

# MANUFACTURING

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In agrē you can manufacture products (create new products from raw ingredients), edit the manufacturing if a correction is required, or undo the manufacturing completely.

In this example you'll manufacture 25 kg bags of lawn fertilizer from bulk product.

**What you'll find:**

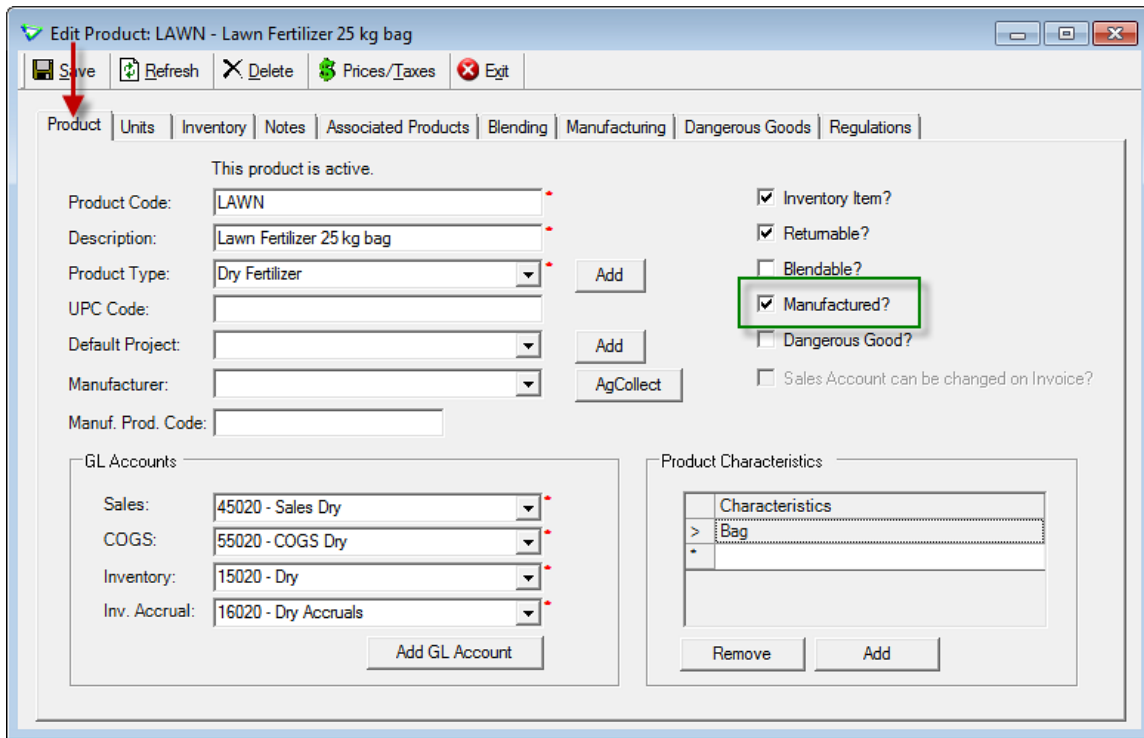
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## Setup the Manufactured Product and Raw Ingredients

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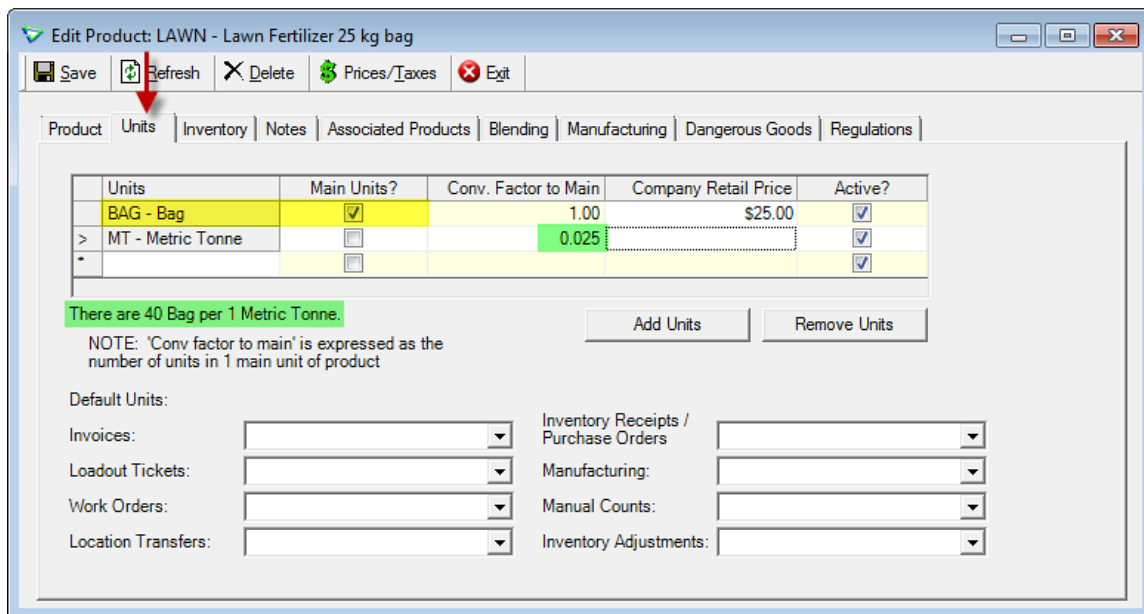
Before you manufacture a product for the first time, setup the “recipe” of raw ingredients (you will still be able to change them or add new ones on the fly).

Add a new (or edit an existing) manufactured product. On the **Product tab**, ensure that the **Manufactured?** box is checked. This tells agrē that you *make* this product rather than purchase it.



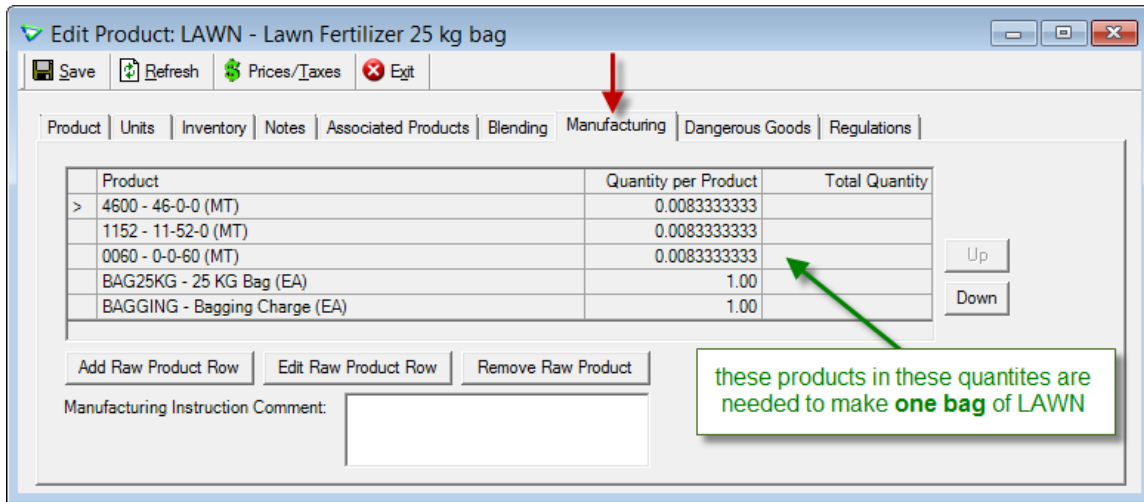
*Inventory > Manage > Products > Add/Edit*

Because the main unit type of the raw ingredients are metric tonnes, the manufactured product also needs to have **MT** as a unit type so agrē knows how to convert MT to bags when manufacturing. On the **Units tab**, set up the main unit type and any conversion factors for alternate units.



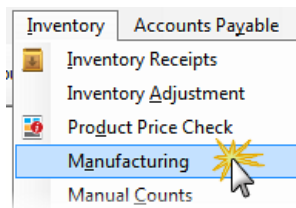
On the **Manufacturing tab**, add the raw products in the quantities needed to make **one unit** of manufactured product (use the **Up** and **Down** buttons to change the order). Notice that all the raw fertilizer

products have MT as the unit type, and the quantity per bag is specified in MT. That's why you needed to add MT as a unit type to the manufactured product.

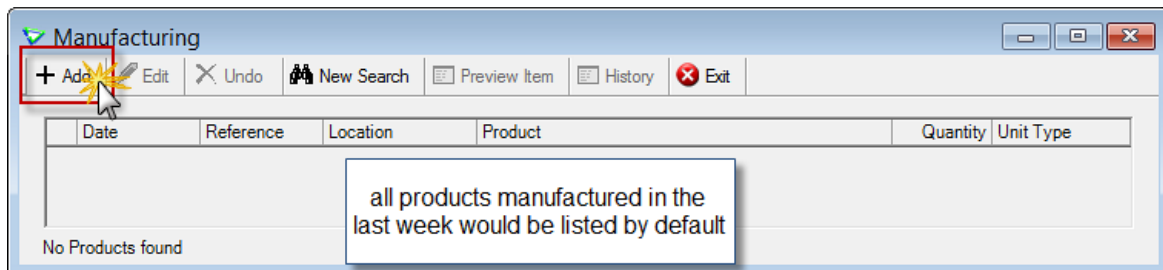


## Manufacture the Product

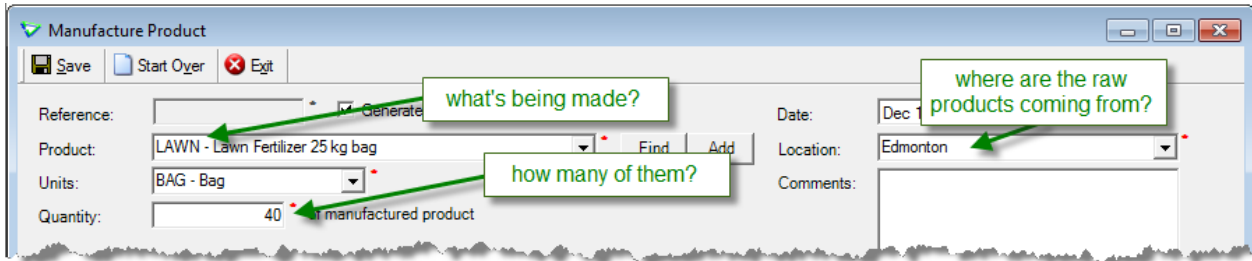
Navigate to *Inventory* > *Manufacturing*.



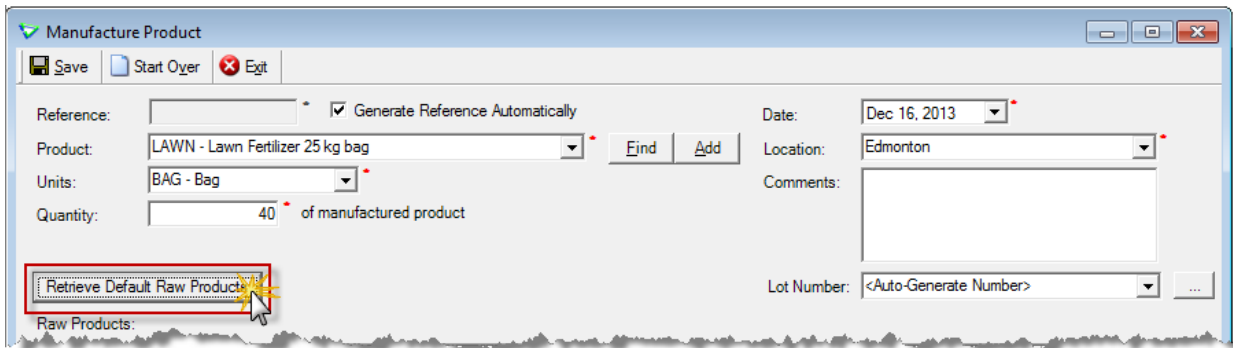
Click *Add*.



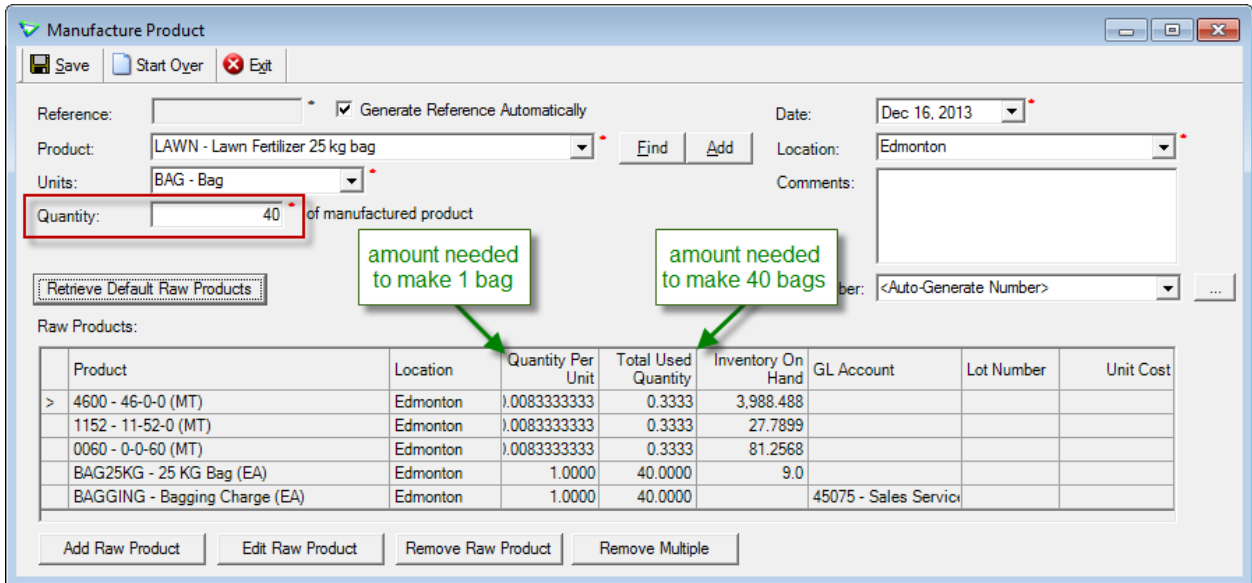
When you want to manufacture, you will start with the product you want to make – in this example, you'll be manufacturing 40 bags of Lawn Fertilizer..



Then you specify the raw materials you need to manufacture this product. If you've previously setup a recipe, click **Retrieve Raw Products**.

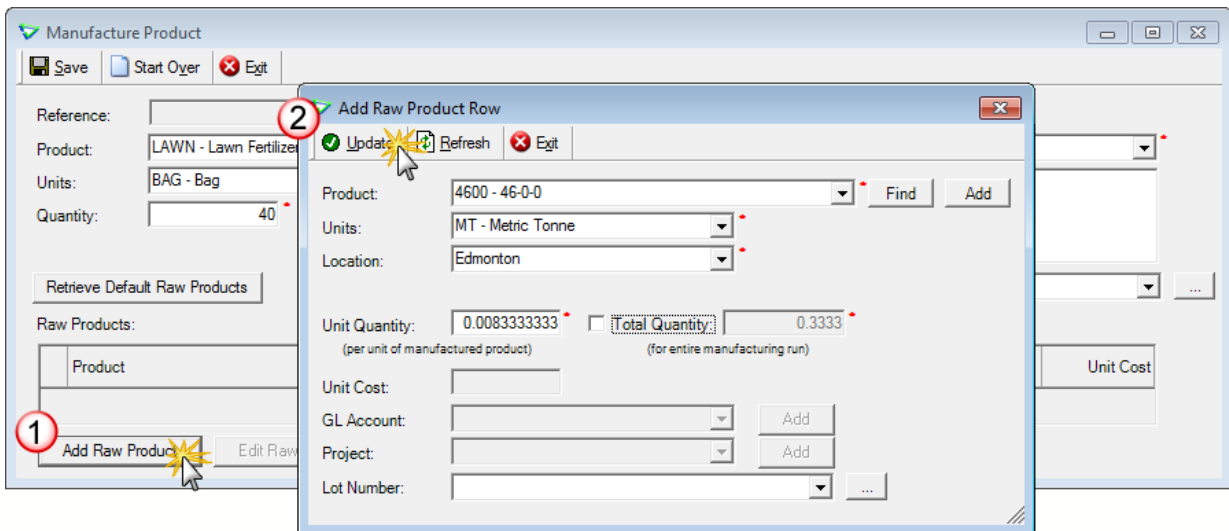


agrē pulls in the raw ingredients and calculates how much of each you will need to make the quantity you specified.



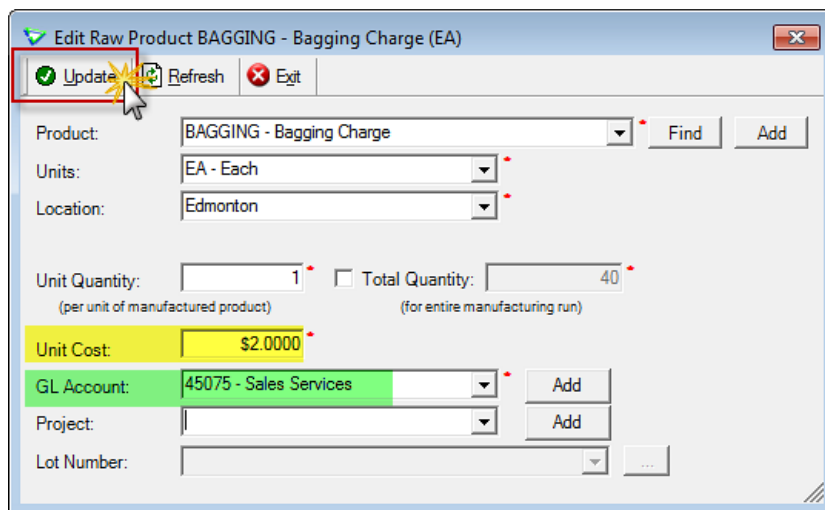
## Add products on the fly

If you haven't setup a recipe in advance, or if the raw products change each time so a static recipe isn't practical, you can add products on the fly with the **Add Raw Product** button.



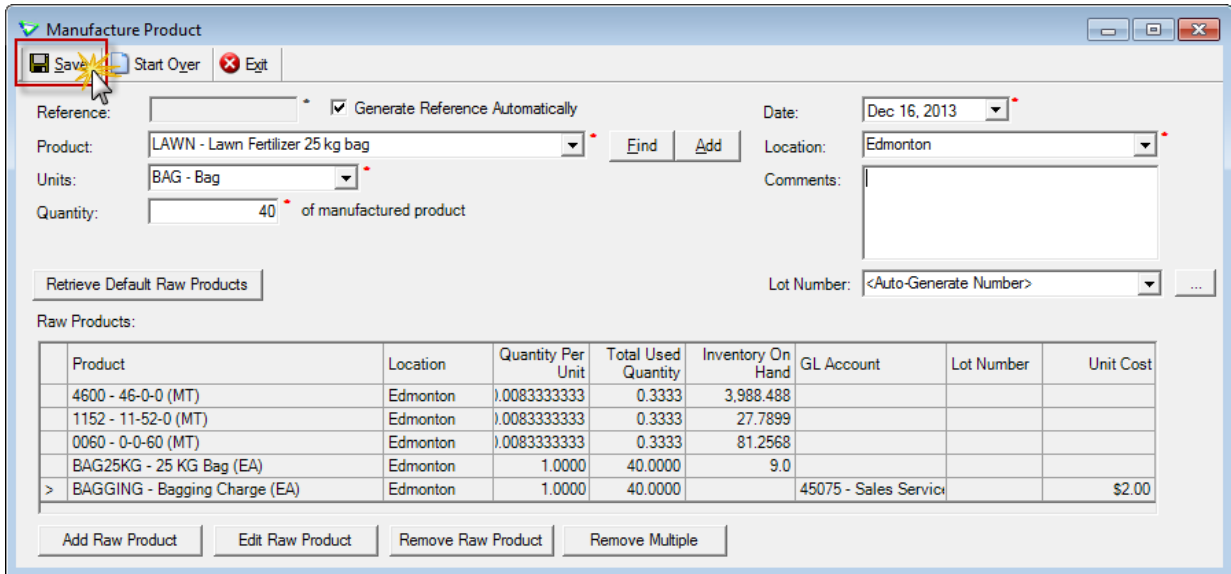
## Specifying the Cost of Non-Inventory Products

Because the **bagging fee is a non-inventory product**, there is no cost associated with it by default. Select and **Edit** the bagging fee product row, and declare the cost (either cost/bag, or cost/40 bags). If you need to change the GL or the raw product location from the defaults, you can do that here too. When you are satisfied that your edits are complete, click **Update**.



# Save to Manufacture the Product

When you've got all your raw products added in the correct amounts, **Save** the Manufactured Product.



You've just manufactured 40 bags of Lawn Fertilizer!

**Preview** the Manufacturing Document and print if you need a copy.

agré		Manufacturing Document		
Reference:	MFE0002			
Date:	Apr 09, 2013			
Location:	Edmonton			
Product	Quantity	Units	Unit Cost	
Lawn Fertilizer 25 kg bag (LAWN)	40	Bag	\$15.943	
46-0-0 (4600)	0.3333	Metric Tonne	\$526.3157	
11-52-0 (1152)	0.3333	Metric Tonne	\$450.00	
0-0-60 (0060)	0.3333	Metric Tonne	\$565.00	
25 KG Bag (BAG25KG)	40	Each	\$1.10	
Bagging Charge (BAGGING)	40	Each	\$2.00	

manufactured 40 bags of this

using this much of these products

# Optional: Confirm the Inventory Counts

You can confirm by checking the inventory levels of the raw products – the quantity should be less.

**agrē** TSL Ag Services Ltd.  
**Inventory Activity Detail**  
 Location is Edmonton and Individual Products Selected between Nov 16, 2010 and Nov 16, 2010

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**0-0-60 Bulk (0060) - metric tonne**

Date	Transaction Type	Description	Ref #	In/Out
Nov 16, 2010	Manufacturing		MF10010	-0.3333
<b>Totals</b>	Manufacturing			-0.3333
	<b>Net Change</b>			-0.3333

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**11-52-0 Bulk (1152) - metric tonne**

Date	Transaction Type	Description	Ref #	In/Out
Nov 16, 2010	Manufacturing		MF10010	-0.3333
<b>Totals</b>	Manufacturing			-0.3333
	<b>Net Change</b>			-0.3333

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**46-0-0 Bulk (46) - metric tonne**

Date	Transaction Type	Description	Ref #	In/Out
Nov 16, 2010	Manufacturing		MF10010	-0.3333

*Inventory > Reports > Inventory Activity Detail*

And the quantity of the manufactured product should be more.

**agrē** TSL Ag Services Ltd.  
**Inventory Activity Detail**  
 Location is Edmonton and Product Name is LAWN - Lawn Fertilizer 25 kg bag between Nov 16, 2010 and Nov 16, 2010

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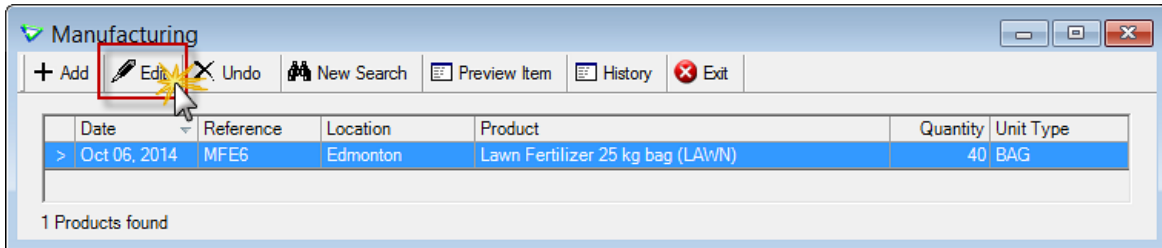
**Lawn Fertilizer 25 kg bag (LAWN) - bag**

Date	Transaction Type	Description	Ref #	In/Out
Nov 16, 2010	Manufacturing		MF10010	40.0
<b>Totals</b>	Manufacturing			40.0
	<b>Net Change</b>			40.0

*Inventory > Reports > Inventory Activity Detail*

## Edit Manufacturing

If an update or correction is required, no worries! You can edit the manufacturing and make changes. Select the manufactured product and click **Edit**. Save your changes when you're done.



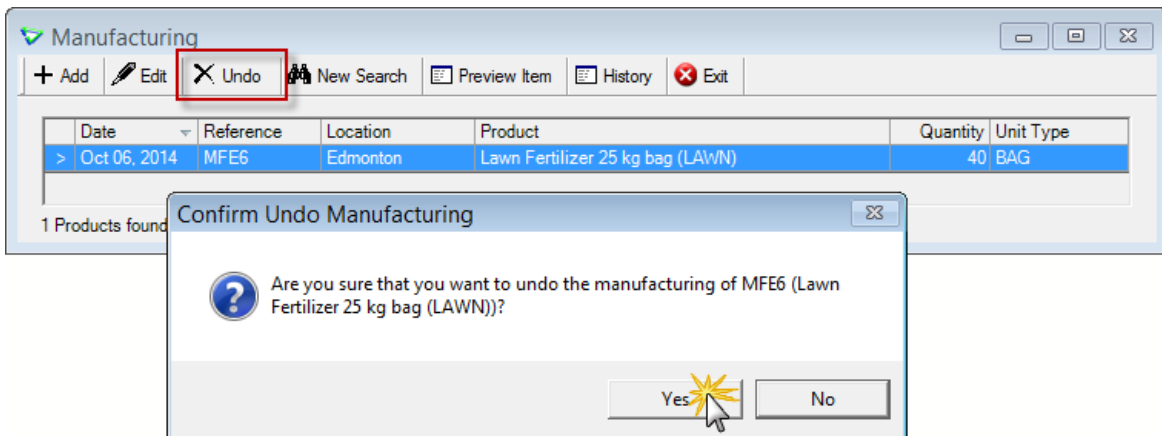
### Note

Manufacturing can be edited or undone as long as the manufacture date is in an open accounting period and it has not been cost-adjusted.

**Edit** is shortcut to “reverse and repost” and **Undo** is a “reverse” so both editing and undoing may affect FIFO (it would depend on what type of activity had already occurred with the raw products before the Edit or the Undo). Use the [Cost Reallocation](#) tool to shuffle costs after the fact if you need to.

## Undo Manufacturing

You can also undo the manufacturing. Select the manufactured product and click **Undo**. Click **Yes** when prompted.





# Cost Adjust Manufacturing

Manufactured items can be cost adjusted just like any other product.

The screenshot shows two overlapping windows from a software application. The top window, 'Add Purchase Invoice', has a 'Supplier' dropdown set to 'Internal Supplier (S0023)', an 'Invoice Date' of 'Dec 11, 2017', and a 'Reference Number' of 'PI-171211-01'. The 'Comments' field contains 'manufacturing cost adjustment'. The bottom window, 'Find Product Cost History', has a 'Product' dropdown set to 'LAWN - Lawn Fertilizer 25 kg bag', 'Adjustment Units' set to 'BG - Bag', and a 'Cost Adjustment / Unit' of '\$1.25'. The 'Quantity (in Adj Units)' is '40', resulting in a 'Cost Adjustment Total' of '\$50.00'. In the 'Apply Cost Adjustment to Inventory Activity' section, the 'Activity Type' dropdown is open, showing options: 'All Types', 'Location Transfer', 'Inventory Receipt', 'Manufacturing', and 'Inventory Adjustment'. The 'Manufacturing' option is highlighted in blue. A red box with the text 'Manufacturing can be cost adjusted' has a red arrow pointing to the 'Manufacturing' option. Below this, a table shows one inventory activity found: 'Manufacturing' on 'Dec 11, 2017' with reference 'DMAN30', location 'Dog River', current cost '\$32.5702', and quantity '40.0000'.

# Manufacturing Reports

There are two Inventory reports designed specifically for manufacturing. The *Manufacturing Instructions* report prints out the “recipe” of raw products needed to make 1 unit of manufactured product.

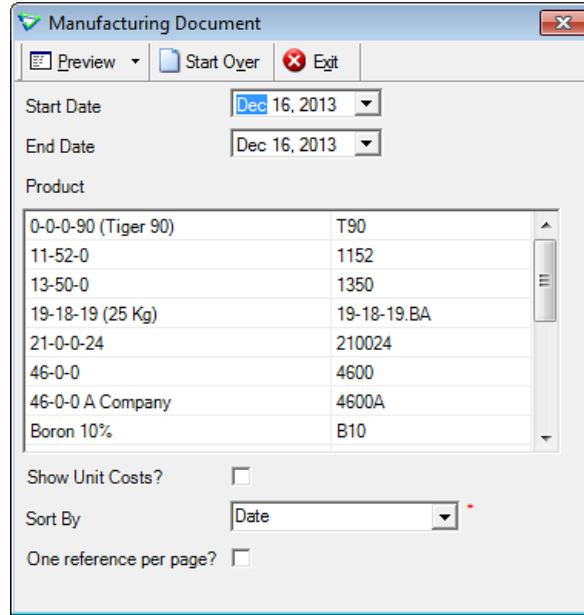


## Manufacturing Instructions

Product	Quantity	Units
Lawn Fertilizer 25 kg bag (LAWN)	1	bag
0-0-60 Bulk (0060)	0.0083	metric tonne
11-52-0 Bulk (1152)	0.0083	metric tonne
46-0-0 Bulk (46)	0.0083	metric tonne
Bagging Fee (BFEE)	1	each
Bags for bulk product (BAG)	1	each

*Inventory > Reports > Manufacturing Instructions*

The *Manufacturing Document* allows you to reprint the details for products that you've already made.



Product	Quantity
0-0-0-90 (Tiger 90)	T90
11-52-0	1152
13-50-0	1350
19-18-19 (25 Kg)	19-18-19.BA
21-0-0-24	210024
46-0-0	4600
46-0-0 A Company	4600A
Boron 10%	B10

*Inventory > Reports > Manufacturing Document*