
Record weight details during picking

When this is enabled, the entered weight during picking on a device will be stored in a separate table: PMX_WDET.
It stores the pick list doc entry, item and batch details.
This allows to retrieve the detailed weight entry for an item on a pick list.

1.3.6. Attributes

Packaging type

The grid shows the packaging type of the item.

- If the UoM Group of the item is set to manual, it is possible to define a specific packaging type based on the SAP OUOM Table.
- If the item is linked to a defined UoM Group, the system applies the packaging type specified here.
- In the Item Master Data window the Purchasing tab has the Purchasing UoM Code setting and the Sales tab has the Sales UoM Code setting.
    - If you open the UoM code list of the settings and remove the same UoM from both lists, the system automatically removes the UoM from the Produmex tab > Attributes tab > Packaging Type Code list. Click Refresh and the changes are reflected on the Attributes tab.
    - If you add the UoM to any of the UoM code list again, the system automatically adds the UoM to the Packaging Type Code list of the Attributes tab. Click Refresh and the changes are reflected on the Attributes tab.

Packaging type code

The packaging type code

Number of UOM 1

The quantity in the packaging, in inventory uom.

Has variable quantity (Goods entry)?

If the quantity for the packaging type can change on each goods entry, this option can be set to true. If the item is batch controlled, the system will ask during goods entry what the quantity in the current packaging type is. This information will be stored, linked to the batch information.

Hide during entering quantity

When this option is set, that packaging type is not shown to the user when he needs to enter the quantity.

Item label report

The specific report that needs to be printed when the option 'Item label printing by packaging type' is set to true. When a report is selected, the number of copies need to be more than 0.

Copies item label

The number of copies that need to be printed in case of option 'Item label printing by packaging type' is set to true. If this is set to 0, no item labels will be printed for that packaging type.

> **Note:** To print by packaging type, ensure the item label is configured for the packaging types on the Attributes tab. The system will not use the default item label set on the General tab of OSE. If no label is specified on the Attributes tab, the user will be prompted to print, but no printing will occur.

Batch attributes

If an item has a batch, batch2 or BBD, the system can ask for batch attributes during reception and production.
When a new combination of batch, batch2 or BBD is entered, the system will ask for the batch attributes linked to the item. The values of the batch attributes will be stored into the table PMX_ITBA. There are some predefined batch attribute types. Those batch attributes will be stored also on the table PMX_ITRI.

Batch attribute code

This is a list of batch attribute types defined in the UDT @PMX_BATT

Value entry option at reception

This will set whether he value should be asked during reception Possible values:

- Required: User will have to fill in the data
- Optional: User can skip entry of the data.
- Hidden: This batch attribute will not be asked during reception.

Is linked to batch?

When this option is set to true, this batch attribute will be linked to the batch number.
This means when a new combination of batch/batch2/BBD is created, and the batch number already exists in the system for this item, the batch attribute is not asked to the user, but the value is copied.

Allergens
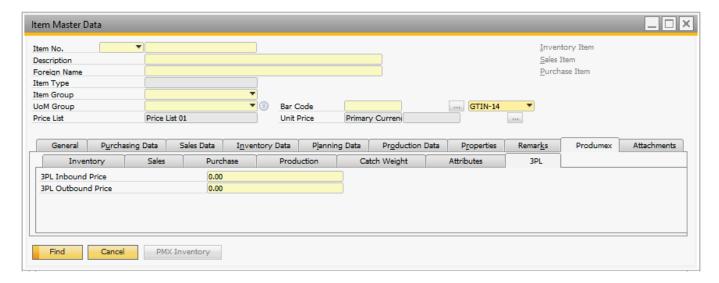
This grid stores all the allergens the item can have.

Allergen code

This is a list of allergens defined in the UDT @PMX_ALLE

Can contain allergen?

If this product does not contain the allergen by default, but it is possible that some trace of this allergen could be present, this option can be checked.

1.3.7. 3PL

3PL inbound price

Defines the price to invoice 3PL partners for each received unit *(in inventory UoM)* of that item.

3PL outbound price

Defines the price to invoice 3PL partners for each delivered unit *(in inventory UoM)* of that item.