Eagle Business Management System - Manufacturing

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Introduction

Technical Support

Welcome to the instructional manual for the Manufacturing module within the Eagle Business Management System (EBMS). Eagle Solutions is pleased to provide you with instructions and tips regarding the Windows version of EBMS. In the sections following, explanations and examples of the available features in the Eagle Business Management System will be explained for optimal use of the System. If you need to reach our staff for further help, contact us using the information below:

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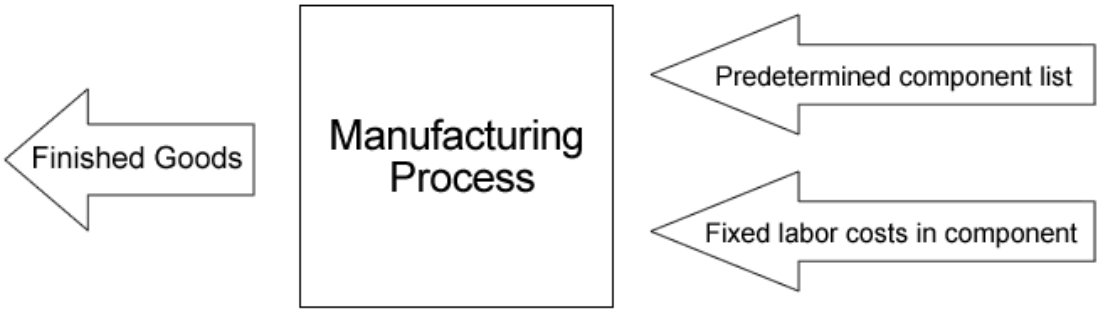
Overview

The Manufacturing module of EBMS is used primarily to manufacture products or create assemblies to distribute or sell. The amount of inventory items are increased using the manufacturing process rather than by purchasing items through an expense invoice. This module should be used in the following situations:

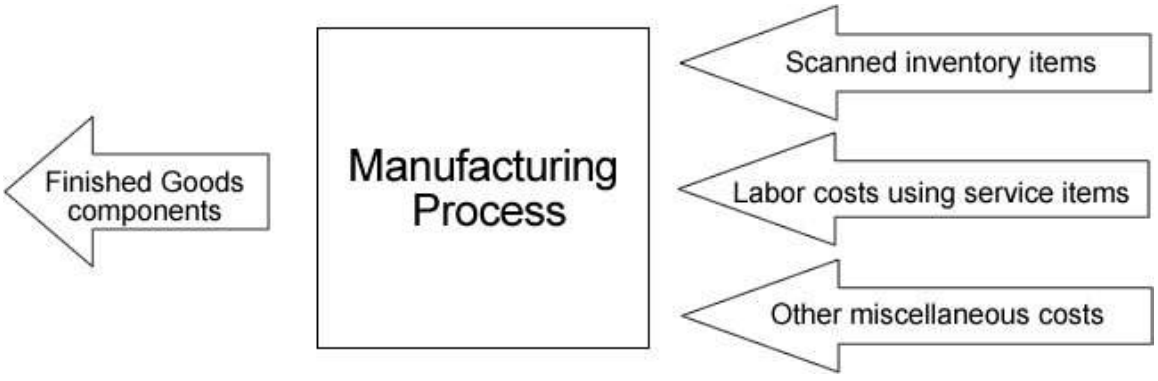
- To create inventory products from raw materials.
- To assemble inventory kits or assemblies before the sale of the item. Review the Inventory > Inventory Components section in the main manual for assembly instructions at the time of the sale.
- To determine the costs for an item or batch of products.
- To compile a materials list needed to manufacture an item or items.

The manufacturing process within EBMS can be accomplished using 3 different methods:

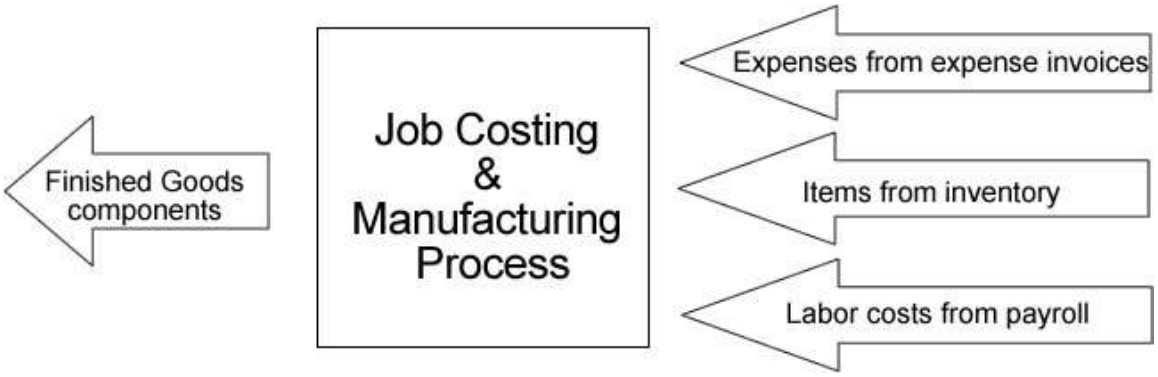
- A simple manufacturing process can be used if the costs are derived solely by a predetermined list of raw materials and fixed labor costs entered in the inventory component list.



- A more complex method can be used to create finished goods if materials consumed list is not consistent. This approach to manufacturing should be used if the materials consumed are scanned or entered into EBMS at the time they are removed from inventory.

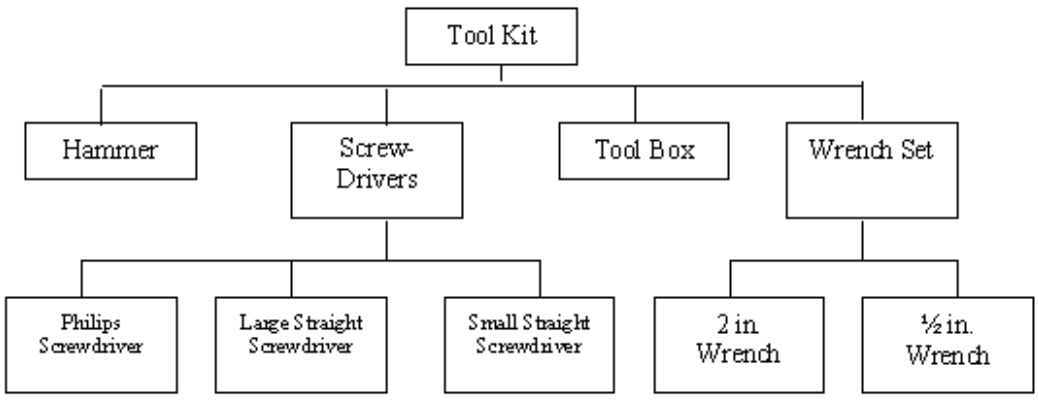


- The combination of the Job Costing and the Manufacturing modules should be used to track a more varied source of actual costs. This EBMS tool can be used to record and analyze the costs of a specific item, batch of products, or a specific line of products. The job costing combination must be used if some of the costs are derived from expense invoices and payroll timecards.



The Manufacturing module loses much of its usefulness if the user does not maintain perpetual inventory and track the total count of inventory items in stock.

The Manufacturing module and the Inventory Component feature can accomplish the same thing – but they differ in a number of ways. For example, if the user is creating complete tool kits using the inventory component feature, the inventory count is tracked on each tool component at the lowest level. In the example below, inventory count would be tracked for the Hammer, Philips Screwdriver, Large Straight Screwdriver, Small Straight Screwdriver, Toolbox, 2 in wrench, and ½ in. wrench. No inventory counts would be tracked for the Tool Kit, Screwdrivers, and Wrench Set items if the Inventory Component feature is used. If the user wishes to track the counts of total assembled tool kits or wrench sets, the manufacturing module should be used. As tool kits are "manufactured" or assembled, the tool kit count is increased and the counts of all the components are decreased.



In summary, if the user wishes to assemble the tool kits at the time of the sale, the Inventory Components feature should be used. If the user wishes to assemble the kits prior to the sale at a predetermined date, the Manufacturing Module should be used. Review the Inventory > Components section for more details on using the Inventory Components feature.

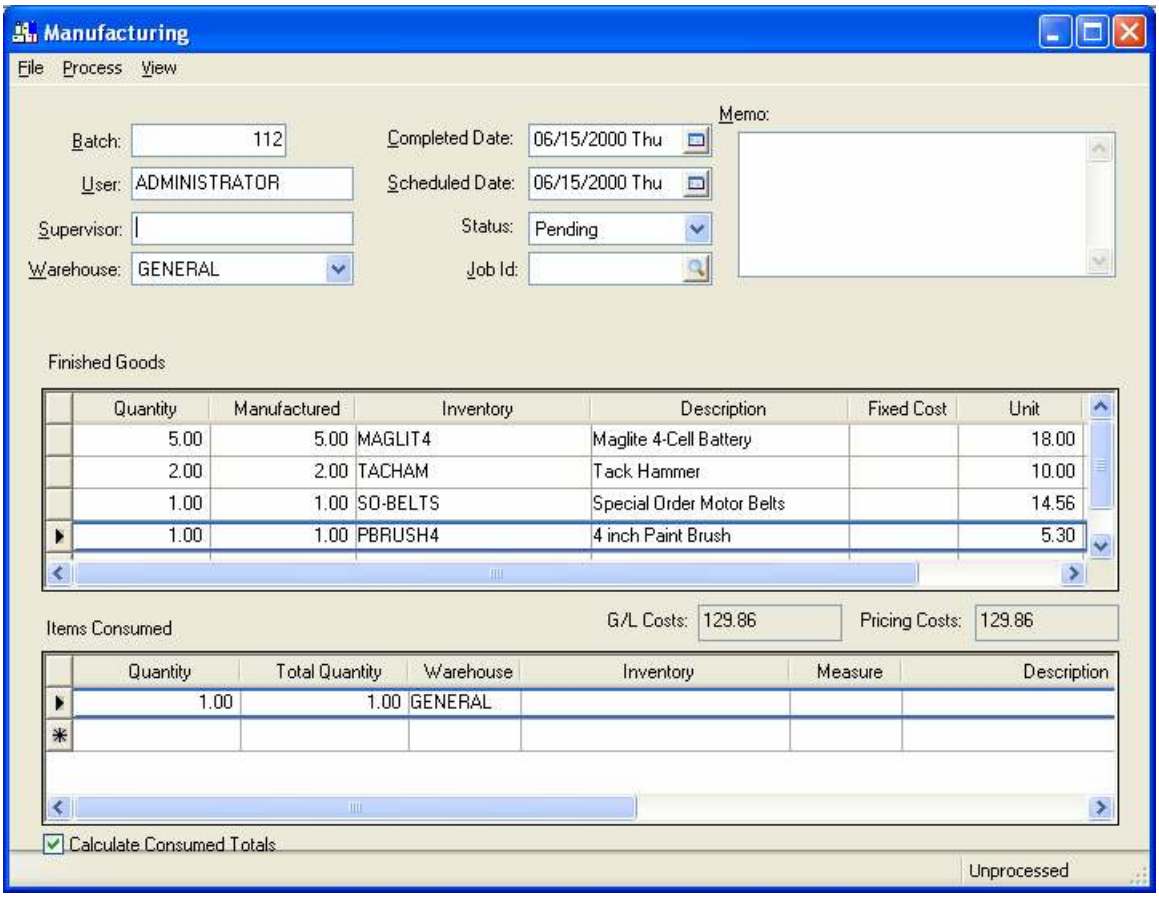
The manufacturing process is done in batches. The user is required to enter the list of items that were manufactured as well as the date and other information. If the user enters information in the Manufacturing window and does not process the batch, the inventory counts are affected in much the same way as entering items in a sales or purchase order and not processing the order into an invoice.

Continue with the next sections for more details on entering and processing a manufacturing batch as well as useful reporting and purchasing options.

Creating a Batch

Creating a Simple Manufacturing Batch

The Manufacturing window is the tool used to create new inventory or to process an assembly of inventory items. Go to **Inventory > Manufacturing** and the following window will open:



- The **Batch** value is used to identify a specific manufacturing batch. Press the Tab key to automatically increment and set the next batch number. The user can manually enter the **Batch** code by entering an alphanumeric code that identifies the manufacturing batch. Go to the **Inventory > Options > Manufacturing** tab to change the **Next Batch Number** value.

- The **User** will default to the EBMS login name. This name should identify the user who entered and processed the batch information with EBMS.

- The **Supervisor** entry is to record the supervisor name for reporting purposes. This entry can be ignored if the supervisor information does not apply.

- Enter the date when the batch will be completed. The **Completed Date** is used for all general transactions and postings that are created at the time the batch is processed. This entry can be kept blank if the batch is not completed at the time of the data entry. A blank completed date will be set to the current date at the time the batch is processed.

- The **Scheduled Date** is useful when the batch must be scheduled. Ignore this field if the batch information is being entered at the time that the product is manufactured.

- Set the **Status** of the batch. This value will be changed to **Completed** at the time the batch is processed. The status options can be changed or additional options can be added by altering the status file list directly. Contact you EBMS consultant for detailed instructions on adding additional options.

Enter the **Finished Goods** that are being manufactured.

- Enter the **Quantity** of the finished goods being manufactured. The **Quantity** value affects the whole good's **Net Ordered** in the count tab of the inventory item. Review the Inventory Item Count section within the main documentation.

- Enter the quantity that was **Manufactured**. This quantity should be zero until the inventory is manufactured or until the materials needed to manufacture the items have been pulled from inventory stock. The **Manufactured** quantity must equal the **Quantity** column before the batch can be processed. The Manufactured quantity affects the total inventory on hand in the **Inventory > Inventory Items > Count** tab.

  Complete the following steps to always copy the **Quantity** amounts to the **Manufactured column:**

  (1) Select **Inventory > Options** from the main EBMS menu.

  (2) Click on the **Manufacturing** tab of the options dialog.

  (3) Turn the **Default Manufactured Quantity to equal the Quantity amount** switch ON.

  This option is useful if the user enters the manufacturing batch after the items have been manufactured.

- Enter the finished good's **Inventory** ID that is being manufactured. This inventory item must be classified as **Track Count** or other perpetual classifications such as **Serialized items** or **Special Orders**. All items such as **No Count** or **Service** classifications can not be manufactured.

- The **Unit** cost and the **Cost** columns cannot be changed by the user. The **Unit** cost value is calculated from the total of the **Cost** column within the Items Consumed list.

- The **Cost** value equals the total of the **Total Costs** column. Review the The Cost (G/L) and Cost (Pricing) Values section if the **Cost (G/L)** and **Cost (Pricing)** columns appear.

The **Items Consumed** list is compiled for each individual list found in the **Finished Goods** list. Click on any **Finished Goods** line to view the list of components in the **Items Consumed** list.

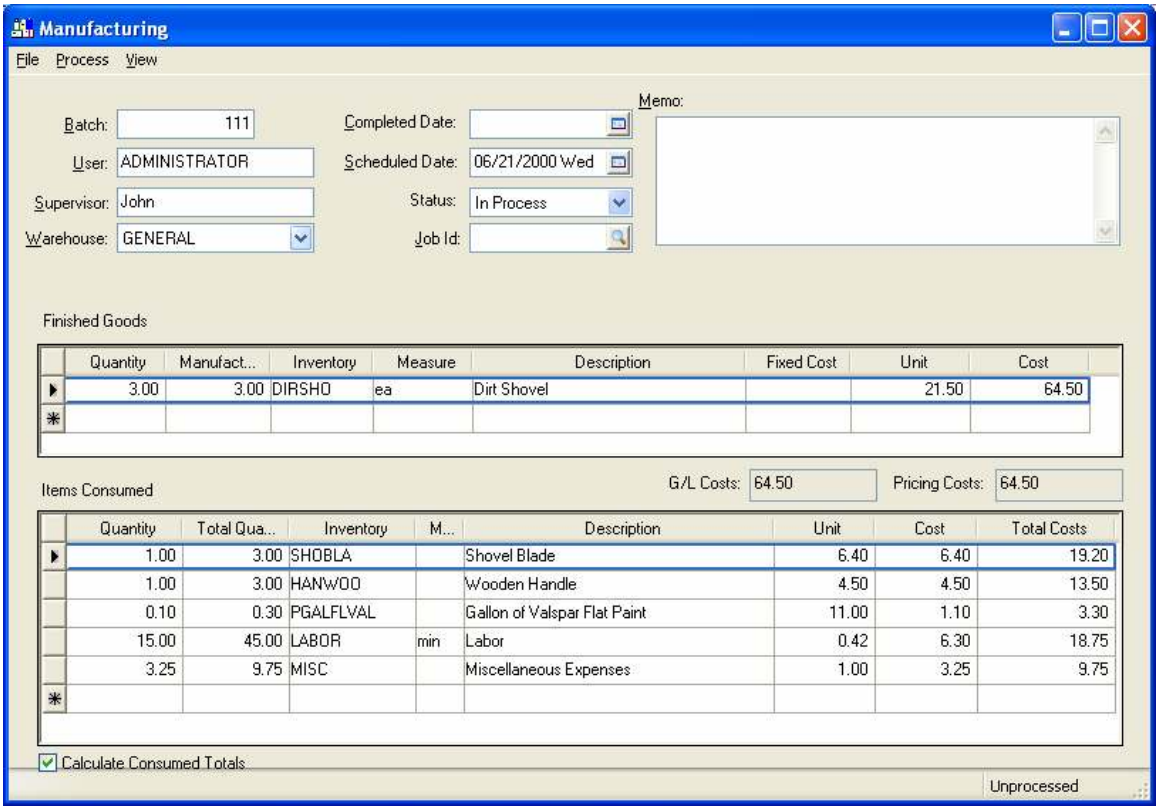
The list will either show a …

A) list of inventory items copied from the component tab of the inventory item

   Review the Using Inventory Components for Manufacturing section for details in creating a component list for a finished goods item.

B) single line with a **Quantity** of 1 with no inventory code

The **Unit** price will default to the last cost recorded in the inventory tab of the finished goods item. Open the finished goods item in **Inventory > Inventory Items** and click on the **Pricing** tab to view the **Cost** value.



The user can add components to the **Items Consumed** list or change the contents of the list. The contents of the following columns can be changed by the user:

- The **Quantity** column reflects the amount of each **Item Consumed** that is contained within each **Finished Goods** item.

EXAMPLE If 5 tool boxes are being manufactured and each tool box contains 2 screwdrivers, the **Quantity** should equal 2 since there are 2 screwdrivers in each tool box. **Do not** enter an amount of 10 into the **Quantity** column since the total amount is reflected in the **Total Quantity** column.

- The **Total Quantity** column reflects the total number of items consumed for the total **Quantity** entered in the finished goods list. **Total Quantity = Quantity** of **Finished Goods** * **Quantity** of **Items Consumed**.
- If the **Inventory** ID is blank, no transactions will be created. Transaction details are described later in this section. Right click on the **Inventory** ID and select lookup from the context menu to view component details.
- Review the Unit of Measure sections in the main documentation for details on the **Measure** column.

- The **Unit** cost column reflects the cost value within the **Inventory Item > Pricing** tab if the quantity **Manufactured** is zero. The **Unit** cost equals the perpetual cost of the **Item Consumed** if the **Total Consumed** column contains a value.
- **Cost** column = **Quantity * Unit** cost.
- **Total Costs** column = **Total Consumed** (Column may be hidden) * **Cost**. The **Total Consumed** column equals the **Total Quantity** if the **Calculate Consumed Totals** is turned ON. Review the Manually Calculating Items Consumed section for details on the **Calculate Consumed Totals** switch and changing the **Total Consumed** columns. Review The Cost (G/L) and Cost (Pricing) Values section if the **Total Cost (G/L)** and **Total Cost (Pricing)** columns appear.

Repeat the steps listed above for each item that is being manufactured. It is recommended that you adjust the widths of the invoice detail columns to your specifications. Review the Column Appearance section in the main documentation for more details.

Select **File > Save** from the manufacturing window menu to save the batch. The inventory counts of both the finished goods and the consumed items are updated when a batch is saved. An un-processed saved batch has the same affect to inventory as a purchase order and a sales order. No general ledger transactions are created until the batch is processed. Right click on any finished goods or consumed items **Inventory** code columns and select **Lookup** from the context menu after the batch has been saved. Click on the count tab to see the affects to the inventory counts.

Select **File > New** to enter a new batch

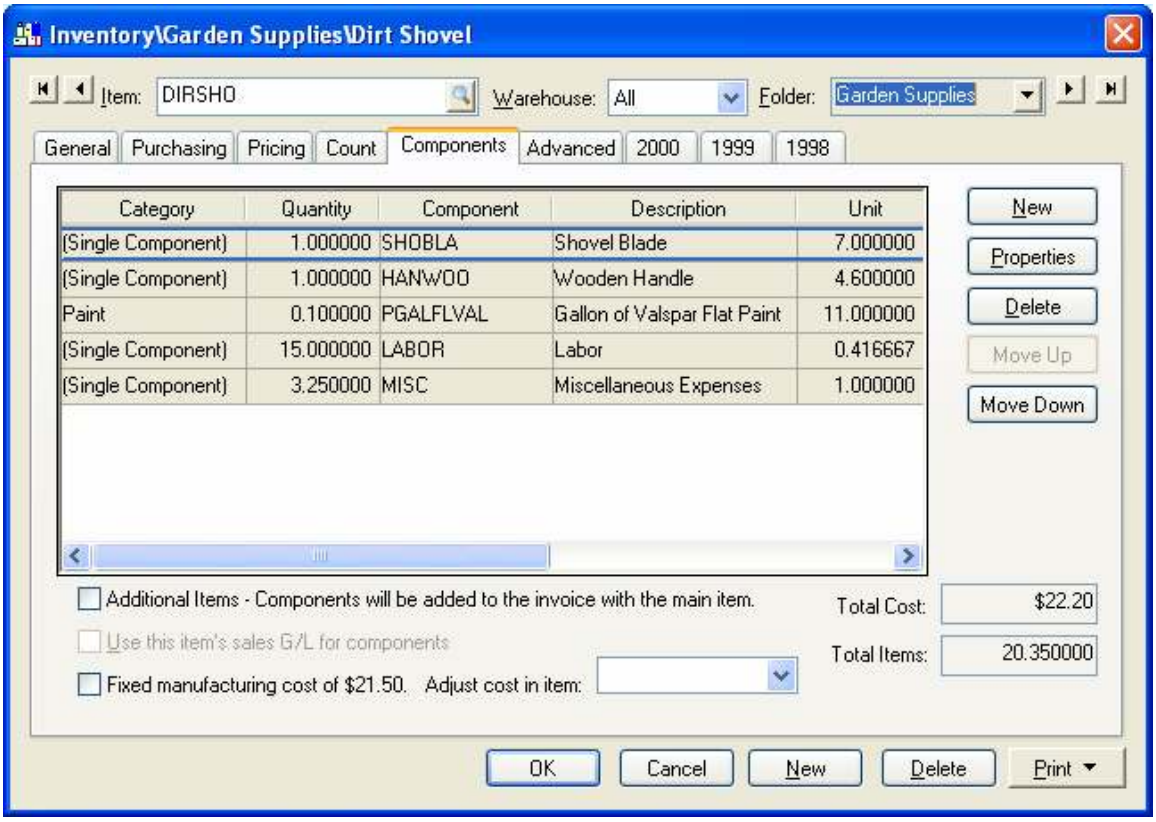
Select **File > Copy Batch** to make a duplicate of a previous batch. This function can save time when batches are similar and can be copied rather than reentered.

Continue with the following section for more detailed instructions for the manufacturing batch window.

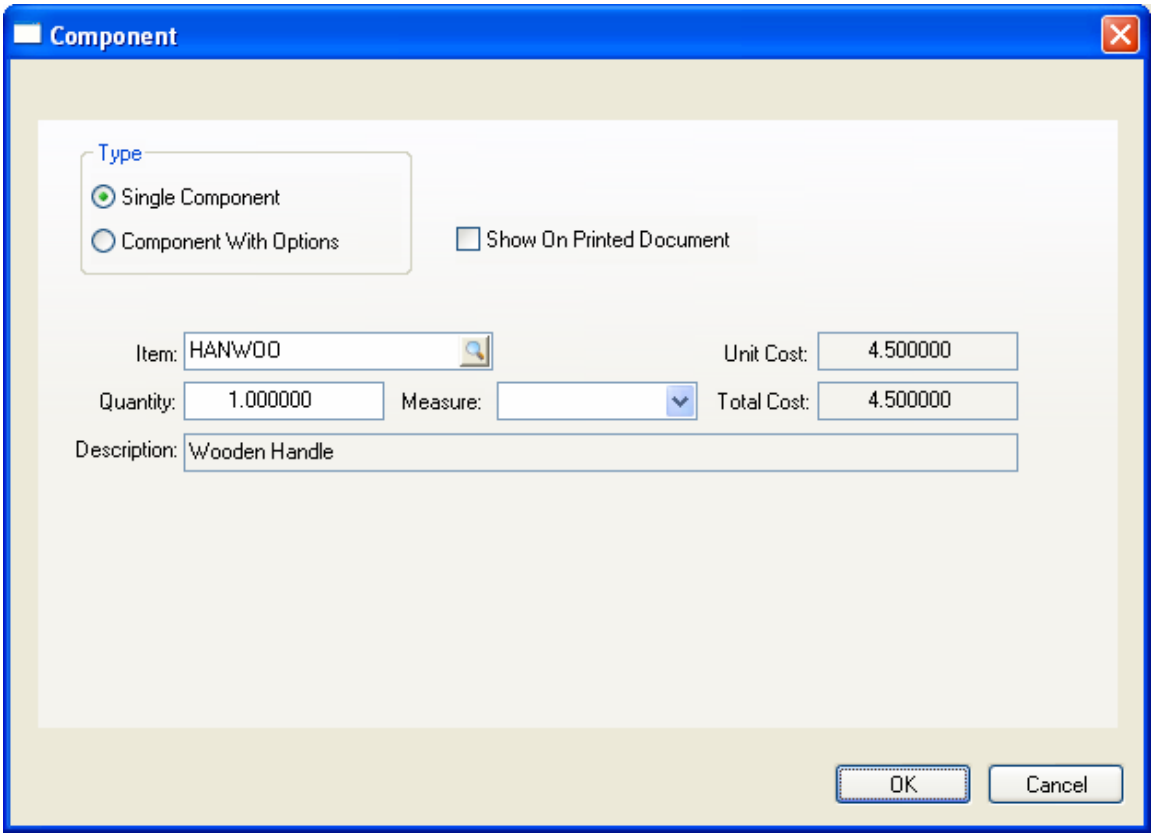
Using Inventory Components for Manufacturing

A Component list is used to define a standard list of materials used to manufacture a product. The component list may consist of other inventory items or may contain non-inventory items such as raw materials or labor. The predefined component list is an optional entry but can save a considerable amount of time if the materials used for the manufactured goods are consistent.

The following example is the manufacturing of a dirt shovel. Open an item that is being manufactured and click on the **Components** tab as shown below:



1. Click on the **New** button to add a new component.



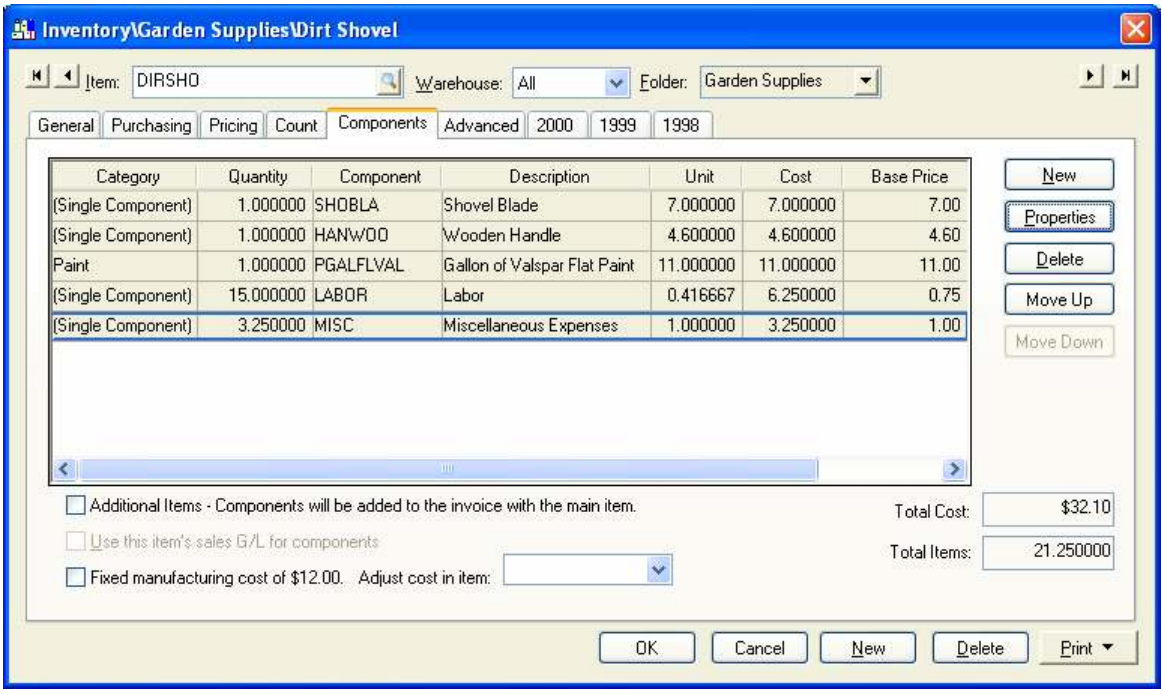
2. Set the component **Type** to **Single Component** option for standard component lists. Review the Optional Components section of the main inventory manual for details on the **Component With Options** setting.

3. Enter the inventory **Item**, **Quantity** of components for each finish goods item, unit of **Measure**.

4. The **Unit Cost** is derived from the **Cost** value found in the **Pricing** tab of the item. The **Unit Cost** and **Total Cost** cannot be changed within this window. Right click on the inventory **Item** entry and click on the lookup option. You can change the cost value in the pricing tab of the component.

Click the **OK** button to add the component.

Click on the **New** button for any additional components.

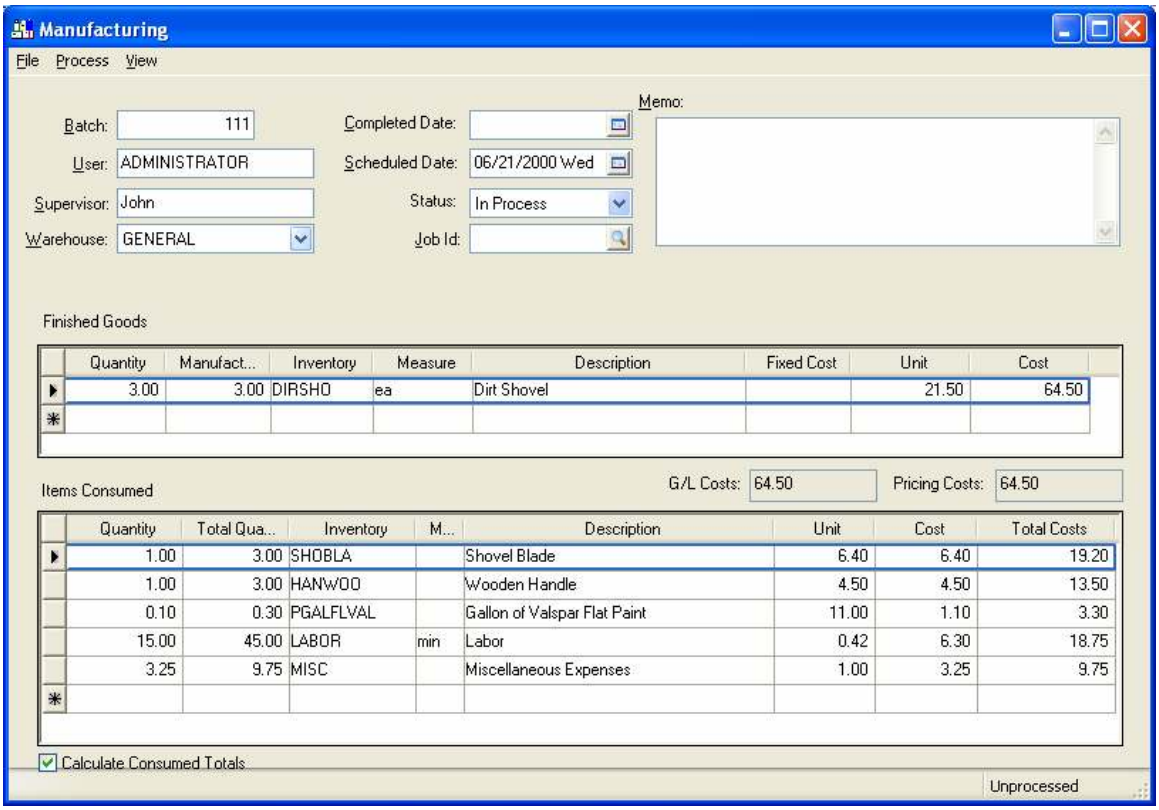


A component list may consist of raw materials or components but may also include fixed labor costs and miscellaneous costs. Review the Adding Miscellaneous Costs and Labor Costs to a Batch section for more details.

The **Additional Items** option switch should be turned off when components are used within a manufacturing batch.

Review the Creating Items with a Fixed Cost section for details on the **Fixed manufacturing cost** option.

Click OK to save the component list. Go to **Inventory > manufacturing** to manufacture the finished goods (dirt shovel) from the components.



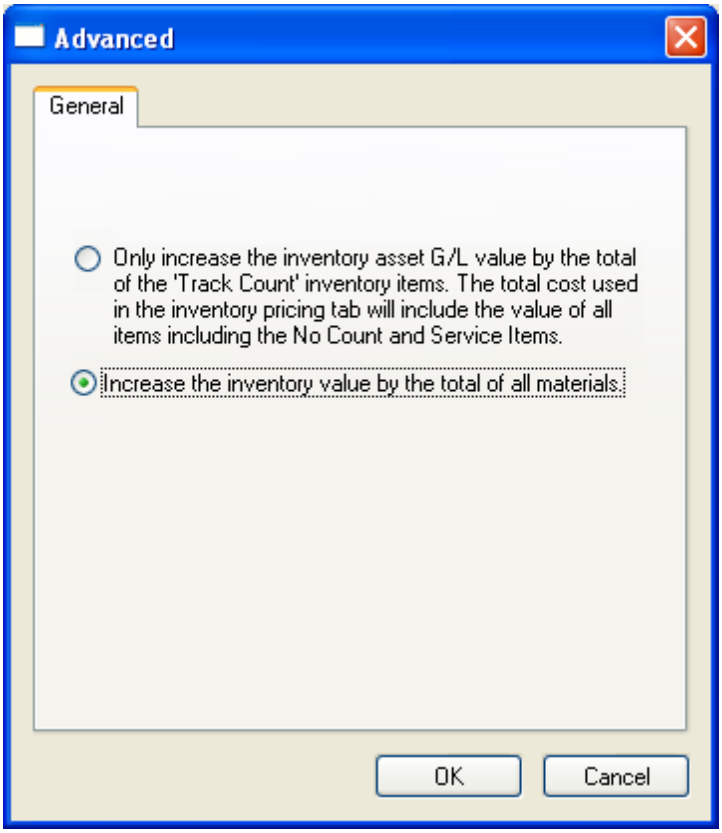
The component list (items consumed) can be changed within the manufacturing batch. Any permanent changes must be made within the component tab of the finished goods item. Review the Manually Calculating Items Consumed section if the components are being recorded for the entire batch rather than per finished good unit.

Note that an item within the materials list may contain components. You can create a component list within the **Items Consumed** list by selecting any component line that does not contain a 'track count' item. Press CTRL + += on the keyboard to create a materials list. The materials list within the **Items Consumed** list works in a similar manner as the sales invoice. Review the Creating an Inventory Unit within the Sales Invoice for more details.

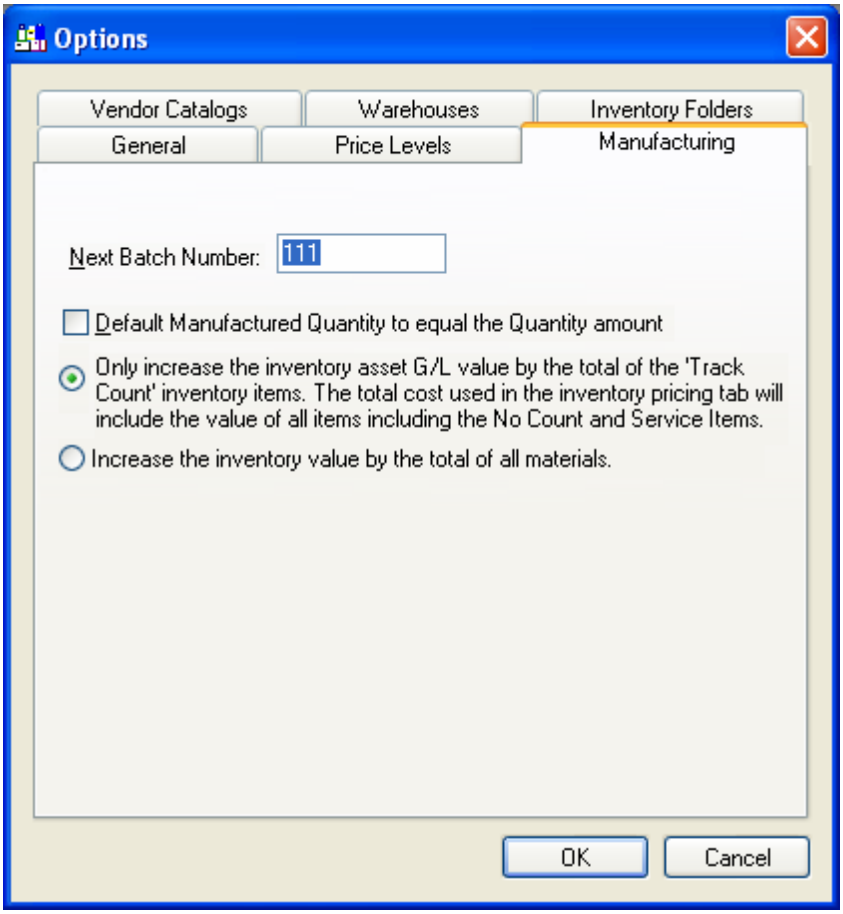
Separate Cost (G/L) and Cost (Pricing) Values

EBMS allows the user to calculate and maintain two different values for the finished goods that are manufactured within the batch screen. These different values are useful when the user does not want to increase the inventory general ledger asset value recorded within general ledger with costs that have been expensed such as labor or miscellaneous costs. Do not use this option without consulting your accountant or an EBMS consultant.

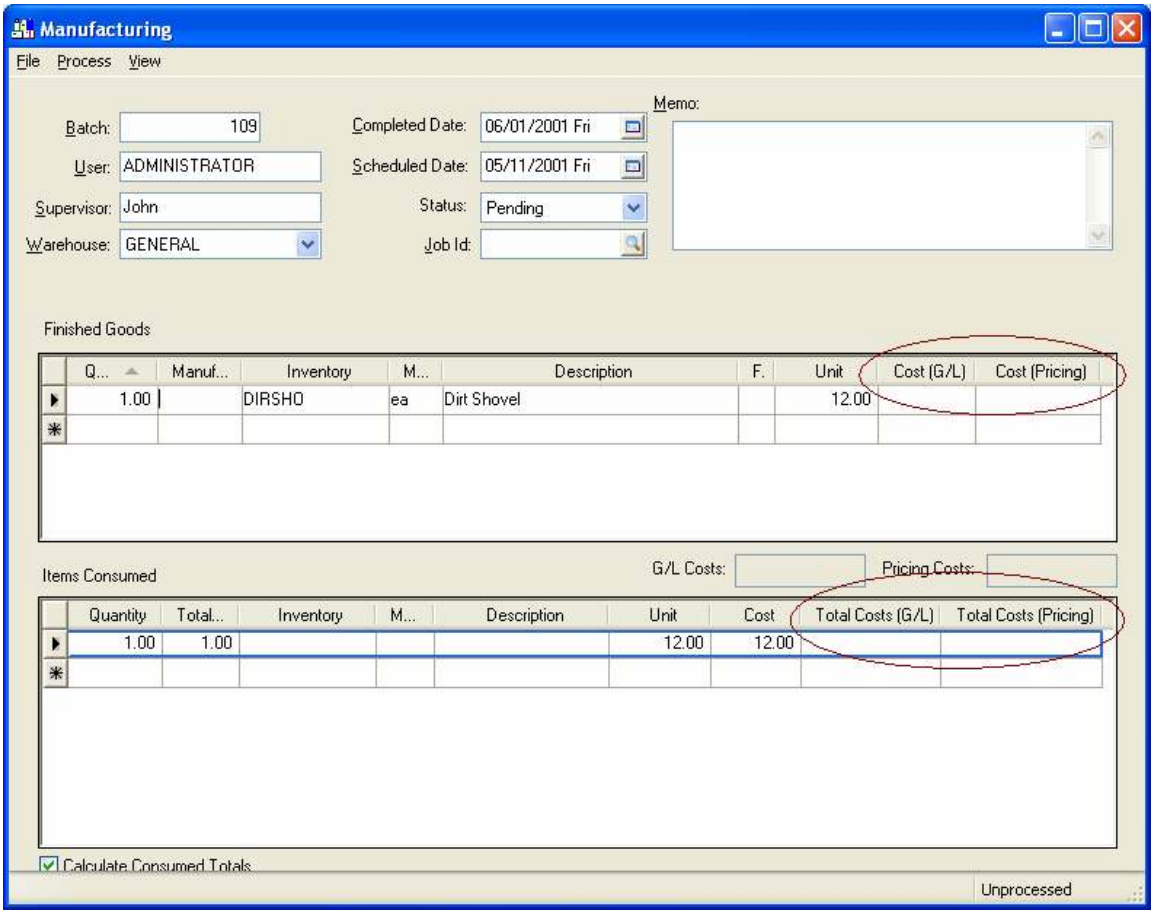
The book value **(G/L)** cost column and **(Pricing)** columns will not appear unless the **Only increase the inventory asset…** option is selected as shown below. Select the **View > Advanced** option from the manufacturing batch menu to set this option.



The value of this setting is copied from a global setting when the inventory batch is created. The Go to **Inventory > Options** and click on the **Manufacturing** tab to set the default global setting as shown below:



The **Only increase the inventory asset G/L value** option should only be used if the cost used for pricing purposes is more than the book value posted to general ledger. This option will cause a pair of costs columns (**Cost (G/L)** and **Cost (Pricing)** to appear within the **Inventory > Manufacturing** window as shown below:

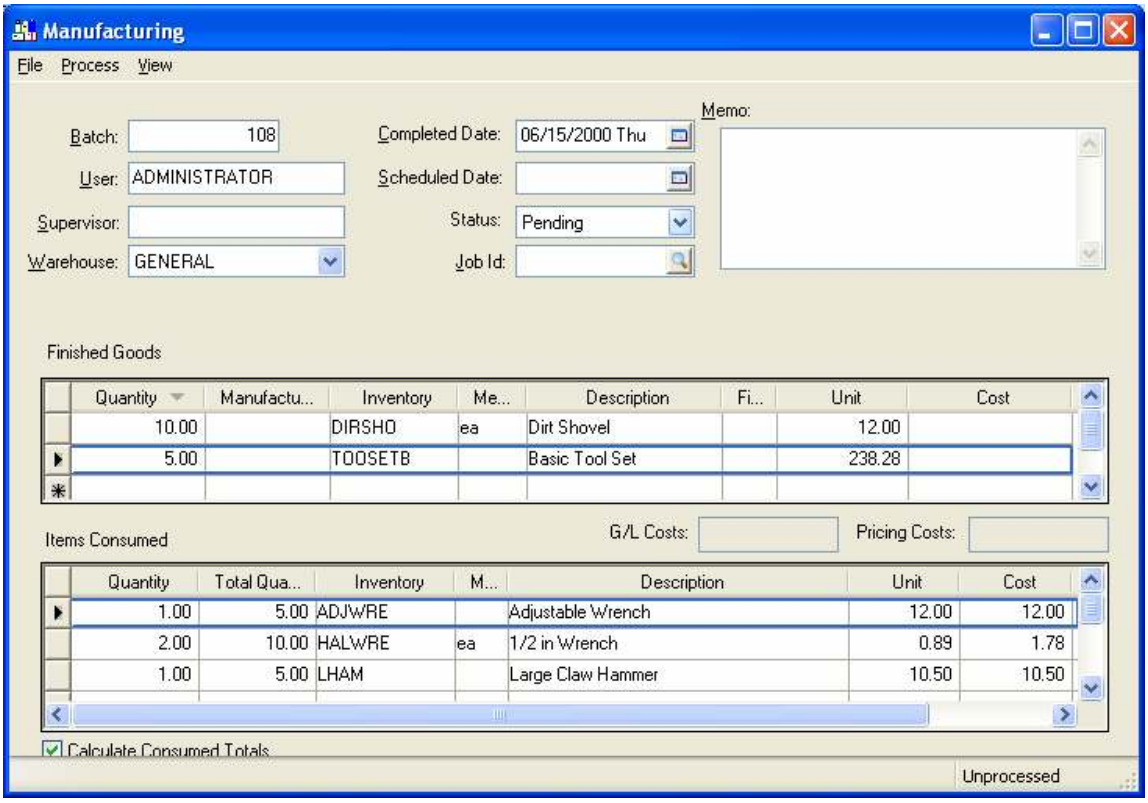


When the first option is selected, the **Costs (G/L)** columns found within the manufacturing batch screen will only include the value of 'track count' items (items classified as 'Track Count" or other perpetual items). Items classified as 'No Count' or 'Service' will not be included in the **Cost (G/L)** and the **Total Cost (G/L)** totals but are included in both the **Cost (Pricing)** and **Total Cost (Pricing)** columns.

The recommended setting is the **Increase the inventory value by the total of all materials** option.

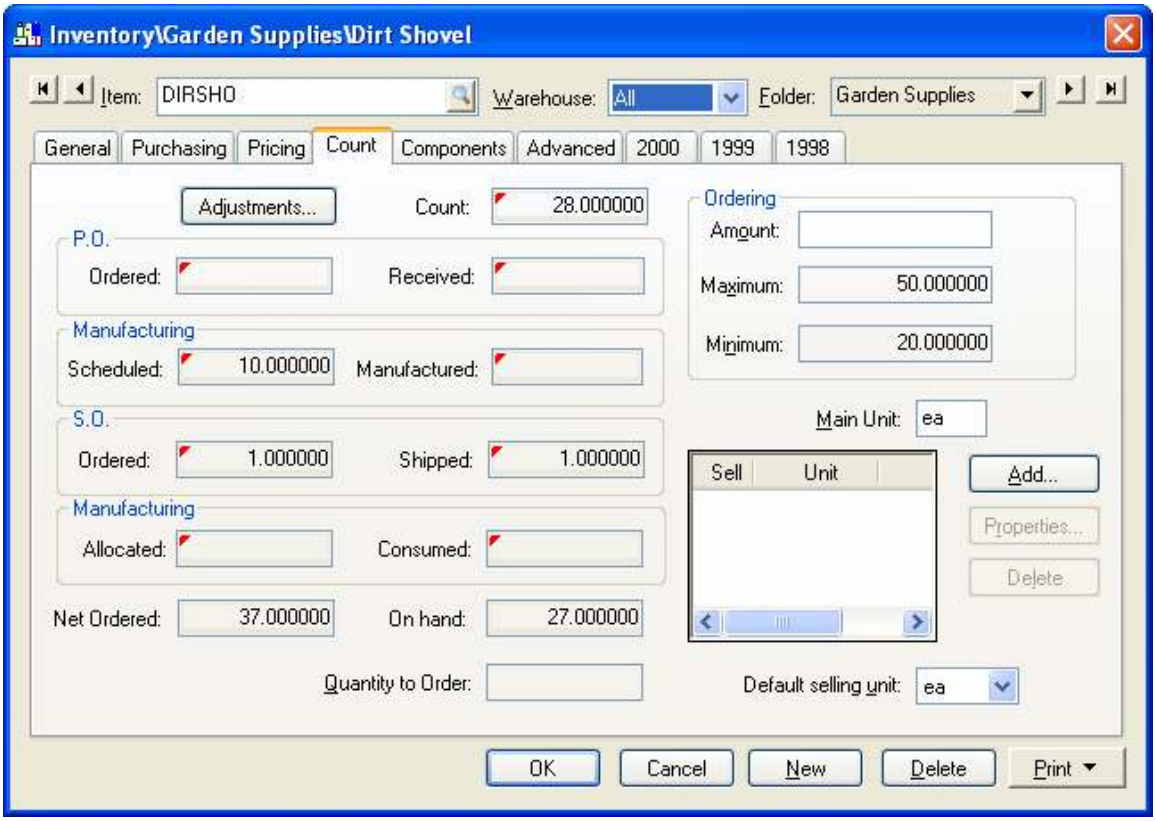
Purchasing the Required Materials

The first step when purchasing materials for a batch is to enter the **Finished Goods** (items scheduled to be manufactured) and the **Items Consumed** (raw materials and parts needed).



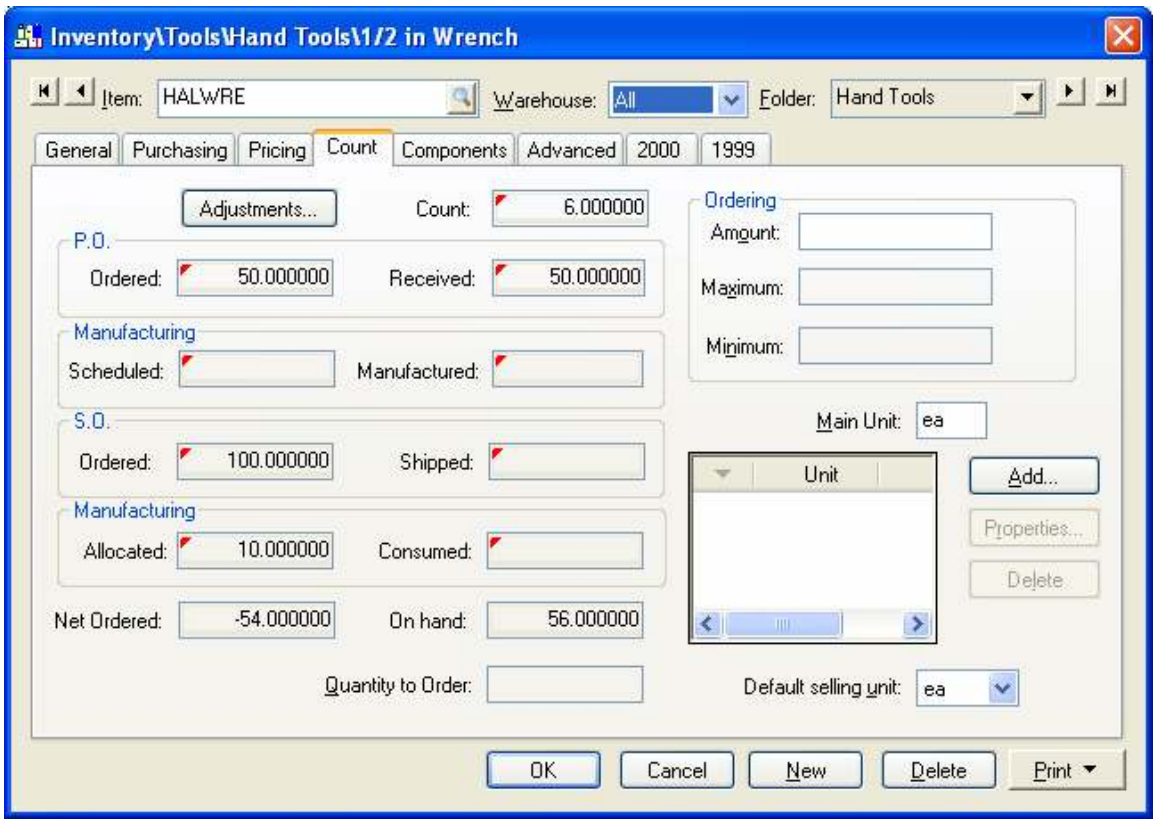
Enter the projected **Quantity** of finished goods into the **Quantity** column. The **Manufactured** column should be kept blank since the manufacturing process has not been completed. The **Quantity** of the **Items** to be **Consumed** must be populated as well to properly determine the needed materials within the purchasing window.

Save the batch and right click on one of the inventory items listed in the **Finished Goods** list. Select lookup from the context menu and click on the **Count** tab as shown below:



The quantity entered within the **Quantity** column of the manufacturing batch is displayed within the **Scheduled** entry of the **Count** tab. The **Scheduled** quantity has the same affect on the **Net Ordered** value as a purchase order. Since the **Manufactured** column was not populated within the batch, the **On hand** value is not affected by the new batch. These values will allow the user to create necessary purchase orders using the inventory purchasing tools as shown later in this section.

Close the inventory window for the finished goods item and lookup a component shown in the **Items Consumed** list. The **Count** tab is shown below:



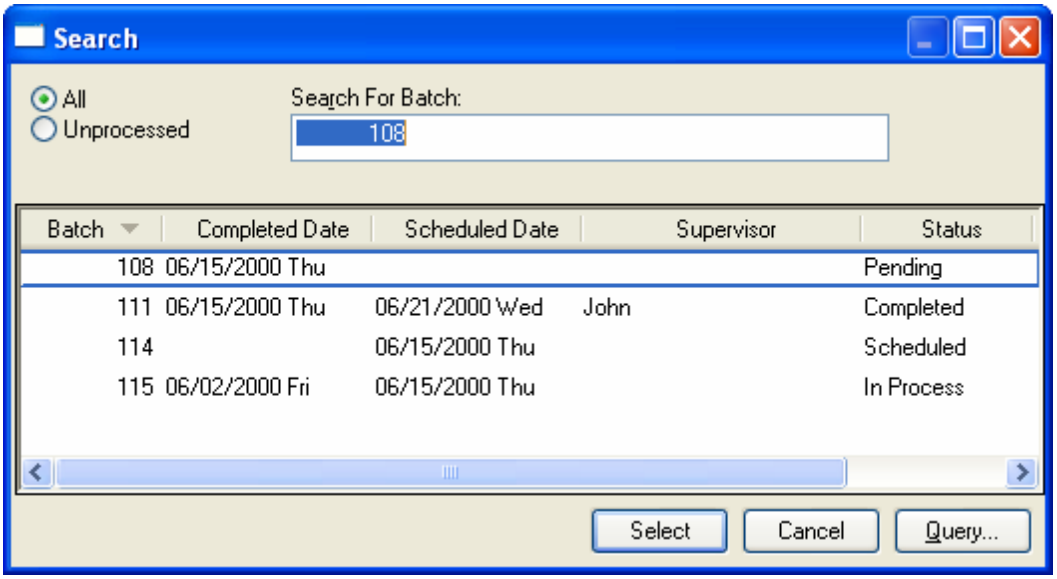
The manufacturing batch example shown above contains 5 finished goods and each item manufactured contains 2 of the components shown above. The total of the items to be consumed is 10 shown in the **Allocated** value field. The raw materials or parts in the **Items Consumed** list affect the **Net Ordered** value in the same manner as a sales order entry. The **Consumed** value will not reflect the quantities within the manufactured batch until the **Manufactured** column is populated.

The materials that are required to maintain the set inventory levels will show within the purchasing window. Review the Inventory > Inventory Purchasing section in the main documentation for detailed instructions about creating purchase orders for low inventory levels.

The user can also print a report that will list all the materials that are required to manufacture the specific batch or batches. Select **File > Print** from the manufacturing window menu to print the Required Materials report.

Viewing or Changing a Batch

All batches either processed or unprocessed can be viewed by selecting **File > Open** from the manufacturing menu.



Click on the **All** option to list all batches including those which have been already processed or select the **Unprocessed** option to list only those that have not been processed.

To view the batch details highlight the appropriate batch and click the **Select** button. You can also double-click on a batch line with the mouse to select it.

All the batch information can be changed at any time if the batch has not been processed. If the batch has been processed the completed date, quantity, inventory items, and cost information cannot be changed. A batch must be unprocessed to change batch information for a batch that has been processed. Review the next section, Unprocessing a Batch for more details on changing data in a processed batch.

To view all the unprocessed batches based on status or scheduled date, select on the **Unprocessed** option in the batch list and click on the **Status** or **Scheduled Date** columns titles with the mouse.

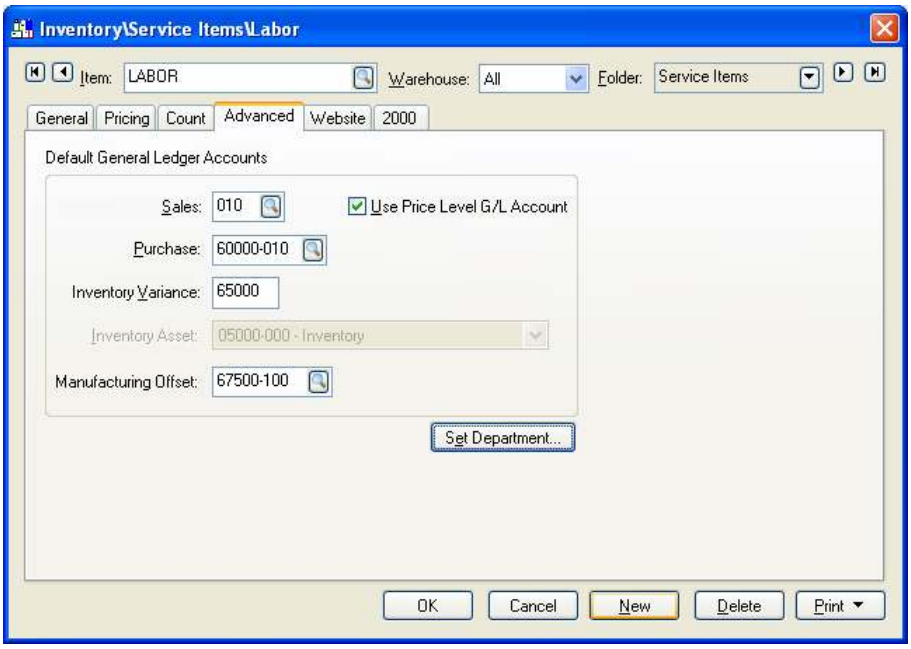
Adding Miscellaneous Costs and Labor Costs to a Batch

This section describes the steps to add miscellaneous costs such as labor or other costs that is not tracked as inventory. Items classified as No Count and Service items are identified as miscellaneous costs. Review the following sections for more details on miscellaneous costs.

Overview

The **Finished Goods** section of the manufacturing batch requires items that are classified as Track Count, Serialized item, or other perpetual inventory. Inventory items entered in the **Consumed Items** section of the batch can be classified as anything including Track Count, No Count, and Service. Review the Inventory > Inventory Items > Entering New Inventory Items section of the main EBMS documentation for more details on item classifications.

The general ledger accounts within the transactions are edited within the advanced tab of each inventory item as shown below:



The general ledger transactions created for each item as listed below:

General Ledger Transactions for Items Consumed for Track Count Items	Debit / Credit
Inventory Variance account + department code from the **Purchase** G/L of the finished good item	Debit
Inventory Asset G/L account -	Credit

General Ledger Transactions for Miscellaneous Items	**Debit / Credit**
Inventory Variance account + the department code from the purchase G/L of the finished good item	Debit
Inventory **Manufacturing Offset** -	Credit

The general ledger account entered in the **Manufacturing Offset** can consist of one of the following two options:

1. The **Manufacturing Offset** general ledger account can equal the 5 digit **Inventory Variance** general ledger and the 3 digit extension of the **Purchase** GL. This approach would have no affect on the general ledger balances since the debit and credit are applied to the same G/L account. The transactions are used to update inventory history.

2. Set the **Manufacturing Offset** account to an offset general ledger account. If the miscellaneous costs are labor, a general ledger account can be used to record the credits created when labor is added to a batch. The balance of this account (which will be negative if an expense account is used) can be compared to the actual costs of the labor.

Debits

Actual payroll costs such as labor, labor overhead, and other miscellaneous costs are debited to individual expense general ledger codes. These codes may be grouped by profit centers for management purposes.

Credits

The **Manufacturing Offset** account records the amount credited as a result of adding miscellaneous costs to a batch.

This comparison can be used as a management tool since miscellaneous costs such as labor are not directly posted to the inventory batch. Job costing is another approach to tracking labor and miscellaneous costs within a manufacturing environment. Review the Job Costing > Overview section of the Job Costing Manual for more details on posting actual labor costs to a manufacturing job or batch.

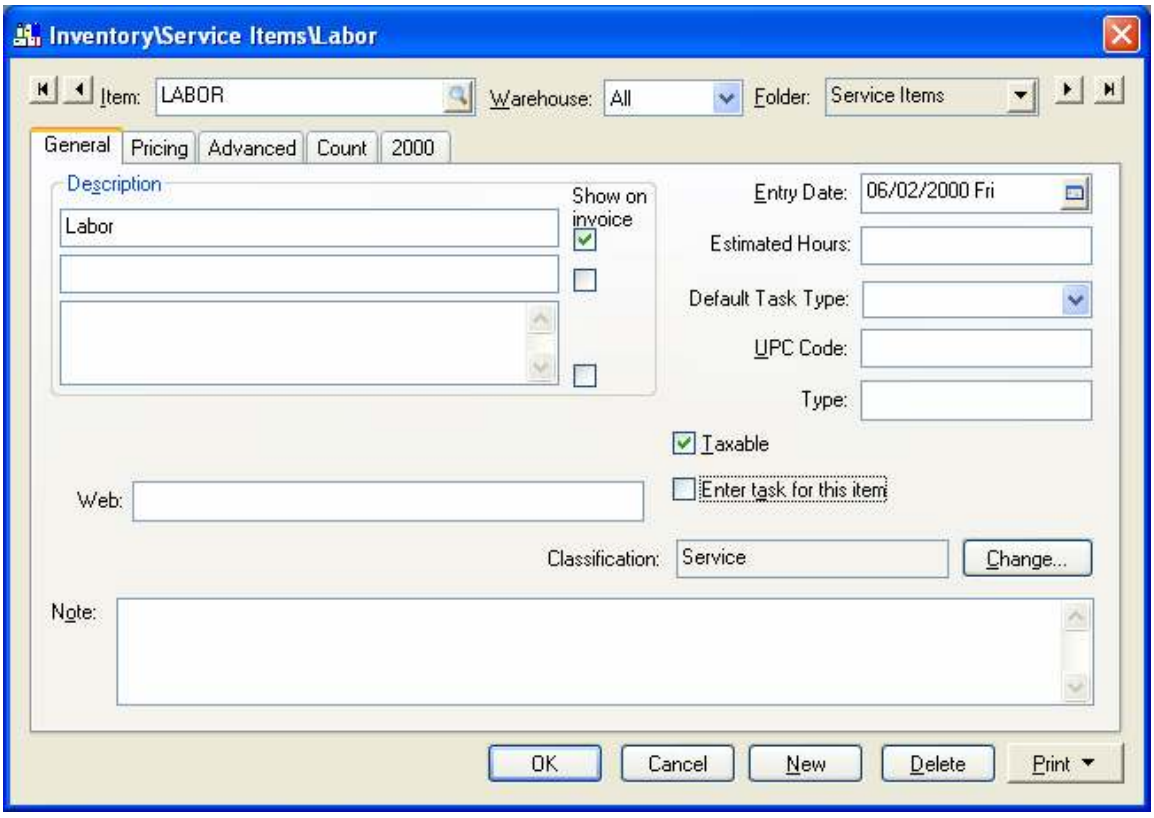
Review the Processing a Batch section of this documentation for more details on the transactions created in a manufacturing batch.

Continue with the following sections for more details in adding labor and miscellaneous costs to a batch.

Labor Costs

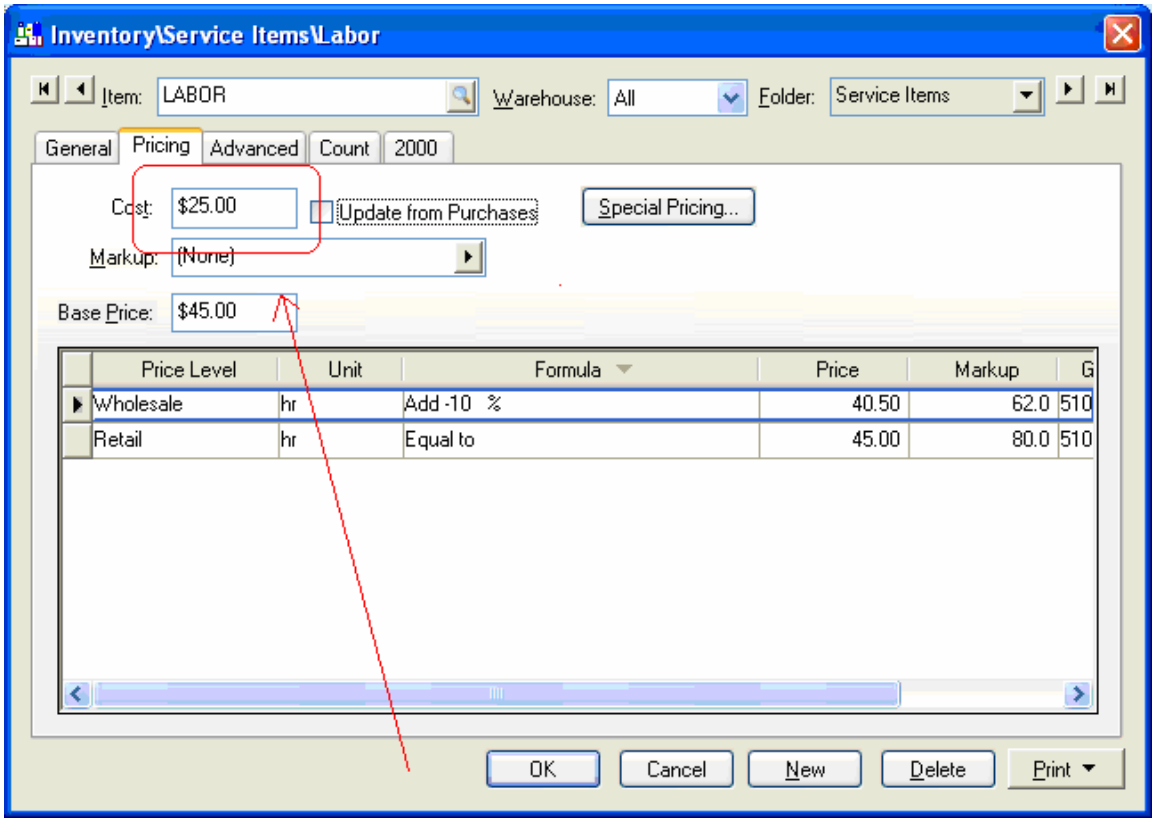
These costs are applied to a manufacturing batch using predetermined labor cost rates that are entered into an inventory service item.

An existing labor inventory item that is used to invoice hourly labor costs can also be used to add labor to a manufacturing batch. Create a new inventory item classified as **Service** if a labor item is needed. Review the Inventory > Using Inventory Items to Identify Service section of the main manual for more details about creating new inventory items classified as "service".

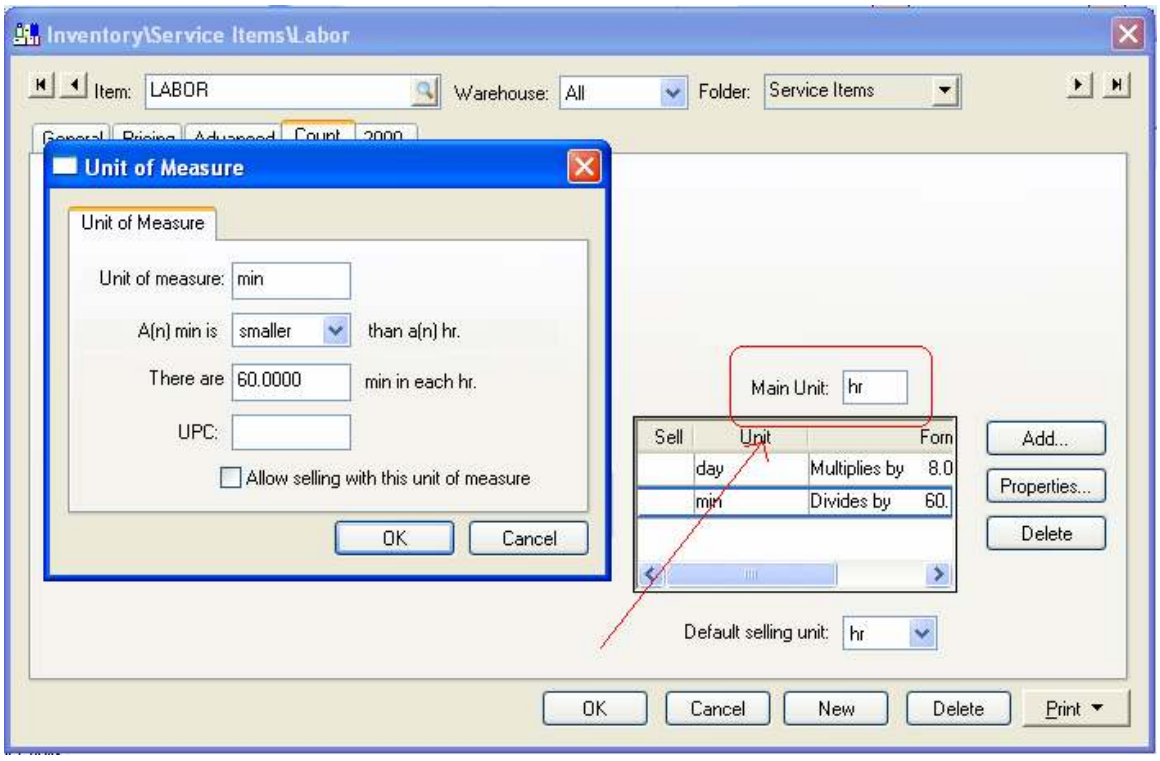


The inventory item should contain an appropriate description and be classified as **Service**.

1. Click on the **Pricing** tab as shown below: Enter the hourly labor cost into the **Cost** entry.



2. Click on the **Count** tab to create multiple units of measure options. This allows the user to use other labor units of measure such as **hr** – hours, **min** – minutes, and/or **day** – for days. Complete instructions below:



3. Enter **hr** into the **Main Unit** entry field.

4. Click on the **Add** button to open the new **Unit of Measure** dialog and enter the following information:

    a. Enter **min** in the **Unit of Measure** entry

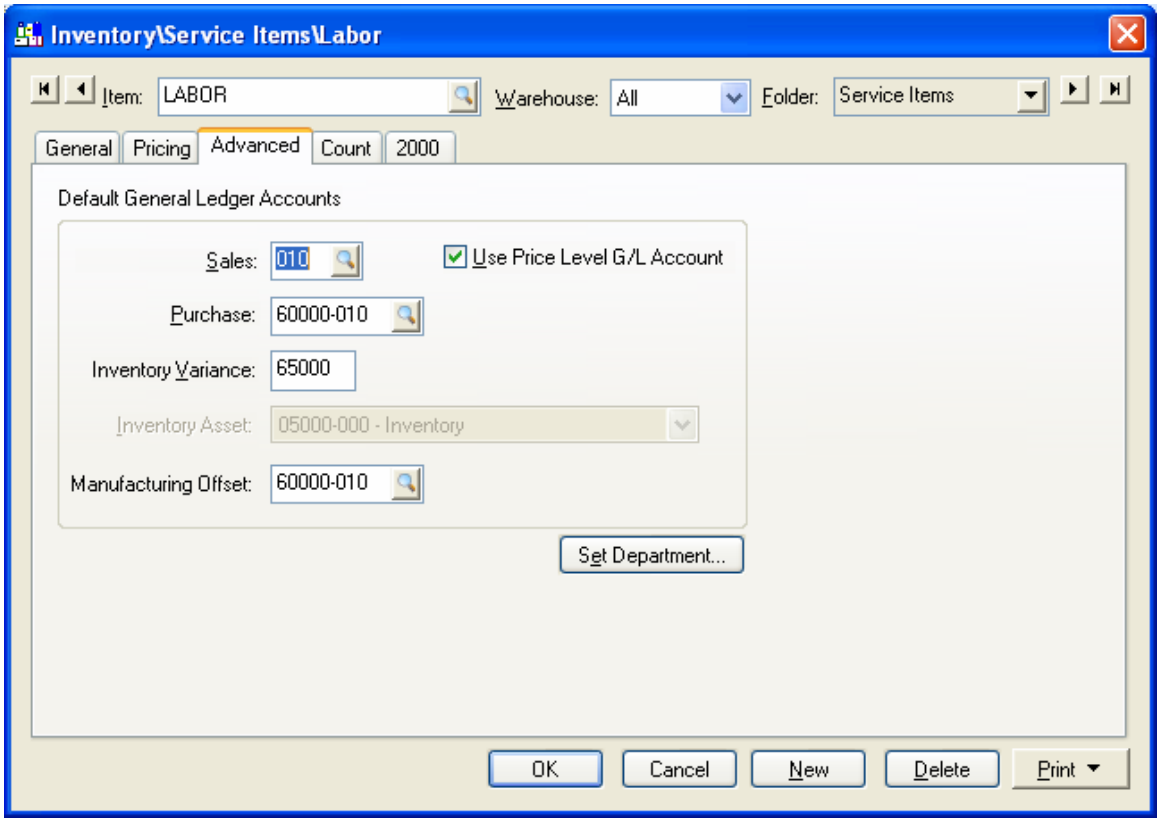
    b. Set the multiplier option to **smaller**

    c. Enter **There are 60 min in each hr** value.

    Click the **OK** button to save and repeat for any additional user of measure settings.

    Review the Inventory > Unit of Measure > Overview section of the main manual for more details on inventory unit of measure settings.

5. Click on the **Advanced** tab of the labor inventory item.



6. The **Sales** general ledger account can be ignored if this item is not sold.

7. Set the **Purchase** and **Inventory** G/L accounts. The inventory debit transaction created for the labor item consists of the **Inventory Variance** general ledger code and the last 3 digits of the **Purchase** G/L code. Review the Inventory > Tracking Inventory Counts > Inventory Variance section of the main EBMS manual for more details regarding the inventory variance account.

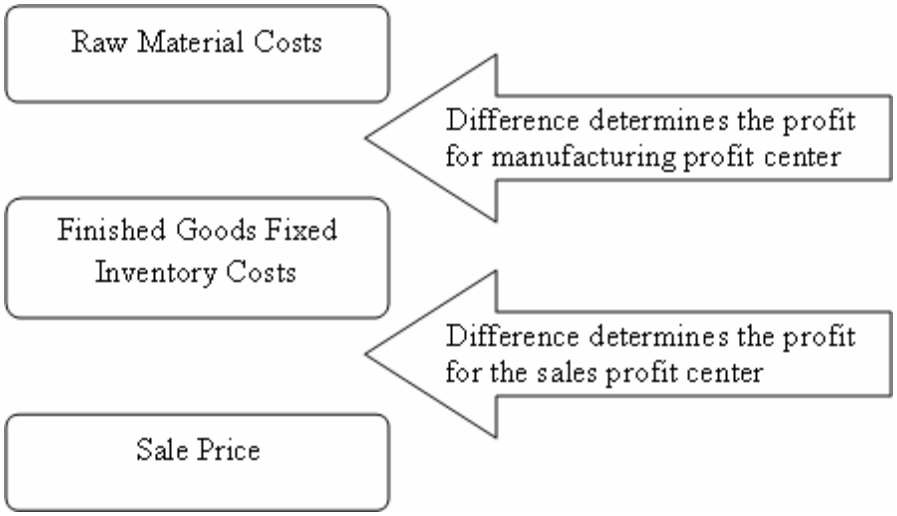
8. Enter the **Manufacturing Offset** general ledger account. The credit side of the transaction will be created using this account. No general ledger account balances will be affected if the **Manufacturing Offset** equals the **Inventory Variance** and **Purchase** department general ledger accounts.

Review the Creating Items with a Fixed Cost section for more instructions about a manufactured item with fixed costs

Creating Items with a Fixed Cost

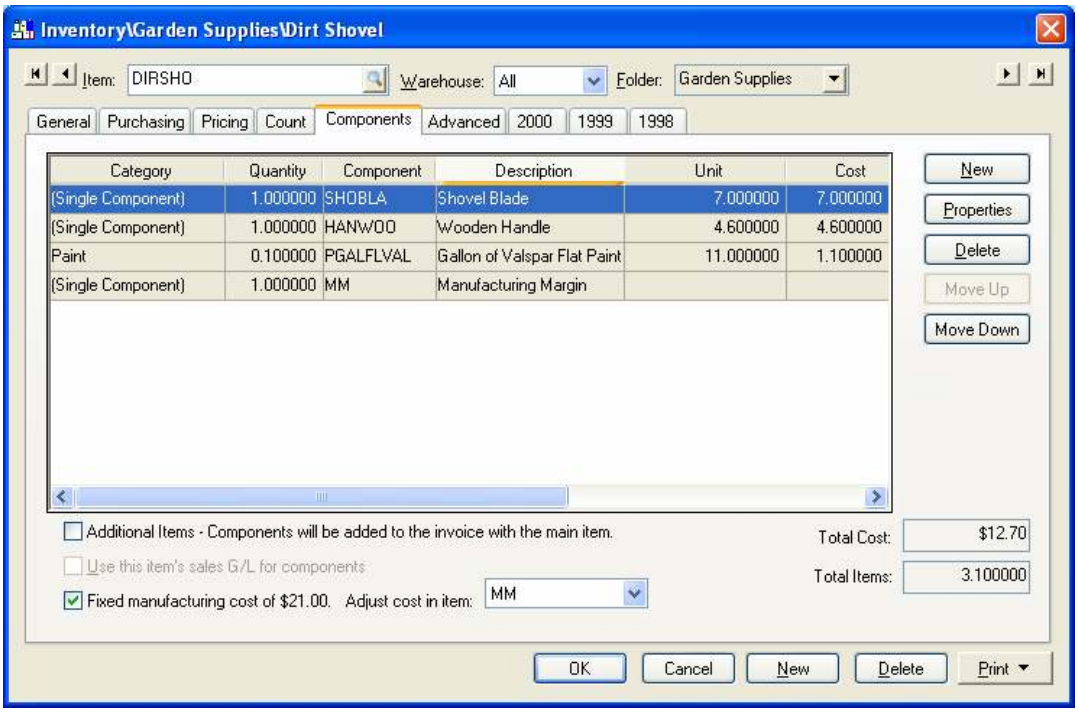
The manufacturing system within EBMS contains an option to preset a fixed cost of finished goods rather than calculating the total cost of the items consumed (raw material). This option is useful in the following situations:

1. To determine the income for a manufacturing division of a company. The difference between the perpetual cost of the raw materials and the fixed cost of finished goods is considered the income for the company profit center that manufactures the finished goods.



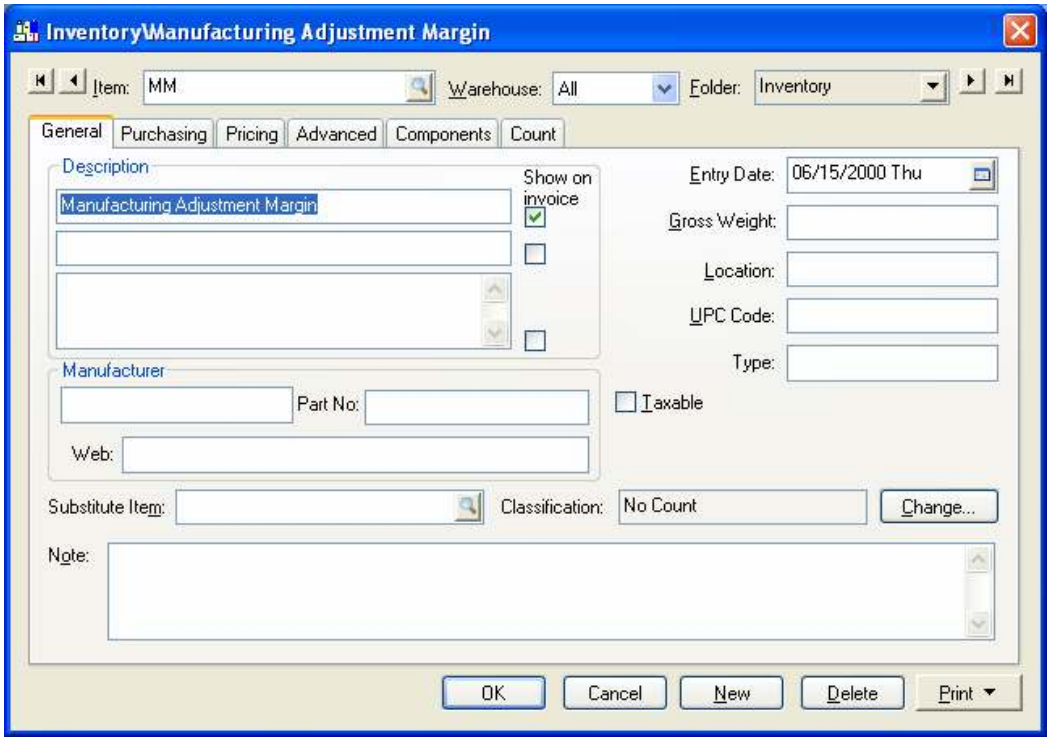
2. To maintain a consistence value of finished goods. The commissions calculated on the profit of individuals sales are consistent if the cost of the finished goods is fixed. Invoice gross profit reports will be easier to analyze if the cost of products do not fluctuate dramatically. The user may base the fixed value on the cost of the same product from a vendor or distributor.

The following whole goods item (Dirt Shovel) contains a manufacturing adjustment component (MM) to create a fixed cost of $21 as shown at the bottom of the following dialog:



Complete the following steps to configure a whole goods item with a fixed cost:

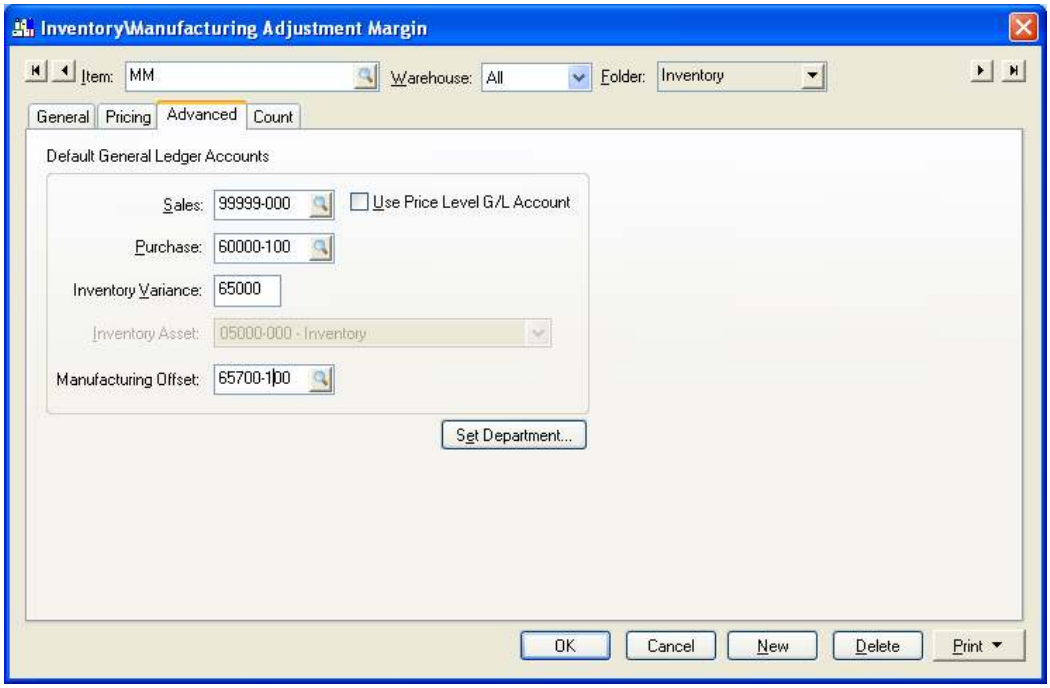
1. The first step is to create an inventory item. Complete the following steps to create an inventory adjustment item:



   a. Create an item with a basic description and appropriate Item code. Review the Inventory >Inventory Items> Entering New Inventory Items for more details on creating new Inventory items.

b. Classify the adjustment item as **No Count** or **Service**.

c. Set the following general ledger codes within the advanced tab of the adjustment item:

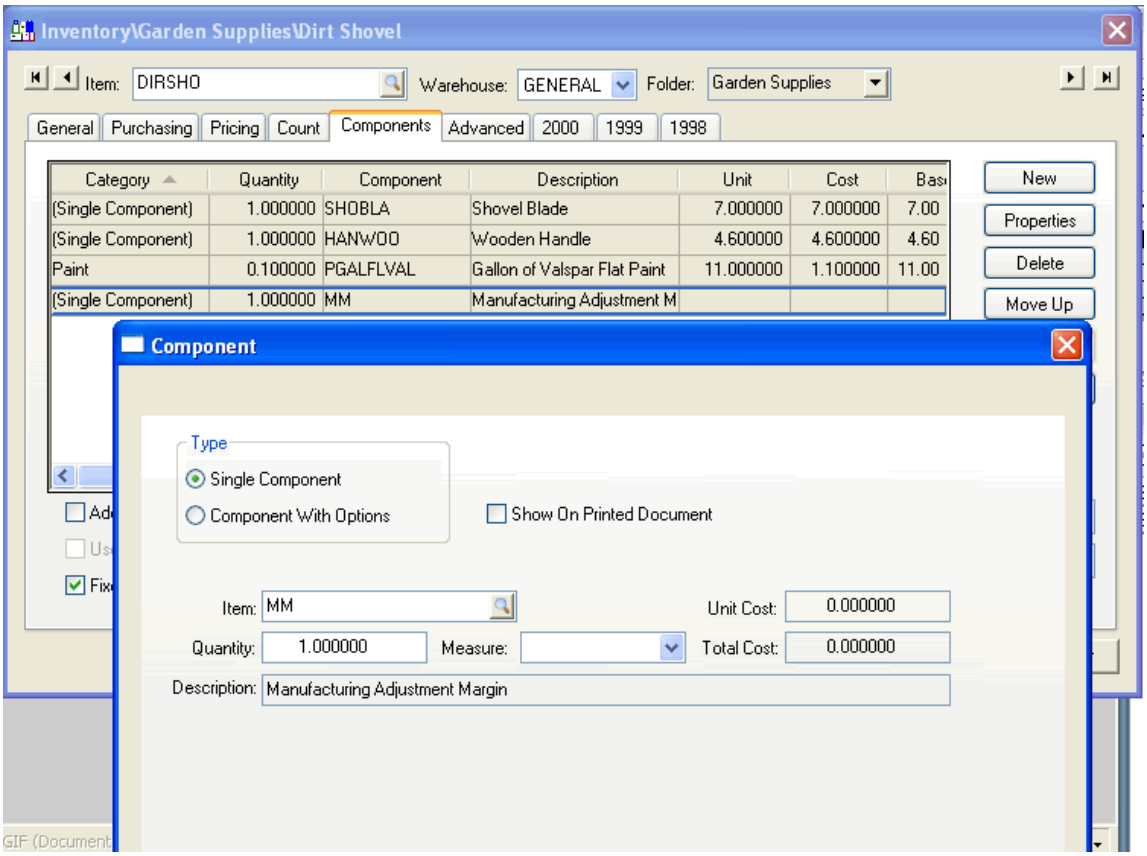


d. The **Sales** general ledger account can be ignored if this item is not sold.

e. Set the **Purchase** and **Inventory** G/L accounts. The inventory debit transaction created for the adjustment item consists of the **Inventory Variance** general ledger code and the last 3 digits of the **Purchase** G/L code. Review the Inventory > Tracking Inventory Counts > Inventory Variance section of the main EBMS manual for more details regarding the inventory variance account.

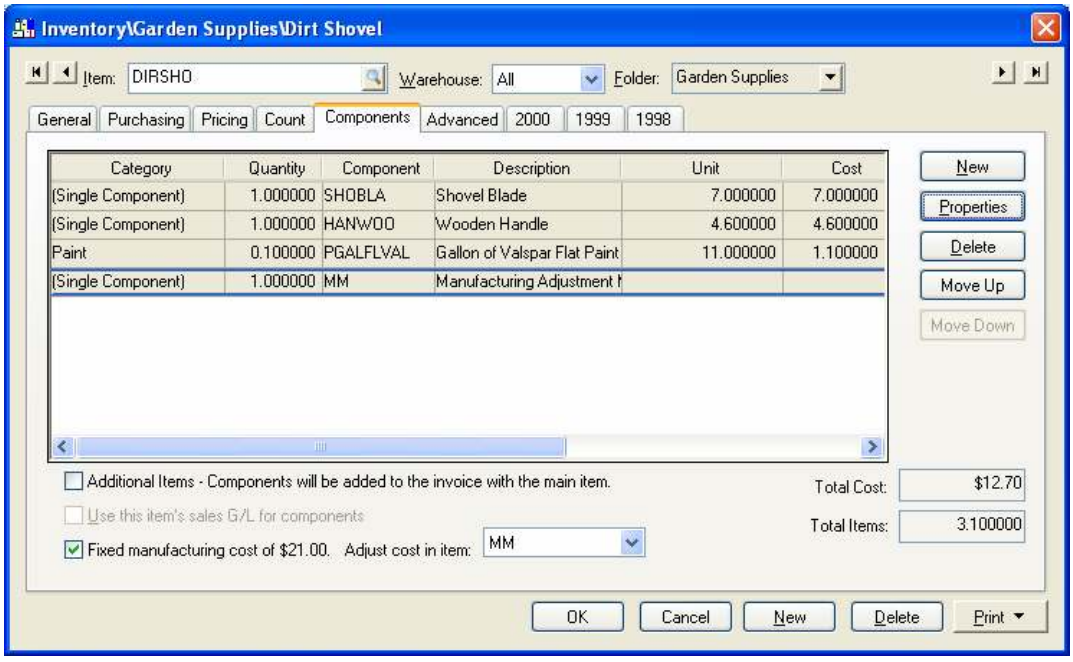
f. Enter the **Manufacturing Offset** general ledger account. Credit transactions will be created to offset the additional inventory value created when the manufacturing batch is processed. Inventory Value of Finished Goods = Cost of Raw Materials (item's consumed) + manufacturing offset. This general ledger account will be used only for the purpose of recording credit transactions for the manufacturing profit center if a manufacturing profit center is created (situation #1 discussed above). Set this account to the standard **Inventory Variance** account if no profit center is being used (situation #2).

g. Insert this new adjustment inventory item into the component list of the finished goods that contains the fixed costs.



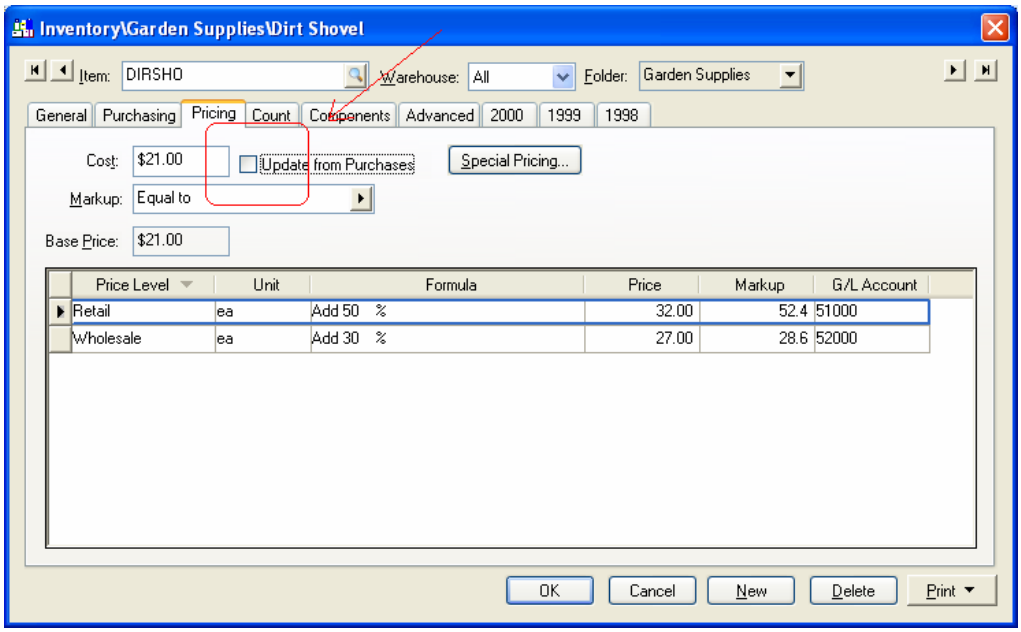
Review the Inventory > Inventory Component section of the main manual for detailed instructions on adding components to an inventory item.

h. Enable the **Fixed manufacturing cost of $xxx.xx** option located below the component list.



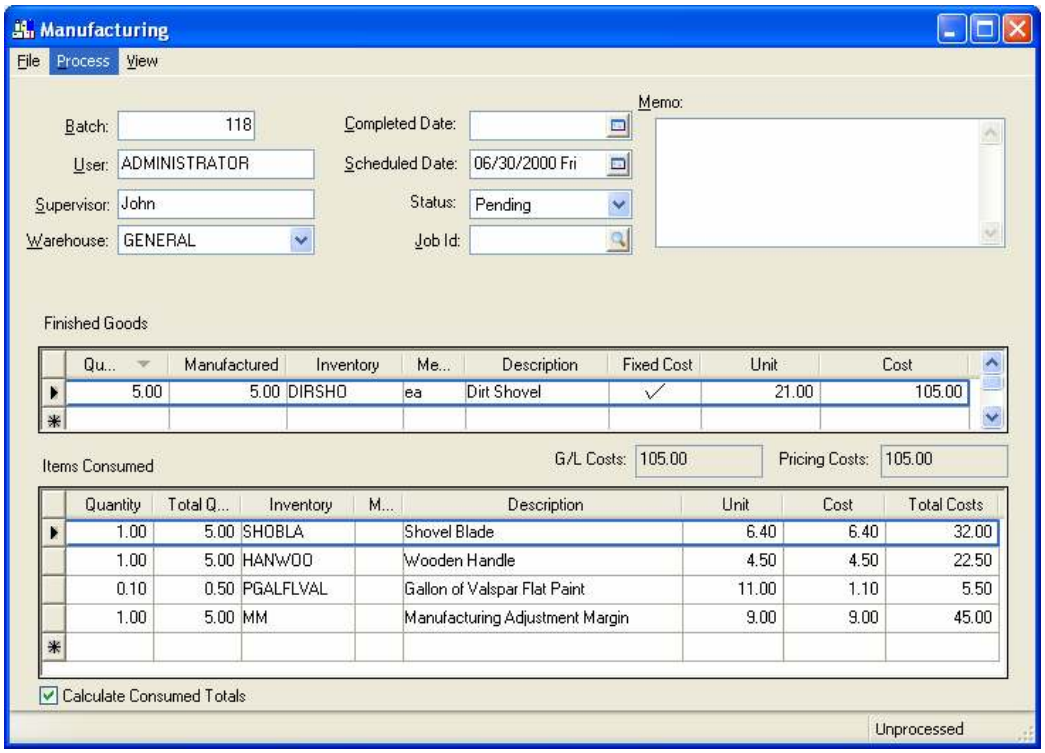
i. Set the **Adjust cost in item** option to the manufacturing adjustment item by clicking on the down arrow to selecting the appropriate inventory item. Only the inventory items that are not classified as **Track Count** will show on the drop down list.

j. Disable the **Update from Purchases** option if the fixed cost should never change. This option is found in the **Pricing** tab of the finished goods item.



The **Fixed manufacturing cost of $xxx.xx** on the **Component** tab is copied from the **Cost** field within the **Pricing** tab. This value is updated when this item is purchased from another vendor if the **Update from Purchases** option is enabled. Click **OK** to save changes.

k. Create a manufacturing batch as shown below:

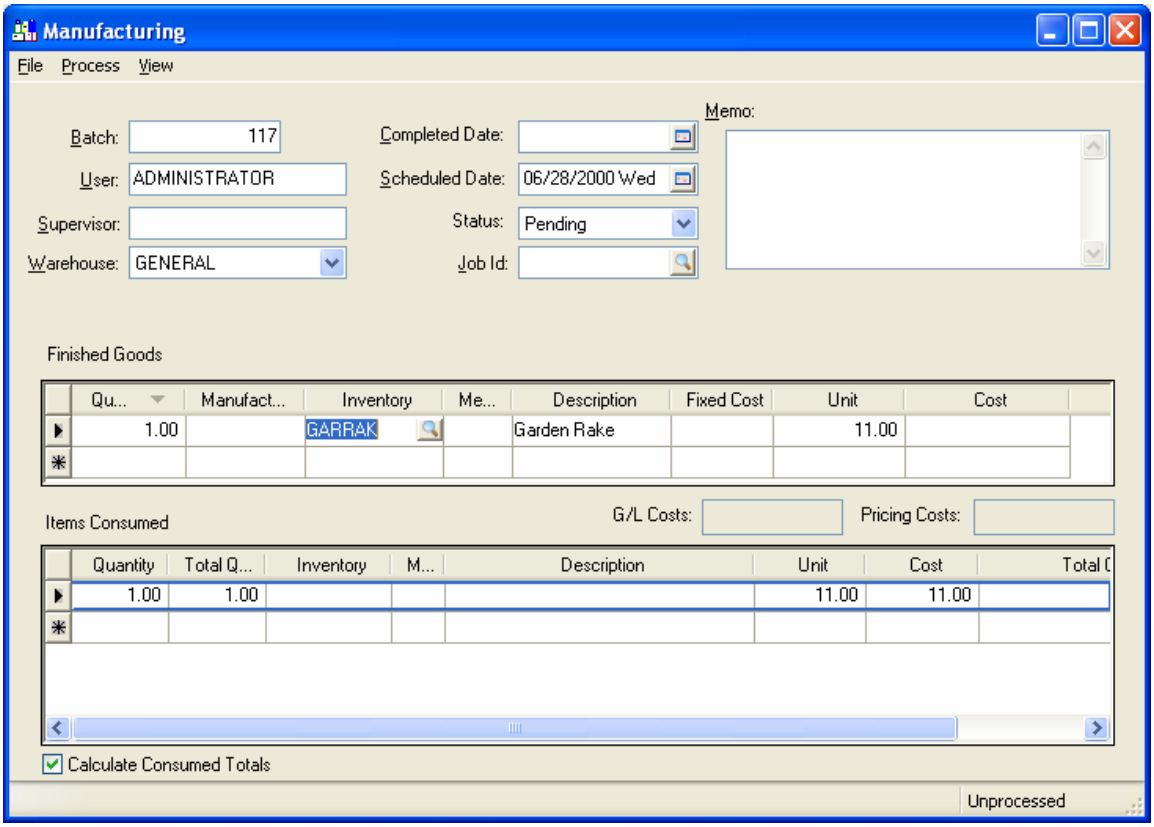


The system enables the **Fixed Cost** option on the **Finished Goods** line of the batch. Notice that the system applied a **Unit** cost of $9.00 to the manufacturing adjustment item on the last line of the **Items Consumed** list. Since the unit cost of the dirt shovel is set at $21.00, the difference of the total of the **Items Consumed** ($6.40 + $4.50 + $11.00) is $9.00. If the unit cost of the shovel blade increases the manufacturing adjustment item decreases to maintain a fixed cost of $21.00. There may only be one adjustment item within a manufacturing batch.

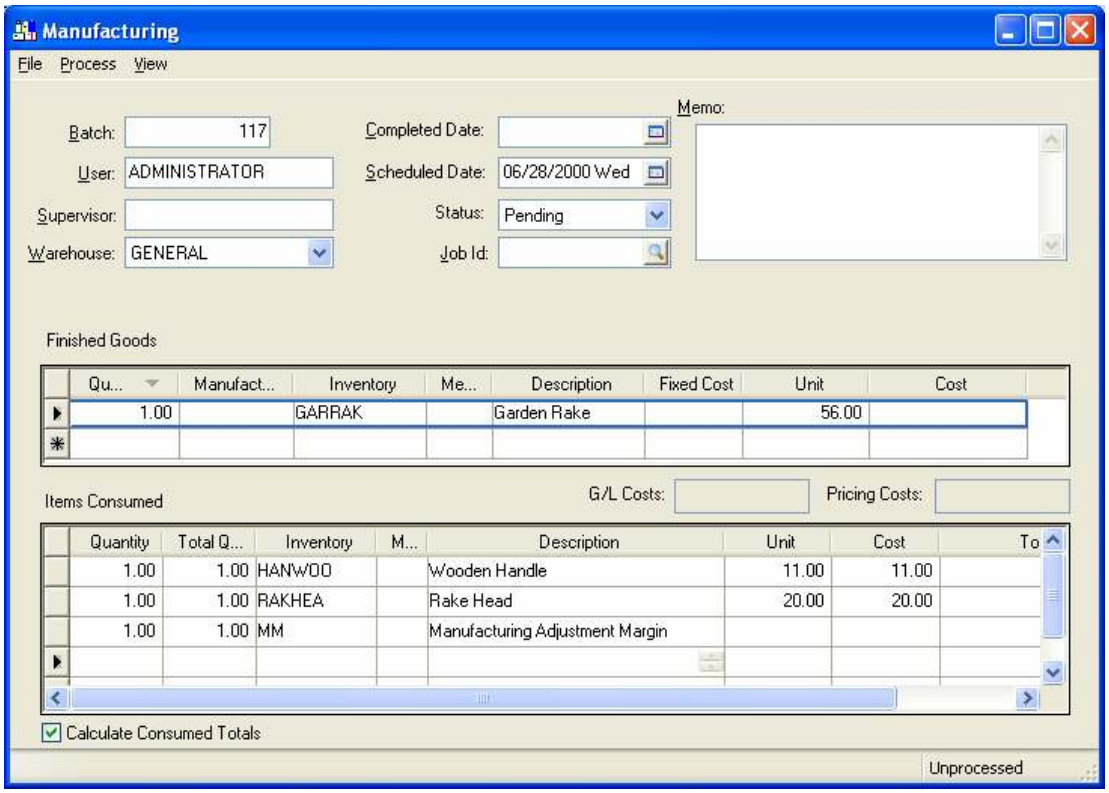
Review the Processing a Batch for details on processing the batch.

Creating fixed Cost Finished Goods without inventory components

A **Finished Goods** item with a fixed cost can be created without using inventory components. Enter an item that is being manufactured and is classified as "Track Count" into the **Finished Goods** list. If the item does not have components a single line will appear in the **Items Consumed** list as shown below:

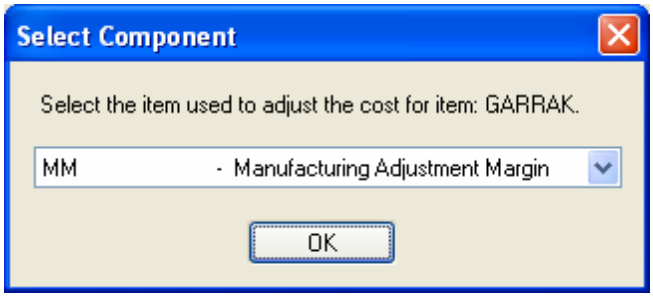


1. Replace the existing line in the **Items Consumed** list with the raw materials or parts used to manufacture the **Finished Goods**. You must enter a minimum of one "no count" item into the **Items Consumed** list before you enable the **Fixed Cost** option.



2. Enable the **Fixed Cost** option on the **Finished Goods** line by clicking on the **Fixed Cost** column field. The following message will appear if there is a single item in the **Items Consumed** list that is classified as No Count:

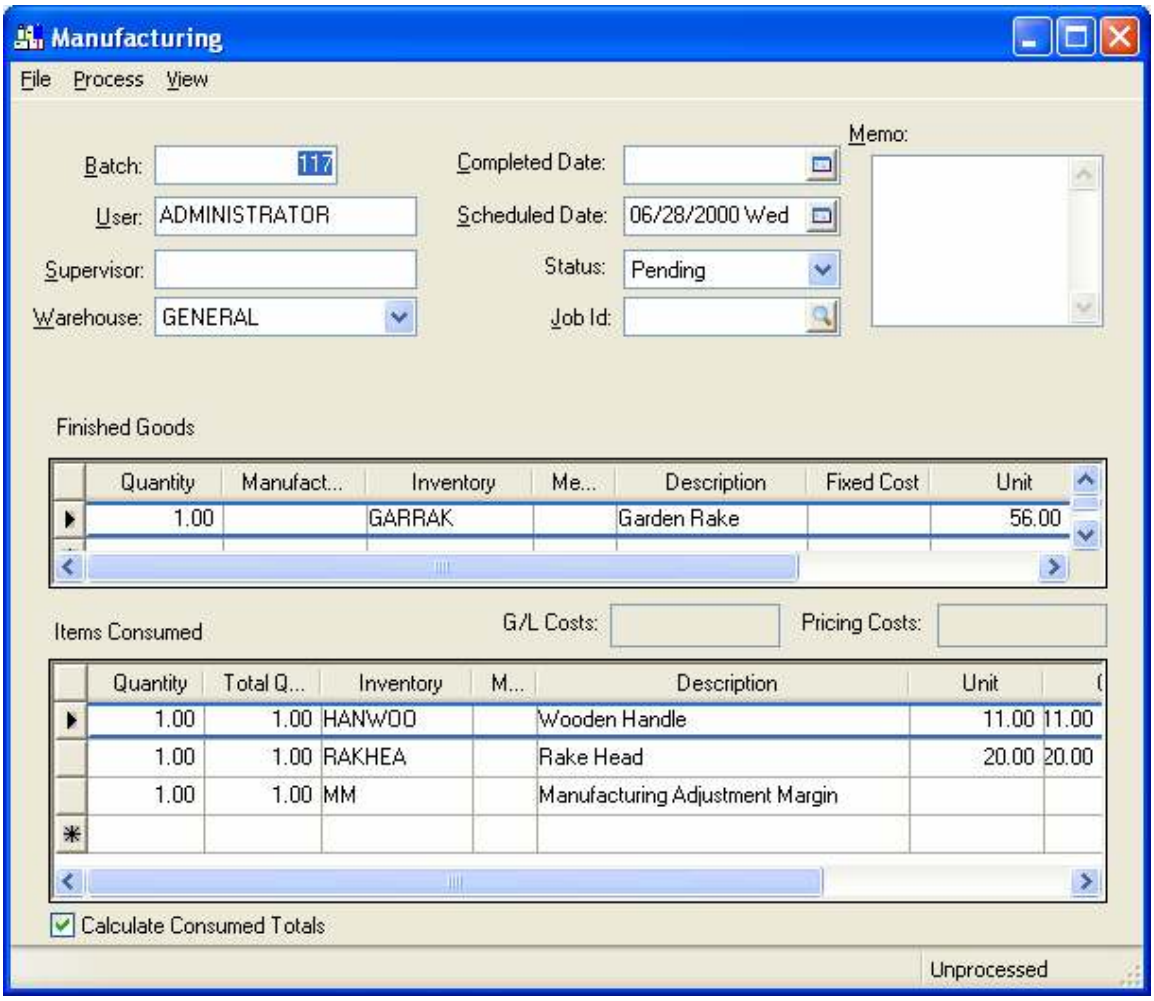
3. Click on the **OK** button to continue. The following selection dialog will appear instead of the previous message if there are multiple "no count" items within the **Items Consumed** list:



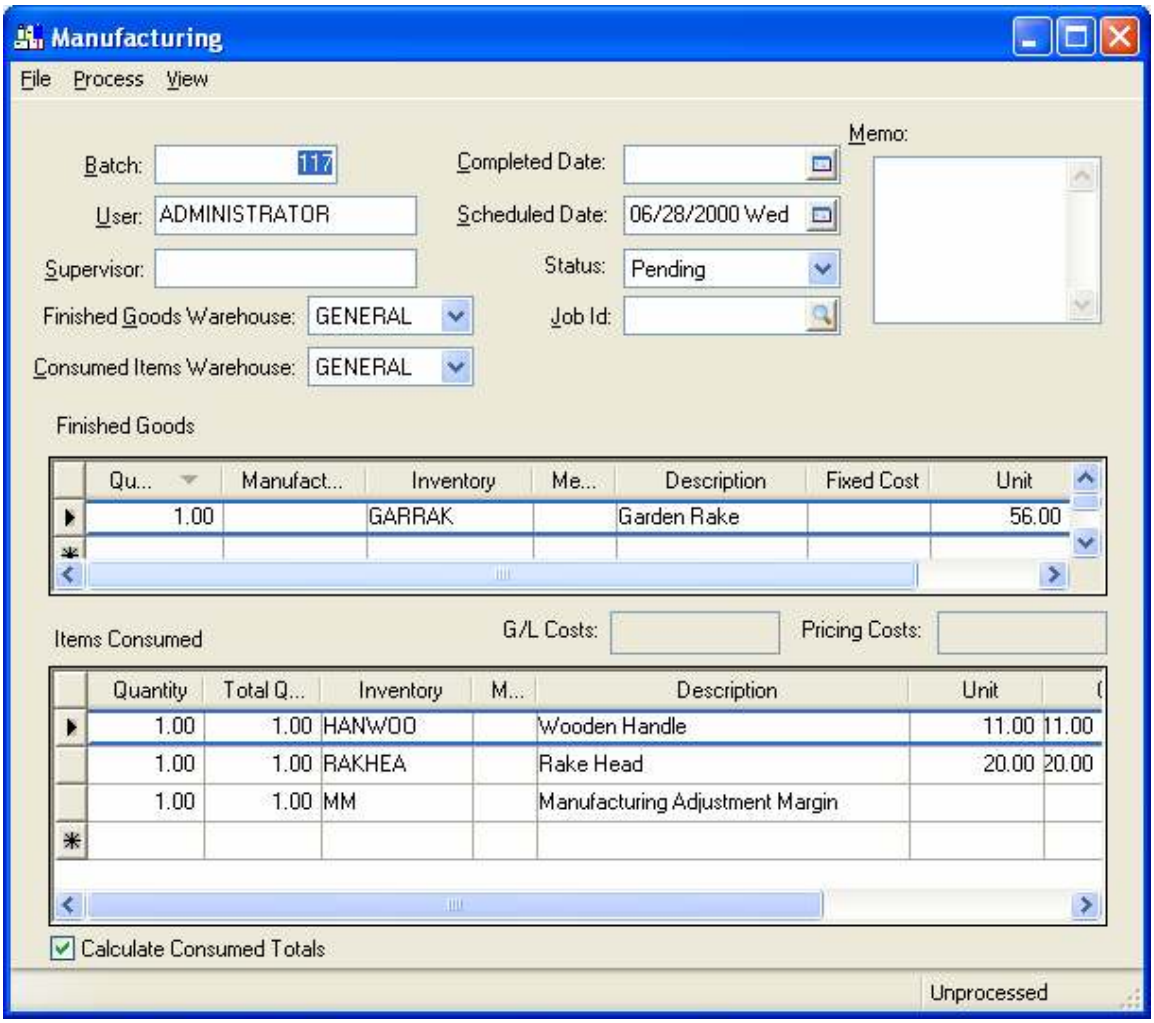
4. Select the item that becomes the variable cost adjustment from one of the multiple "No Count" options by clicking on the drop down option. Click **OK** to continue. Note that only one "No Count" item can be designated as the variable cost adjustment item.

Multiple Warehouses

The **Warehouse** settings on the manufacturing window shown below will only appear if the optional EBMS Multiple Warehouse module option is installed:

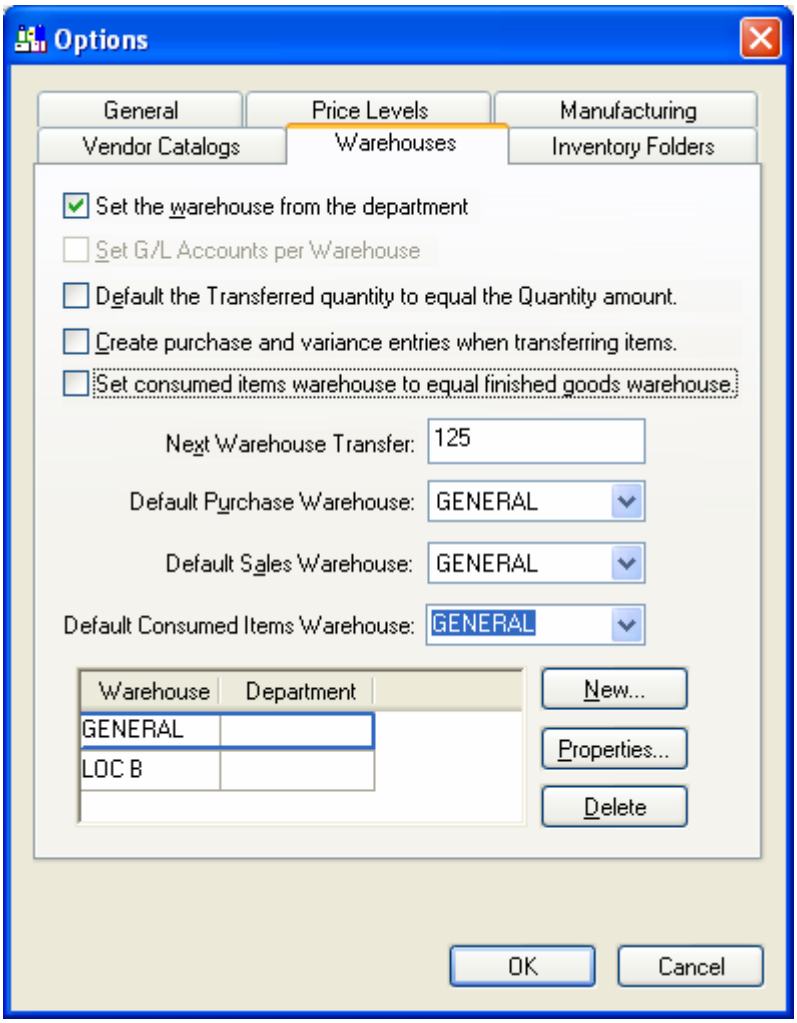


The **Warehouse** setting will be replaced with the **Finished Goods Warehouse** and **Consumed Items Warehouse** settings if the **Set consumed items warehouse to equal finished goods warehouse** option is enabled.



The **Finished Goods Warehouse** setting identifies the destination warehouse of the **Finished Goods**. The **Consumed Items Warehouse** setting identifies the warehouse location that contains the items to be consumed.

Go to the **Inventory > Options > Warehouses** tab to disable the **Set consumed items warehouse to equal finished goods warehouse** option setting as shown below:



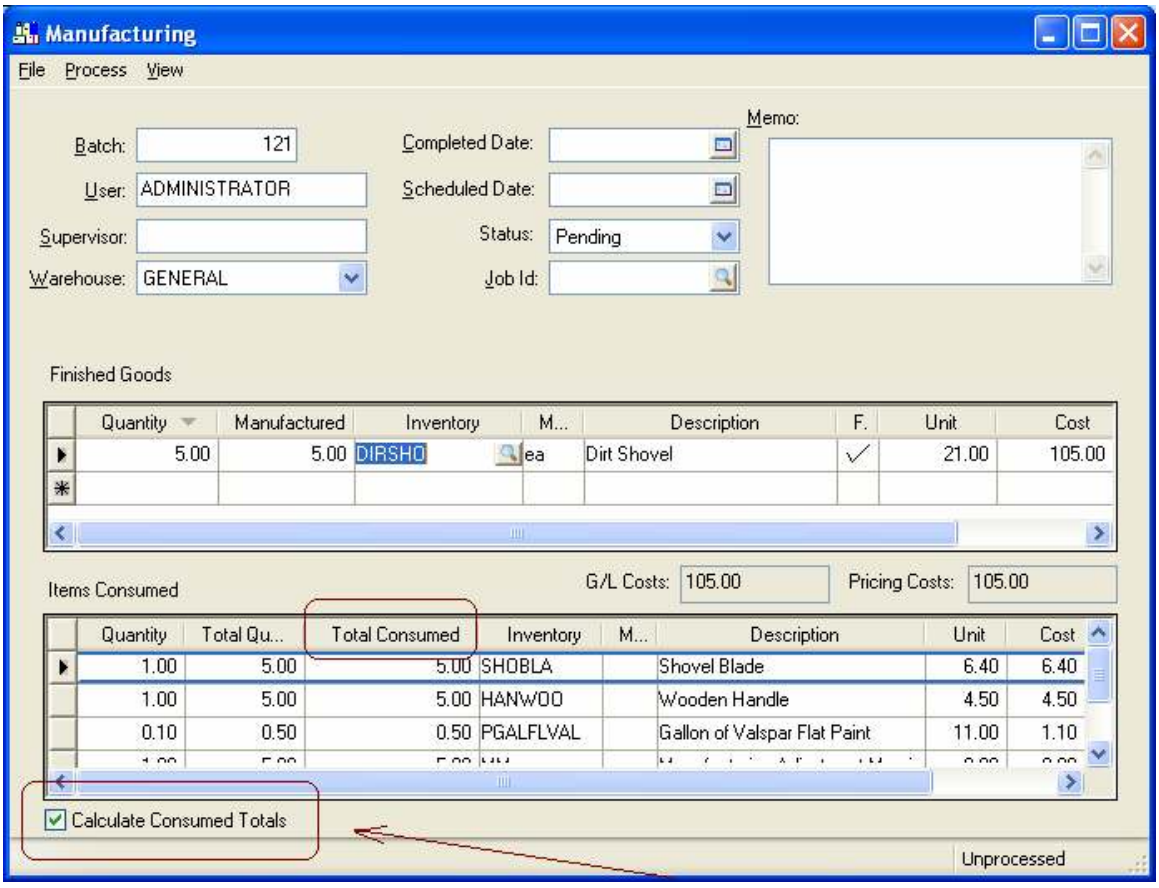
The **Default Consumed Items Warehouse** appears when the **Set consumed items warehouse to equal finished goods warehouse** option is disabled. The **Default Consumed Items Warehouse** setting is copied to the **Consumed Items Warehouse** setting within the manufacturing batch. Keep this setting blank if the raw materials (consumed items) are not located in a common warehouse.

Review the Multiple Warehouse documentation for more details on multiple warehouses including the other options shown on the **Warehouses** option tab.

Processing a Batch

Manually Calculating Items Consumed

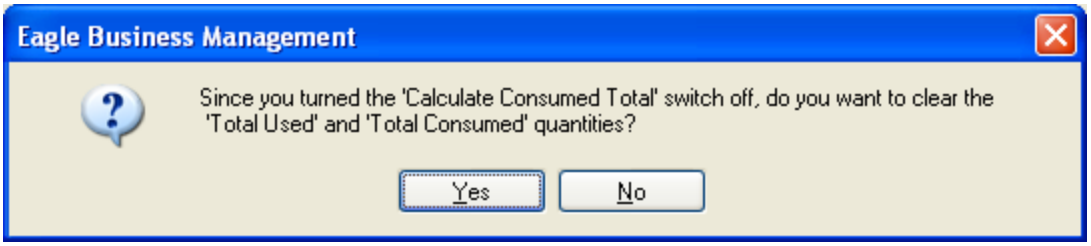
A **Calculate Consumed Totals** option is located at the bottom of the manufacturing window as shown below:



This option is defaulted ON. When this option is enabled, the **Items Consumed** list is created from the components within a **Finished Good**'s component tab to simplify the data entry process. The component approach works well if the finished goods item contains a consistent list and quantity of components. The **Calculate Consumed Totals** option should be disabled if the user prefers to manually list the items consumed to create a batch of finished goods.

Verify that the **Consumed Totals** column in the **Items Consumed** list is visible as shown in the example above. The column will equal the **Manufactured** value in the **Finished Goods** list times the **Quantity** in the **Items Consumed** list.

Click on the **Calculate Consumed Totals** to disable the option and the following message will appear:



Click on the **Yes** button to clear the **Total Consumed** column. The user should manually enter the individual quantities consumed total. This column will not longer be calculated based on any other value within the window. The user may wish to scan all the **Items Consumed** using a bar code scanner to insure accurate inventory.

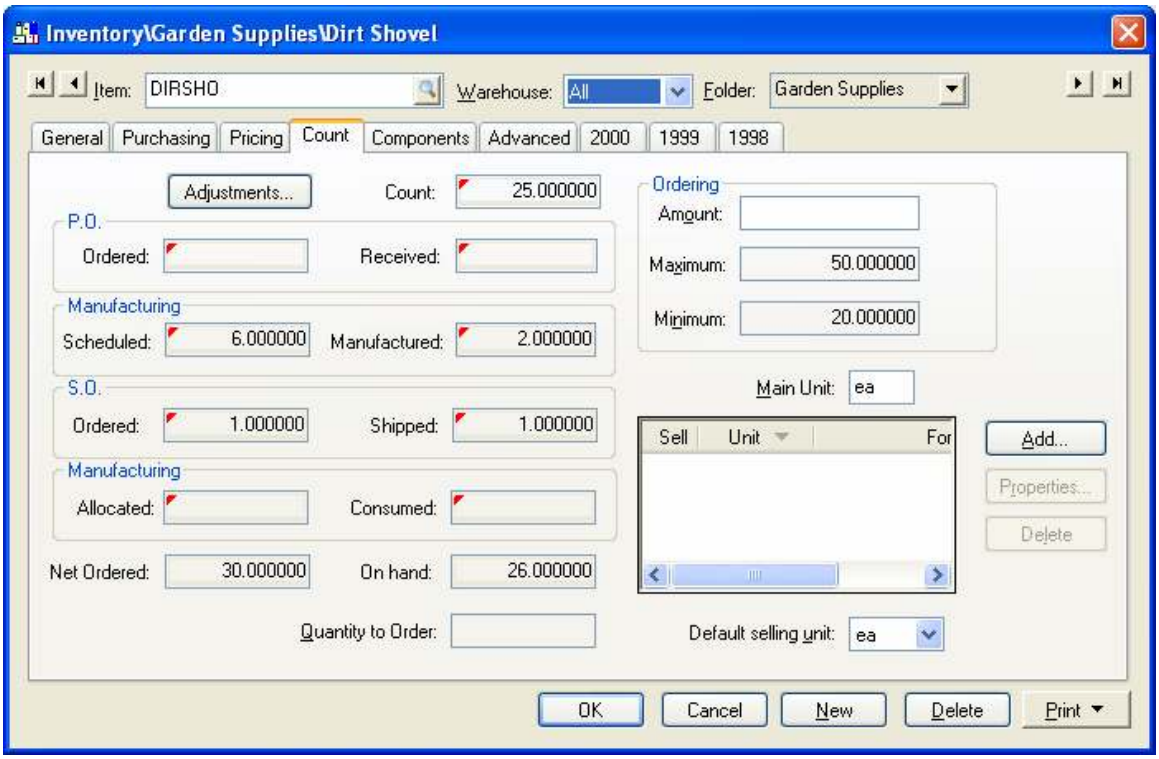
The user may want to adjust the **Total Consumed** values rather than manually entering the quantities. For example, if an extra wooden handle was used (6 HANWOO instead of 5 as shown in the example above) the user will want to increase the **Total Consumed** by one handle. This adjustment may be necessary if a handle was damaged. The **Quantity** column cannot be incremented since this value identifies the number of handles per shovel. Complete the following steps to make this adjustment:

1. Enter the total number of **Finished Goods** in the **Manufactured** column.
2. Disable the **Calculate Consumed Totals** option
3. Click on the **No** button so the **Total Consumed** totals are not cleared
4. Adjust the quantities consumed.

Review the Processing a Batch section for details on processing the batch.

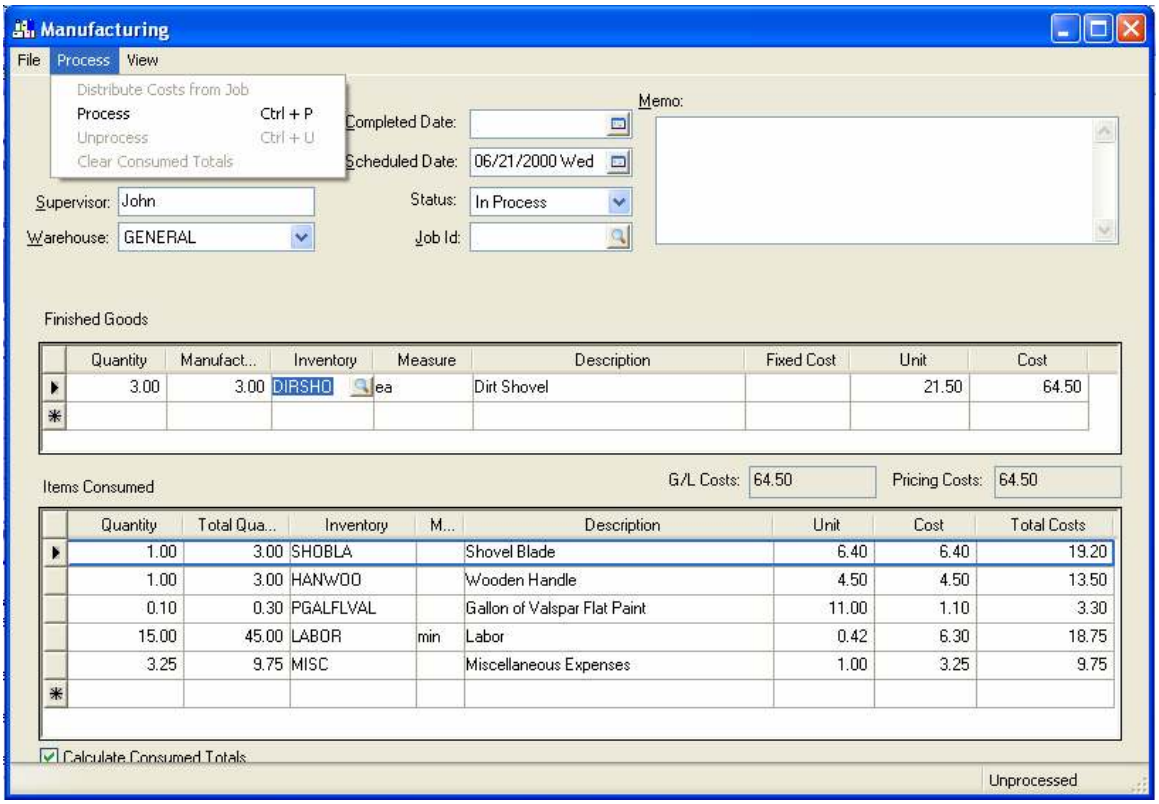
Processing a Batch

Inventory general ledger transactions are not created until a batch is processed. The only inventory counts affected by batch entry before the process are the Manufacturing fields located in the **Inventory > Inventory Item > Count** tab as seen below:



These manufacturing fields are affected in a similar manner as the S.O. and P.O. values contained in the Count tab. A batch can be changed or deleted as long as the batch is not processed.

A batch is processed within the manufacturing window as shown below:



A batch should not be processed until the manufacturing process is completed. Select **Process > Process** from the manufacturing window menu to process a batch. An alternate way of processing is by hitting the **CTL + P** keys on the keyboard.

The process step affects the following information.

- The **Completed Date** will be set to today's date if the entry is blank.
- The **Status** field within the manufacturing window will be set to **Completed**.
- The inventory **Count** for all **Finished Goods** will be incremented and the manufacturing fields within the **Inventory > Inventory item > Count** tab will be decreased.
- The inventory **Count** for all **Items Consumed** are decreased and the manufacturing fields within the **Inventory > Inventory item > Count** tab will be decreased.
- The following general ledger transactions are created if the **Inventory > Options > General** tab **> Inventory Method** option is set to **Perpetual**.

  General Ledger Account of Finished Good items **Debit / Credit**

  Inventory asset account of each **Finished Good** that is being manufactured - Debit

  Inventory variance account within **Finished Good** item + department code

  from the Purchase G/L code of finished good item. Credit

  General Ledger Account of Items Consumed **Debit / Credit**

The following transactions are created for all track count inventory items:

Inventory asset G/L account - Credit

Inventory Variance account + department code from the purchase G/L

of the finished good item Debit

The following transactions are created for no count and service items:

Inventory Manufacturing Offset - Credit

Inventory Variance account + the department code from the purchase

G/L of the finished good item Debit

Review the Adding Miscellaneous Costs and Labor Costs to a Batch section for more details on transactions and details regarding miscellaneous costs.

No Transactions are created for lines without an Inventory ID.

All General Ledger Accounts are found in the **Advanced** tab of the Inventory Item.

The general ledger transactions must be posted from the inventory module before the general ledger account balances or the inventory history year pages are updated.

Note: The total costs of the items consumed will normally equal the total value of the finished goods. Rounding costs can cause the total costs of the consumed items to differ from the total cost of the finished goods by a few cents. This rounding issue may cause the inventory value to fluctuate very slightly on rare occasions.

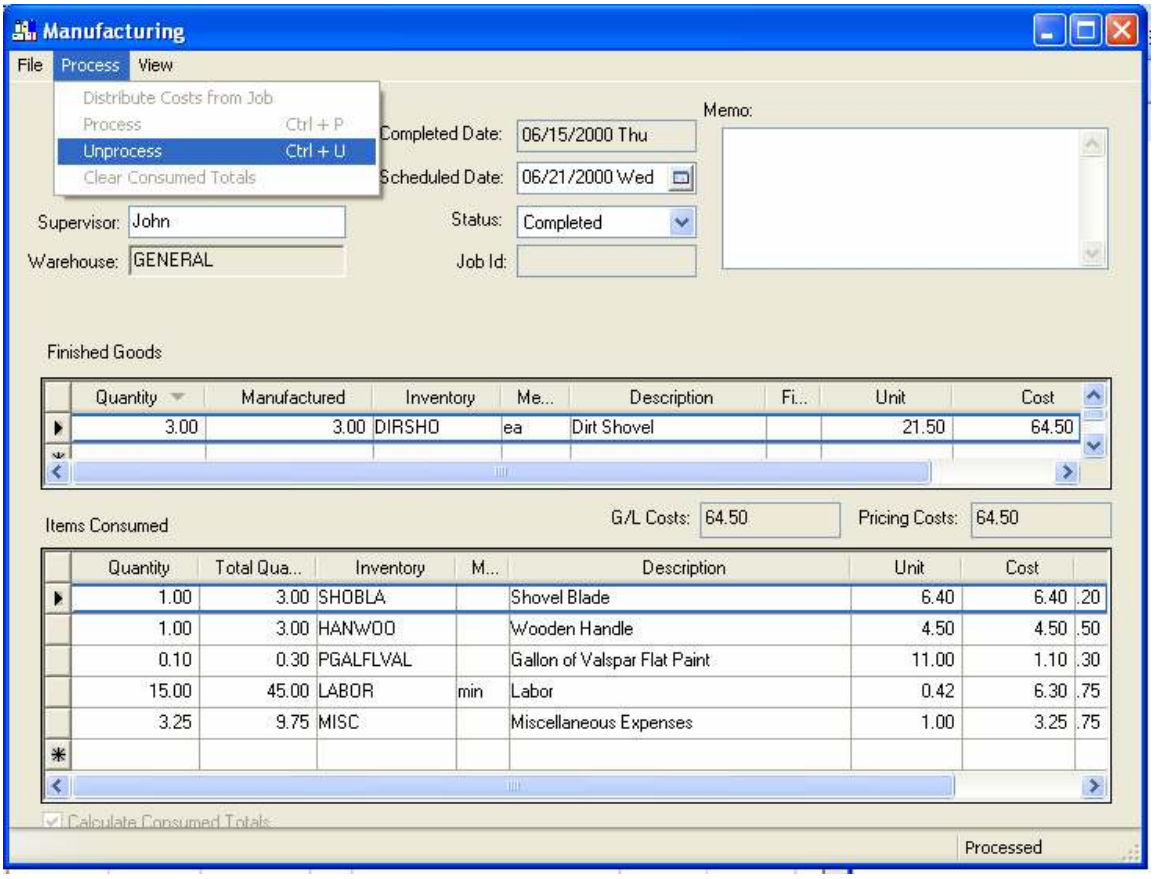
Unprocessing a Batch

If a manufacturing batch is voided or unprocessed, negative transactions are posted to the general ledger to void the transactions posted when the batch was processed. The user can change the batch and reprocess or can delete the batch after the batch is unprocessed.

A batch may need to be voided for the following reasons:

- Invoice information was entered incorrectly and data needs to be changed such as a wrong quantity, cost, of inventory code. A batch should not be unprocessed after items have been sold.
- The batch was accidentally processed.
- A processed batch cannot be deleted directly but first be unprocessed and then deleted.

To un-process a batch, open the batch to void. Review the Viewing or Changing a Batch section for further details on viewing a batch.



Select the manufacturing menu option - **Process > Unprocess** or press Ctrl + `U' on the keyboard.

Note that you will not be able to unprocess a batch processed within a fiscal year or month that is closed. If it is not possible to unprocess the batch, enter a negative batch to offset the transactions created by the original batch process.

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