

# Extensions of SAP Business One

## Overview

Produmex WMS extends the standard functions of SAP Business One with concepts that are important for the operational management of items, for example Best Before Date and location code. Produmex WMS also adds specific parameters to standard SAP Business One functions and they must be set to ensure the proper functioning of Produmex WMS.

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.

## 1. Item Master Data

### 1.1. Item Master Data - main screen

The screenshot shows the 'Item Master Data' configuration window. The 'Bar Code' field is highlighted with a red box, containing the value '12345678901231' and the format 'GTIN-14'. Another red box highlights the 'Serial and Batch Numbers' section, which includes the following fields:

- Has PMX Serial Number:
- Track Location of Serial Numbers:
- Serial Number Format:

### Bar Code

Bar Code is an existing field in SAP Business One. Produmex offers users the possibility to choose the type of barcode:

- GTIN-14 (*GS1 Global Trade Item number*)
  - The system verifies whether this is a correct bar code (according to the GS1 rules).
- GTIN-Variable
  - This is also a GTIN-14 barcode, but with a part that contains information about a certain value (weight, price, etc.).
  - This kind of barcode is used nationally and not internationally, that is, some additional configuration must be added so it is possible to know which part of the barcode is variable, and what that values represent. The configuration is done in the [Produmex Variable GTIN Configuration \(PMX\\_VGTC\)](#) UDT.
  - The barcode to be stored should only be the fixed part of the variable barcode, without the check digit.
- Free barcode.
  - No restrictions on format

On the scanner it is possible to scan an EAN 13. The system converts it to a GTIN, and checks that GTIN against the barcode on the Item Master Data. If you have valid EAN 13 barcodes, they should be stored in the system as a GTIN, with a leading 0 in front of the EAN 13.

### Has PMX Serial Number

In SAP Business One an item can be managed by batches OR serial numbers. Produmex allows for

managing an item both by batches AND serial numbers.

Note: The setting does not apply to items that also have SAP serial tracking enabled. The system displays the following message when clicking Add or Update: *The item has SAP serial numbers and PMX serial numbers. Please choose only one of them.*

### **Track Location of Serial Numbers**

If it is checked, Produmex keeps track of the location of items with serial numbers (both SAP serial numbers and Produmex serial numbers) by forcing the stock to be on an SSCC. The serial number is linked to that SSCC.

### **Serial Number Format**

It specifies the serial number format as a regular expression. The available formats have to be specified in the [Produmex Item Serial Number Format \(PMX\\_ISFT\)](#) UDT.

#### **Serial Number Format Validation**

When the **Serial Number Format** is set, the system checks if scanned serial numbers meet the format requirements. If any **serial numbers in stock do not match the criteria, the system will not allow their use**. Therefore, it is recommended to set a new format only when there are no items in stock with the old serial number format.

## **1.2. Item Master Data: Purchasing Data tab**

Produmex WMS adds the **Mfr Item Descr.** field to the **Purchasing Data** tab of the **Item Master Data window**.

The field can be used to add a distinctive description to an item and the system displays this description in the name of the item in the **Reception Flow** and **Bulk Reception Flow**.

Be aware during **Reception Flow** and **Bulk Reception Flow**, items on the **Select Product screen** are **listed according to** the **Mfr Item Descr. field**.

**The system checks the custom fields in the following order:**

- substituteltemDescr (U\_PMX\_SIDE)
- Mfr item desc ( U\_PMX\_VIDE)
- custom item descr (U\_PMX\_CUDE) → Updated automatically



## **1.3. Item Master Data: Inventory Data tab**



The following columns are added to the inventory grid:

### **Uom2 Qty Warehouse**

This is the quantity for the second UOM that is in stock. In case it is a catch weight item, this will be the actual weight. If it is an item with a UOM2, but no catch weight, this will be the calculation of UOM2 based on the default ratio between both UOM.

### **Uom2 Qty Confirmed**

This is the quantity for the second UOM that is committed. The calculation of UOM2 based on the default ratio between both UOM.

### **Uom2 Qty Ordered**

This is the quantity for the second UOM that is ordered. The calculation of UOM2 based on the default ratio between both UOM.

### **Uom2 Qty Available**

This is the quantity for the second UOM that is available. The calculation is: (In stock + Ordered) - Confirmed

Note: The above listed UoM2 columns are filled in only when there is a UoM2 defined.

### **PMX Free Stock**

This is the free stock that is available for Produmex. This is the sum of the quantity in inventory minus the sum of the quantity that is locked.

$(SUM(PMX\_INVT.Quantity) - SUM(PMX\_INLD.Quantity))$

## **1.4. Item Master Data: Produmex tab**

A *Produmex* tab is added to *Item Master Data* with fields that are not available in standard SAP Business One.

**Important:** When duplicating an Item in Item Master Data, only the predefined Zone Type grids carry over to the newly duplicated Item. The standard way to copy bulk data to the new Item is by using [Import Data](#) tool.

### **1.3.1. Inventory**

The screenshot shows the SAP Item Master Data form with the 'Inventory Data' tab selected. The form contains several sections:

- General Data:** Item No., Description, Foreign Name, Item Type, Item Group, UoM Group, Price List (Price List 01), Bar Code, Unit Price (Primary Current), and GTIN-14.
- Inventory Data Section:**
  - UoM Name
  - Number of Decimals for UoM 1: 0
  - UoM 2
  - Number of Decimals for UoM 2: 0
  - 1 UoM 2 =: 0.000 uom 1
  - Has Best Before Date:
  - Has Second Batch Number:
  - Default Quantity on Logistical Unit: 0.000
  - Item Storage Location Type
- Logistical Properties:**
  - Is Logistic Carrier:
  - Is Logistic Unit (GS1):
  - Has No Value:
  - Report Label Key
  - Report Label Number of Copies
  - Ask for Quantity on Item Label Printing:
  - Item Label Printing by Packaging Type?:
  - Seveso Class
  - Use in WA Functionality:
  - Is Returnable Item:
  - Non Inventory Returnable Item Code
  - Force Serial Numbers During Cycle Count?:
- Zone Type Table:**

#	Zone Type Code	Zone Type Name
- Pmx Warehouse Table:**

#	Pmx Warehouse Code	Default Location or Z...

**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

The screenshot displays the 'Item Master Data' window. At the top, there are input fields for 'Item No.', 'Description', 'Foreign Name', 'Item Type', 'Item Group', 'UoM Group', 'Price List', 'Bar Code', and 'Unit Price'. Below these are tabs for 'General', 'Purchasing Data', 'Sales Data', 'Inventory Data', 'Planning Data', 'Production Data', 'Properties', 'Remarks', 'Produmex', and 'Attachments'. The 'Sales Data' tab is selected, showing fields for 'Shelf Life Delivery', 'Pick Type', 'Pick Type 2', 'Bulk Pick Quantity', 'Enter Reason for Sales Return', 'Print Label During Picking', 'Replenishment: Quantity on Pick Locations', 'Estimated Sales Quantity by Month', 'Default Quality Status for Sales Return', 'Allow Multiple Batches on Sales Doc.', 'Allow Stock to be Locked in Advance', 'Smallest Sellable Packaging Type', 'Default Log. Car. Picking', and 'Scan Base Component'. There are also checkboxes for 'Sales Remarks Pop-up' and 'Add Non-Inventory Item to Pick List'. At the bottom, there are two tables: one with columns '#', 'Country Code', 'Card Code', 'Card Name', and 'Shelf Life'; the other with columns '#', 'Card Code', 'Card Name', 'Whs', and 'Minimum Stock Level'. Buttons for 'Delete row', 'Find', 'Cancel', and 'PMX Inventory' are visible at the bottom.

#### **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



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 Structure](#).)

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  $\geq 100$ , no tolerance check will be done. This check will be used for all documents except: goods issue and goods receipts. Calculation:

$(\text{Pieces} * \text{Default weight of 1 piece}) -$

$(\text{Pieces} * \text{Default weight of 1 piece}) * \text{Weight tolerance}/100$

**< Allowed weight <**

$(\text{Pieces} * \text{Default weight of 1 piece}) +$

$(\text{Pieces} * \text{Default weight of 1 piece}) * \text{Weight tolerance}/100$

### **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:  $\text{Unit price before discount} = (\text{Unit price before discount sales order} / \text{Default weight by piece}) * \text{Actual weight} / \text{Quantity}$

Database columns:  $\text{DLN1.PriceBefDi} = (\text{RDR1.PriceBefDi} / \text{OITM.U\_PMX\_DQUM}) * \text{DLN1.U\_PMX\_QTY2} + \text{DLN1.Quantity}$

#### **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:**

$(\text{Unit price sales order} / \text{Default weight by piece}) * \text{Actual weight} / \text{Quantity} = \text{Unit price}$

$(48\$/24 \text{ pounds}) * 500 \text{ pounds} / 20 \text{ cases} = 50\%$

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**

The screenshot shows the 'Item Master Data' window in SAP. At the top, there are fields for Item No., Description, Foreign Name, Item Type, Item Group, UoM Group, Price List, Bar Code, and Unit Price. On the right, there are checkboxes for 'Inventory Item', 'Sales Item', and 'Purchase Item'. Below these fields are several tabs: General, Purchasing Data, Sales Data, Inventory Data, Planning Data, Production Data, Properties, Remarks, Produmex, and Attachments. Under the 'Inventory Data' tab, there are three sub-tabs: 'Inventory', 'Sales', and 'Purchase'. The 'Inventory' sub-tab is active, showing a table with columns: '#', 'Packaging Type Code', 'Number of UoM1', and 'Has Variable Quantity (Goods entry)'. Below this table is a 'Delete row' button. The 'Sales' sub-tab shows a table with columns: '#', 'Batch Attribute Code', 'Value Entry Option at ...', and 'Is Linked to Batch?'. Below this table is another 'Delete row' button. The 'Purchase' sub-tab shows a table with columns: '#', 'Allergen Code', and 'Can Contain Allergen?'. Below this table is a third 'Delete row' button. At the bottom of the window, there are buttons for 'Find', 'Cancel', and 'PMX Inventory'.

**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 the 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.

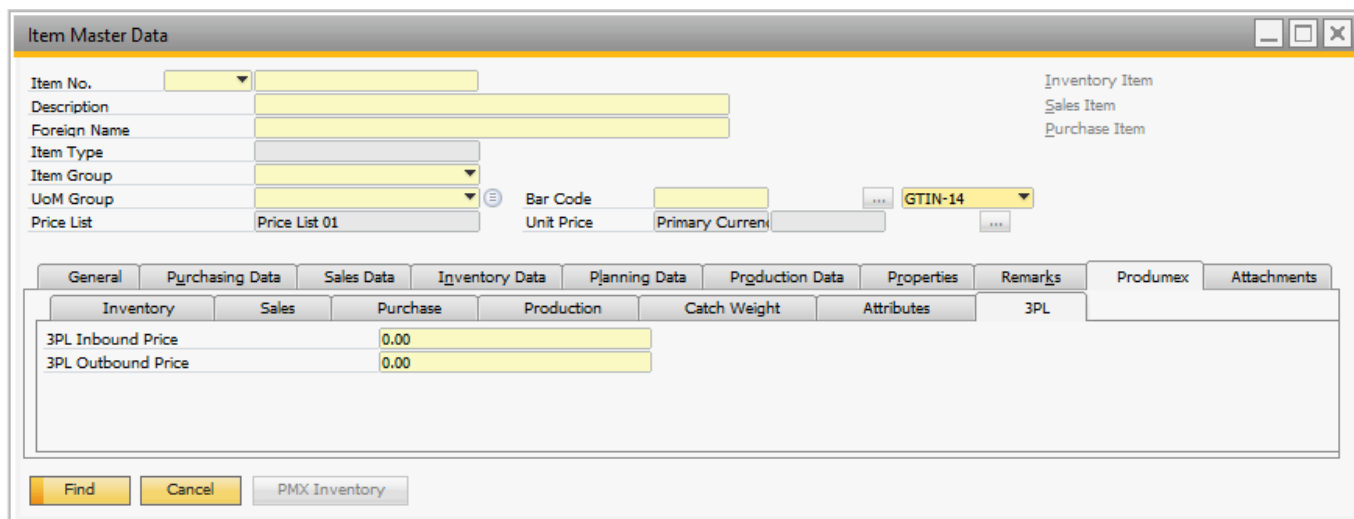
### **Allergen code**

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.

## 2. Administration

The Administration module of SAP Business One allows for defining important general settings to ensure the proper functioning of the system. Produmex WMS adds specific settings concerning authorizations and users.

### 2.1. Authorizations

#### General authorizations for Produmex WMS

At the user level it is possible to define the authorizations for the various functions of Produmex WMS. An authorized user can define the rights of the individual users. In order to do this select Administration → System Initialization → Authorizations → General Authorizations.



An authorized user can then set the user authorization for Produmex WMS as a whole or for the various parts of it. The authorization levels are:

- Full Authorization
- Read Authorization
- No Authorization

The various aspects to which the authorization levels apply are:

- Organization structure
- Print reception logistic unit reports
- Inventory reports selection criteria
- Inventory report detail
- Change quality status
- Route templates
- Route generation
- Route detail
- Picklist proposal generation
- Generated Picklist proposal detail
- Picklist proposal detail
- Picklist detail
- Open documents
- Move
- Production order step list
- Tracking Tracing Search
- Route planning customer details
- Production step list
- Open Sales Orders
- Audit trail search
- Audit trail
- Interface monitor
- Production manager
- Cycle count select location
- Cycle count processing
- Adjust packaging quantity
- Adjust manual locking
- Move order
- Manual interfacing
- Container
- Advance inventory locking
- Print SSCC
- Change BBD on batch
- Change Batch2 on batch
- Wave report form
- Change batch attributes
- Stock selection
- Cycle count Pmx serial numbers
- KPI Report selection criteria
- 3PL invoicing selection criteria
- Alternate items selection
- Select printer form

- Stock allocation form
- Picklist proposal manager selection criteria
- Picklist proposal manager
- Perform move form

## 2.2. Users

### Additional setting for users

- It is possible to set the language in which the “thin client” application runs for each individual users. To do this select Administration → Setup → General → Users. A user-defined field “Language” has been added there to allow you to set the language code for the user in question. This language is used on the scanner/touchscreen when the user has logged on.
- It is also possible to assign a user to a PMX User Group. The available authorizations are defined in the UDT “[PMX\\_UAUT](#)” (*User Authorizations Definitions Table*) and can be linked to the PMX User Groups (UDT “[PMX\\_USGR](#)”) through the UDT “[PMX\\_UGAU](#)” (*Link Usergroup To Authorizations Table*).

The screenshot displays the 'Users - Setup' dialog box in SAP. The 'General' tab is selected, showing various user configuration options. The 'Pmx User group' dropdown is open, showing two options: '01\_ADMIN - Administration' and '02\_SHPFLR - Shopfloor'. The 'Language' field is empty. The 'User Code' and 'User Name' fields are both set to 'manager'. The 'Password' field is masked with '\*\*\*\*'. The 'Take Control of eDoc Processing in Electronic Document Monitor' checkbox is checked.

## 2.3. User defined tables

The user defined tables are available via SAP Tools > Default Forms.

- [2.3.1. Box for WAS \(PMX\\_BFWA\)](#)
- [2.3.2. Box type by item for WAS \(PMX\\_BTIT\)](#)
- [2.3.3. Box type for WAS \(PMX\\_BTWA\)](#)

- 2.3.4. Container shipping status (PMX\_CSST)
- 2.3.5. Defines the weighing scales available to a specific thin-client (PMX\_TCSC)
- 2.3.6. Down time types (PMX\_DTTY)
- 2.3.7. List of selectable drivers (PMX\_DRIV)
- 2.3.8. Freight charges definitions (PMX\_FCDE)
- 2.3.9. Expiry definitions (PMX\_EXDE)
- 2.3.10. Hidden Fat Client buttons (PMX\_HFCB)
- 2.3.11. Item storage location type (PMX\_ISLT)
- 2.3.12. Link packline to zone table (PMX\_LPLZ)
- 2.3.13. Link usergroup to authorization table (PMX\_UGAU)
- 2.3.14. Produmex application identifiers (PMX\_APID)
- 2.3.15. List of actions for certain events (PMX\_EVAC)
- 2.3.16. List of selectable license plate (PMX\_LIPL)
- 2.3.17. List of selectable trailer numbers (PMX\_TRNR)
- 2.3.18. List of warehouse to warehouse where serial numbers need to be entered (PMX\_WSMM)
- Location Attributes (PMX\_OSAT and PMX\_OAVV)
- 2.3.19. Package Dimensions (PMX\_PADI)
- 2.3.20. Port (PMX\_PORT)
- 2.3.21. Pmx priority (PMX\_PRIO)
- 2.3.22. Produmex allergen types (PMX\_ALLE)
- 2.3.23. Produmex batch attribute types (PMX\_BATT)
- 2.3.24. Produmex batch attribute valid values (PMX\_BAVV)
- 2.3.25. Produmex cycle count - other operations filter (PMX\_COOF)
- 2.3.26. Produmex item pick types (PMX\_IPIT)
- 2.3.27. Produmex item serial number format (PMX\_ISFT)
- 2.3.28. Produmex location types (PMX\_LOTY)
- 2.3.29. Produmex picklist types (PMX\_PLTY)
- 2.3.30. Produmex quality types (PMX\_QUTY)
- 2.3.31. Produmex quality valid values (PMX\_QUVV)
- 2.3.32. Produmex user item groups (PMX\_UITB)
- 2.3.33. Produmex user item pick types (PMX\_UIPT)
- 2.3.34. Produmex user picklist types (PMX\_UPLT)
- 2.3.35. Produmex user warehouses (PMX\_UWHS)
- 2.3.36. Produmex variable GTIN configuration (PMX\_VGTC)
- 2.3.37. Put away zone (PMX\_PAZO)
- 2.3.38. Scale definition (PMX\_SCLD)
- 2.3.39. Scale weight result (PMX\_SCWR)
- 2.3.40. Sequence configuration (PMX\_SECO)
- 2.3.41. Seveso classes (PMX\_SEVE)
- 2.3.42. Shelf life per country and business partner (PMX\_CSSL)
- 2.3.43. Shipping quality option (PMX\_SQOP)
- 2.3.44. User authorization definitions table (PMX\_UAUT)
- 2.3.45. User group for PMX (PMX\_USGR)

Note: The following user defined tables are no longer used:

- Links between GS1 units of measurement and GS1 measure types (PMX\_LUMT)
- Produmex measure types (PMX\_PMTY)

### 2.3.1. Box for WAS (PMX\_BFWA)

Definition of all boxes that can be used in the warehouse automation system (WAS).

#### **Box type**

The box type can be selected from a list. The list comes from the [Box type for WAS UDT](#).

### 2.3.2. Box type by item for WAS (PMX\_BTIT)

If needed, it can be specified how many items in a certain box type can be stored.

#### **Box type**

The box type can be selected from a list. The list comes from the [Box type for WAS UDT](#).

#### **Quantity**

The quantity of the item that can be stored in the given box type.

### 2.3.3. Box type for WAS (PMX\_BTWA)

Definition of box types that can be used in the warehouse automation system (WAS).

#### **# Compartments**

The number of compartments a box has

### 2.3.4. Container shipping status (PMX\_CSST)

This table holds the shipping statuses a container can have.

#### **Sequence**

The sequence is used for the sorting on the combobox on the container management screen.

### 2.3.5. Defines the weighing scales available to a specific thin-client (PMX\_TCSC)

Links a scale to a thin client.

#### **Thin client code**

The code of the thin client, as defined in the organizational structure.

#### **Scale def. code**

The scale definition code. It can be selected from a list coming from the [Defines the weighing scales available to a specific thin-client UDT](#).

### 2.3.6. Down time types (PMX\_DTTY)

List of down time types. This is used in the time registration module when entering a down time.

### 2.3.7. List of selectable drivers (PMX\_DRIV)

A list of known drivers that can be selected during shipping process.

#### **Is the record canceled?**

If it is set to Yes, the record is cancelled. The user cannot select cancelled records when the data is asked on the scanner or the touchscreen.

### 2.3.8. Freight charges definitions (PMX\_FCDE)

Configuration of freight charges that will be added to a sales document.

#### **Freight code**

The line number of the freight to be added. The freight charges are added on a sales order when it is added. The line number must correspond to a line in the freight charges screen on sales order header:



#### **Shipping type code**

The shipping type code where this freight charge needs to be added.

#### **Cost**

The price to be added.

#### **Min. document price**

The minimum document price that is required to add the cost.

Example:

Freight code	Shipping type code	Cost	Min document price
1	1	30	0
1	1	20	100
1	1	0	200

If the price is between 0 and 99,999,999, a cost of 30 will be added to Freight for shipping type 1  
If the price is between 100 and 199,999,999, a cost of 20 will be added to Freight for shipping type 1  
If the price is above or equal to 200, no cost will be added to Freight for shipping type 1

### 2.3.9. Expiry definitions (PMX\_EXDE)

A list of possible expiry definitions. This is used to calculate best before dates.

#### **Days**

The number of days to add.

#### **Months**

The number of months to add.

#### **Years**

The number of years to add.

### 2.3.10. Hidden Fat Client buttons (PMX\_HFCB)

This table holds configuration to hide buttons on flows used in the Fat Client. This configuration table is intended to be used by consultants who are familiar with the workflows and know how to retrieve the needed information to complete the configuration.

#### **Calling workflow**

The work flow that is used.

#### **Title key**

The title key of the screen where the button needs to be hidden.

#### **Button key**

The button key of the button that needs to be hidden.

#### **Disabled**

Check this checkbox to disable the configuration to hide the button.

#### **Pmx User Group**

The user group this configuration applies to. If no user group is set, it applies to all users.

#### **Examples:**

- How to hide button 'No PO' on the reception flow
- How to hide button 'Change lined up location' on the production flow

#	Code	Name	Calling workflow	Title key	Button key	Active	Pmx User group
1	1	1	WorkflowScript_ReceptionScript	MSG_TITLE_SELECT_PO_FILTER	MSG_BUTTON_PO_FILTER_NO_PO	<input checked="" type="checkbox"/>	Administration
2	2	2	WorkflowScript_ProductionScript	MSG_TITLE_SELECT_TASK	MSG_BUTTON_CHANGE_LINED_UP_LOCATIONS	<input checked="" type="checkbox"/>	Shopfloor
3						<input checked="" type="checkbox"/>	

### 2.3.11. Item storage location type (PMX\_ISLT)

This table holds a list of item storage location types.  
An item and/or location can have this property.  
It is used in the functionality for Location Suggestions.

### 2.3.12. Link packline to zone table (PMX\_LPLZ)

Defines the zone linked to pack lines. This is use on the 'Consolidated packing' flow.  
The pick list destination location should be on that zone. Also the available stock to pack needs to be stored on that zone.  
The level of the zone is 1. This means that the zone you define here needs to be the direct zone of the location.

#### **Name**

The code of the user.

#### **Code of the pack line**

The code of the pack line, as define in the organizational structure.

#### **Code of the zone**

The code of the zone, as define in the organizational structure.

### 2.3.13. Link usergroup to authorization table (PMX\_UGAU)

Define the authorization a user group can have.

#### **User code**

The code of the user.

#### **User group code**

The user group code. The user group code can be selected from a list. The list comes from the '[User group for PMX](#)' UDT.

#### **User authorization code**

The user authorization code. The user authorization code can be selected from a list. The list comes from the '[User authorization definition](#)' UDT.

#### **Value**

The actual authorization. Possible values:

- Disabled
- Enabled
- Hidden

### 2.3.15. List of actions for certain events (PMX\_EVAC)

Defines actions that can be performed for certain events.

Possible events:

- Open extra documents when another print job within SAP is performed.

This print job needs to be for Sales quotation/order/invoice.

It will get documents defined on the item master data in the column defined.

Configuration:

- Table name = OITM
- Colum name = [a column name within OITM where the path to the document that needs to be opened is stored]
- Object type = The object type for Sales quotation/order/invoice
- Action type = Does not need to be filled
- For event = Does not need to be filled

#### **For event**

Defines the event this action is for.

#### **Action type**

The type of action that needs to be performed.

### 2.3.16. List of selectable license plate (PMX\_LIPL)

A list of known license plates that can be selected during shipping process.

#### **Is the record canceled?**

If set to Yes, the record is cancelled. The user cannot select cancelled records when the data is asked on the scanner or the touchscreen.

### 2.3.17. List of selectable trailer numbers (PMX\_TRNR)

A list of known trailer numbers that can be selected during shipping process.

#### **Is the record canceled?**

If set to Yes, the record is cancelled. The user cannot select cancelled records when the data is asked on the scanner or the touchscreen.

### 2.3.18. List of warehouse to warehouse where serial numbers need to be entered (PMX\_WSMM)

Defines whether a PMX serial number needs to be asked when performing a move between

warehouses.

**From warehouse (PMX)**

The source warehouse. This is the code of the warehouse as defined in the organizational structure.

**To warehouse (PMX)**

The source warehouse. This is the code of the warehouse as defined in the organizational structure.

**Ask serial number?**

Do serial numbers need to be asked?

**Print documents?**

Do warehouse documents need to be printed?

**2.3.19. Package Dimensions (PMX\_PADI)**



Depending on the pick list type, the user might have to add the dimensions of the package after a logistic unit is finished during picking and packing. The user can enter the dimensions manually or select a package dimension that was defined on this table.

**Code**

Internal code of the package dimension.

**Name**

The name of the package dimension that is displayed on fat client screens.

**Is the record canceled? (Y/N)**

If checked, it indicates that the record is cancelled and cannot be selected as the package dimension during picking or shipping. Cancelled records can be restored.

**Width**

The width of the package.

**Length**

The length of the package.

**Height**

The height of the package.

**2.3.20. Port (PMX\_PORT)**

This table holds the ports.

It is used for the container management: Port of origin, port of destination.

**Normal lead time (in days)**

The lead time in days for normal delivery at this port.  
This is used for calculation of dates in the container management.

***Express lead time (in days)***

The lead time in days for express delivery at this port.  
This is used for calculation of dates in the container management.

**2.3.21. Pmx priority (PMX\_PRIO)**

The Produmex priorities. This is used on pick list (proposals) and move orders. The system has already 3 predefined priorities:

- High (100)
- Normal (200)
- Low (300)

***Sequence***

A number defining the order of the priority. The value needs to be unique.  
Order is done ascending. This means that 1 has a higher priority than 99.

***Is default?***

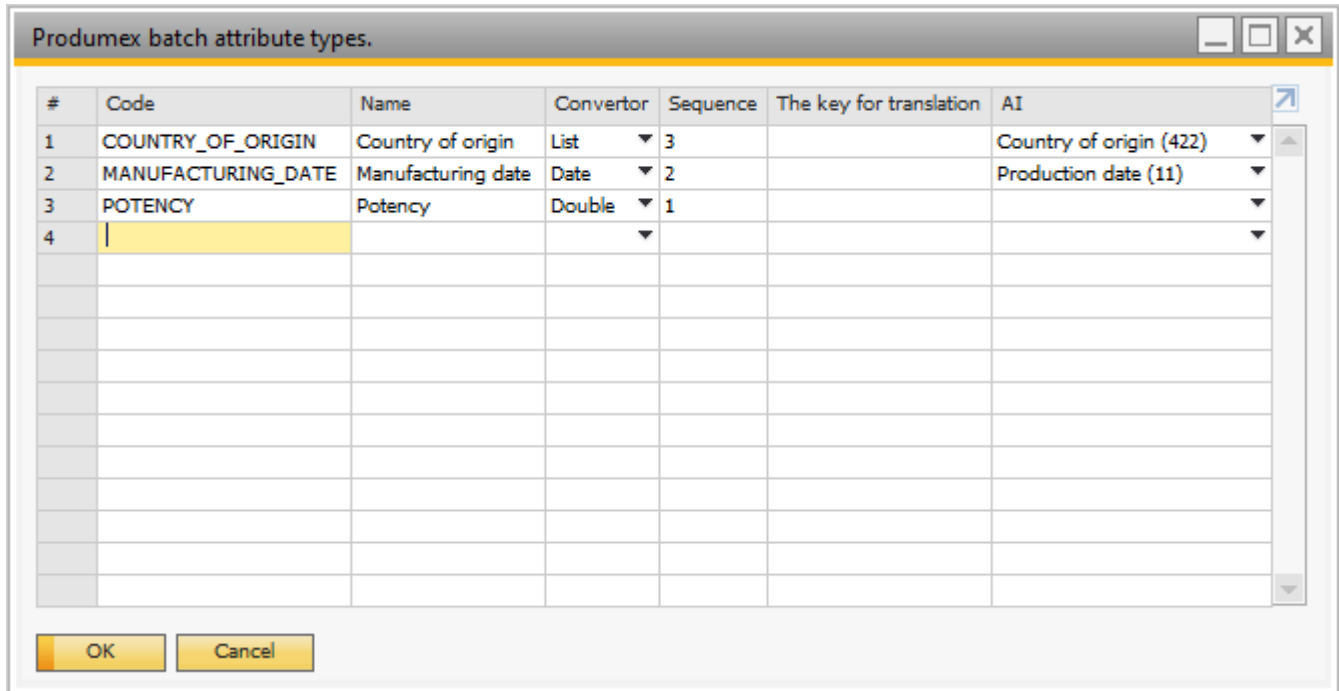
For the default priority this option should be set to true.

**2.3.22. Produmex allergen types (PMX\_ALLE)**

A list of possible values an allergen can have.  
This is used on the item master data to select an allergen.

**2.3.23. Produmex batch attribute types (PMX\_BATT)**

The defined batch attribute types can be added to items in the Item Master Data window > Produmex tab > Attributes > Batch Attribute Code drop-down menu.



**Converter**

The data is stored in the database as text. The system needs to know what type to convert it to. This can be set with the converter.

Possible values:

- Int
- String
- Date
- Double
- List

**Sequence**

The sequence of the defined batch attribute types in the Batch Attribute Code drop-down menu.

**The key for translation**

The key that will be used for the translation of the title. When this is not set, the system will use MSG\_TITLE\_BATCH\_ATTRIBUTE.<Code of the batch attribute>. In case there is only 1 language in the company, a title can be entered here directly.

A list of possible batch attributes that can be linked to an item.

Some predefined codes have been added:

- COUNTRY\_OF\_ORIGIN: Country of origin
- MANUFACTURING\_DATE: Manufacturing date

When custom batch attribute types are added, a translation should be added to the system. This translation is used on a device when entering the batch attributes.

The translation node for COUNTRY\_OF\_ORIGIN looks like:

```
<PmxLocalizationKey>
  <Canceled>False</Canceled>
<LocalizationKey>MSG_TITLE_BATCH_ATTRIBUTE.COUNTRY_OF_ORIGIN</LocalizationKey>
```

```

<ApplicationTypeCode>SLIM_SCR</ApplicationTypeCode>
<LocalizationProperties>
  <PmxLocalizationProperty>
    <Canceled>False</Canceled>
    <LocalizationProperty />
    <ExtensionCode>CONVSTR</ExtensionCode>
    <LocalizationValues>
      <PmxLocalizationValue>
        <Canceled>False</Canceled>
        <LocalizationValue>Enter the country of
origin</LocalizationValue>
        <LanguageCode>3</LanguageCode>
      </PmxLocalizationValue>
      <PmxLocalizationValue>
        <Canceled>False</Canceled>
        <LocalizationValue>Vul het land van herkomst
in</LocalizationValue>
        <LanguageCode>16</LanguageCode>
      </PmxLocalizationValue>
    </LocalizationValues>
  </PmxLocalizationProperty>
</LocalizationProperties>
</PmxLocalizationKey>

```

The LocalizationKey starts with 'MSG\_TITLE\_BATCH\_ATTRIBUTE.'  
Add the code of the attribute type at the end.

When making a complete valid translation file to import, make sure the root tags are also added:

```

<?xml version="1.0" encoding="utf-8"?>
<TestRoot>
</TestRoot>

```

### **AI**

The application identifier. It allows a scanned value from a barcode to be automatically stored in the batch attributes.

### **2.3.24. Produmex batch attribute valid values (PMX\_BAVV)**

A list of possible values a batch attributes type can have.

#### **Batch attribute type**

The batch attribute type. This is a link to the table [PMX\\_BATT](#)

#### **Value**

The possible value for the batch attribute type

### 2.3.25. Produmex cycle count - other operations filter (PMX\_COOF)

Cycle counting can be done during other operations. To have a more flexible way of configuring when such a cycle count can be performed, configuration settings can be defined in this table.

#### **[Days of the week]**

Define whether the cycle count during other operations can occur or not on a certain day of the week.

#### **Other operation type for cycle count**

The type of operation where the cycle count can be performed. Possible values:

- Ad hoc picking - Transport (Pick list or route)
- Ad hoc picking - Customer collect.
- Picking

### 2.3.26. Produmex item pick types (PMX\_IPIT)

This lists the possible item pick types. This is used on the item master data on fields 'Item pick type' and 'Item pick type 2'.

This is only used in the Zone Picking Flow.

### 2.3.27. Produmex Item Serial Number Format (PMX\_ISFT)

In the Produmex Item Serial Number Format window serial number formats can be defined. The defined format applies to SAP serial numbers and Produmex serial numbers as well.

In the Serial Format column define the format of the serial number in .Net regular expression (regex). For more information on regex click [here](#).

Example of serial number format:

- (SN)[0-9]{8}
- ^(SN)[0-9]{8}\$

Symbols:

- The value in parenthesis ( ) is a constant character-string.
- The value in brackets [ ] defines the range of valid character values, e.g. 0-9, A-Z.
- The value in braces { } defines the length of the character set provided in the brackets [ ].
- The caret symbol ^ and the dollar symbol \$ can be used to define the beginning and the end of the serial number pattern.



The defined formats are displayed in the Serial Number Format drop-down menu on the General tab of the Item Master Data window.



### 2.3.28. Produmex location types (PMX\_LOTY)

A list of location types. These types can be selected on the organizational structure - location.

#### 3PL item code

For 3PL invoicing only. The code of the item that will be used on the A/R invoices sent to the 3PL customers. The price of one day of storage in each location of that location type is represented by the 3PL item's price.

The item must be non-inventory.

#### 3PL active?

For 3PL invoicing only. If disabled, the price for this location type will not be included in the A/R invoices sent to the 3PL customers.

### 2.3.29. Produmex picklist types (PMX\_PLTY)

Open the **Picklist types** table:

**Tools > Default Forms > PMX\_PLTY Produmex Picklist types**

#	Code	Name	Split PL on item pick type?	Split PL on item pick type 2?	Full-pallet PickList Type (spl)	Item-pick PickList Type (split)	A..
1	C	Cross-docking	<input type="checkbox"/>	<input type="checkbox"/>			
2	PRD	Standard production	<input type="checkbox"/>	<input type="checkbox"/>			
3	S	Standard	<input type="checkbox"/>	<input type="checkbox"/>			
4			<input type="checkbox"/>	<input type="checkbox"/>			

Picklist types are used on picklist proposals and picklists and can affect the following:

- if it is split to multiple picklist proposals or not,
- which users are allowed to pick the pick list (see: [user picklist types](#)),
- in which flows it can be picked,
- whether certain dimensions should be added during packing.

**For the following Picklist workflows you must enable these settings in the Produmex Picklist types table:**

Picklist Type	Setting	Enable
Box Pick and Pack	Use for Picking?	Yes
Zone Box Picking	Use for Zone Picking?	Yes
Prepare carts	Use for multi picking?	Yes

When creating a proposal, the system determines the picklist type based on the following settings in the mentioned order:

1. Picklist type on document. The picklist type can be set on sales orders, sales invoices and warehouse transfer requests.
2. Picklist type on business partner. A default picklist type for sales documents can be set for business partners on the [Business Partner Master Data](#).
3. Default picklist type. The default picklist type is the '**Standard**' picklist type. Do not delete the '**Standard**' picklist type as it might lead to errors when creating picklist proposals.

Column	Description
Code	The code of the picklist type
Name	The name of the picklist type
Split PL on item pick type?	When this is true, several picklist proposals can be created, grouping items with the same item pick type.
Split PL on item pick type 2?	When this is true, several picklist proposals can be created, grouping items with the same item pick type 2.
Full pallet picklist type	When this is set, the created proposal is split up between full quantity (this is a multiple of the default quantity defined on the item master data) and partial quantity (Item pick). The proposal created for the full pallet have this picklist type.
Item pick picklist type	When this is set, the created proposal is split up between full quantity (this is a multiple of the default quantity defined on the item master data) and partial quantity (Item pick). The proposal created for the item pick have this picklist type.
Always status picked?	When this is true, the picklist line status after picking will always be <i>Picked</i> , that is, when you pick without a moveable location, the status will not be <i>Packed</i> . Picklists with a type that have this setting, need to go through the Consolidated Packing flow. If any picklist within the same wave has this option, all pickings will follow this setting.
Ask weight?	When this is true, the weight of the (master) logistic unit is asked when the logistic unit is finished. The data is stored on the PMX_LUID table. The unit of measure is the Default Weight UoM set on the Display tab of General Settings.
Ask length?	When this is true, the length of the (master) logistic unit is asked when the logistic unit is finished. The data is stored on the PMX_LUID table. The unit of measure is the Default Length UoM set on the Display tab of General Settings.
Ask width?	When this is true, the width of the (master) logistic unit is asked when the logistic unit is finished. The data is stored on the PMX_LUID table. The unit of measure is the Default Length UoM set on the Display tab of General Settings.
Ask height?	When this is true, the height of the (master) logistic unit is asked when the logistic unit is finished. The data is stored on the PMX_LUID table. The unit of measure is the Default Length UoM set on the Display tab of General Settings.
Use for production?	When this is true, the picklist can be used for picklists of type <i>Production</i> . When this is false, the picklist type can be used for shipping and warehouse transfer.
Use for Picking?	When this is true, the pick list can be used in the Picking flow. At least 1 of the picklists in the flow needs to have a picklist type with this flag enabled.
Use for Ad Hoc Picking?	When this is true, the picklist can be used in the Ad Hoc Picking flow.

Column	Description
Use for Zone Picking?	When this is true, the picklist can be used in the Zone Picking flow. At least 1 of the picklists in the flow needs to have a picklist type with this flag enabled.
Use for multi picking?	When this is true, the picklist can be used in the multi picking flow.
Number of pallets	This defines the number of pallets that can be added to a picklist proposal. When the value is higher than 0, the proposals are split during creation. The splitting is done based on the setting on the item master data for the default quantity on a logistic unit. ( <i>OITM.U_PMX_DQLU</i> ) The system calculates a fill rate of the proposal line, based on this setting. The fill rate of the proposal lines can go up to the defined number of pallets. In case the default quantity on a logistic unit on the item master data is not set (=0), the fill rate of that proposal line is 0.
Ask weight Sub SSCC?	When this is true, the weight of the logistic unit is asked when the sub logistic unit is finished. The data is stored on the PMX_LUID table. The unit of measure is the Default Weight UoM set on the Display tab of General Settings.
Ask height Sub SSCC?	When this is true, the height of the logistic unit is asked when the sub logistic unit is finished. The data is stored on the PMX_LUID table. The unit of measure is the Default Length UoM set on the Display tab of General Settings.
Ask width Sub SSCC?	When this is true, the width of the logistic unit is asked when the sub logistic unit is finished. The data is stored on the PMX_LUID table. The unit of measure is the Default Length UoM set on the Display tab of General Settings.
Ask length Sub SSCC?	When this is true, the length of the logistic unit is asked when the sub logistic unit is finished. The data is stored on the PMX_LUID table. The unit of measure is the Default Length UoM set on the Display tab of General Settings.
Use for Cash Register Packing?	When this is true, the picklist can be used in the Cash Register Packing flow.
Print after item picked	If <a href="#">print event 204 - Picking: after item is picked</a> is set on the <a href="#">Print Events</a> tab of the Organizational Structure, the print event applies to those picklist types where setting <i>Print after item picked</i> is set to true.
Num of PL per Wave	Number of picklist per wave: In this column you can add the maximum number of picklists of the given type that has to be grouped into a wave. For more information click <a href="#">here</a> .

### 2.3.30. Produmex quality types (PMX\_QUTY)

This is the configuration of quality types that can be asked during certain processes. The recorded values are stored in the table PMX\_QUVA.

Supported flows:

- Reception
- Bulk reception
- Production
- Production receipt
- Disassembly

Configuration:

#### **Code**

The code.

#### **Name**

The name.

### **Convertor**

The data is stored in the database as text. The system needs to know what type to convert it to. This can be set with the convertor.

Possible values:

- Int
- String
- Date
- Double
- List

### **Document type**

The document object type for this quality type. This is the ObjType from SAP.

For the moment only Purchase delivery (=20) and production order (202) are supported.

### **Remarks**

Additional remarks. This is just informational.

### **Sequence**

The sequence the quality type should be shown when entering the data. This is used to sort the quality types. This can be any numeric value.

### **Moment of capture**

The moment of capture: When does this quality type need to be asked?

Possible values:

- Start
- End

### **The key for translation**

The key that will be used for the translation of the title. When this is not set, the system will use MSG\_TITLE\_QUALITY\_TYPE.<Code of the quality type>.

In case there is only 1 language in the company, a title can be entered here directly.

When custom quality types are added, a translation should be added to the system. This translation is used on a device when entering the quality values.

The translation node for TEMP\_TRUCK looks like:

```
<PmxLocalizationKey>
  <Canceled>False</Canceled>
  <LocalizationKey>MSG_TITLE_QUALITY_TYPE.TEMP_TRUCK</LocalizationKey>
  <ApplicationTypeCode>SLIM_SCR</ApplicationTypeCode>
  <LocalizationProperties>
    <PmxLocalizationProperty>
      <Canceled>False</Canceled>
      <LocalizationProperty />
      <ExtensionCode>CONVSTR</ExtensionCode>
      <LocalizationValues>
        <PmxLocalizationValue>
          <Canceled>False</Canceled>
```

```

    <LocalizationValue>Enter the temperature of the
truck</LocalizationValue>
    <LanguageCode>3</LanguageCode>
  </PmxLocalizationValue>
  <PmxLocalizationValue>
    <Canceled>False</Canceled>
    <LocalizationValue>Vul de temperatuur in van de
vrachtwagen</LocalizationValue>
    <LanguageCode>16</LanguageCode>
  </PmxLocalizationValue>
</LocalizationValues>
</PmxLocalizationProperty>
</LocalizationProperties>
</PmxLocalizationKey>

```

The LocalizationKey starts with 'MSG\_TITLE\_QUALITY\_TYPE.'  
Add the code of the attribute type at the end.

When making a complete valid translation file to import, make sure the root tags are also added:

```

<?xml version="1.0" encoding="utf-8"?>
<TestRoot>
</TestRoot>

```

### **AI**

The GS1 application identifier (AI) linked to this batch attribute. On the flows batch attributes can be entered, based on the batch attributes linked to an item. When a GS1 barcode has been scanned, and a batch attribute needs to be entered with an AI, the system will check if this AI is available in the scanned barcode. If so, this value will be used and the user will not have to manually enter a value for this batch attribute.

### **2.3.31. Produmex quality valid values (PMX\_QUVV)**

A list of possible values a batch attributes type can have.

#### **Sequence**

The sequence of the valid value in the list. This is used to sort the values to select from.

#### **Quality type**

The quality type. This is a link to the table [PMX\\_QUTY](#)

#### **Value**

The possible value for the quality type

### **2.3.32. Produmex user item groups (PMX\_UITB)**

Here it can be defined what item groups can be visible for a certain user.

This is used on the RF terminals and Produmex screens in the administrative module (SAP).  
If the user is not present in the table, he can view data for all item groups.

**User code**

The code of the user.

**Item group**

The item group a user is allowed to view.

**2.3.33. Produmex user item pick types (PMX\_UIPT)**

This table is to configure the item pick types a user can pick. If the user is not present in the list, he is allowed to pick all items. If the user is present in the list, he can only pick items with item pick types defined in the table.

This is only used in the Zone Picking Flow.

**User code**

The code of the user.

**Item pick type**

The item pick type. The item pick type can be selected from a list. The list comes from the 'Produmex Item pick types' UDT.

**Item pick type property**

The property on the item master data the current line refers to. Possible values:

- ItemPickType1: The item pick type on item master data.
- ItemPickType2: The item pick type 2 on item master data.

**2.3.34. Produmex user picklist types (PMX\_UPLT)**

This table is to configure the pick list types a user can pick. If the user is not present in the list, he is allowed to pick all pick lists. If the user is present in the list, he can only pick from pick lists with pick list types defined in the table.

**User code**

The code of the user.

**Pick list type**

The pick list type. The pick list type can be selected from a list. The list comes from the '[Produmex pick list types](#)' UDT.

**2.3.35. Produmex user warehouses (PMX\_UWHS)**

With the Produmex user warehouses UDT you can define the warehouses that can be visible for a certain user. It is used on the RF terminals and Produmex screens in the administrative module of SAP Business One.

If the user is not present in the table, the user can view data for all warehouses.

### User code

It can be 25 characters long.

### SBO Warehouse

The SBO warehouse that the user is allowed to view.

### 2.3.36. Produmex variable GTIN configuration (PMX\_VGTC)

This table holds a list of configurations of variable GTIN barcodes. The user can store a prefix, define the variable part of the barcode, and what the purpose is of the quantity retrieved from the barcode.

#	Code	Name	Prefix	Start Index Variable Part	Length Variable Part	# Decimals	Value purpose (AI)
1	3	3	02801180	8	5	3	Product Net Weight (Kg) (310)
2	5	5	027	8	5	3	Product Net Weight (Kg) (310)
3							

#### Prefix

The prefix of a barcode that needs to be regarded as a variable GTIN. This does not need to be the full fixed part of the barcode.

#### Start index variable part

The barcode has variable part. This field stores the index where the variable part of the barcode starts. This index is zero-based. Supported values: 8, 9, 10.

#### Length variable part

The barcode has variable part. This field stores the length of the variable part. The sum of the fixed and variable part should be 13 in order to create a GTIN-14 barcode.

#### # Decimals

The number of decimals of the variable value.

#### Value purpose (AI)

This defines on what Application Identifier the value needs to be stored, after the value has been captured. Note: Not all listed AI is supported.

### 2.3.37. Put away zone (PMX\_PAZO)

This table holds a list of put away zones. It is used in the functionality for Location Suggestions.

### 2.3.38. Scale definition (PMX\_SCLD)

Configuration of scales that can be used in Produmex RF terminals.

***Linked object type***

Data needed by the system for the current weighing object. Do NOT adjust values in this column.

***Linked doc entry***

Data needed by the system for the current weighing object. Do NOT adjust values in this column.

***Linked line number***

Data needed by the system for the current weighing object. Do NOT adjust values in this column.

***Scale setting***

Settings for the scale. What needs to be entered here is depending on the scale.

***Scale provider type***

Provider type for the scale. What needs to be entered here is depending on the scale.

***Scale setting***

Settings for the scale.

***Instance ID***

The instance ID

***Max. Weight***

The maximum weight the scale can handle.

***Nr. of decimals***

The number of decimals the weight is captured in.

### 2.3.39. Scale weight result (PMX\_SCWR)



The branch ID.

### Sequence code

The sequence code. This is a numeric value.

### 2.3.41. Seveso classes (PMX\_SEVE)

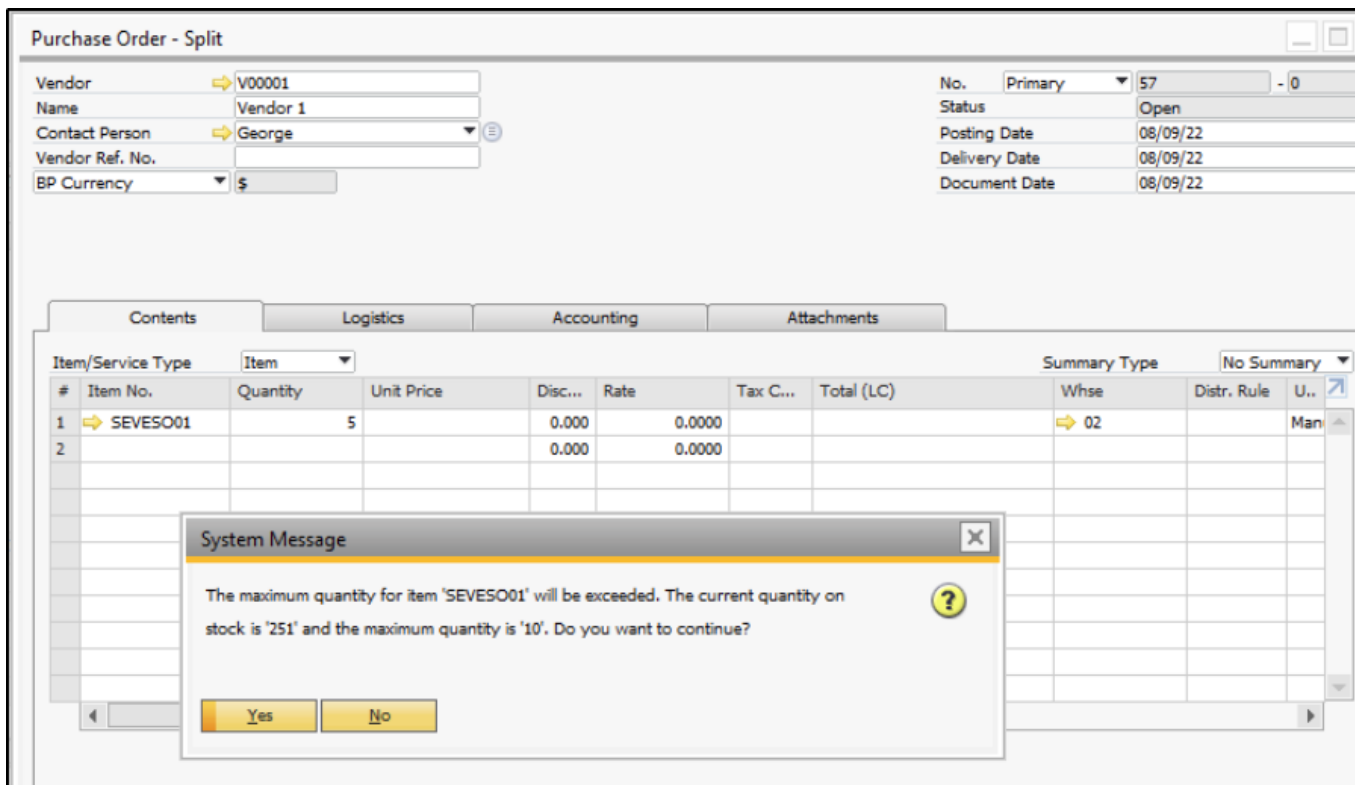
It defines a seveso class for an item to hold the maximum quantity allowed for the total inventory.



The system checks the total inventory and gives a warning if it exceeds the defined maximum quantity.

Example:

- Maximum quantity = 10
- Stock in warehouse 1 = 251
- Stock in warehouse 2 = 0



### 2.3.42. Shelf life per country and business partner (PMX\_CSSL)

A list of default shelf lives per business partner and country. These shelf lives are taken into account for items where no shelf life per business partner and country is defined on the item master data. They have however precedence over the general shelf lives

defined on the item master data.

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.

### **Country code**

The country code (from table OCRY).

### **Card Code**

The card code of the business partner.

### **Shelf life**

The shelf life in days.

## **2.3.43. Shipping quality option (PMX\_SQOP)**

In the quality status, it is possible to set the status to **“Can Be shipped under quarantine”** but still allow shipping. On the sales document line, there is a column (Shipping quality option) to set the allowed quality statuses.



### **The options for shipping qualities are the following:**

- **CAN\_USE\_SUQ:** All quality statuses that ‘Can be shipped’ and ‘Can be shipped under quarantine’ are allowed.
- **MUST\_USE\_SUQ:** Only quality statuses that ‘Can be shipped under quarantine’ or ‘Can be shipped’ are allowed.
- **RELEASED or no selection:** Only quality statuses that ‘Can be shipped’ are allowed.

It is allowed to delete an option if it is not needed, but changes to the code are not allowed. This is used on an SAP document line UDF (*Shipping quality option*) in combination with the Pick List proposal creation.

### **Useful Information**

#### **Shipping quarantined items can be affected by the following settings:**

- **Quality Status** tab on the **Organization Structure**:
- **Learn more about the Organization tabs:** [Promumex WMS Fields and Settings](#)
- **Learn more about the defined tables:** [2.3. User defined tables](#)
- **Inventory Report:** Ensure the **Quality Status** column is correctly set.
- **Sales Order:** Adjust the **Shipping Quality Option** column as needed.

### **Important Notes!**

- Pick locations cannot be used for items labeled as **“Quarantined”** or **“Shipping Under Quarantined (SUQ).”**
- Ensure that items with different quality statuses (e.g., Quarantined and SUQ) are not stored in the same location. Mixing items with different quality statuses can cause issues during the picking process.

**If items must be shipped even if it's quarantined make sure to set the following settings.**

### **Procedure for Shipping Quarantined Items**

- **Inventory Report:** In the Inventory Report window of the Desktop Client, you have the capability to modify the quality status. Similarly, the Mobile Client also provides the functionality to change the quality status: [Change Quality Status Flow](#).
- **Sales Order:** On the sales order line, set the Shipping Quality Option to **“Shipping under Quarantine”**. If you set the **“Released or SUQ”** option on the Sales Order line during the picking, you can pick from both Released and SUQ stock.
- **Organization Structure (OSE):** Under the Quality Status tab, enable the **“Can be shipped Under Quarantine”** setting for the **SUQ**. This allows SUQ items to be shipped.

### **Picking and Shipping Flow for SUQ items**

1. **Create a Picklist** from the SUQ stock.
2. Open the **Mobile Client** and navigate to **Sales > Picking**, then select the previously created Picklist.
3. On the **Identify Pick Location** screen, click on **Other Task** and then **Alternate Stock**.
  1. During the standard picking flow, if your stock has an SUQ status, the **Identify Pick Location** will only work if you select **Alternate Stock**.
4. After selecting the needed alternate stock, the **Identify Pick Location** screen can be filled.
5. On the next screen, **Scan a Product** and select the product.
6. Select a Batch Number. Here, you can see the stock's quality status: SUQ.
7. Finish the picking flow by entering the quantity. Items are successfully picked.
8. Continue with the Shipping on the Mobile Client: **Sales> Shipping > Select the Picklist** and scan the SSCC. The shipping is finished!

### **Ad Hoc Picking Flow cannot work with “Shipping Under Quarantine” items!**

**Note:** In Ad Hoc picking, it only allows products with the **“Can be shipped “** setting on the quality status, even if the shipping quality option has **“Can be shipped under quarantine”**. The **“Can be shipped”** status is the strongest point of view and cannot be overwritten by the **“Cannot be shipped under quarantine”** status.

### **2.3.44. User authorization definitions table (PMX\_UAUT)**

Definition of possible authorizations that can be set. This is system information. Do not adjust/delete the code.



### Possible values:

- **PRD\_FLOW\_ON\_HOLD:** The 'on hold' button on the Production flow
- **PRD\_FLOW\_STOP\_BTN:** The 'stop' button on the Production flow
- **PROPOSAL\_CLOSE\_BUTTON:** The close button to close pick list proposals (Open documents report, pick list proposal form, ...)
- **PICK\_LIST\_CLOSE\_BUTTON:** The close button to close pick lists (Open documents report, pick list proposal form, ...)
- **WO\_OVERRULE\_DEFAULT\_SCALE:** Weigh order: Overrule default scale.
- **WO\_OVERRULE\_SCALE\_SWITCH:** The 'Switch scale' button in the weighing flows.
- **WO\_OVERRULE\_WEIGHT:** For weighing outside of the tolerance range in the weighing flows.

### 2.3.45. User group for PMX (PMX\_USGR)

Definition of Produmex user groups. The user group can be linked to a user.



There are already 2 predefined user groups.

- 01\_ADMIN: Administration
- 02\_SHPFLR: Shopfloor

## 2.4. Business Partner Master Data



### **S/P Remarks Pop-Up**

If the setting is enabled, the text in the Sales/Purchase remarks is shown as a pop-up when using this business partner in a sales/purchase document in SAP Business One.

### **Sales/Purchase Remarks**

The Sales/Purchase remarks to be shown when selecting the business partner in a sales/purchase document in SAP Business One.

### **Group Sales Delivery**

If various orders for a customer have been entered and picked, it is possible to group the various orders in one sales delivery (Yes) or to have a sales delivery per individual order (No).

It is also possible to base this setting on the extension parameter [Sales delivery note generator](#)

on the company level in the Organizational Structure.

### **Check the following settings:**

- *Group sales orders for the same customer to 1 delivery? (Y/N)*
- *Group similar picklists? (Y/N)*

### **Linked Business Partner**

In a third party logistics context, a supplier can be linked to a customer so that a purchase order to the supplier can be linked to a sales order to the customer.

### **Default Currency**

The field is used in [3PL Invoicing](#).

- If the Currency field in the head of the Business Partner Master Data window is set to All Currencies, the value selected in the Default Currency field is used as the Business Partner's Currency.
- If neither the Currency field nor the Default Currency field has a value, the Local Currency field is used on the Basic Initialization tab of the Company Details form.

### **Picklist Type**

In case a default pick list type applies to a business partner, this can be indicated here. When a proposal is created, it will set a pick list type in this order:

- On document
- On business partner (*Only for sales proposals*)
- Default pick list type

### **Pallet Packing Type**

This is used during packing, consolidated packing, item packing, in combination with allowing to use the pallet packing type on customer (*Setting on PackingController*).

Possible values:

- Pallet (Default)
  - In case master is allowed, then user is asked whether to create master SSCC or normal SSCC
- Multiple identical pallets
  - Creates identical normal pallets
- Pallet - Multiple identical sub packages
  - Creates 1 master SSCC, but identical sub SSCC's
- Always ask user
  - Ask the user how to create the pallets
    - Identical master and/or identical sub SSCC's are allowed.

### **Check to Add Return Items**

The setting defines whether the system adds returnable items when booking a document for this business partner or not. Possible values:

- If it is set to Yes, the system adds returnable items when booking a document for this business partner.
- If it is set to No, the system does not add returnable items to the documents of this business

partner.

- If it is set to Take Setting on Company, returnable items are added based on the Check to Add Returnable Items setting on the [General tab](#) of the Organizational Structure.

### Reception

#### **Enter Specific Pallet Nr**

If the setting is enabled, a supplier pallet number needs to be entered during reception. This is stored on the table (PMX\_LUID) where the SSCC is stored.

If for certain business partners you use that business partner's own pallets (*meaning that these have to be traceable within your company*), you can indicate that upon receipt of such a pallet, the pallet number has to be registered.

#### **Has No Logistic Carriers**

If checked, the screen to select a logistic carrier will be skipped during the reception process

#### **Has No Logistic Labels**

If checked, the screen to scan the logistic label will be skipped during the reception process

#### **Has No Identical Logistic Units**

If checked, the screen to choose between identical and non identical logistic units will be skipped during the reception process

#### **Never Delivers Mixed Logistic Units**

If checked, the screen to add more items to the logistic unit will be skipped during the reception process

#### **Group Purchase Delivery**

If stock is received based on multiple purchase orders from the same vendor, it is possible to group the orders into a single Goods Receipt PO document. Possible values:

- If it is set to Yes, a single Goods Receipt PO document is created for every purchase order that is received in one step.
- If it is set to No, a separate Goods Receipt PO document is created for each purchase order.
- If it is set to Take Setting on Company, the Goods Receipt PO document is created based on the Group Purchase Delivery setting on the [Purchase Delivery Generator](#).

## **2.5. Shipping types**



have multiple deliveries created when shipping (multiple) pick lists, only 1 tracking number is asked, and stored on all deliveries.

### ***The shipping type setting in SBO 9.2.***

**Disclaimer: This documentation describes the standard SAP Business One shipping type function.**

The shipping type can be set in three level:

1. Business Partner (On the General tab of the Business Partner Master Data)
2. Sales order (On the Logistics tab of the order)
3. Item (On the General tab of the Item Master Data)

The default shipping type of a sales order is the shipping type of the customer, but it can be adjusted on the Logistics tab of the order. When changing the sales order shipping type, the system will ask whether to modify the shipping type of the sales order lines as well.

The default shipping type of the sales order lines is the shipping type of the sales order. When adding an item that has a shipping type defined, the shipping type will be automatically set to the item's default. Changes of the sales order line shipping type will not affect the sales order shipping type.

## **3. Production**

### **3.1. Bill of Materials**

#### ***Is base component***

Is the current ingredient the base component of the product to produce? (*Informational*)

This is also used in combination with the 'Scan base component' option on item master data.

During picking the user will be asked to scan the barcode of this base component when picking the master item.

#### ***Has to be lined up***

Does this component need to be consumed from a lined up location?

#### ***Qty tolerance %***

The quantity tolerance allows flexibility in material usage, enabling slight variations either more or less within a specified percentage range. If there is not enough raw material, the system blocks the receipt from production and displays an error message.

## 1. Work Order Header (OWOR)

The work order (OWOR) is created from the Bill of Materials (BOM) and defines what and how much should be produced.

### Production Order header - OWOR - Product item:

Column Description	Column Name
Planned Quantity	OWOR.PlannedQty
Completed Quantity	OWOR.CmplQty

### Planned Quantity

- The target quantity to be produced.
- Defined when the production order is created.

### Completed Quantity

- The quantity that has already been produced and received into stock.
- This value increases with each receipt from production.

## 2. Production Order Lines - Raw Materials (WOR1)

The raw material components required for production are stored in the WOR1 table. Each line represents one raw material from the BOM.

### Production Order lines - WOR1 - Raw material items:

Column Description	Column Name	Comment / Calculation formula
Base Quantity	WOR1.BaseQty	
Planned Quantity	WOR1.PlannedQty	= OWOR.PlannedQty * WOR1.BaseQty
Quantity Tolerance Percentage	WOR1.U_PMX_QTYTOLPCT	

### Base Quantity

- Defines how much raw material is required per 1 unit of finished product.
- **Example:**
  - 10 breads planned to be produced.
  - 1 kg bread requires 0.7 kg flour
  - Base Quantity = 0.7 kg

### Completed Quantity

- The planned raw material requirement for the entire production order.
- **Planned Quantity** = OWOR.PlannedQty × WOR1.BaseQty

## Quantity Tolerance Percentage

- Defines how much under- or over-consumption is allowed for the raw material.
- Maintained via the Produmex PMX feature.
- Expressed as a percentage.
- **Example:**
  - 10% tolerance: That means the users may consume up to 10% less or more than the calculated requirement.

### 3. Touch Client

This section applies when the user posts a receipt from production in the Touch Client.

#### Touch Client - Receipt from production script:

Steps	Variable Names	Comment / Calculation formula
Entered Quantity to Produce	EnteredQtyToProd	(entered by user)
Available Quantity of Raw Material	AvailableQty	(queried from stock)
Allowed Deviation	AllowedDeviation	$(OWOR.CmplQty + EnteredQtyToProd) * WOR1.BaseQty * (1 - WOR1.U\_PMX\_QTYTOLPCT / 100)$
Missing Quantity of Raw Material	MissingQty	$= AllowedDeviation - AvailableQty$

**IF MissingQty > 0 THEN ShowErrorMessage**

#### Entered Quantity to Produce

- The quantity the user currently wants to produce.
- Manually entered by the user.
- **Example:**
  - User enters 10 breads to produce in this transaction.

#### Available Quantity of Raw Material

- The current stock quantity of the raw material - the system using free stock that available at the storage location where production takes place (if there is free stock elsewhere in the warehouse, it does not count).
- Retrieved automatically from inventory.
- **Example:**
  - Available flour in stock = 6 kg (Also referred to as CurrMaterialStock in some contexts.)

## Allowed Deviation

This is the core logic that ensures production is allowed only if sufficient raw material exists within the allowed tolerance.

**Allowed Deviation** =  $(\text{OWOR.CmpltQty} + \text{EnteredQtyToProd}) \times \text{WOR1.BaseQty} \times (1 - \text{WOR1.U\_PMX\_QTYTOLPCT} / 100)$

- **Example:**

- Total produced: 10 breads
- Base Qty: 0.7 kg
- Tolerance: 10% (the base quantity can be between 0.63 kg - 0.77 kg)
- Minimum required flour:  $10 \times 0.7 \times (1 - 0.10) = 6.3$  kg

## Missing Quantity of Raw Material

This value checks whether enough raw material exists.

**MissingQty** =  $\text{AllowedDeviation} - \text{AvailableQty}$

- If  $\text{MissingQty} \leq 0$  → sufficient material available
- If  $\text{MissingQty} > 0$  → not enough material, the system shows an error that raw material stock is insufficient
- **Example:**
  - Minimum required (allowed deviation): 6.3 kg
  - Available: 6 kg
  - $\text{MissingQty} = 0.3$  kg

## *Is the item optional*

Set whether the component is optional. If set to true, this component is not required to produce.

## **Prod. Order start condition**

- N = No condition
- Q = Component part. weighed
- W = Component weighed

These are the start conditions of a production order. The requirements need to be met, before the production order can be started.

## **Best before date option**

This is used when picking for production. It configures the way the system should calculate a valid best before date for the ingredient. Possible values:

- BBD of finished product and shelf life: Take the BBD defined on the production order + shelf life of the ingredient.
- Due date and shelf life: Take the due date of the production order + shelf life of the ingredient
- Pick date: Take the date when the picking occurs or in case of pick lists for production the creation date of the proposal.

## **Allow to pick for line up? (True/False)**

If enabled for a component that has to be lined up, the component can be consumed from every lined

up location assigned for the production line, otherwise it can be consumed only from the assigned lined up locations with stock for the item.

Such a component will be added to the pick list (proposal) for production or can be picked for production. When moving the components to the production line, it will be moved to the lined up location selected for the component.

When the 'Direct consumption of goods' option is enabled for the [lined up location](#) the component is consumed, the component will be automatically issued when the product is received, therefore it will not be listed among the other components on the [Production Manager - Stop screen](#). However, if the 'Allow to pick for line up setting' is enabled for the component, it is possible to issue more than the planned quantity, therefore the component will be listed on the [Stop screen](#) of the Production Manager.

### ***Weighing needed? (True/False)***

Set whether the component must be weighed or not. When creating a weighing order, only components, that have the 'Weighing needed?' setting enabled, are added to the weighing order.

### ***Weigh order batch quantity***

Add number of batches for the weighing order. If the quantity is greater than 1, the planned quantity of the item to be weighed will be split into multiple weigh order lines. The number of lines is defined by the *Weigh order batch quantity* value.

### ***Batch attribute & Batch attribute value***

This is used when picking for production.

If certain batch attributes need to be picked for production, select the batch attribute type from the dropdown menu in the Batch attribute field. Every batch attribute defined on the [Batch attribute types user table](#) can be selected. Then enter the given value to the *Batch attribute value* field. You can add up to three batch attribute per line.

On the production order, you can also add batch attributes by selecting the 'Batch attributes' option from the right-click menu of the line. On the opening Batch attributes control screen you can select the batch attribute type and add/select the batch attribute value.



If a batch attribute is defined for a production line, the stock that can be picked is filtered based on the batch attribute.

## **3.2. Production order header**

### ***Produmex production status***

Next to the status of SAP, there is the Produmex production status.

*Possible values: Planned, On hold, Started, Closed*

### ***Production step list***


Next to the item to produce, the user can select a steplist.

The requirements to select a steplist:

- One or more steplists for the item to produce needs to be configured
- The production type needs to be 'Special'

When a step list is selected, a list of components is created according to the selected steplist.

### **Production line**

Next to the warehouse, the user can select the production line where this production order needs to  be produced. Only the production lines in the warehouse are shown.

## **3.3. Production order lines**

The extra fields added to the BOM, are also added to the production order. When creating a new production order, the Produmex add-on will copy the data from the BOM to the production order in case the UDF's are named the same.

The following fields are used for picking for production: *(And not for Pick List for production)*

### **Quantity picked**

The quantity that already has been picked for this component.

### **Batch(es) to pick**

If a certain batch needs to be picked for this production order, this column needs to be filled with the batch to pick.

When multiple batches are required, those batches can be entered with a pipe as separator: '|'

## **3.4. Production issue lines**

### **Is waste?**

Is this line registered as waste?

### **The production batch**

This stores the production batch this line was issued for.

# **4. Resource Master Data**

## **4.1. Produmex tab**

### **Use for time registration (Y/N)**

Indicates if the resource can be used for time registration when added to the Bill of Materials or production order.



From:

<https://wiki.produmex.name/> - **Produmex**

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Last update: **2020/06/16 11:23**

