

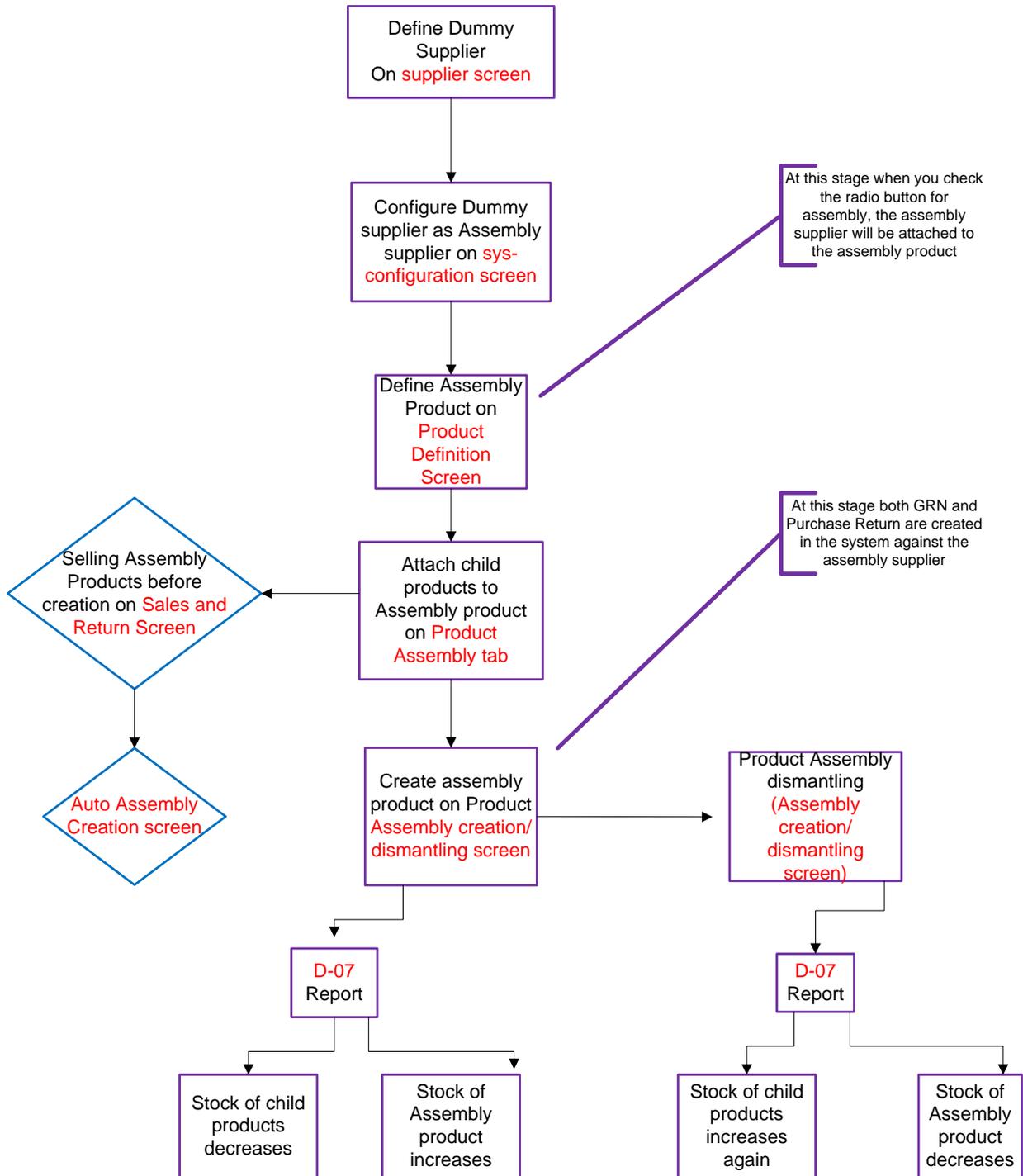
*Playing Virtual Lego in Candela*



# Creating Product Assemblies



## Product Assembly at a Glance



# Creating Product Assemblies

## ASSEMBLING PRODUCTS

Before we begin, it is important to note that *Assemblies can only be created for products without size and colour*.



Combining/ assembling two products to sell it as one is called product assembly. Sometimes retailers may offer a package deal and sell two or more products as one combined product. You can think of the assembled product as a **Parent** product and the products that are put together to make parent product as **Child** products. There may be different reasons for offering such deals such as combining a fast selling item with an items not selling so well and offering it at an attractive price. Whatever the reason, Candela allows you to create product assemblies.

Tea Combo  
(Assembly  
Product)

*We will be using the metaphor of Parent and Child products (explained above) throughout this document.*

## Creating Product Assemblies in Candela RMS

Creating assemblies in Candela RMS is an interesting and a creative process. It is almost like playing virtual Lego. It is fairly simple too. All you need to do is carry out the following steps:

### A. Defining Assembly Supplier

Suppliers are the people from whom we buy our products/ raw materials and add them to our stock. Sometimes, when merchandise is not of required quality or quantity, we also return it to our suppliers and minus the returned quantity from our stock.

As you know, assembly products are not actually purchased from any suppliers but are *created* by combining two or more products that you have in stock. It thus makes sense that the products (child products) being used for creating assemblies will be subtracted from their stock and added to assembled products.

Now Candela RMS knows that stock can only be subtracted and added in three ways:

- You **sell** the stock to customer or you make a **sale return**
- You **Purchase** stock from supplier or you **return** it back
- During stock audit the physical stock may be **less or more** than the system stock

In case of assembly products two questions arise:

1. How do you account for the subtraction of child products from their stock?
2. How do you explain the addition of assembled products in the stock?

The Answer is: By *creating* a dummy supplier. This dummy supplier will help the system to carry out background calculations and the system will consider the products being used (child products) for Assembly products as **returned to the (dummy) supplier, and will thus create a purchase return against the dummy supplier.**

On the other hand, the dummy supplier will also **create a GRN in the system for the assembled products.**

Isn't the dummy supplier really smart?

Let's now create an assembly supplier. We do so at the supplier screen like we do with real suppliers:

### Configuration > Misc > Supplier

Supplier Name	Supplier Code	Phone 1	Phone 2	Mobile	E-Mail	Fax	Address	Comments	Cont
Boota Singh	Boota Singh			03336361...	boota@gmail.com		53-shalimar Road	Reliable person	Boot
Hafeez Chaudry	Hafeez Chaudry	042-3682134		03214446...		042-36821...	7 Mughal pura R...	Can't be contact...	Naw
Naina Tara	Sef	042-3633131		0333-4234...	naina@gmail.com	042-36331...	5-Mason Road		Self
Sarah Paul	Sarah Paul	042-3631225		0300-4446...	sara@gmail.com	36361226	78-P, Gulberg II	needs three mon...	Sara
Spider Man	Spider Man						Story Books and ...	Quick at assembl...	

Figure 1

## B. Configuring System for Creating Assemblies

Creating product assemblies requires you to first configure your system for the task. On the configuration screen you will now make two changes:

1. You will tell the system that you want it to treat one of the suppliers as assembly supplier:

Assembly Supplier

- Spider Man
- Select--
- Boota Singh
- Hafeez Chaudry
- Naina Tara
- Sarah Paul
- Spider Man

Figure 2

## Configure > System Configuration > Product /STR > Assembly supplier

In the **Assembly Supplier** field (the last field on the left hand columns on the Product/STR screen) you will select the supplier (from the drop down menu) you want to treat as assembly supplier (see **Fig-2**).

2. The cost price of your assembly product will be the combined cost of its child products:

**Cost-CP1+Cost-CP2+Cost CP\*.... = Cost Assembly Product**

\*(abbreviation of child product)

Now if for instance the cost of any of the CPs (child products) changes, the cost of the assembly product will also change. You need to configure your system to incorporate such possible changes. This is how:

## Configuration > System Configuration > Product/STR > Auto Update Assembly Cost

Once you check the **Auto Update Assembly Cost** on this screen (**Fig-3**), the system will automatically update the cost of the assembly product if the cost of any of its child products changes.



Figure 3



*Don't forget to Log-off and Log on after every configuration*

### C. Defining Assembly Products

Now that you have created an assembly supplier and have also configured the system for auto updating of assembly costs, it is time to define your assembly product.

Let's work with an example of grocery items, and create an assembly product by combining a tea pack and one packet of biscuits. Let's call this assembly product Tea combo:

**One Tea pack (CP-1) + One biscuits packet (CP-2) = Tea Combo (Assembly product)**

Let's assume you have already defined tea pack and biscuits as regular grocery items. This means you have purchased them from suppliers (real ones), made their GRNs, assigned them retail price and they now exist in your stock.

It is now time to define our assembly product:

### Configuration > Product Definition

You will define your assembly product under its line item (in **Fig-4**) line item is grocery and assembly product is 'tea combo. Also note that **assembly mode** is selected for this product. Moreover, assembly supplier is attached to this product from the drop down menu).

The screenshot shows the 'Product Definition' form with the following details:

- Line Item:** Grocery
- Product Code:** GR00004
- Product Name:** Tea Combo
- Line Item Based:**
  - Category: ---Select---
  - Sub Category: ---Select---
  - Product Group: ---Select---
  - Age Group: ---Select---
  - Packaging Type: ---Select---
- Product Based:**
  - Cal. Season: ---Select---
  - Product Gender: ---Select---
  - Quality: ---Select---
  - Life Type: ---Select---
- Supplier:** Spider Man
- Acquire Type:** ---Select---
- Purchase Type:** ---Select---
- Manufacturing:** ---Select---
- Basic:**  Assembly
- Purchase Conv. Unit:** ---Select---
- Purchase Conv. Factor:** 0
- Sale Tax (%):** 0.00
- At Retail Price:**  **At Purchase Price:**
- VAT Percentage:** 0.00
- Value:**
- Average Cost:** 0.00
- Date:** 08/May/2014
- Price:** 150.00
- Product ID:** 0

Figure 4

### D. Attaching Child Products to Parent Product

Once you have defined your assembly product, you can proceed to attach child products to it or, in other words, you will tell the system what products the assembly product will be composed of. Here's how:

### Configuration > Product Definition > Product Assembly

Load the assembly product on the product definition screen. Now click **Product Assembly tab** and a screen will open up. You will see **Product Assembly** field where the code of the assembly product

The screenshot shows the 'Product Assembly' form with the following details:

- Product Code = [GR00004]** **Product Name = [Tea Combo]**
- Product Assembly:** GR00004
- Product:** [Empty field]
- Qty:** [Empty field]
- Add:** [Button]
- Table:**

Sr No	Code	Name	Qty	Retail Price	Cost Price	Net Retail Amount	Net Cost Amount	Delete
1	GR00003	biscuits pack	1.00	10.00	5.00	10.00	5.00	Delete
2	GR00003	Tea pack	1.00	160.00	70.00	160.00	70.00	Delete

Figure 5

already exists. Now enter code of the first child product in **Product** field. You can select child products by clicking on product help or F1. In the **Qty** field enter quantity of the product you are attaching. For instance in the **Fig 5**, you can see one pack of biscuit and one tea pack is attached to the assembly product:

**One biscuit packet + one tea pack = Tea combo**

The list view in **Fig-5** shows you the details of child products (their quantity, retail price and cost price) that are combined to create the assembly product.

## E. Adding Assembly Products to Stock

You have defined and assembled the assembly product and have also configured your system accordingly. Now you want to sell it. But you can't, not yet. Because your assembly products still do not exist in stock. If you remember, we normally create GRNs on receiving supplies against our purchase orders. But here in the case of assembly product we never made any purchase order, and there is no supplier at least not a real one. So how do we create stock for the assembly product?

Here's how:

### Purchase > Product Assembly Creation/ dismantling

On this screen you will select the assembly product from the drop down menu (only those products will appear that have been defined as assembly products). Now enter the **quantity** of the assembly product you want to keep in stock. Press **Create**. The system will ask you if you want to create the assembly product, press **Yes**.

In **Fig-6**, you can see we entered 21 in the quantity field. This means 21

SR No	Code	Name	Qty	Total Qty
1	GR00003	Tea pack	1.00	21.00
2	GR00001	biscuits pack	1.00	21.00

Figure 6

Tea-combos are created in your stock. This also means that 21 biscuits pack and 21 tea packs were used in tea combo creation, and thus were subtracted from the stock. We can verify this by looking at the before and after stock reports.

*(Do you remember which report tells us about our stock position? No? It is D07)*

**Reports > D-Stock Reports > D07 Shop Inventory Report**

Product Code	Product Name	Size	Colour	Quantity	Value
GR00001	biscuits pack	Default	Default	5,530.00	55,300.00
GR00002	Shampoo	Default	Default	427,800.00	427,800.00
GR00003	Tea pack	Default	Default	120.00	19,200.00

Figure 7—Shop inventory before creating assembly products

Product Code	Product Name	Size	Colour	Quantity	Value
GR00001	biscuits pack	Default	Default	5,509.00	55,090.00
GR00002	Shampoo	Default	Default	427,800.00	427,800.00
GR00003	Tea pack	Default	Default	99.00	15,840.00
GR00004	Tea Combo	Default	Default	21.00	3,150.00

Figure 8—Shop inventory after creating assembly products

In **Fig-8** you can see, the stock of child products ((biscuits and tea pack) used in the creation assembly product (tea combo) has decreased. And the same numbers (**21**) of assembly products are created in the stock.

**Two Smart Actions of the Dummy Supplier**

As you have read above, the dummy supplier has carried out two functions to account for this addition in stock of the assembly products, and subtraction from stock of the child products.

We can view these actions on the **Purchase Return and GRN** screens:

Return No	Return Date	Return Qty	Return Amount	Ret. Batch No	Invoice No	Invoice Date	Invoice Amount	Comments	Supplier Name
AS3	08/May/2014 05...	-40.00	-1,500.00	3					Spider Man
AS1	08/May/2014 05...	-2.00	-75.00	2					Spider Man

Figure -9: Purchase return made for two child products against the dummy supplier

Invoice No.	Invoice Date	Qty	Amount	Bill No.	Bill Date	Batch No.	PO	Supplier Name
AS4	08/May/2014 05...	20.00	1,500.00		08/May/2014	9		Spider Man
AS2	08/May/2014 05...	1.00	75.00		08/May/2014	8		Spider Man
7	08/May/2014 02...	50.00	3,500.00		08/May/2014	7	8	Hafeez Chaudy
6	08/May/2014 02...	50.00	250.00		08/May/2014	6	7	Hafeez Chaudy
5	08/May/2014 01...	120.00	5,150.00		08/May/2014	5	6	Hafeez Chaudy

Figure-10: GRN made in the system for assembly products against dummy supplier

## CREATING AUTO ASSEMBLIES

As you have learned above, once you have defined assembly products and attached child products to them, you go to the product assembly creation page and *create* product assemblies.

But Candela gives you the option to *let the system* generate assemblies automatically. Sometimes, you have no idea in advance about how many assembly products you will sell, so you don't *create* assemblies in stock but sell the products as assemblies (*however, you need to define products as assembly products and attach their child products to them to let the system create auto assemblies*).

As you might have figured out, selling assembly products without creating them in the stock will show negative inventory on the Sales and Return screen. Ignore this and keep selling.

By the end of the day, or whenever you want to, you can check how many assembly products have been sold and tell the system to create as many assemblies. This will balance out the negative inventory in the stock.

Now let's suppose you have sold all your created stock of tea combos. And on a certain day you sell fifty products as tea combos for which no stock

exists. Let's look at this activity

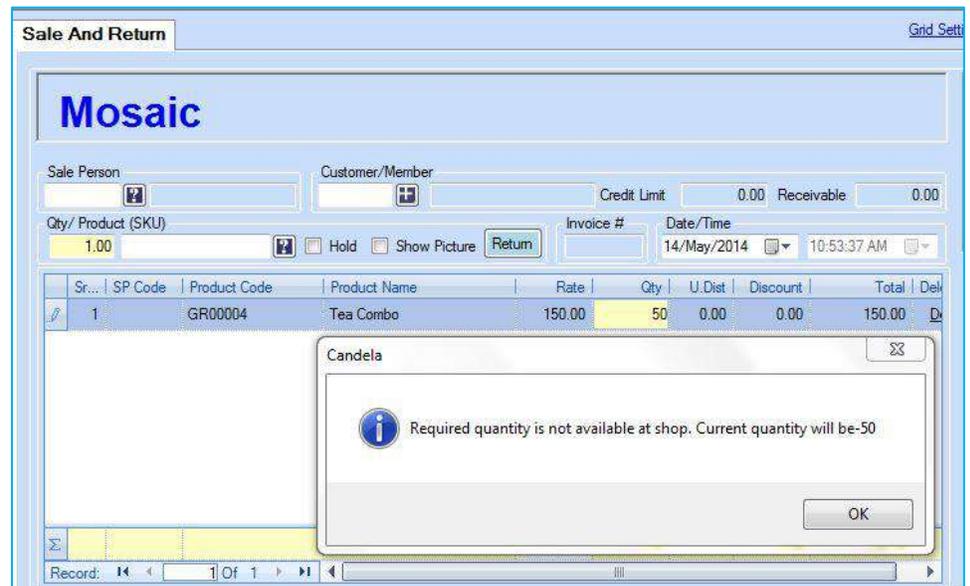


Figure-11

on the Sales and Return screen (Fig-11). As you can see, the system will give you a warning that the inventory will be in negative. Press okay and go ahead with what you are doing.

After selling these items, go the Auto Assembly Creation Screen.

### Purchase > Auto Assembly Creation:



Figure 12

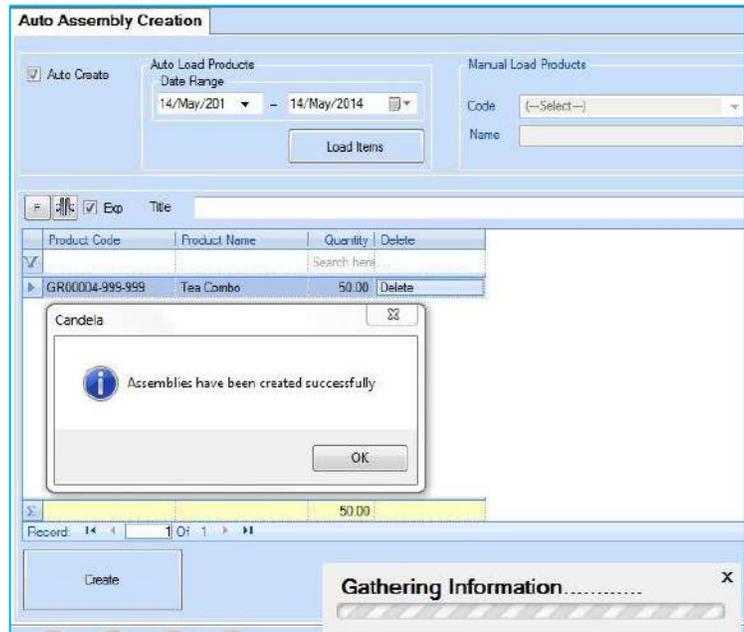


Figure 13

On the screen, you will give the date range during which you sold items as assemblies without first creating them, and **Load** items. The system will show you the items sold along with their quantities. You will Press **Create** to create product assemblies.

You can also manually create multiple product assemblies (Fig-14). For this uncheck the **Auto Assembly** check box, and enter codes of assembly products you want to create. In the list view all selected products will appear, manually add the quantity you want to create in stock and press **Create**.

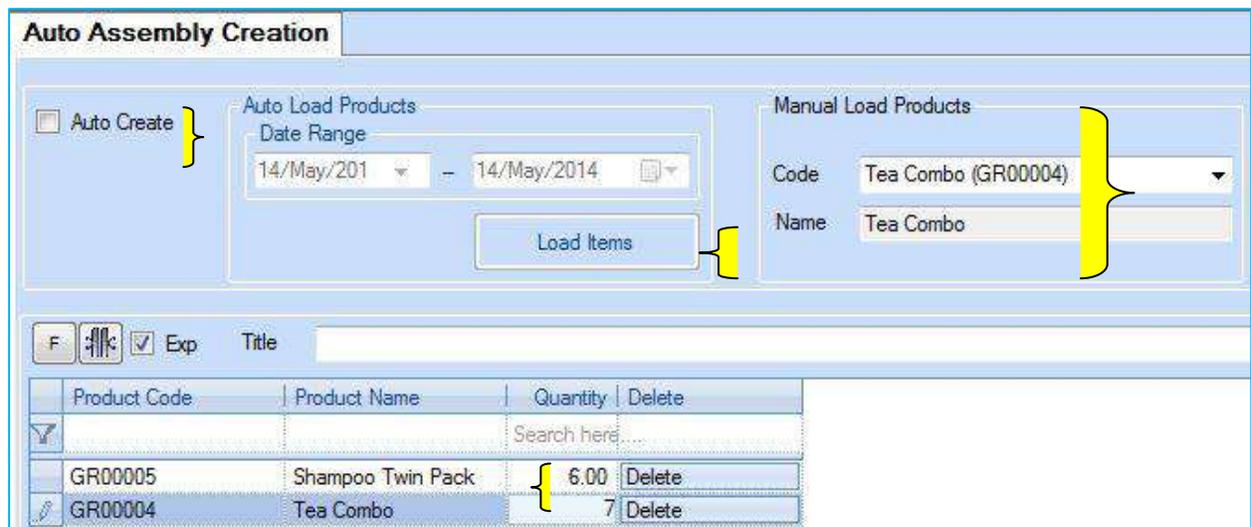


Figure 14

## DISMANTLING PRODUCT ASSEMBLIES

If you have once created product assemblies, you are not stuck with them forever. There is a way to dismantle them and sell them as individual products. This is how:

### Purchase > Product Assembly Creation/ Dismantling

Select the product code, give the quantity you want to dismantle and press **Dismantle**.

Dismantling comes in handy if you have created a certain assembly product by mistake. As you know, the GRNs and Purchase Return Orders made against your assembly supplier can't be deleted. But you can reverse the process through dismantling.

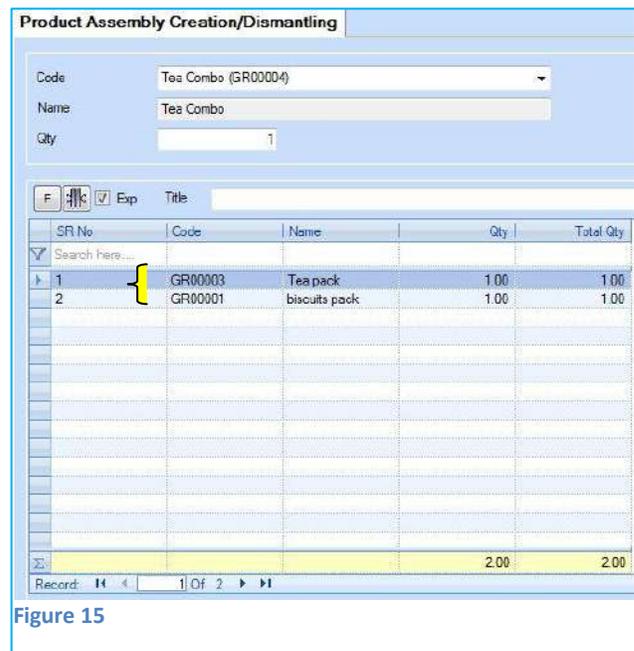


Figure 15



## Exercise

- For creating assembly products it is mandatory to create a dummy -----
- When you create assemblies the stock of your ----- products will reduce.
- The cost price of the assembled product is the combined cost of its -----
- Which screen makes it easier to create multiple product assemblies? -----
  
- Defining an assembly supplier on the supplier screen is enough to carry out assembly functions. **True**      **False**
- For entering assembly products to stock, you create GRNs like you do for basic products. **True** **False**
- Once product assemblies are created, there is no way to sell them as separate items. **True** **False**
- If you are selling burgers, will they be defined as assembly products? **Yes**      **No**
  
- Tasks
- Define four products as assembly products.
- Create stock of assembly products.
- Check stock reports before and after creating assembly products