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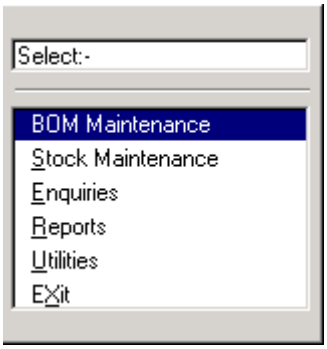
CONTENTS

Introduction to Bills of Materials

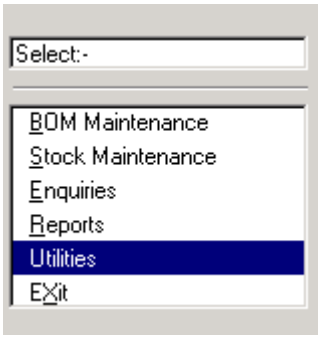


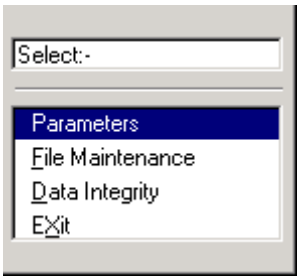
The Bill of Materials (BOM) or Product Structure module was developed by Economic Data Services (EDS) using the Line 100 Retrieve 4GL language and is completely compatible with other Line 100 modules. The module provides all the functions to maintain details of Bills of Materials (BOMs) i.e. the components and sub-assemblies that comprise a complete assembly. The BOM is multi-level, allowing an infinite number of levels. Each assembly and component must already exist on the Line 100 stock control file. The BOM module therefore requires the Line 100 stock control module to operate. The BOM module is integrated with other Line 100 modules through the Sovman Works Order module.

The BOM has the following features: -

- A verification function (optional) ensures that BOMs may not be used until formally verified by an engineer.
- Effectivity dates control engineering changes for both assemblies and components
- Unlimited Comments/Narrative for assemblies & components for specifications or manufacturing instructions
- Mass component changes or deletions
- Duplicate a Bill of Material
- Free text or non stock items
- Factoring (i.e. differing units) based on the Line 100 stock control function.
- Drawing Register with revisions
- Yield expressed as a percentage loss
- Alternative components
- Variable items may be specified within a BOM. These may be used where the quantity-per is not known until the time of order or to handle products with features either present or not present.
- Comprehensive enquiry and reporting functions.
- Indented BOM & Where Used
- Full BOM costing, including material, labour, machine, set up and overhead costs integrated with Line 100 stock control & nominal ledger. Material may be costed at standard cost, average price or latest purchase price. Labour may be calculated as a labour rate, specified at product group level, times a labour time or analysed by operations and work centres using the Sovman Capacity Planning module. Overhead may be calculated as a percentage of labour.
- Stock items may be created 'on the fly'. The BOM uses multi-depots and locations through the Sovman works order and materials planning modules.
- Product routings may be created using the BOM text feature or more formally by defining works centres and operations in the Sovman Capacity Planning module.

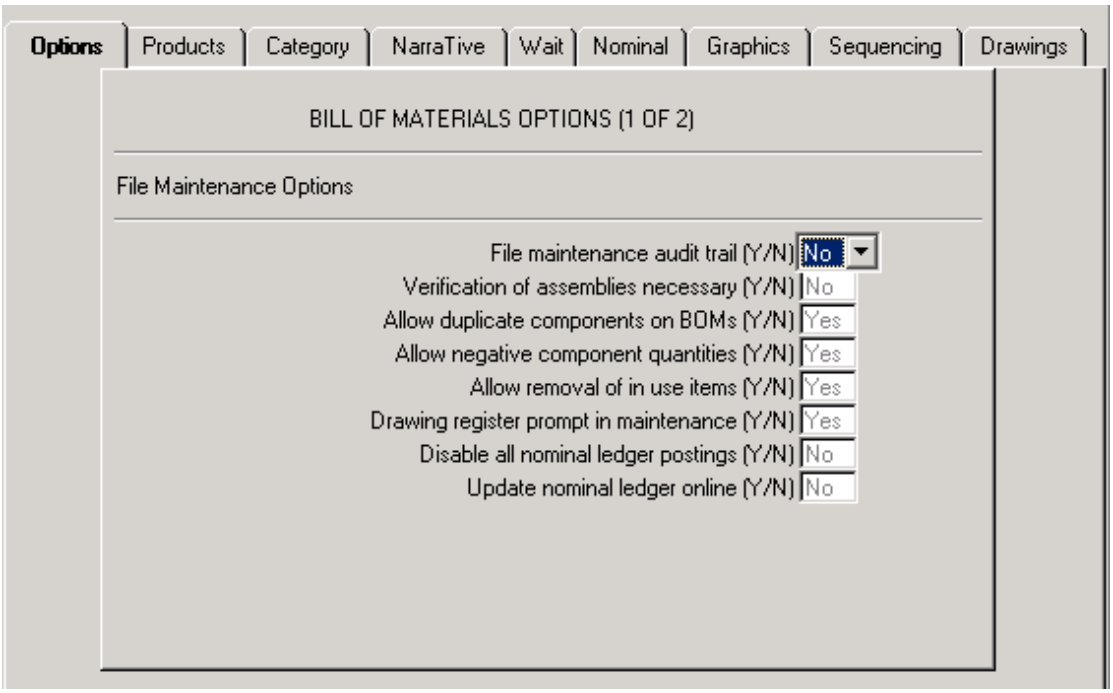
Parameters

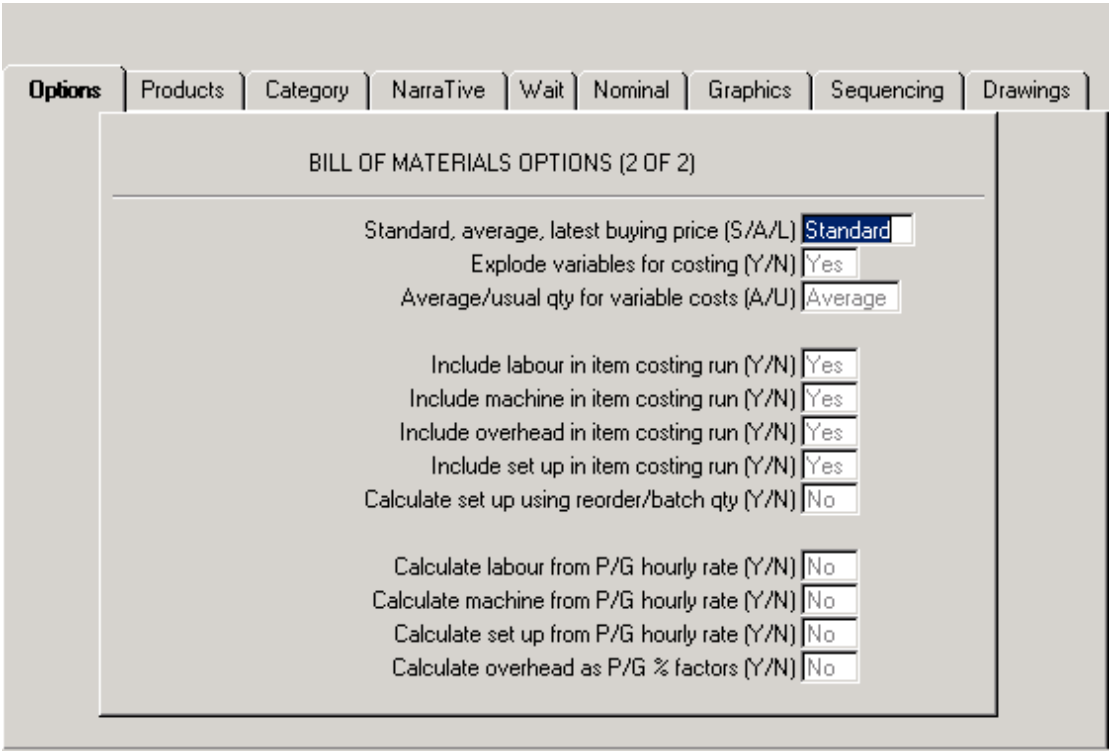




Use this program to set up the options and defaults of your BOM module before you begin creating BOM records. As with all Line 100 modules, the parameters are an important first step, which must be taken before any further processing is attempted.

Options





When you select the Parameters option, the screen displays a menu with Options as the first choice.

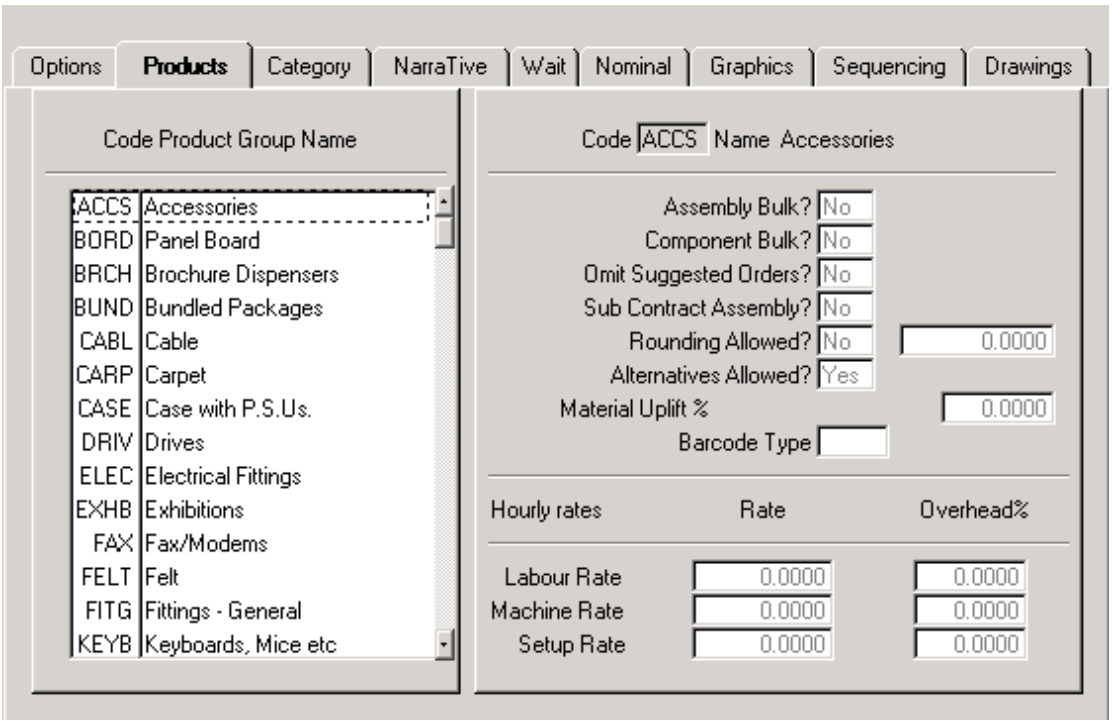
The following options simply require a single response: -

File maintenance audit trail	Set to Y - an audit trail will be printed when creating, amending or removing BOM details. Set to N - no audit trail is produced.
Verification of assemblies necessary	Set to Y - BOMs must be formally verified before use. Set to N - No verification is required.
Allow duplicate components on BOMs	A component may be duplicated within a BOM so that the BOM reflects the product build sequence. Set to Y - duplicates are allowed Set to N - no duplicates are allowed
Allow negative component quantities	Set to Yes - components may be added to a BOM structure with a negative quantity per. This has the opposite effect to a conventional component in that stock will be credited not debited using the works order module. Set to No - no negative components are allowed.
Allow removal of in use items	This option determines the rules that apply when a BOM assembly, or a component within a BOM is removed or deleted. A BOM is considered to be 'in use' if there are works orders outstanding for that item. Set to Y - a BOM can be removed at any time through the File Maintenance function or the component can be deleted through the BOM Maintenance function. Sovman will display a warning if there are works orders within the system. Set to N - a BOM or component cannot be removed if there are outstanding works orders in the system.
Drawing register prompt in maintenance	When entering or amending BOMs through the BOM Maintenance function, you will be prompted to modify drawing details if this parameter is set to Yes. If set to No, you cannot modify drawings.
Disable all nominal ledger postings	The BOM module makes postings to the Line 100 nominal ledger whenever the cost of the product changes using the BOM costing function for products within product groups that are based on standard cost and the product has stock. These postings may be ignored using this parameter. Set to Yes - no nominal postings are made. Set to No - nominal postings are created.
Update nominal ledger online	Set to Yes - the nominal ledger is updated immediately. Set to No - the nominal ledger postings are processed in the normal Line 100 way using the end of day procedure.

Standard, Average, Latest buying price (S/A/L)	This option determines which price from the Line 100 stock control file is used when costing a BOM from the component make-up. Set to S - The standard cost is used. Set to A - The average buying price is used. Set to L - the latest price is used.
Explode variables for costing	BOMs may contain components with variable quantities. The quantity must be entered when the works order is raised or the sales order released. Normally these variable components are ignored for BOM costing. If this parameter is set to Y, the variable components will be exploded down in the costing run using the quantity on the BOM as a default/average quantity.
Average/usual qty for variable costs	If you are using variable quantity items within the BOM, the BOM may still be costed. There are two quantity-per fields within the component details of the BOM. The usual quantity-per would normally be used for costing the variable items within the BOM. The average quantity-per is calculated from past usage of previous BOMs, and may be used as an alternative when costing a BOM.
Include labour in item costing run	If this option is set to Y, the labour element is included in the cost of a BOM. If set to N, the labour is ignored.
Include machine in item costing run	If this option is set to Y, the machine element is included in the cost of a BOM. If set to N, the machine is ignored.
Include overhead in item costing run	If this option is set to Y, the overhead element is included in the cost of a BOM. If set to N, the overhead is ignored.
Include set up in item costing run	If this option is set to Y, the set up element is included in the cost of a BOM. If set to N, the set up is ignored.
Calculate set-up using reorder/batch qty	When an item is costed and the set-up is included in the cost, the usual batch quantity (stored within the BOM header) may be taken into account in calculating the total cost. Thus if the usual batch quantity is 100, the set up cost will be divided by 100 to give a set up cost for each. The following parameters determine how labour, machine, set-up and overhead costs are calculated. If the Sovman Capacity Planning module is present, these costs are calculated from the work centre rates and product routing. If there are no routings defined or the Capacity Planning module is not present, the labour costs can be calculated from a time and the hourly rate. The time is defined within the BOM Assembly header and the hourly rates are defined at product group level.
Calculate labour from P/G hourly rate	If this parameter is set to Y, the labour cost for an assembly is calculated by multiplying the labour time by the hourly labour rate for the product group, when a BOM Costing run is performed.
Calculate machine from P/G hourly rate	If this parameter is set to Y, the machine cost for an assembly is calculated by multiplying the machine time by the hourly machine rate for the product group, when a BOM Costing run is performed.
Calculate set up from P/G hourly rate	If this parameter is set to Y, the set up cost for an assembly is calculated by multiplying the set-up time by the hourly set up rate for the product group, when a BOM Costing run is performed. If the parameter to calculate set-up using the reorder/batch quantity is set to Yes, this cost is divided by the reorder quantity to give a set-up cost per each BOM unit.

Calculate overhead as P/G % factors	If this parameter is set to Y, the assembly overhead cost is calculated as a % factor of the labour machine, and set-up cost based on the product group factor when a BOM Costing run is performed.

Product Groups



When this parameter is selected, the product groups from the Line 100 stock control module are displayed. Each product group has a number of factors that may be set as defaults for all stock items within that product group. If a factor is changed, you are asked if you wish all items within this group to be amended to the new factor. If not, only new items created will pick up the default factors.

For each product group, the following factors may be set: -

Assembly Bulk

Assemblies may be treated as bulk items for stock control purposes. A bulk item will not have stock controlled through the Bill of Materials and Works Order modules i.e. stock will not be allocated, issued or received. Any stock transactions will be input manually through stock transactions within stock control.

Set to Yes - assemblies within this product group will default to bulk issue.

Set to No - assemblies within this product group will have stock controlled through the BOM and Works Orders.

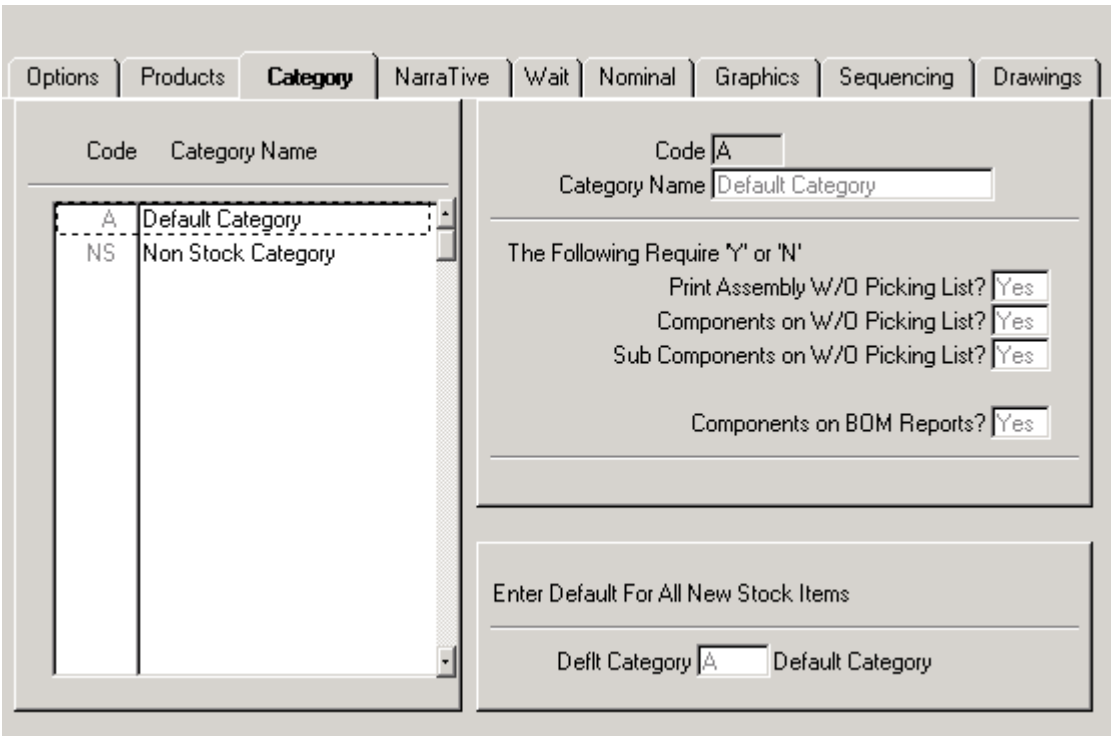
Component Bulk

Components within a BOM may be treated as bulk items for stock control purposes. A bulk item will not have stock controlled through the Bill of Materials and Works Order modules i.e. stock will not be allocated, issued or received. Any stock transactions will be input manually through stock transactions within stock control although Sovman will record the amounts that should have been used.

Component bulk should be used for free issue items such as screws. Alternatively items such as sheet metal may be handled as bulk as it is difficult to control units e.g. .25 of a sheet may be sufficient material but may be the wrong shape.

	Set to Yes - components within this product group will default to bulk issue. Set to No - components within this product group will have stock controlled through the BOM and Works Orders.
Omit Suggested Orders	The Sovman Materials Planning module will create suggested purchase orders for stock items. These may be converted directly into Line 100 purchase orders. This factor determines whether items within this product group are ignored for the suggested orders function. Set to Yes - items within this product group are ignored. Set to No - items within this product group are included.
Sub Contract Assemblies	A sub-contract assembly is one that is not manufactured on a works order but sent out to a sub-contractor. The assembly is maintained using the BOM module and sub-contract orders are raised through the Sovman Works Orders module. This factor specifies whether items within this product group are normally sub-contract items. Set to Yes - items within this product group will default to sub-contract. Set to No - items within this product group will not default to sub-contract.
Rounding Allowed	The Sovman BOM module will apply rounding to selected component quantities. This may be used for example for items such as packaging e.g. cartons, where the quantity would always be integer. If this parameter is set to Yes, the quantity to round up to can then be input e.g. boxes rounded to 1.
Alternatives Allowed	The Sovman BOM module will allow alternative items to be used if the original component is unavailable. This parameter will set the alternatives allowed parameter for all items within this product group.
Material Uplift %	You may specify a percentage uplift for a product group. This applies to the material cost of an item within the BOM module. Sovman will increase the material cost of the product by this percentage. This is used to calculate a wastage cost. It does not affect quantities of material used.
Barcode Type	Use the drop down menu to select the barcode type you require. You may choose from “Star” or “Zebra”.
Hourly Rates	If there are no formal product routings defined through the Sovman Capacity Planning module, labour, machine and set-up costs may be calculated for each product by specifying an hourly rate for a product group and inputting the corresponding labour, machine and set-up times for each assembly. The hourly rates may be updated here for each product group.
Overhead % Factor	In the same way, overhead may be calculated as a percentage of any labour, machine or set-up cost for each product group.

Category Groups



Category groups may be defined within the BOM module. A category group will determine how stock items are treated within the BOM and Works Order modules. The main purpose of categories is to identify low usage value items (i.e. category C items within a Pareto analysis) that you may wish to ignore on works order paperwork and BOM reports.

To create a category, simply select the next available group and press enter. You may now enter the category group code and details. To amend a category, select the category group and press enter. The category details may now be amended.

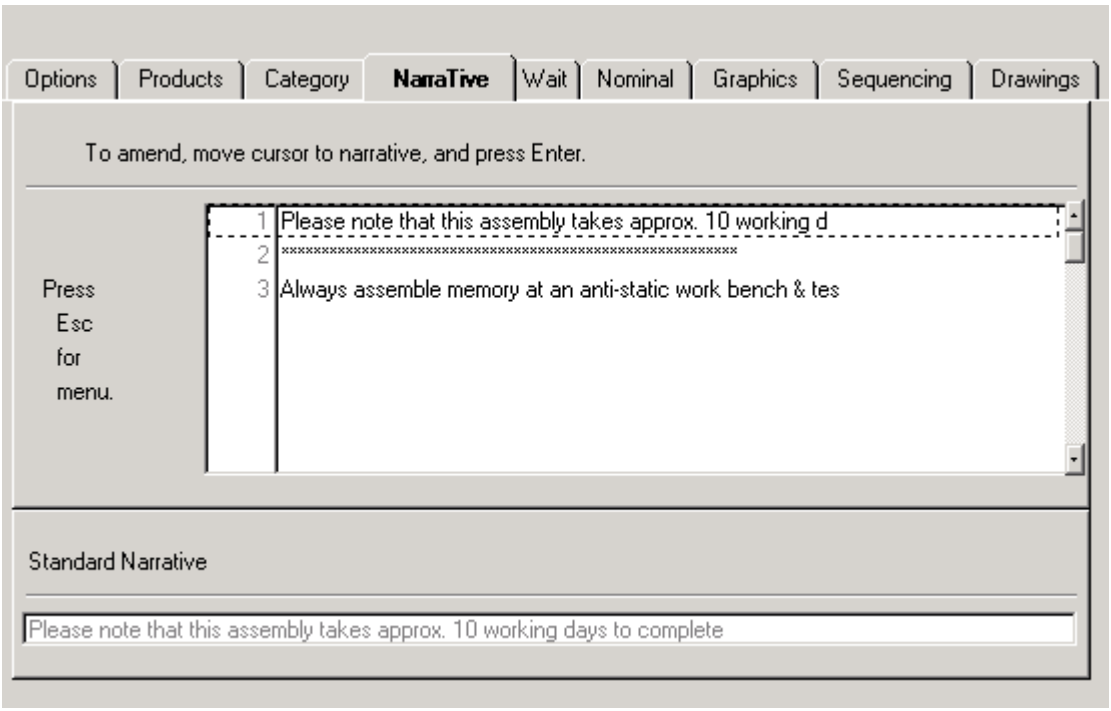
Each category group has the following data items: -

Category Name	An appropriate name for the category.
Print Assembly W/O Picking List	When a works order is created that generates lower level orders through the multi-level explosion, this parameter determines whether a picking list is printed for an assembly within this category group.
Components on W/O Picking List	This parameter determines whether stock items within this category are printed on the works order picking list.
Sub Components on W/O Picking List	This parameter determines whether stock items within this category that are sub-assemblies, are printed on the works order picking list.
Components on BOM Reports	This parameter determines whether stock items within this category are printed on any BOM reports.

When you exit from this function with the escape key, you are prompted to print the category groups, change the default or exit.

If you select Change Default, you may change the default category group for any stock items that are subsequently created.

Standard Narrative



When a BOM is created, narrative or text can be entered for either the assembly or component detail. This narrative can then be printed on the works order paperwork if required.

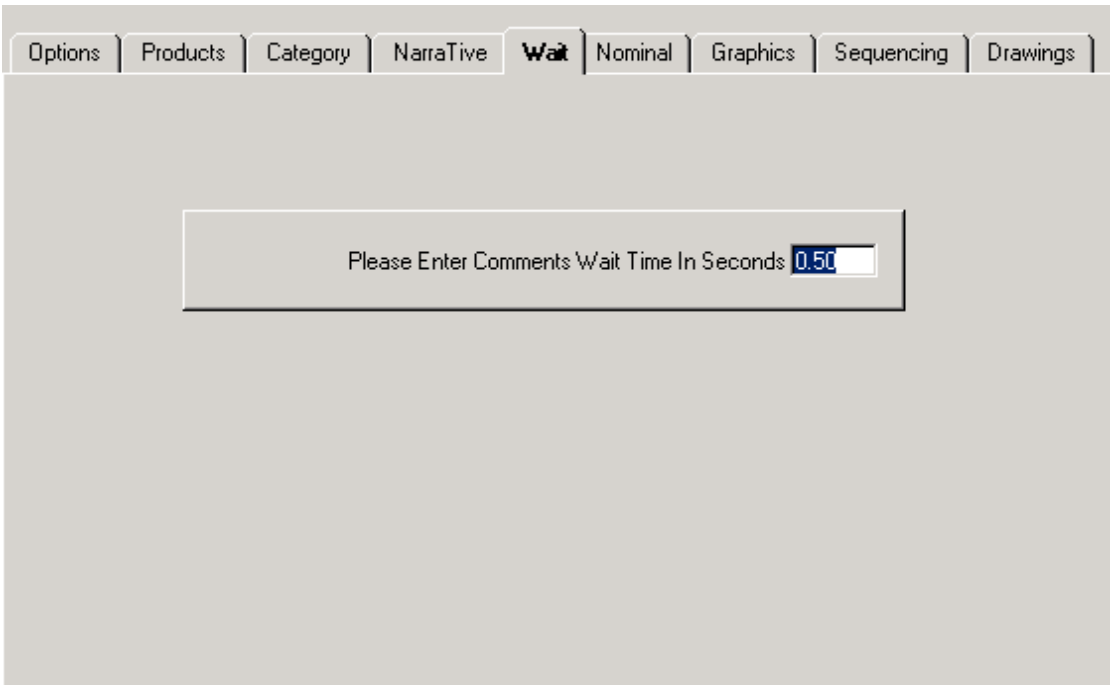
This function will allow standard narrative messages to be maintained. These can then be accessed through the BOM Maintenance functions.

To create a narrative record, select the next available blank record and press enter. Enter a 4 digit numeric code. You may now enter the narrative line.

To amend a narrative record, select the appropriate record and press enter. You may now amend the narrative line.

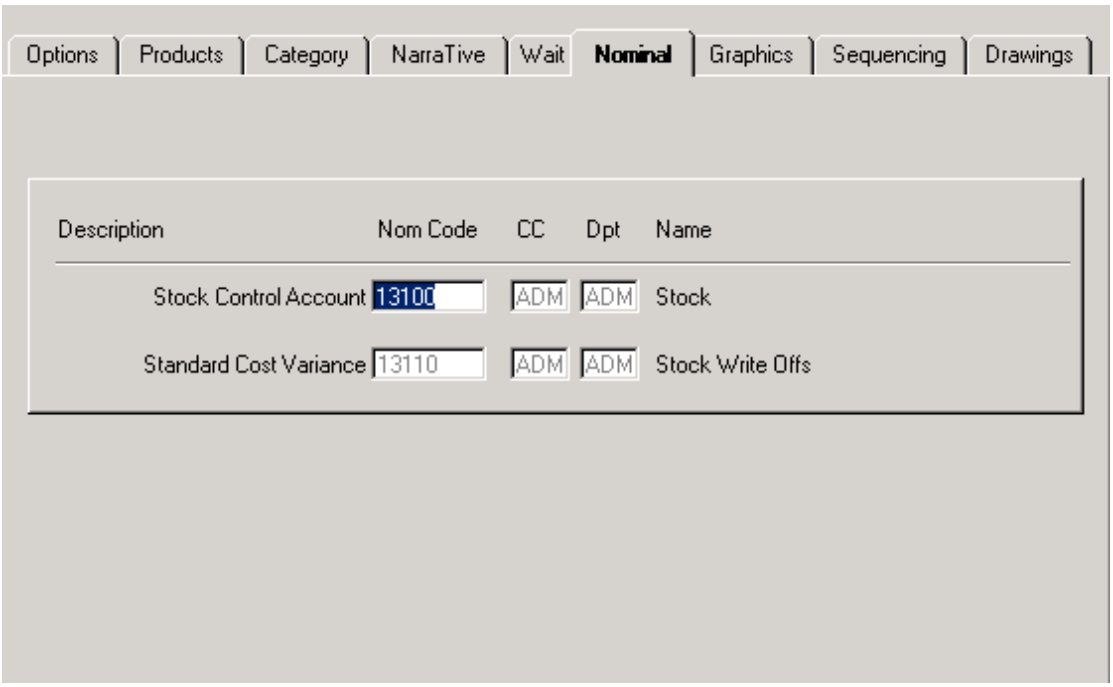
To delete a narrative record, select the appropriate record and press enter. You may now delete the code and the narrative line will be deleted.

Comments Wait Time



This parameter determines the number of seconds that the comments from the BOM assembly header are displayed when a works order is released within the Sovman works order module.

Nominal Codes



Use this section to specify the default nominal codes for the purpose of integrating with the Nominal Ledger.

There are two default nominal codes required by BOM: -

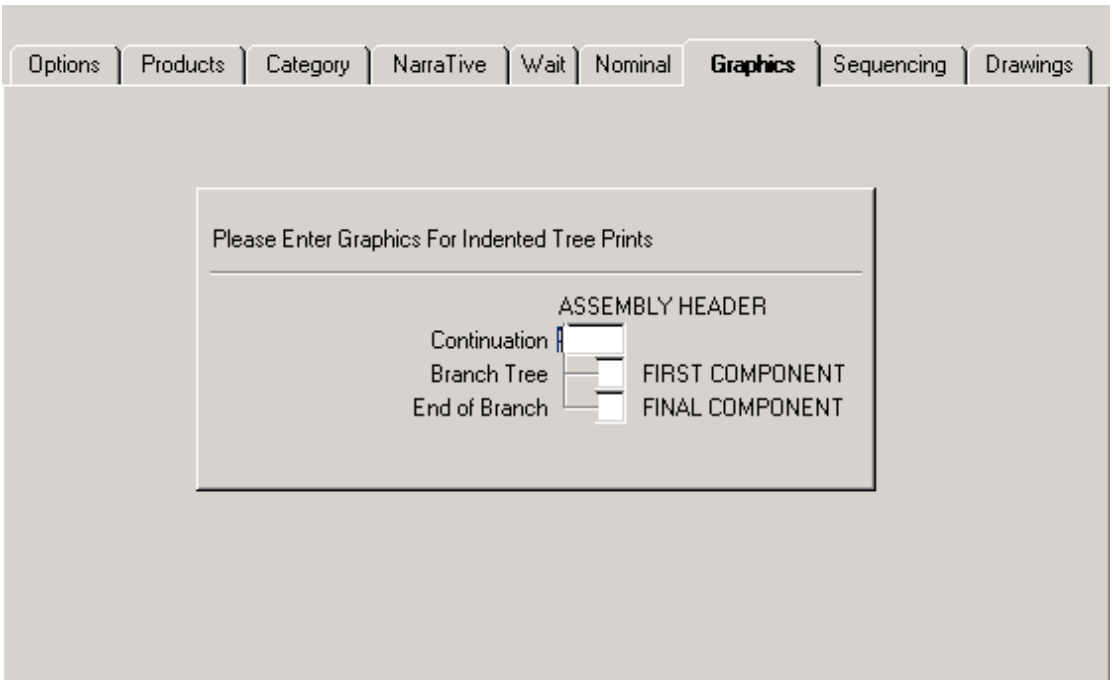
Stock Control Account

The stock control account is updated if there are items within a standard cost product group and the BOM is re-costed or if the standard cost is updated within the BOM module.

Standard Cost Variance Account

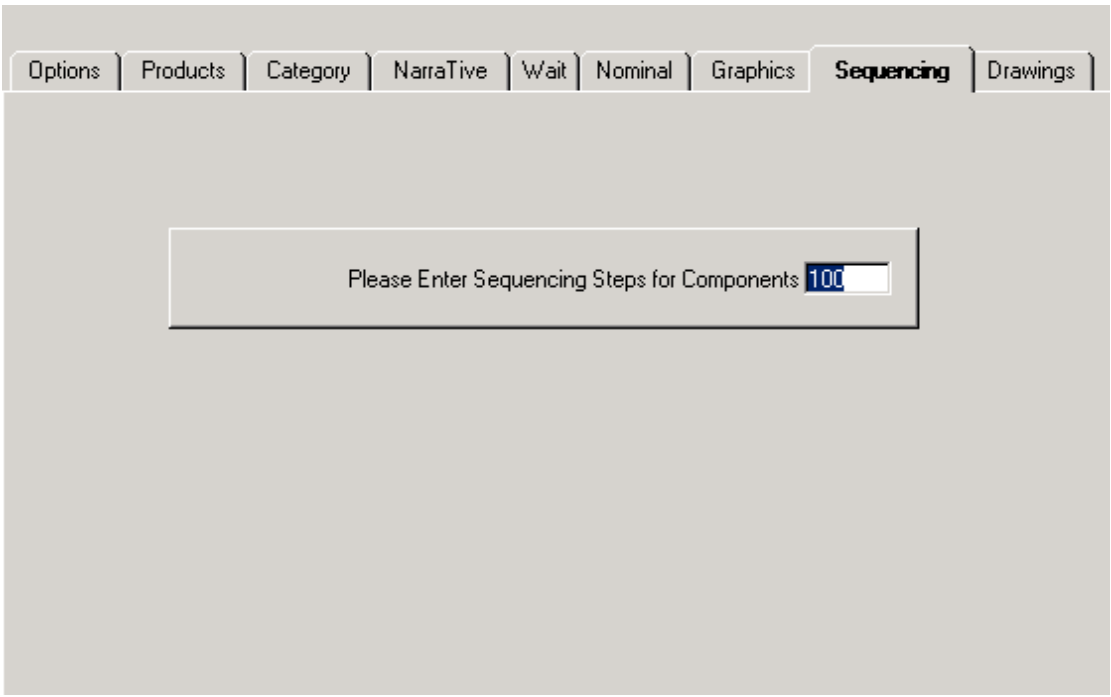
The standard cost variance account is updated with the variance in the value of stock resulting from a standard cost adjustment.

Graphics Tree Print



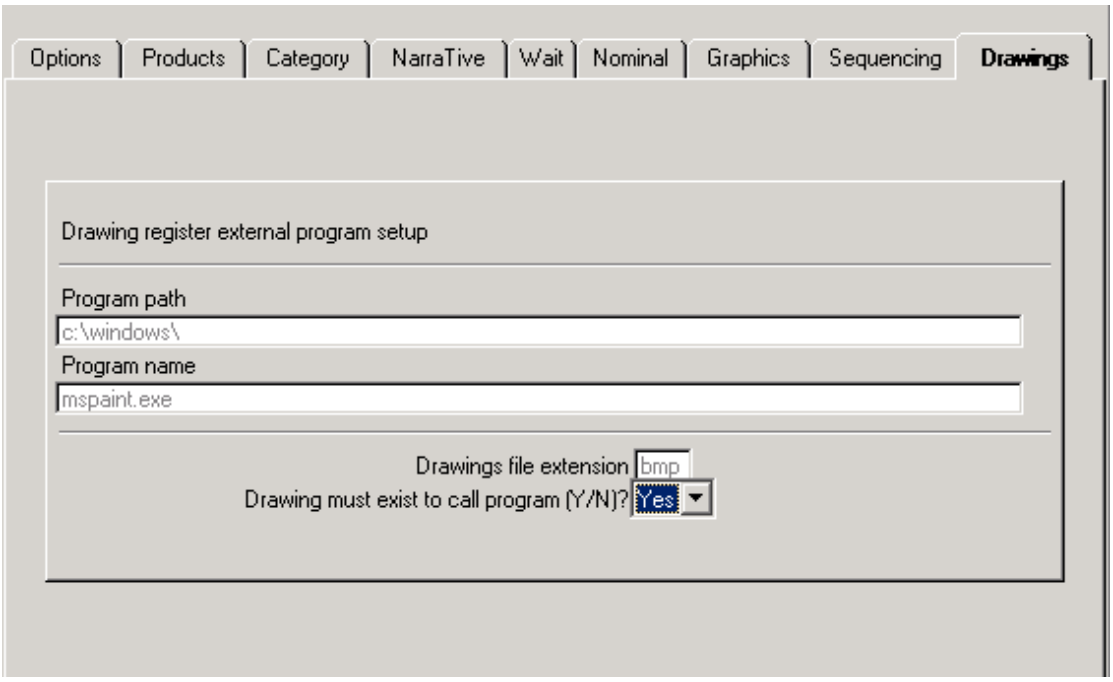
The BOM structure may be printed within the Reports menu as a tree diagram. This parameter specifies the graphics characters that are used for the tree diagram. If your printer does not support the standard graphics font, you may use this parameter to insert your own graphics characters.

Sequencing Steps



When a BOM is created, the sequence number determines the order of the components within the BOM. Using the sequence number, it is possible to insert additional components within the sequence of the BOM structure or change the sequence. The sequence number is usually incremented in steps of one hundred. This factor may be changed using this parameter.

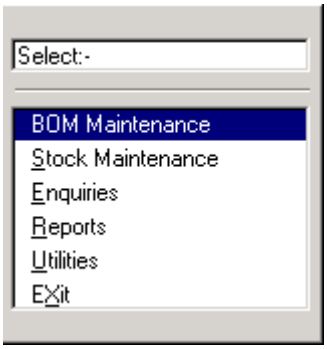
Drawings



You may link any external drawing file (i.e. bit map) to the drawing(s) specified in the drawing register. Sovman will search for a filename the same as the drawing number. Use this function to specify the external program and path name to open the drawings and the appropriate extension for the filename.

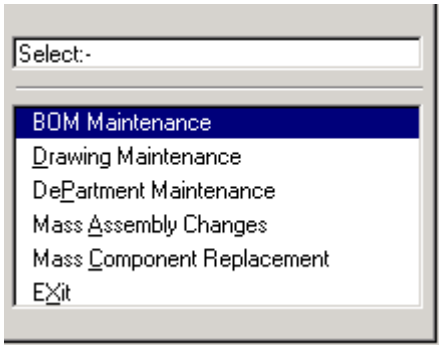
The final parameter determines whether the drawing must exist in the BOM drawing register before the external program is called.

BOM Maintenance



This function maintains details of assembly header records on the BOM file. Assembly and component details must exist on the Line 100 stock control file although the BOM module will allow these to be created 'on the fly'.

Assembly Maintenance



This function allows you to create or amend a BOM structure. The screen displays a form for input of assembly details.

Assembly

This is the code by which BOM assemblies are identified. The code must exist on the Line 100 Stock Control file, unless the record is created on the fly. Entering an assembly code that does not exist on the Line 100 stock control file will prompt the user to create the stock record 'on the fly'. If this is selected, the Line 100 stock control create screen is displayed to allow the item to be created (see Stock Control manual). Once the record has been created, you are returned to the BOM screen.

The Line 100 '/' facility is available to search the file for existing records. If the search facility is selected, the following options appear: -

Assembly Headers Search	This will display existing BOM products only.
Stock Control File Search	This will display the Line 100 stock control file. Items with a "*" are current BOM assemblies. If you select an item that is not a current assembly, you are prompted to: -

Create Assembly Header	This option will allow you to create the BOM structure (see below for a description of the fields).
Duplicate Another Assembly	This function allows an existing BOM structure to be copied and subsequently amended. If selected, you are prompted for the assembly number to copy from. Use of the search facility ('/') will display existing assemblies only. After selection of the BOM to be copied, you are prompted to add a standard message. If Yes is selected, a message is added to the new BOM within the comments fields, to indicate this BOM was copied from a specific assembly structure. You are then asked to confirm the creation of a duplicate assembly, to re-enter or exit the function. The new BOM is then available for amendment (see below for details of fields).

BOM Fields

Description	This is the description of the item from the stock control file.
Class	The class of an assembly determines whether the BOM is verified and available for use. When a BOM is created, it has to be formally checked and verified using the "Verify Assembly" option. This check is ignored if the parameter to ignore verification is set. When an assembly is first created the class is set to "Inserted".
Prd Group	This is the product group from the Line 100 stock control file.
Item Cost	This displays the item cost, followed by the last buying price from the Line 100 stock control file. The first cost will be displayed as 'Std', if the item is in a standard cost product group or 'Ave' if the item is in an average cost or FIFO/LIFO cost product group. The appropriate standard cost or average cost is displayed from the Line 100 stock control file.
Recosted	The assembly cost may be re-calculated at any time using the recost function within BOM Maintenance. For assembly records, this cost is calculated from the material costs of the components (either at standard cost, average price or latest price), the labour, machine, set-up and overhead costs of this assembly and the labour, machine, set-up and overhead costs of any sub-assemblies. The date of this cost is also displayed.
Drawing	When you first enter this field, you are prompted to update the drawing register associated with this product (see below). If you select Yes, you are given a list of drawings linked to this assembly. You may add drawings to this list by moving the cursor to the last entry and pressing ENTER. You may remove a drawing by deleting the drawing number field. When adding a drawing, if the drawing does not exist on the drawing register, you are prompted to create it 'on the fly'. This field displays the first or primary drawing number that is accessed from the drawing register file maintained through the drawing maintenance function. The issue letter of the drawing is also displayed.

Phantom	A phantom assembly is one that has a bill of material but never actually exists as a product i.e. it is not stocked or built, but is simply a collection of parts common to many assemblies. Phantoms do not raise requisitions when exploding multi-level using the Sovman Materials Planning module. Similarly, works orders are never created for a phantom. Phantoms may be used to: - Link a collection of components i.e. a kit, to a product. This eliminates the entering of each individual component on each BOM. Enable a global yield factor to be defined at a phantom level rather than at individual component level. This provides an easier maintenance function if the yield applies to all components. Set to Y - the assembly is a phantom. Set to N - the assembly is not a phantom.
Sub Contract	Assemblies within the BOM may be specified as sub contract items i.e. a sub-contractor normally produces them. The Sovman works order module treats these items differently from in-house items. The Sovman Materials Planning module will show sub-contract items in a separate suggested orders section.
Assembly Qty	This would normally default to 1 i.e. a BOM is defined to make a unit of the product. In some cases it may be appropriate to define a BOM for a number of products e.g. in producing chemicals we may define a BOM for a ‘mix’ of 100 litres. This feature may be used to avoid loss of accuracy for components when the qty-per cannot be expressed for a product unit of one.
Reorder Qty	This is the batch quantity that can be used to calculate the total cost of manufacturing one item of an assembly. The set up time will be divided by this quantity to calculate a set up cost per each. The default is one. The Sovman works order module and materials planning module will use this quantity when raising works orders and requisitions.
Top Up Qty	This is the additional top up quantity used when raising works order. Thus a product with a reorder quantity of 100 and no top up quantity would generate an order for 200 if the requirement were 105. If the top up quantity were 10, a reorder quantity of 110 would be generated. A top up quantity of 1 would generate a reorder quantity of 105. *The following fields can only be amended if there are no product routings defined within the Sovman Capacity Planning module. If a routing is defined, these fields are displayed only.*
Labour Time	The labour time in hours, minutes and seconds (2 decimals) to manufacture one unit (as defined in the Assembly Qty) of the assembly.
Machine Time	The machine time in hours, minutes and seconds to manufacture one unit of the assembly.
Set Up Time	The set up time in hours, minutes and seconds.

Multi Level	This parameter determines whether requirements for sub-assemblies will explode down further levels when the works order module is used to generate works orders that are multi-level or within the materials planning module for generating requirements. Set to 'E'xplode Shortages - requisitions will be raised in the normal way within works orders and materials planning by netting against free stock and/or existing work in progress. Set to 'A'lways - only shortage quantities will explode. This parameter causes works orders and materials planning to ignore the free stock position and always generate a requisition to cover the requirement. Set to 'N'ever - no requisitions will be exploded to lower levels, regardless of shortages. This assumes the sub-assembly production is always manually planned.
Effect Dates	A date from and date to can be entered. The BOM may only be used between these dates. This can be used for temporary BOMs or to restrict the use of a BOM until a certain date.
Department	This can be used in a number of ways. It may be the originator of the BOM or a 'department' or 'grouping' of products. The BOM reports can be used to select or sort by department. The department name must exist on the Sovman Department file. If you enter a code that does not exist, you are prompted to create it. The '/' facility will display a list of department names.
M/Uplift	You may enter a percentage uplift figure in this field. When costing the BOM for this product, any material costs will be increased by this percentage. The uplift does not affect actual material used i.e. stock and is only applied to the material cost element. This is used for costing wastage or yield.
Bulk Completion	An assembly may be treated as a bulk item. This means that stock is not controlled through the BOM module but completions will be processed through stock control transaction entry. This normally only applies to components or raw materials.
Labour Cost	If the product routing has not been created through the Sovman Capacity Planning module, the labour cost may be calculated from the labour time and product group rate or input directly. The cost is also displayed and can be amended. If the Capacity Planning module is present and a routing has been created, this cost is calculated from the product routings and work centre rates and is displayed only.
Machine Cost	If the product routing has not been created through the Sovman Capacity Planning module, the machine cost is calculated from the machine time and product group or can be input directly. The cost is also displayed and can be amended. If the Capacity Planning module is present and a routing has been created, this cost is calculated from the product routings and work centre rates and is displayed only.

Overhead Cost (Machine)	If the product routing has not been created through the Sovman Capacity Planning module, the overhead cost is calculated from the appropriate product group percentage factor specified within the product group parameters for labour, machine and set-up. The cost is also displayed and can be amended. If the Capacity Planning module is present and a routing has been created, this cost is calculated from the product routings and work centre percentage rates and is displayed only.
Set Up Cost	If the product routing has not been created through the Sovman Capacity Planning module, the set-up cost is calculated from the set-up time and product group. The cost is also displayed and can be amended. If the Capacity Planning module is present and a routing has been created, this cost is calculated from the product routings and work centre rates and is displayed only.
Overhead Cost (Set-up)	You may specify a different overhead cost associated with machine set-up.
Comments	Unlimited lines of comments (75 characters each) may be added. These may be used for special instructions, specifications, test instructions etc. The standard narrative entered through the utilities function can also be accessed at this point. The search function '/' will display all narrative records or the '/' followed by the narrative line number will select a particular narrative. If creating an assembly, when the escape key is entered, the options to Accept, Re-enter or Discard are displayed.

When accepted, an option is displayed 'Component Maintenance', 'Assembly Maintenance', 'Re-cost' or 'Exit'. Assembly Maintenance simply returns you to the assembly maintenance function. Re-cost will recalculate the assembly cost and update the re-costed field and date. If the Sovman Capacity Planning module is present the option 'Operation Maintenance' also appears. If selected, you may create product routings (see the Capacity Planning manual).

Component Maintenance

If 'Component Maintenance' is selected, the component details screen is displayed. Components may be sub-assemblies or components. Each item must already exist on the Line 100 stock control file, unless you create them on the fly. If you enter an item that does not exist you are prompted to create the stock record. If you select Yes, you are dropped into the Line 100 stock maintenance function to create the stock record.

The component number (the stock code) must be entered or searched. When searching, the '/' displays two options: -

Component Details Search	This will display existing components linked to this BOM. An '∗' against a component means that this component is a sub-assembly i.e. it has its own BOM structure. The Sovman BOM is therefore, multi-level, allowing for an infinite number of levels. When you select an item from the stock control file, you are prompted to create the component detail.

Stock Control File Search

This will display items from the Line 100 stock control file.

When you select an existing component, you are prompted to select this item or create a duplicate component (if the parameter has been set to allow duplicates).

The component details are displayed and the following BOM details requested for the item: -

Drawing

This specifies the drawing numbers that are accessed from the drawing register file maintained through the drawing maintenance function. When a drawing is selected, the issue letter is displayed. (See Drawing on Assembly above)

Required Qty

The quantity of this item per each assembly quantity. Quantities are held to 4 decimal places. The BOM uses the Line 100 stock control factored pricing. If a component is one for which different units have been specified within the stock control module, you are asked to select the unit required. (See Line 100 Stock Control manual).

If the parameter has been set to allow negative quantities, a negative figure may be entered. This will have the reverse affect on stock through the works order module (i.e. stock will be credited rather than allocated/issued) and the BOM costing (the cost will be subtracted).

Sequence No

This is used to maintain the sequence of components on a BOM. Numbers are raised automatically at intervals of 100 but may be overwritten by the user.

Type

This defaults to Fixed. If set to 'V'ariable, the component is treated as a variable quantity item on the BOM. Variable items are only exploded down for costing purposes if the parameter is set to explode variables within the BOM. Variables are ignored for materials planning explosion unless the parameter is set within the planning module to explode. If exploded, the quantity is taken as an average/default quantity. When a works order is raised that includes a variable item within the BOM, the variable quantity is requested.

Thus the variable parameter can be used to control products that have items whose quantity may be unknown e.g. cabling or memory within a computer. It can also be used to allow products with a selection of features. In this case the different features would be present as variable components with a quantity of zero. When an order is entered the relevant feature or component is selected by inputting a quantity of 1. Thus a computer BOM may be created with or without a CD-Rom, the CD-Rom being a variable.

Effect Dates

The start and stop dates for which this component is effective on this BOM. This can be used to phase in engineering changes to the BOM. Thus one component could be replaced by another, by setting the effective dates accordingly: -

Component 1 effective date to 30/09/00
Component 2 effective date from 01/10/00

This will replace component 1 by component 2 from 1st October 2000.

Yield — This is the percentage yield factor for this component. The default is 100%. A yield of 50% means that you expect to waste half of the quantity. Thus a required quantity of 5 with a yield of 50% will generate a quantity of 10 on both the works order and in the materials requirement plan. A yield greater than 100% means you require less than the required quantity.

Rounding — This field allows you to round the quantity required up. If you set this to Yes, you are allowed to enter a quantity to round up to. This may be used where components are issued in batches e.g. cartons of 10 or for items such as packaging e.g. boxes.

Alternatives — This parameter determines whether alternative items may be used if there are shortages against this original component.

The alternative items are picked up from within Line 100 stock control using the alternative items fields. Items may be 'chained' together, thus item A may be superseded by item B, which may be superseded by item C. The Sovman Works Order module will allocate stock using all items within the chain until it finds sufficient stock (see the Works Order manual for details).

Set to Yes - alternative items will be used if present within the Stock Control record.

Set to No - alternative items will be ignored.

Bulk Issue — This item indicates whether the component is to be treated as a bulk item or free issue item for the purposes of stock control. Bulk items do not have the stock allocated or updated when using the BOM with the Works Order module. Stock is controlled separately through the stock control functions of issue and adjustment. This would normally be used for items such as screws or fasteners or items difficult to control through the computer such as sheet metal.

Comments — Unlimited lines of comments (75 characters each) may be added. These may be used for special instructions, specifications, test instructions etc. The standard narrative entered through the utilities function can also be accessed at this point. The search function '/' will display all narrative records or the '/' followed by the narrative line number will select a particular narrative.

The user is prompted to Accept, Re-enter or Discard the component.

Non Stock Components

Components may be added to BOM structures that are not necessarily stock items, i.e. they do not exist on the Line 100 stock control file. This may be appropriate when creating BOMs for prototypes, samples or to produce estimates/quotations. In these cases, the components may not be stocked until the customer places an order.

Non-stock items are added by pressing the escape key when entering a component number. You are prompted to enter: -

Non Stock — This is a code for the non-stock item. Although the item will not exist on the stock control file the non-stock file contains any non-stock items. You can therefore select an existing code or create a new one. Non-stock items can therefore be used to produce where used enquiries and reports.

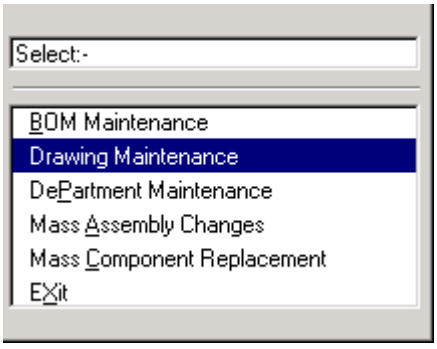
Description	The description of the item.
Item Cost	The cost of the non-stock item.
Prd Group	Non-stock items must belong to a product group from the Line 100 stock control file.
Lead Time	The lead time in days.

The rest of the fields are the same as for a stock component.

After Accepting, the following options are displayed: -

Another Component	Another component may be selected.
Resequence	Selection of this option allows the components within the BOM structure to be re-sequenced. The user is prompted to confirm (default = No). If confirmed, the component sequence numbers are re-set from 100 in increments of 100 (or in different steps depending on the sequencing steps parameter). Note that when components are scanned, they are always listed in part number sequence.
Remove Component	This allows you to remove a component from this BOM. You can select the component to delete and are asked to confirm to remove.

Drawing Maintenance



The Sovman Bill of Materials file uses a separate drawing register to control drawing numbers and issue letters. The drawing numbers are linked to assemblies and components through the BOM Maintenance and BOM Stock Maintenance functions.

The drawing register contains the following fields: -

Drawing No

The drawing number may be entered or selected using the search function. If you enter a drawing number that does not exist, you are prompted to create a drawing master or re-enter the code.

Description

A drawing description should be entered.

Issue Letter

An issue or revision letter of the drawing should be entered. This is displayed within the BOM details.

Issue Date

The date of the issue or revision of the drawing should be entered.

Account

This is an optional field when a drawing is for a specific customer. The account number is the Line 100 sales ledger reference. The search function may be used to select a customer.

Comments

You may enter an additional two lines of comments relating to the drawing.

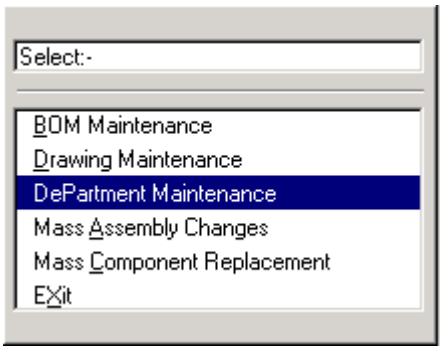
Document

Drawings within the Sovman BOM module may be linked to their external file e.g. bit map. The name of the external document is stored in this field.

Historical

If a drawing issue letter has been modified, details of previous versions are stored within this section, including the date changed and user name.

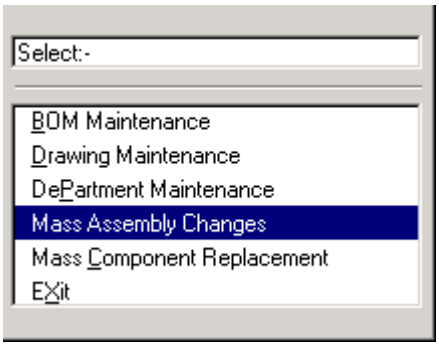
Department Maintenance



A department may be an engineer who is responsible for a Bill of Materials or a department or grouping of products. Within the BOM Maintenance function, each BOM may be assigned to a department. This function allows you to create or amend department names or descriptions.

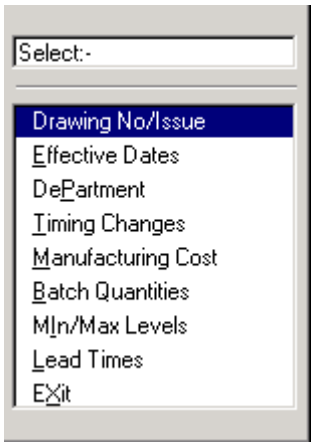
The department code may be used to report all products within a common section or all work in progress e.g. list all products or works orders on machine XXX or all products or works orders for Type AAA items.

Mass Assembly Changes



This function allows you to update selected fields for a range of assemblies and stock codes. It is a more efficient method than the BOM or Line 100 maintenance functions when a range of items are involved.

The following menu is displayed to allow selection of the BOM fields to be amended.



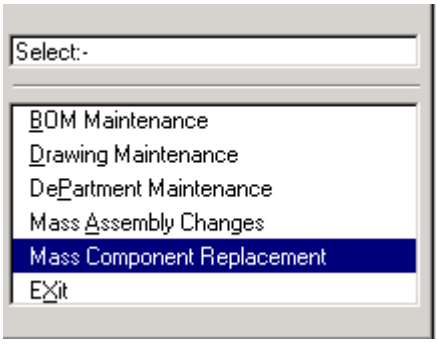
After selecting the fields to be amended, you are prompted for the first assembly number or to enter a start assembly number. You may start at the first assembly within the BOM or enter a start assembly number. The search facility can be used to identify the latter.

The following fields can be updated with this function: -

Drawing No/Issue	The drawing number can be amended. This is selected from the drawing register and the corresponding issue letter displayed.
Effective Dates	The effective dates of a BOM may be amended.
Department	The department of the BOM. You can search the department file from this function.
Timing Changes	The labour, machine and set up times may be amended only if the Sovman capacity planning module is not present or there is no routing defined for the assembly.
Manufacturing Cost	The labour, machine, overhead and set up cost may be amended only if the Sovman Capacity Planning module is not present or there is no routing defined for the assembly.

Batch Quantities	The reorder quantity (i.e. the economic batch quantity) and the top up quantity may be amended.
Min/Max Levels	The Line 100 stock control minimum and maximum stock levels may be amended.
Lead Times	The Line 100 lead time and Sovman additional lead time fields may be amended.

Mass Component Replacement

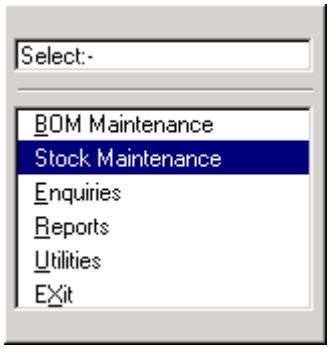


This option will replace one component by another across all BOMs. The component to be replaced is first selected and it's details displayed from the stock control file. The replacement component is then selected. The '/' search function may be used to locate components. Two options are then requested: -

Unverify Assembly Headers	Set to Y - all BOMs where the component is replaced will have their assembly header status set to 'Inserted'. Each BOM will then have to be checked and verified before use (if the verify parameter is set). Set to N - the BOM assembly header will remain verified.
Qty Multiplication Factor	This field determines the quantity of the replacement component to be assigned to each BOM. The original component quantity is multiplied by this quantity to derive the quantity of the replacement component.
Add Standard Comment	This option will add a standard comment to the component within each BOM it is replaced in indicating which component it has replaced.

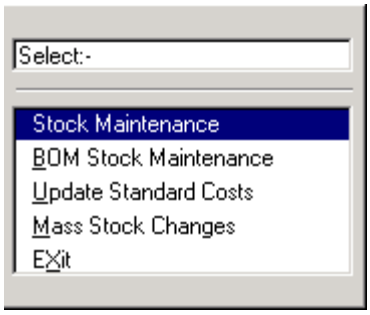
When completed, the user may replace another component, discard or exit.

Stock Maintenance



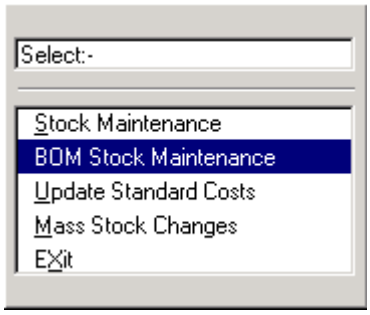
Choose this option to enter the Stock Maintenance section of the programme.

Stock Maintenance



This function simply allows access to the Line100 stock maintenance option to create and amend stock records within the BOM system.

BOM Stock Maintenance



Sovman uses the BOM stock file to hold parameters for the appropriate Sovman modules. This function is used to amend the Sovman Bill of Material stock record to add the relevant data items required for the Sovman modules. After the stock record is located (the search function may be used), the following fields may be amended (The default values are taken from the product group defaults specified in the parameters section but may be amended for any item): -

Category	The category group that the item belongs to (see Utilities, Parameters).
Drawing	The drawing number(s) of the component. The drawing number is accessed from the drawing register. The corresponding issue letter is displayed. These drawing numbers are used on every occurrence of this component on a BOM structure. An item may be linked to many drawings.

Bin Locns	The bin locations for this assembly may be entered.
Reorder Qty	The reorder quantity (i.e. economic batch quantity for assemblies). This is the same as the Line 100 stock control reorder quantity.
Top Up Qty	The additional minimum reorder quantity required when added to the reorder quantity to cover the requirement.
Lead Time	The lead time in actual days for this item. This is the same as the Line 100 stock control lead time. This is used by Materials Planning to offset requirements.
Additional	The lead time field (above) in Line 100 only allows a maximum lead time of 99 days. If you require a lead time greater than the additional days are entered in this field. Materials Planning takes the offset lead time as the sum of the lead time and additional.
Assembly Bulk	An assembly may be treated as a bulk item i.e. Sovman will not control the stock of the item but stock will be issued/received manually. The bulk category normally only applies to components.
Component Bulk	A component within a BOM may also be treated as a bulk item. Bulk items do not have stock allocated or issued within Sovman but are issued manually through the Line 100 stock control transactions. This would be used to control free issue items such as screws, washers, and fasteners. Bulk issue can also be used for items that are difficult to control such as sheet metal or tape.
Omit Suggested	The Sovman Materials Planning module will create suggested orders from requisitions raised within the Stock Status run. If this parameter is set to Yes, then this item will be ignored for suggested orders.
Sub Contract	The Sovman Works Order module will handle sub-contract items through the BOM structure. This field identifies assembly items that are sub-contracted and not manufactured. The works order module will not generate works orders for a sub-contract item. The Sovman materials planning module also produces re-order lists for sub-contract items using this field.
Rounding	If the quantity required for this component is to be rounded up within the Sovman BOM module. If rounding, quantities computed by the works order and materials planning module (for requisitions) are rounded. This field is followed by the amount to be rounded up to.
Alternatives	If this item is to have alternatives if there is no free stock available when allocating through the Sovman works order module. The alternative item is picked up from the Line 100 stock control alternative items.
Planning Decs	This option determines the number of decimal places that will be displayed for requirements within the materials planning module. The option will determine the accuracy of netted requirements. The default ‘D’ picks up the materials planning module parameter default.
Barcode Type	Use the drop down menu to select the barcode type you require. You may choose from “Star” or “Zebra”.

Works P/L Qtys

This option is used by works orders to determine the quantity per pack unit that is used when printing the quantity required on the picking list. There are two possibilities, the stocked in unit, or the BOM unit i.e. the qty-per unit. Thus an item may be stocked in KG with a qty-per in grams. The picking list may therefore print the quantity required in grams or, if required, in KGs.

The field may only be accessed if the item is a factored item within Line 100 stock control.

Weekly Forecast

The Materials Planning module uses this option. If the Sovman sales forecasts module is not present, a weekly forecast, entered in this field, will be used to determine product requirements for as many weeks defined by the forecast horizon (see Materials Planning manual).

Item Cost

This is the standard cost of the item on the Line 100 stock control file. When this is amended through the BOM function, the appropriate stock variance is calculated and posted to the nominal ledger using the default nominal codes set up within the Utilities section (see Parameters).

Forecast Information

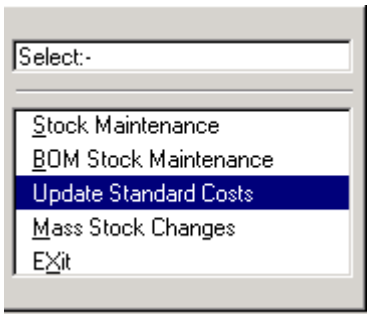
The following fields apply if the Sovman sales forecasts module is present: -

Forecast Inputs	Whether this item is to have a sale forecast or not.
Manual/Automatic	If the sales forecast is to be input manually or calculated automatically.
Demand Weeks	The number of past demand weeks of sales history used to compute a weekly forecast.
Creation Weeks	The number of projected weeks the forecast is to be applied.
Forecast Override	Whether the sales forecast figure is to override actual sales orders for the week or to include them.
Forecast Usage Based On	This parameter displays the number of past weeks that are used to calculate from past demand. This parameter comes from the Analyse Usage by horizon within materials planning.
Reorder Safety Factor	The automatic calculation of reorder levels will multiply the lead time in weeks by the average weekly demand. You may add a % safety factor to this level e.g. lead time 4 weeks, average demand 50, reorder level = 200, safety factor 10%, reorder level = 120.
Min Stock Weeks	The minimum stock level is set to the average demand times this parameter e.g. one week.
Max Stock Weeks	The maximum stock level is set to the average demand times this parameter e.g. twelve weeks.

Hourly rates/percentages

The labour, machine, and set-up hourly rates, together with the overhead percentage factors can be specified at individual item level. See the Parameters section for details of how these fields are used.

Update Standard Costs

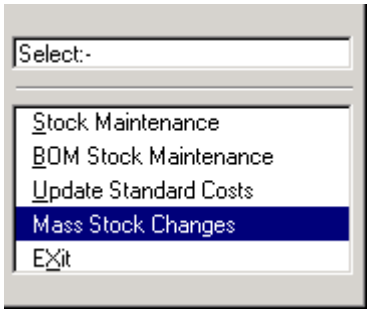


This function allows the amendment of the standard costs for an assembly or component. This is simply a convenient way of updating standard costs.

The procedure is selective, first by product group, and then by item (stock code) range. Only those product groups that use standard cost within Line 100 are displayed.

If the audit trail parameter is set, the old and new costs will be reported. Any stock variances are logged to the nominal ledger using the default account codes.

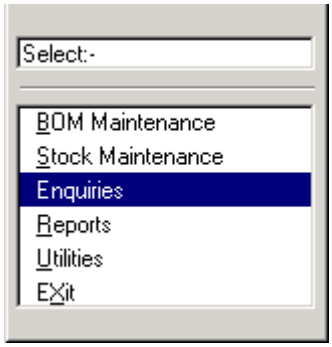
Mass Stock Changes



This function is similar to the Mass Assembly Changes function and can be used to update fields for drawing numbers/issue letters, batch quantities, minimum/maximum stock levels and lead times.

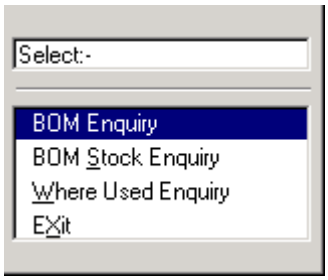
See the Mass Assembly Changes function for details.

Enquiries



Choose this option to enter the enquiry section of the programme.

BOM Enquiry



This option displays the BOM or exploded details for an assembly. The assembly number is requested and entered or the search mode will select all stock codes with a BOM.

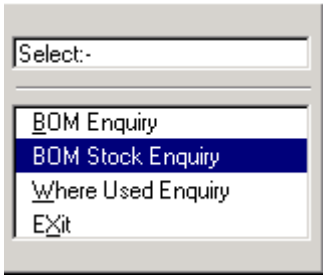
The assembly details are displayed and the user is presented with the following options: -

Components	This will display all components from this BOM. An '*' against a component means that this component is a sub-assembly with its own BOM structure. Having selected the component, the component details are displayed. The spacebar returns you to the component display screen to select another component. If you select a sub-assembly, you are prompted to display the component details of this item or to change the BOM enquiry to the selected BOM for this sub-assembly.
Operations	This option will only appear if the Sovman Capacity Planning module is present. If selected, this will display the product routings. See the Capacity Planning module for details.
Where Used	This option displays all higher level assemblies that this assembly is used on. Selection of an assembly from this list gives you the option to change the enquiry to the selected assembly or remain with the current assembly.

Explosion — This option will accept a quantity field and explode this multi-level to produce a full indented costing.

The total (i.e. including sub-assemblies) labour, machine and set-up times are displayed in hours, minutes and seconds. The corresponding costs are also displayed. The total material, and overhead costs are also displayed. These times and costs include this assembly and all sub-assemblies i.e. the total labour time and cost including labour for all sub-assemblies.

BOM Stock Enquiry



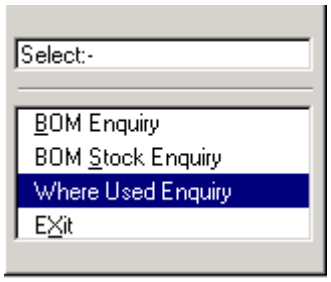
This function allows you to enquire on the details held within the Sovman BOM stock file (see BOM stock maintenance above). You may enter a stock code or use the search key to select an item. The BOM stock details are displayed. You may select another item or: -

Drawing Register — This will display details of all drawings associated with this item.

Quantity Allocation — This displays details of stock. The following fields are displayed: -

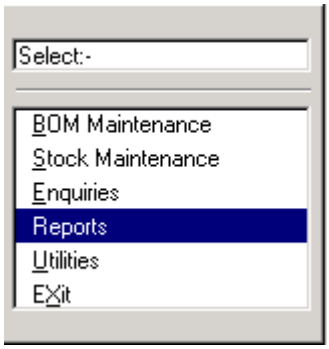
Overall	The actual stock of this item.
S/O Alloc	The quantity of stock allocated to Sales Orders
S/O Fwd	The quantity of stock on forward Sales Orders
On Order	The quantity outstanding on purchase orders.
WIP	The quantity of work in progress on Sovman Works Orders.
W/O Alloc	The quantity of stock allocated to Works Orders
W/O Fwd	The quantity of stock on forward Works Orders
Released	The quantity of released but not issued on Sovman Works Orders.

Where used enquiry



This option will display all the assemblies where a particular component or sub-assembly is used i.e. the imploded details. The component number is first requested. Use of the search mode will display all components from the Line 100 stock control file that are currently used within a BOM. Upon selection of the component, the assembly details are displayed together with the quantity-per field. Selection of a particular assembly will display the corresponding BOM details. Finally, the user may select another enquiry or return to the menu.

Reports



Use this section of the Bill of Material to produce printouts, including details of the data stored in the BOM files. When the Reports option is selected, the screen displays a list of options for reports: -

Report Scope	For most reports, the system offers a choice of the scope of the records. These include: -	
	One Level Print	A BOM report for an assembly will show the components and sub-assemblies comprising that assembly.
	Indented Print	This will show the BOM for an assembly but any sub-assemblies within the structure will themselves be 'exploded' into their structure. Thus all levels within an assembly will be printed and each level indented.
	Tree Print	Where appropriate, the BOM structure will be printed as a tree diagram.

A report template will then be displayed. This works in exactly the same way as the standard Line 100 templates and allows selection and sequencing by assembly, product group, category, first or prime drawing number, department and description. The quantity field is also displayed so that reports can be produced for an extended quantity e.g. a costed BOM may be produced for 10 off an assembly. The mask facility may be used to select specific characters within the appropriate field.

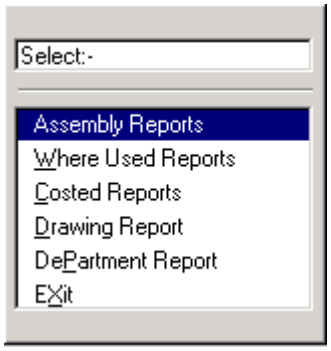
A further selection box is displayed with the following options: -

Comments	Reports may be produced including or excluding the comments fields.
Drawings	If set to yes this will print all drawing details linked to these BOMs.
Component Sequence	For BOM listings, the components may be printed in sequence number order or component order (i.e. stock code). Enter C for component sequence or S for sequence number.
Variables Average/Usual Qty	When printing BOMs with variable quantity items, either the usual qty-per or the average qty-per may be printed. Enter A for average or U for usual.
Use Category Print Options	This allows you to ignore the parameter set for reporting category groups within utilities, parameters.

Summary / Detailed Print

This selection applies only to the 'unverified BOMs' report. A summary report will show only the assembly header information. A detailed report will show all components/sub-assemblies within the structure.

Reports - Specific



Assembly Reports

These reports show the complete BOM details for a range of assemblies.

Where Used Reports

These reports show the assemblies where a particular component is used.

Costed Reports

These reports show the total cost of an assembly. The cost is computed from the sum of the component material costs (standard, average or latest buying price depending on the parameter within utilities) from the stock control file. The labour, machine, overhead and set-up costs are displayed. These are either calculated from the product routings defined within the Capacity Planning module or from the product group hourly rate (as defined within Utilities, Parameters) or entered manually in the BOM Maintenance function.

Costs are computed for both item cost (standard cost, average or latest buying price) and latest buying price. The date of the latest buying price is printed.

The material and labour costs are the total of all the costs at all levels.

The indented report shows costs of all levels, but the total costs are only calculated for the selected assembly.

Drawing Reports

These reports print the drawing details from the drawing file.

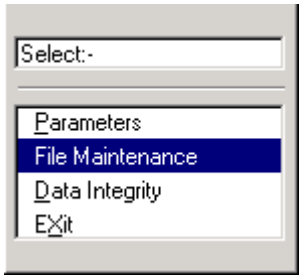
Department Reports

These reports print the department names from the department file.

Unverified Reports

These reports will print all BOMs that have not been verified. This function only appears if the parameter is set to verify assemblies.

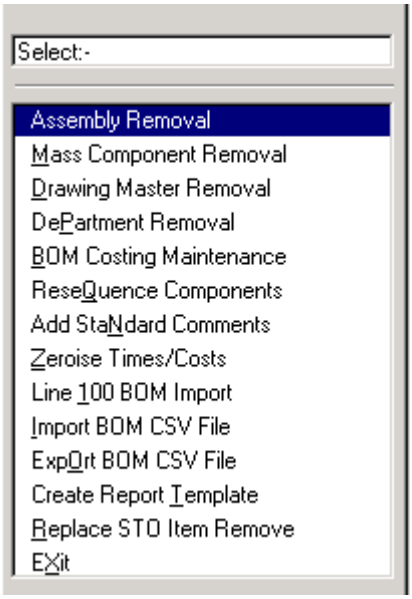
File Maintenance



This option is within the Utilities section of the programme.

File Maintenance – Menu Options

When selected, the following menu is displayed (If user access level is set to 20): -



These utilities provide special functions associated with the BOM module.

Verify Assembly

BOMs may be verified before use, provided the verification parameter has been selected in the parameters section. To verify a BOM, this option displays the assembly details screen. The assembly number must be entered or selected. This must be an existing BOM with a class of Inserted or Amended. Upon entering the assembly number, the assembly details are displayed and you are prompted to update the drawings associated with this BOM. Then the following details are requested: -

Drawing	The prime drawing number is displayed for confirmation.
Effect Dates	You may amend the effective dates from and to at this point.
Department	The department for this BOM.
Verifier	The verifier, this defaults to the user ID.

Assembly Removal

Use this maintenance utility to delete assemblies from the BOM file. When an assembly is deleted, all of the links to components / sub-assemblies are also deleted. A warning message is displayed if the assembly is a sub-assembly in a higher level BOM. If the parameter is set to allow removal of in use items, you may still delete the assembly. If the parameter is not set, the higher level BOM must first be removed. A warning is also displayed if there are works orders in the system for that assembly. If the parameter is set to allow removal of in use items, you may still delete the assembly.

Enter the assembly number for selection or use the search facility to locate the assembly required. Confirm the deletion to remove the assembly and associated components.

The option is displayed to remove another assembly or to exit to the menu.

Mass Component Removal

Use this option to delete or remove a component from every BOM it appears in. The component is first selected and then three options are requested: -

Unverfiy Assembly Headers	Set to Y – the assembly headers will be set to amended following this routine. Set to N – the assembly headers remain unchanged.
Remove Assembly Headers if No Components	Set to Y - if the component is the last for a BOM, the assembly header record will be removed also. Set to N - the assembly header record will remain on the BOM even though there are now no components remaining. Components may, of course, be added later.
Resequence Components After Removal	Set to Y - the remaining components are resequenced within the BOM structure. Sequence numbers are regenerated in increments of 100 or the sequencing steps specified within the parameters. Set to N - components are left with their original sequence numbers.

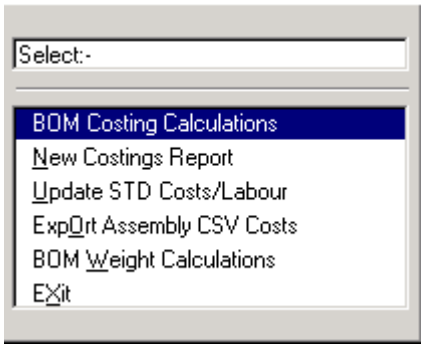
Drawing Master Removal

Use this function to delete drawing details from the drawing register. A drawing can only be deleted if it is not in use.

Departmental Removal

Use this function to delete department names from the department file. A department can only be deleted if it is not in use.

BOM Costing Maintenance



BOM Costing Calculations

This option will recalculate the assembly costs for all assemblies by accumulating the component material costs and the labour and overhead costs for sub-assemblies.

For assemblies/sub-assemblies, the labour, machine, overhead and set-up costs are included in the total cost for that item.

The costs are automatically reported for checking before an automatic update is applied to the standard cost on the Line 100 stock control file for items within a standard cost product group (See options later).

Costs are calculated either at standard, average or latest buying price depending on the parameters set.

New Costings Report

This will print a report of new assembly costs. The report displays the report template allowing a selection on assembly number etc.

Update STD Costs / Labour

This procedure will automatically apply the re-calculated costs of each assembly to the standard cost field on the Line 100 stock control file if there are any items within standard cost product groups. The function will also update the labour, machine, set-up and overhead costs for assemblies provided no routings have been defined within the Capacity Planning module.

The default nominal account codes must be set up within the parameters section before this procedure can be run (if the nominal module is present).

You are asked to confirm. You are prompted to confirm the update of standard cost and labour/overhead costs.

You are given the option to update assemblies without components (i.e. labour only items).
A template is displayed to allow you to select on various fields.

Any product groups without standard costs are ignored and reported.

Any stock value variances will be posted to the stock control account and standard cost variance account within the nominal ledger.

BOM Weight Calculations

Use this function to calculate the total weight of an assembly from the weights of each component. A report is produced and the Line 100 stock control weight field updated.

Resequence Components

This function will resequence all components in selected BOMs using the sequence steps within the parameters. The user is prompted to confirm the process and then select from the template the range of assemblies to re-sequence.

Add StaNdard Comments

Each BOM may have unlimited comments or text lines added. These may also be added to each component within a BOM. Standard phrases may be stored on the standard narrative file and picked up within a BOM. You are prompted for: -

Assembly Comment Changes	This function allows you to record a standard set of comments to all or selected assemblies. You are prompted to remove any old comments or retain them. You can then enter the standard comments. The standard narrative file may be accessed if required. You are then given a template to select on various criteria.
Component Comment Changes	This function allows you to record a standard set of comments to all or selected components. You are prompted to remove any old comments or retain them. You can then enter the standard comments. The standard narrative file may be accessed if required. You are then given a template to select on various criteria.

Zeroise Times / Costs

This function will zeroise out any labour, machine and set-up times for an assembly and any associated labour, machine, overhead and set-up costs. The function will only apply to assemblies that do not have a product routing defined within the Capacity Planning module.
You are presented with a template to make selections.

Line 100 BOM Import

The Sovman BOM module will convert an existing Sage Line 100 BOM database into the Sovman format.

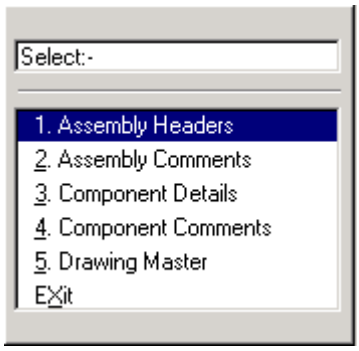
Import BOM CSV File

This function will create the BOM file from an imported CSV format file.

Please see Appendices for file import layouts.

Export BOM CSV File

This function will export the BOM file to a CSV format file. You are prompted to import from the following menu: -



Please see Appendices for file export layouts.

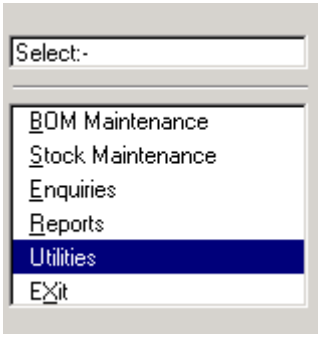
Create Report Template

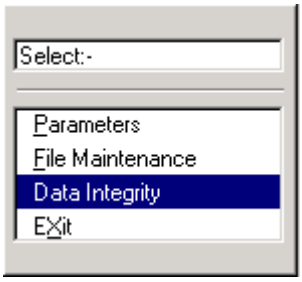
This function will re-create all report templates if they have been corrupted.

Replace STO Item Remove

This function will replace the Sage L100 stock item remove function and replace it with a Sovman stock item remove function. If this function is then performed within Sage L100, it will then also check the Sovman modules to check whether the stock item is in use.

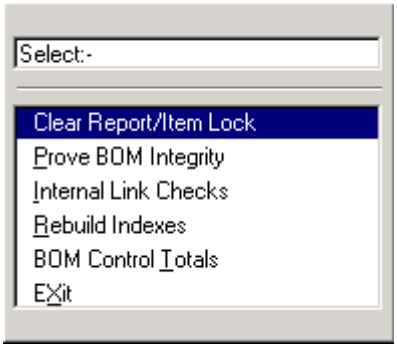
Data Integrity





This section deals with the housekeeping utilities that are provided to ensure the integrity of your data files is maintained. The functions include facilities to check the Bill of Materials data files, to ensure that they contain data that properly balances, and special utilities for recovering from circumstances that might otherwise leave the data files inaccessible, perhaps as a result of a computer or power failure during processing.

Clear Report/Item Lock

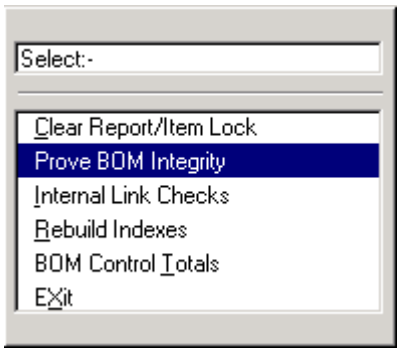


Use this function to clear locks on files for reports and Bill of Material item records. Locking facilities are built into Line 100 for multi-user purposes, though they may be encountered while using the system in single user mode if it is interrupted by hardware or power failure while the Bill of Material module is in use.

When the option is selected, the user is asked to confirm that no other users are accessing the report concerned. If you are sure that there are no other users of the system enter 'Y' to confirm. You will be asked to confirm again to proceed. The screen then prompts to confirm that no one is updating items and to confirm again. Finally you are asked to confirm that no one is running a costing run and to confirm again.

The system will automatically reset the lock flags on all files concerned and, when complete, will display the Data Integrity menu.

Prove BOM Integrity

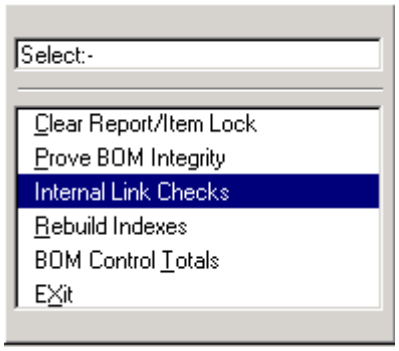


Use this program to ensure that all the data stored for the BOM module is intact and has not become corrupted in any way. It is good practice to run this operation on a regular basis, as a preventative measure, to detect whether or not your computer is recording information properly. If corruptions do occur and are left undetected, you may find that all back-up disks are similarly affected.

When the option is selected, the screen warns you that you can only run this routine in single user mode i.e.. There must be no other users on the system. You are asked to confirm that you are the only user. Having ensured that there are no other users, the screen displays a box informing you of the process about to be performed. To proceed simply enter Y.

The system will print a reconciliation report.

Internal Link Checks

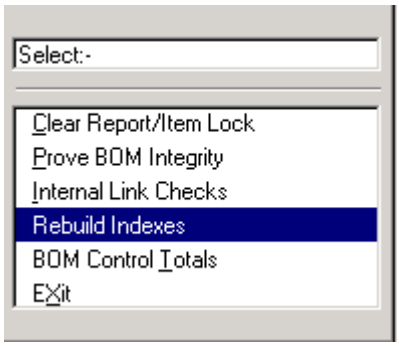


This function performs checks on the links within the BOM to ensure there are no cyclical links. These may occur in two ways: -

- An assembly explodes to itself within the BOM structure e.g. Assembly A explodes to assembly B which explodes to assembly A.
- A component within a BOM structure has an alternative component that may refer back the original component through the alternative chain. The alternative part numbers are held on the Line 100 stock control file.

The function will read all assemblies and explode them down, checking and reporting on any invalid links.

Rebuild Indexes

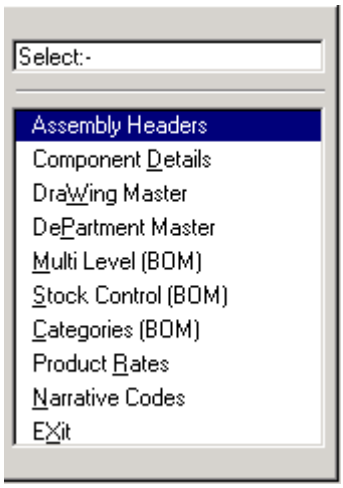


Use this program to recreate a corrupt BOM index file. A symptom of a corrupt file may be one of the following error messages being displayed on the screen: -

- Index has not been created.
- Index key not deleted.
- Index key not found.
- Index not positioned at a record.

The routine will delete all or selective indexes and create new ones from existing data files.

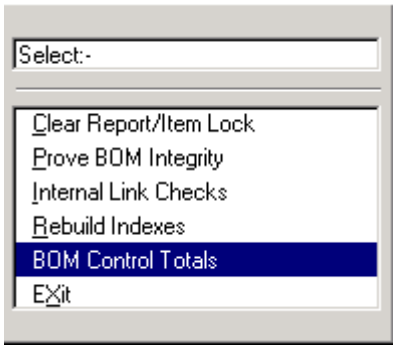
When the option is selected, the screen will display a list of the BOM files for which indexes may be corrupted:



Simply select the file(s) to be re-indexed or exit to the menu.

Once the file has been selected, the screen will display a list of index names for that file. At the foot of the screen, the options are displayed to create all indexes or specified indexes only. If you choose to recreate all indexes, the system will work sequentially through the index files, displaying each one as initialised when complete. If you choose to recreate selected indexes, the screen will prompt you to reply Y or N against a 'Create?' prompt, displayed alongside each index name in turn. When all selected indexes have been recreated, press the space bar and the Data Integrity menu is redisplayed.

BOM Control Totals



Use this program to display the file total details of the BOM module, as normally displayed when you exit from the BOM module main menu. When selected, the screen displays number of records and the % file space used for each of the BOM files.

To print the totals, select Print or exit to the menu.

Appendices

CSV file layouts for Bill of Materials import / exports

Assembly Header Layout (V6.22)

Assembly Number	X(20)	(Mandatory)
Drawing Number	X(20)	
Issue Letter	X(10)	
Phantom Flag	9	(1 = Yes, 2 = No, Default = 2)
Sub Contract Flag	9	(1 = Yes, 2 = No, Default = 2)
Bulk Completions	9	(1 = Yes, 2 = No, Default = 2)
Assembly Qty	9(10).9(4)	(Cannot be zero, Default = 1)
Reorder/Batch Qty	9(10).9(4)	
Reorder/Batch Top Up Qty	9(10).9(4)	
Labour Time	X(13)	(HHHH:MM:SS.SS)
Machine Time	X(13)	(HHHH:MM:SS.SS)
Setup Up Time	X(13)	(HHHH:MM:SS.SS)
Explosion Type	X	(E = Explode Shortages) (N = Never Explode) (A = Always Explode) (Default = E)
Effective Start Date	X(10)	(DD/MM/CCYY)
Effective Finish Date	X(10)	(DD/MM/CCYY)
Department	X(20)	
Labour Cost	9(10).9(4)	
Machine Cost	9(10).9(4)	
Overhead Cost	9(10).9(4)	
Setup Cost	9(10).9(4)	
Setup Overhead Cost	9(10).9(4)	

Notes

1. Stock control records must already exist or the assemblies will be rejected. This can be achieved by using the Line100 Stock CSV Import feature before running the assembly imports.
2. Records will only be created if no assembly record exists.
3. Drawing numbers that do not exist will be automatically created, therefore the drawing number import (if one exists) must be done before the assembly import.

Assembly Comments Layout (V6.22)

Assembly Number	X(20)	(Mandatory)
Narrative Code	9(4)	(Standard Narrative Code, 0000-Non Standard)
Comment Line	X(75)	

Notes

1. Assembly headers must already have been imported before comments can be accepted.
2. Comments will only be imported onto assemblies which do not already have comment lines attached. An override option is available to allow comments to be appended.

Component Detail Layout (V6.22)

Assembly Number	X(20)	(Mandatory)
Item Type	9	(1 = Stock item) (3 = Non stock item) (Default = 1)
Component Number	X(20)	(Mandatory)
Item Description 1	X(30)	(Only for non stock items)
Item Description 2	X(30)	(Only for non stock items)
Item Description 3	X(30)	(Only for non stock items)
Item Cost	9(10).9(4)	(Only for non stock items)
Reorder Lead Time	99	(Only for non-stock items. Value in days)
Product Group	X(4)	(Only for non-stock items. Must exist in stock product groups)
Drawing Number	X(20)	(Ignored for non stock items)
Issue Letter	X(10)	(Ignored for non stock items)
Variable/Fixed Qty	9	(1 = Variable) (2 = Fixed) (Default = 2)
Sequence Number	9(6)	
Required Qty	9(10).9(4)	
Average Usage	9(10).9(4)	(Only for variable quantities)
Buying Unit Code	9(2)	(Stock buying unit code)
Effective Start Date	X(10)	(DD/MM/CCYY)
Effective Finish Date	X(10)	(DD/MM/CCYY)
Yield Percentage	9(3).9999	(Values between 0.0001 and 999.9999) (Default = 100%)
Rounding Flag	9	(1 = Yes) (2 = No) (Default = 2) (Ignored for non stock items)
Rounding Value	9(10).9(4)	(Ignored for non stock items)
Bulk Issues	9	(1 = Yes) (2 = No) (Default = 2) (Ignored for non stock items)
Replacement Allowed	9	(1 = Yes) (2 = No) (Default = 2) (Ignored for non stock items)

Notes

1. Stock control records must already exist for stock item components or the items will be rejected. This can be achieved by using the Line100 Stock CSV Import feature before running the assembly imports.
2. Assembly headers must already have been imported before components can be accepted.
3. If duplications are allowed then components will be appended to assemblies. If not then any duplicates found will be rejected.

Component Comments Layout (V6.22)

Assembly Number	X(20)	(Mandatory)
Component Number	X(20)	(Mandatory)
Narrative Code	9(4)	(Standard Narrative Code, 0000-Non Standard)
Comment Line	X(75)	

Notes

1. Assembly headers and components must already have been imported before comments can be accepted.
2. Comments will only be imported onto components which do not already have comment lines attached. An override option is available to allow comments to be appended.

Drawing Master Layout (V6.22)

Drawing Number	X(20)	(Mandatory)
Drawing Description	X(30)	
Drawing Description 2	X(30)	
Issue Letter	X(10)	
Issue Date	X(10)	(DD/MM/CCYY - Default to today's date)
Sales Ledger Account Code	X(8)	
Comments	X(30)	
Comments 2	X(30)	
Document	X(20)	

Notes

1. Records will only be created if no drawing record exists.

CSV file layouts for Capacity Planning

Work Centre Layout (V6.22)

Work Centre	X(20)	(Mandatory)
Cost Centre	X(3)	
Department	X(3)	
Description	X(30)	
Description 2	X(30)	
Tracking Depot	X(4)	(Only available for machines)
Tracking Bin	X(5)	(Only available for machines)
Work Centre Flag	9	(1 =Labour, 2 =Machine, Default =1)
Sub Contract Flag	9	(1 = Yes, 2 = No, Default = 2)
Serial/Parallel Flag	9	(1 = Serial, 2 = Parallel, Default = 1)
Default Hours	X(5)	(HH:MM)
Default Unit Time	X(13)	(HHHH:MM:SS.SS)
Default Setup Time	X(13)	(HHHH:MM:SS.SS)
Number of Units	9(4)	(Default = 1)
Standard Rate	9(10).9(4)	
Standard Setup	9(10).9(4)	
On Cost Percentage	9(3).9(4)	
Warning Load Percentage	9(3).9(4)	
Default Unit Capacity	9(10).9(4)	(for and operation, Default 1)
Charge Rate	9(10).9(4)	
Charge Setup	9(10).9(4)	
Std Overhead Percentage	9(3).9(4)	
Setup Overhead Percentage	9(3).9(4)	

Notes

1. Records will only be created if no work centre record exists.

Operation Layout (V6.22)

Operation Code	X(20)	(Mandatory)
Description	X(30)	
Description 2	X(30)	
Alternative Operation	X(20)	
Unit Capacity	9(10).9(4)	
Work Centre	X(20)	(**This block from Work Centre to Queue Time)
Cost Centre	X(3)	(repeats ten times)
Department	X(3)	
Number of Units	9(4)	
Run Time	X(13)	(HHHH:MM:SS.SS)
Setup Time	X(13)	(HHHH:MM:SS.SS)
Movement Time	X(13)	(HHHH:MM:SS.SS)
Queue Time	X(13)	(HHHH:MM:SS.SS)

Notes

1. The first block of work centres must include at least one valid work centre in block one otherwise the item will be rejected.
2. Work Centres must already have been imported before operations can be accepted.

Routing Detail Layout (V6.22)

Assembly Number	X(20)	(Mandatory)
Operation Code	X(20)	(Mandatory)
Series Level Number	9(4)	(Default = 10)
Sequence Number	9(6)	
Required Qty	9(10).9(4)	
Tooling Reference	X(20)	
Milestone Flag	9	(1 = Yes, 2 = No, Default = 2)
Effective Start	X(10)	(DD/MM/CCYY)
Effective Stop	X(10)	(DD/MM/CCYY)
Yield Percentage	9(3).9999	(Values between 0.0001 and 999.9999) (Default 100%)
Setup Factored	9	(1 = Yes, 2 = No, Default = 1)

Notes

1. Assembly headers and operation records must already exist or the items will be rejected.
2. If duplications are allowed then operations will be appended to assemblies. If not then any duplicates found will be rejected.

Route Comments Layout (V6.22)

Assembly Number	X(20)	(Mandatory)
Operation Code	X(20)	(Mandatory)
Narrative Code	9(4)	(Standard Narrative Code, 0000-Non Standard)
Comment Line	X(75)	

Notes

1. Assembly headers and operations must already have been imported before comments can be accepted.
2. Comments will only be imported onto operations which do not already have comment lines attached. An override option is available to allow comments to be appended.

Tooling Master Layout (V6.22)

Tooling Reference	X(20)	(Mandatory)
Tooling Description	X(30)	
Information	X(30)	
Information 2	X(30)	

Notes

1. Records will only be created if no tooling record exists.

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