

Production

1. Production Module

The Production Module is used for factories, production houses and other similar plants with the purpose of systematically tracking production-related inventory transactions, supporting planning and tracking the inventory status of production departments.

2. Receipt

2.1 Bill of Materials

The screenshot displays the 'Bill of Materials' software interface. The window title is 'Bill of Materials'. The interface includes several input fields and controls:

- Product Code** and **Product Description** fields.
- Structuring Code** and **Explanation of Structuring Code** fields.
- BOM Tot.** field, **Auto Prod.** checkbox, and **Unit** dropdown (set to '1 -').
- Two tabs: **BOM Info-1** (selected) and **BOM Info-2**.
- Under **BOM Info-1**: **Sequence** field, radio buttons for **Operation** and **Component**, and **Component Code** field.
- Another **Structuring Code** and **Explanation of Structuring Code** field.
- A table with columns: **Unit**, **Quantity**, and **Code of product consumed**.
- A main table with columns: **Sequen**, **Component Code**, **Component Desc.**, and **Unit**.
- Status bar: **Current BOM Tot.** (value: 1), **New BOM** button, and **Delete BOM** button.

In this section, you should record, view and modify the raw material and/or semi product bill of materials for the products that you will produce. You should record the BOMs for all products and semi products separately in this section. Consider every product that you produce as either a product or a semi-product, and the goods that you buy in order to realise your production as raw material. In this way, you can generate your BOMs for semi-products

according to the raw materials that you use in those semi-products, and you can generate your BOMs for your products according to the raw materials and semi-products that you use in those products. You can also create multi-level BOMs. You can multiply the semi-product level as much as you need.

For example, you can insert infinite number of levels as shown below:

PR1 is made of SP1 and SP2;
SP1 is made of RM1 and RM3;
SP2 is made of RM4, etc.

Your work in the production module will be easy if your levels are clear and simple. No specific sequence priority is required for semi-products and products when creating a BOM. You can generate your BOMs in the sequence that you desire. The only condition is that the raw material, semi-product and product codes must be previously defined in the inventory module.

The BOM is used for defining the product. It is the Bill of Material record, which defines to the programme the components that constitute a certain product.

Product Code

This is the section where you should enter the code of the product/semi-product for which you will create a BOM. This code should be the same as the code recorded in the Inventory Master Records section.

Product Description

In this section, the programme inserts the explanation related to the Product/Semi Product code that you entered.

Structuring Code

In cases where the Flexible Structuring application is used, this field is active for inventory items for which the "Configurable" option is selected on the inventory card. When creating the customer/supplier records for inventory items, the configuration for which that specific record is valid is specified in this field. You can enter in this field one of the structuring codes that you have previously recorded in the Product Structure Definition menu. You must enter a structuring code if this field is active; it cannot be left blank.

[For details about the Flexible Structuring application, please see Inventory/Flexible Structuring.](#)

Explanation of Structuring Code

This is the section where the programme inserts the explanation information for the code that you entered in the Structuring Code field.

BOM Total

This is the field where you specify the product/semi product units for which you define the BOM.

Auto Prod.

If there is a semi-product recorded in the BOM of a product, in other words, if you are using a semi product in the production of a product, then this parameter also realises the automatic production of those semi products during the production of that product. This parameter frees you of separately producing the semi products that are recorded in the BOM of the related

product. The only record that you should insert for the production of the related semi products is the Finished ods Receipt. To explain this parameter with an example, let us assume that we have raw materials defined by codes RM1, RM2, RM3, RM4, and semi products defined by codes SP1 and SP2, and products defined by code P1.

As you see in this example, two different semi products are used in the production of P1. Let us again assume that the Auto Prod. option is selected in the manufacture BOM of SP1 and not selected in the manufacture BOM of SP2. If we realise the production of P1 according to these parameters, since the Auto Prod. option is selected in the BOM of SP1, the system both deducts from the related transaction records the amount of SP1 that is required for this production, and automatically realises the production for the same amount of SP1. And because the Auto Prod. option is not selected in the BOM of SP2, the system again deducts the amount of SP2 that is required for this production from the transaction records of SP2 but does not realise the production for SP2. Thus, you should produce SP2 minimum at the quantity used in this production by processing a finished ods receipt. The transactions for the raw materials and semi products when the product is produced with these conditions will be as follows:

SP1 (+) = RM1 (-) , RM3 (-) ,

There are no changes for RM4 that is defined on SP2's BOM.

P1 (+) = SP1 (-) , SP2 (-) , RM2 (-) .

This parameter is valid for semi product BOMs. It is important that you specify when recording BOMs for semi products whether or not you want the system to automatically produce the semi product when it is used in the production of a semi product or product. If you want the system to automatically produce the related semi product in the quantities that you consumed in the production of a semi product or product, then you should select the Auto Prod. parameter, otherwise leave the parameter not selected. You should separately produce the semi products for which you do not select this parameter.

Warning: Selecting or not selecting the Auto Prod. parameter in product BOMs has no function.

Unit

The screen displays the Measurement Unit 1 information, which you have previously entered in the Inventory Master Record of the component. It is not possible to record the components on the basis of other measurement units. You should enter the BOM quantities in the same unit as given in Unit-1.

2.1.1 BOM Info-1

Sequence

This is the sequence number that is used for the components you recorded on the BOM. Every component should have a sequence number. Sequence numbers enable you to see the order in which the components are used. It

furthermore enables you to define the usage order if the same component is used several times in the same BOM.

Sequence numbers can have maximum 8 digits. The programme automatically brings 4-digit sequence numbers. If you need to insert new components between the already recorded components after you complete the BOM, you can do so by using sequence numbers in the desired order. For example, if you wish to insert a new component between components numbered 0004 and 0005, you can insert this new component with sequence numbers 00041, 000401, 0004001 or 00040001.

Operation/ Component

With this option you can specify whether the item you record in the BOM is a component or an operation. Only companies that run the MRP module can use the operation option. These companies can insert their operation definitions in the MRP module and enter their operation (route) codes in this field.

Operation is a production stage. This is to say that the product may undergo certain operations (washing, drying, gluing, etc.) after certain components are used. For example, it may be boiled in 100°C water for ten minutes.

Companies who do not use the MRP module should select the COMPONENT option in this field.

Component Code

This is the code that you previously recorded in the inventory master records of the raw material and/or semi products, which are listed in the BOM of the product.

Component Description

When you correctly enter the component code, the programme displays the component description as it is recorded in the Inventory Master Records.

Quantity

This field specifies the quantity of this component in the BOM. Here you should determine the coefficient of the component quantity according to the quantity you inserted in the BOM total.

Code of Product Consumed

This field is for fictive product usage. In some applications several products are produced when raw materials or semi products are produced. Because components can be defined for only one product in the BOM Definition section, a fictive product can be created to support this application. To do this, in the BOM of the fictive product you should define the components and the products for which these components are consumed. You should first insert a record for the fictive product in the Inventory module, and then select the "fictive product" parameter on the Inventory Master Records / Extra Information page. Then in the bill of material definition section you should define the bill of material for the fictive product. As mentioned above, unlike the current application, the components in the BOM may be consumed for more than one product. Thus in the BOM of the fictive product you should enter in the "code of product consumed" field the product codes of the different products for which the components will be consumed on component basis. And for the products consumed you should insert a record that indicates "PRODUCTION" as the component code and the code of the produced product in the "code of product consumed" field. You can read the operation for the fictive products in the Finished ods section.

Description

This field enables you to enter explanations on BOM basis for the related component. For example, you can write an explanation that the component should be slowly stirred in the product.

Current BOM Total

If the BOM total is different than 1, in other words if the quantity total of the components adds to the unit total of the product, in this case, this field shows you the updated BOM total as you add components (raw material/ semi product) to the BOM. You are not allowed to manually modify this field. You can view this field as you enter information and compare the figures that you previously defined in the BOM total according to the component records with the total figure you get at that moment.

New BOM

When you complete the BOM record related to a product, you can use this key to clear the screen and record a new BOM.

Delete BOM

You can use this key to delete a BOM that you previously recorded.

2.1.2 BOM Info-2

The screenshot displays the 'Bill of Materials' window with the following fields and values:

- Product Code:** G001
- Product Description:** Shirt
- Structuring Code:** BL
- Explanation of Structuring Code:** WHITE LARGE
- BOM Tot:** 1,00
- Auto Prod.:**
- Unit:** 1
- Component Information:**
 - Fix Quantity:**
 - Inventory Cost:**
 - Operation Code:** [Empty]
 - Loss Qty.:** 0,00
 - Fixed Loss Quantity:** 0,00
- Operation Info.:**
 - Workst. Code:** [Empty]
 - Simult. Opr.:** 1,00
 - Use in S.F.C.:**
 - Setup Time:** 0
 - Transport Time:** 0
 - Labor Cost:** 0,00
 - Last Oper.:**
 - Production Time:** 0
 - Transport Qty.:** 0,00
 - Other Cost:** 0,00
- Alternative Policies:**
 - Priority:** 0
 - Planning Ratio:** 0,00
 - Change priority in document:**
 - W.H. Trans. Vchr.:** None
 - W.Hs. Issue Vchr.:** None
 - Fin. G. Rcpt.:** None
 - MRP:** None
- Validity Information:**
 - Validity Date:** 00.00.0000
 - Revision No.:** [Empty]
 - Last Rev. No.:** [Empty]
 - Status after Brk.:** Self, Delete, Catalog, New
- Current BOM Tot.:** 1
- Buttons:** New BOM (with refresh icon), Delete BOM (with delete icon)

Component Information

Fix Quantity

When you produce a product for which you have recorded the BOM, you should select this field if the consumption quantity of a raw material or semi product remains the same, regardless of the production quantity. During the production of the product (Finished ods) regardless of the production quantity you entered, the system reduces the raw material or the semi product according to the quantity that you specified in the BOM record.

Contract Type (Inventory/Cost)

Here you can specify either the Inventory or the Cost option. The contract type of components that can affect inventory onhands in quantity, e.g. raw materials/ semi products, should be marked Inventory. The contract type of components that do not affect the inventory onhands in quantity, but affect only the product cost, e.g. electricity, should be marked Cost. In order to record the components, which can generate additional cost on the BOM, you should first record these items in the inventory in the same way you record inventory items. The programme processes transactions for the cost contract type components not in quantity but only in amount as production records are processed.

Operation Info.

The programme displays information in this section only if you are running the MRP application. If, for companies that run the MRP module, there is an operation in the production phases then the related operation definitions are recorded in the MRP module. If *Route* is defined in the MRP, and you retrieve the route code, then the programme automatically displays all of the information. If *Route* is not defined, then the lower fields appear blank. If the related component recorded in the BOM is an operation, you can view information in the fields at the bottom. You can read the details for these fields in the MRP module help menu.

Alternative Policies

When you define alternative materials for product trees, the programme runs the operations on the warehouse transfers, warehouse exit voucher, finished ods and MRP sections according to the alternative policies indicated on the Bill of Materials/BOM Info-2 page.

These policies determine how to proceed according to the inventory onhand of the materials in the planning and production stages. For example, when transferring materials from the headquarters to the production line by using the warehouse transfer operation, you can decide whether you should supply the required material quantities with the material indicated in the BOM or according to an alternative policy as determined.

Priority

In this field you can define a priority sequence for the materials on your product trees. If you have defined alternative materials for the inventories on your product trees, the programme supplies the required material quantities by considering the previously recorded information. In doing so, the below-explained Alternative Policies gain importance.

Planning Ratio

You should use this field if you wish to supply a material that is defined in the product tree and the alternative materials in quantities according to a specific ratio. However, if you wish to supply these materials according to the planning ratios, then you should select the Ratio in Alternative Policies.

Change Priority in Document

This parameter enables you to manually modify the priorities during the warehouse transfer, warehouse exit voucher, manufacture order entry and finished ods operations. If you select this parameter, the system processes the main material to which you assigned priority when inserting the related

document or its alternative. If you don't select this parameter, the system proceeds according to the defined alternative policy.

For example, let us assume that in there are three main components of X1, Y1 and Z1 in the BOM of product P1, and the priorities for each of these three components are 1. Let us again assume that the alternative of X1 is X2, the alternative of Y1 is Y2 and the alternative of Z1 is Z2, and the priorities for each of these three alternatives are 2. In this example, when you use component Y1 you must physically use Z1. In the same way, when you use Y2 you must use Z2. This is to say that you cannot use Y1 and Z2 together, and you cannot use Y2 and Z1 together; but there are no physical conflicts in using X1 and X2. In this case, you should select this parameter for components Y1 and Z1. In these types of components you cannot allow the programme to run according to the determined alternative policies. You should decide on document basis which of the Y1 – Z1 or Y2 – Z2 pairs you will use. If you enter 1 for the priority information queried in the document, the programme uses Y1 – Z1, and if you enter 2 for the priority information the programme uses Y2 – Z2. The programme proceeds according to one of the other defined alternative policies for X1.

None

Selecting this parameter indicates that you wish to use the material that is defined in the BOM and not the alternative products even if there are alternative definitions.

Ratios

When you select the ratios, the programme locates the required material quantities according to the ratios defined in the BOM or alternative definition, and uses the materials according these ratios. For example, let us assume that in the BOM you indicated a ratio of 80% for RM1 and 20% for RM2 which is the alternative of RM1. If, in this case, you need 100 units of RM1 for the production, the system uses 80 units of RM1 and 20 units of RM2.

Priorities

This information indicates that the programme verifies the priorities and first uses the required material that has the smallest value different than zero. You can define priorities for a material used in a BOM both in the BOM and in the alternative definition if applicable. For example, let us assume that the priority of RM1 on the BOM is 2 and the priority for its alternative RM2 is 1. In this case the system supplies the required quantity from the smaller priority value, i.e. RM2.

If the system does not locate a priority value that is specified in this policy and is different than zero, then it uses the material indicated in the BOM. Defining the priority zero for a material indicates that it does not hold any priority and is for information purpose only.

Onhand in Priority Sequence

When you select this policy, the system verifies the inventory onhands according to the priority sequence for the required material. If the inventory that holds the highest priority displays sufficient onhand quantity, then the system uses this material for the total required quantity. If, however, the onhand quantity of the material with the highest priority is not sufficient, then the system uses the onhand quantity and supplies the remaining required

quantity from the material that holds the second highest priority. If, for this material, the system does not locate any priority other than zero, then it uses the material indicated in the product tree. If the onhand of a material does not meet the required quantity, then the system uses the available quantity.

100% in Priority Sequence

When you select this policy, the system verifies the inventory onhands according to priority sequences and uses the material that can supply the total required quantity.

For example, for a material that you require 200 units, the onhand of material priority-1 is 150, and the onhand of material priority-3 is 250. In this case, the system uses the material with priority 3 that can supply the total required quantity.

If the system does not locate any material onhand, which supplies for 100% of the required quantity, then the system consumes the components indicated on the related BOM.

When verifying the inventory onhands the system checks the code of the warehouse/branch from which the product is supplied.

The system may use alternative materials according to the policy you defined, also in the Finished ods and record accordingly.

When verifying the inventory onhands in the Finished ods records, the system checks the given local warehouse code or the branch/warehouse descriptions defined in the Production parameters.

You can select only the Ratios or None policies in the MRP query. MRP does not support the other policies.

You can access the Alternative Material Information with a right-click when you are in the BOM.

Validity Information

In these fields you can view the modifications that you made or will make in the Planned Engineering Changes section.

Validity Date

If you plan to change the component that you are currently processing with another material, you can view the date of this change in this field.

Component Code After Brk.

If you plan to change a component in the BOM with another material after a certain time period, this is the field where you can specify this change on the BOM. If you will change the component that you are currently processing and substitute it with another material, you can view the new component code in this field.

Component Description After Brk.

In this section you can view the description of the component code, which you entered in the above-explained field as it is defined in the inventory card.

Revision No

This is the field where you can view the number of the revision that you defined by using the planned engineering changes function. In this field you can view the information about the revision with which the validity information is defined and reflected on the BOM.

Last Revision Number

If there are any planned revisions for the related component, you can view the related revision number in this field even if this revision is not yet reflected on the BOM. This field will be blank if there are no planned revisions.

Status After Brk.

In this field you can view the state, which a component will display after a plan that has been defined with a revision number. If the related component will be replaced by another component according to the information defined in the BOM, then you will view this component as SELF. If you are running the MRP module and you have defined the operation information, then, because the system retrieves the information of the new component from the operation information, you will view this component as CATALOG. If this component will not be used again and will be deleted, then you will view this as DELETE.

2.1.3 Function Keys used in BOM

2.1.3.1 View BOM

This option allows you to view your BOMs also at lower levels. You can view the component details of the BOM by right-clicking your mouse.

2.1.3.2 General Explanation

This is the option that enables you to enter general information about the BOM. You can view this option by right-clicking your mouse, and then enter your explanation. The explanation you enter here will also be displayed in the Inventory Information section in the product or semi product inventory master records.

2.1.3.3 Raw Material Total Information

This is the option where you can view the usage quantities of the raw materials that are used in the product BOM, even to the lowest levels. In case a certain raw material is repeated in the BOM and/or at the lower levels you can view the cumulative usage quantity. If there is a Solid Material Application, then you can calculate the solid material quantities by using the evaporation ratios that you previously recorded in the inventory cards of the raw materials, and view these quantities.

2.1.3.4 Alternative Material Information

You can display this option by right-clicking your mouse and access the alternative material information for the components recorded in the BOM that you are currently processing. To be able to use this feature you must have defined the alternative for the related component in the alternative material definition section.

2.2 Super Bill of Materials

Since a separate inventory card should be inserted for every specification of the product when flexible structuring is not used, you should also define every BOM separately. With the flexible structuring application, however, after you insert a single BOM definition, the programme can create BOMs according to the specifications of the product.

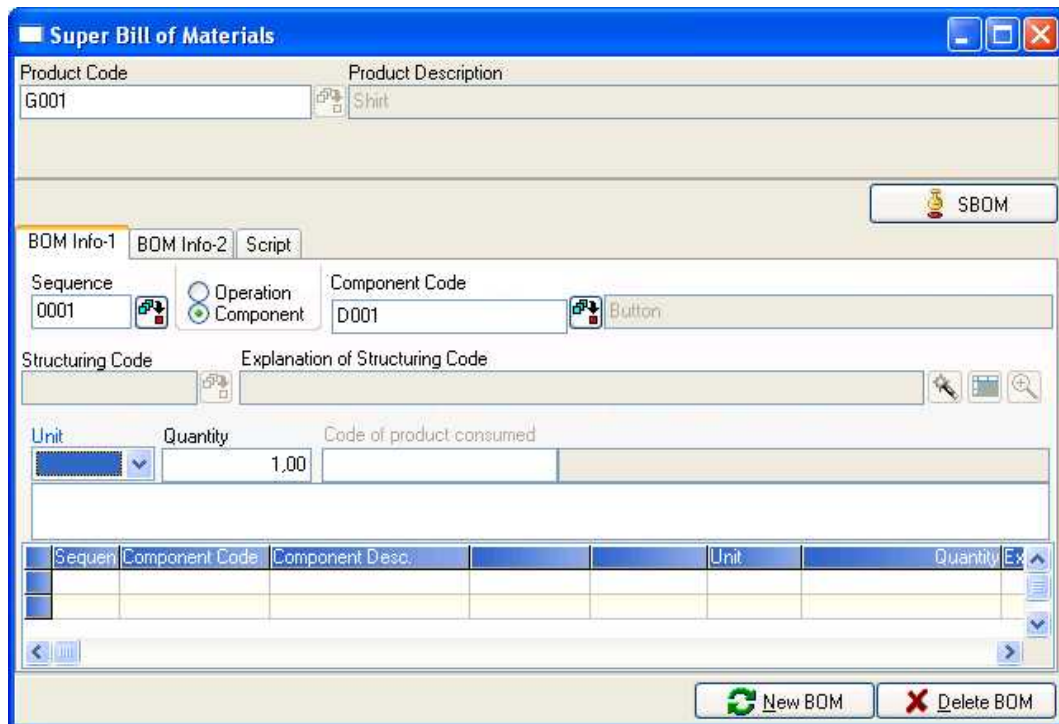
With the Super Bill of Materials, it is possible to define product or semi product BOMs that can be discriminated according to their structuring codes. For example, let us assume that you require cloth to use in shirt production. But you will use different fabrics to make different types of shirts, e.g. white cloth to make white shirts.

In order to define Super Bill of Materials for any product, you should have selected the "Flexible Structure" and "Use Super BOM" options in the Inventory Master Records/ Extra Information page of the product. You do not need to select the "Use Super BOM" option for the components, which you will use in the Super Bill of Materials definitions.

You cannot insert a Super Bill of Materials record for products for which you have not selected the "Use Super BOM" option in the Inventory Master Records. For these type of products you should insert the BOM records in the Bill of Material Records section. Let us explain the Super Bill of Materials Records with an example. Let us assume that the components for the shirt product are as below.

G001: Shirt
→ K001: Cloth
→ I001: Thread
→ D001: Button

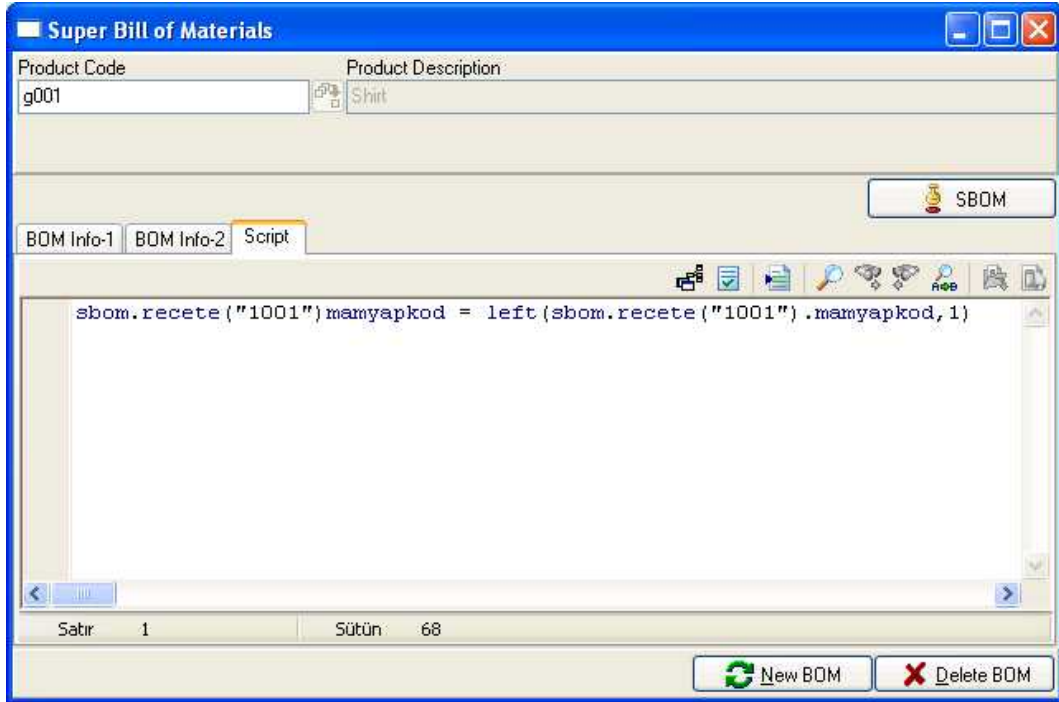
After you enter the inventory code for which you will define the BOM, you should define the components information in the BOM Info-1 section.



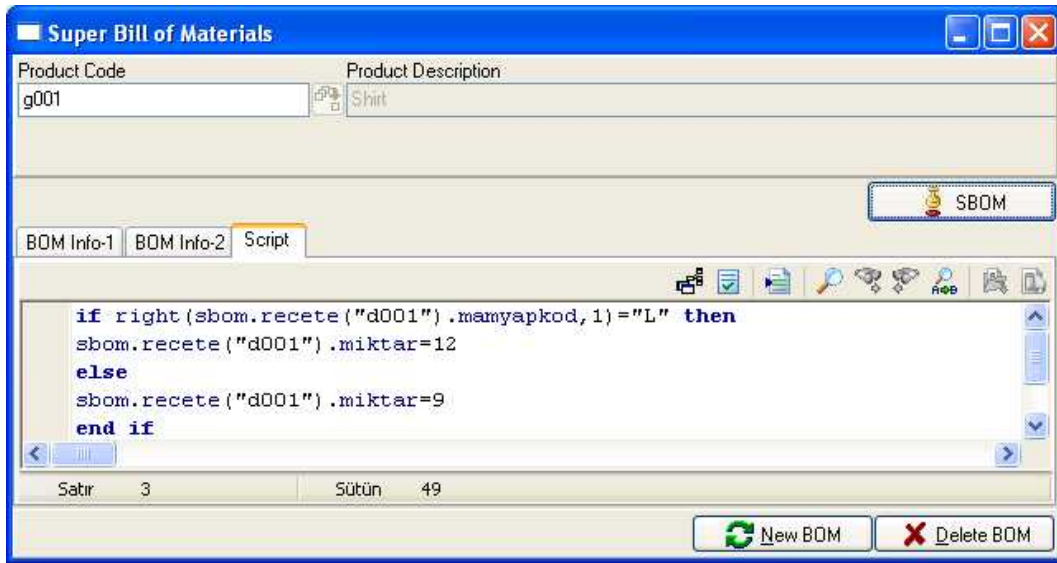
The BOM for the shirt in the above-given example is as in the screenshot. The difference of a Super Bill of Materials from a Bill of Materials is the “**Script**” entry in the Super BOM. Let us explain the purpose of this entry again with the shirt example. The structuring codes for the shirt product can be one its colour and second its size:

BL: White-Large
GM: Grey-Medium

We should consider that the thread and fabrics that are used in shirt production can also be structured and vary according to the colour of the shirt. I.e., you should white thread and cloth to make a white shirt. As shown in the screenshot below, on the script page you can define that the raw materials for the thread and cloth should change according to the structuring code and get the first character of the structuring code.



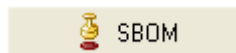
In case the sentence that you write on the Script page is as shown above, when you select raw material I001 (Thread) on the Super Bill of Materials, the programme assigns the first character on the left of the structuring code of the product as the structuring code of the thread raw material. In other words, if you define the BOM for the structuring code BL (White-Large) of the product, the structuring code of the thread will be B (White). Also the number of buttons (D001) may vary according to the shirt size. You may want to differentiate the quantity value according to the structuring code of the button raw material. In this case you do not need to select the "Flexible Structure" option in the Inventory Master Records of the Button. You can assign the quantity in the Super Bill of Materials according to the structuring code, which the product can get.



In case the sentence that you write on the Script page is as shown above, when you select raw material D001 (Button) on the Super Bill of Materials, if the first character on the right of the product's structuring code is L (Large), the programme understands that you want to use 12 buttons, in other cases it will use 9 buttons.

You can regard the Super Bill of Materials as a template. The Super Bill of Materials will change as you define different specifications. You cannot insert Finished ods with the Super Bill of Materials. To be able to insert Finished ods the related Super Bill of Materials should be concrete and transformed into a normal Bill of Materials.

To be able to get a normal BOM breakdown from a Super BOM definition, you should indicate a structuring code (combination of specifications) for the product that can be structured. In order to create a normal BOM breakdown for the structure, you should use the **SBOM** key in the **Structuring Wizard**. The **SBOM** key in the Super Bill of Materials definition section also takes you to the **Structuring Wizard**.

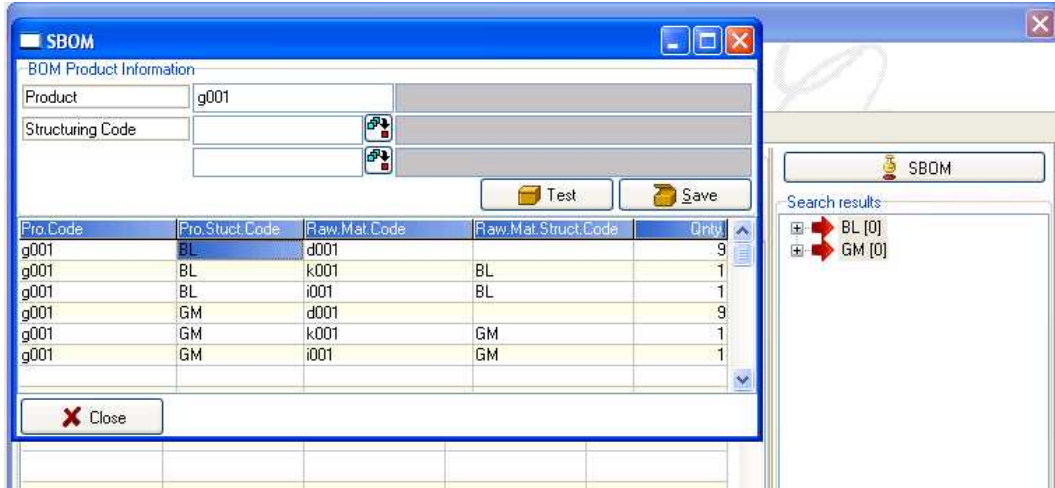


After defining the Product BOM in the above-explained way, you should use the SBOM option to create normal BOMs according to different structuring codes.

When you press the SBOM key the programme displays the **Structuring Wizard**. In the search Results section of the Structuring Wizard you should specify the desired structures for which you want to insert BOMs. You can select multiple codes by clicking on the entry and pressing the CTRL key at the same time.

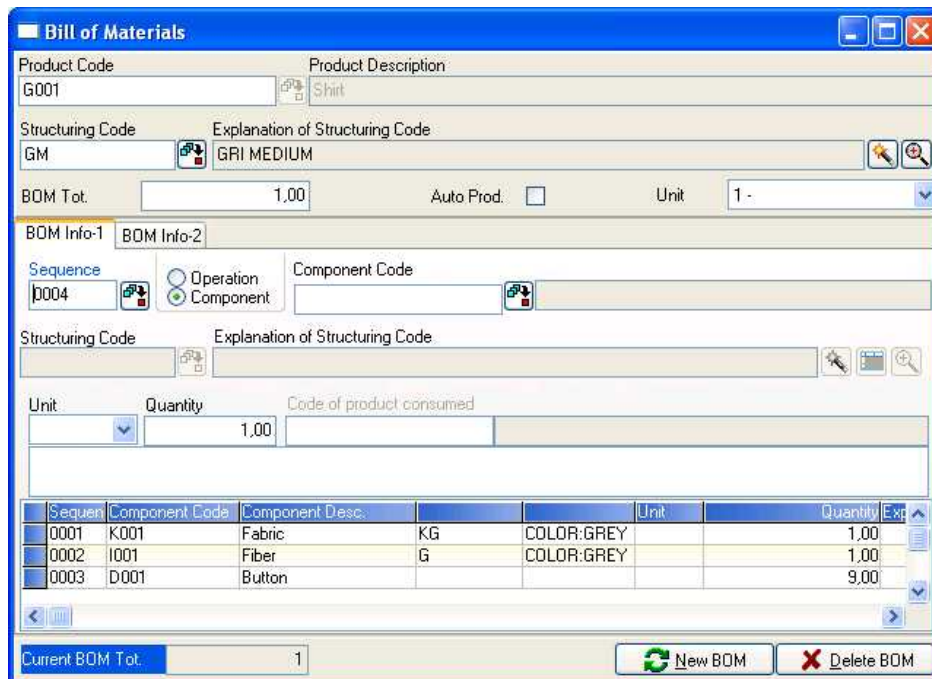
After you select the structuring codes, if you press the SBOM button in the Structuring Wizard section, the programme displays the SBOM → BOM (Creating normal BOM from Super BOM) screen. When you press the **Test** button on the SBOM screen, you can view the normal BOM information that

will be created for the structuring codes that you selected on the wizard screen.



BL (White-Large) and GM (Grey-Medium) structuring codes are selected in the above example. The structuring codes of the raw materials and the quantities differ according to the structuring codes used for the product. For example, while 9 buttons are assigned to the shirt that has the structuring code GM, 12 buttons are assigned to the shirt that has the structuring code BL.

After verifying the BOMs with the test button, you can press the **Save** button to insert the definitions in the Bill of Materials section. On the Bill of Materials screen you can view the Bill of Materials information that you created by using the SBOM option in the Super Bill of Materials section.



The screenshot above shows the BOM record created for the GM structuring code of product G001. When you insert bill of materials by using the SBOM option in the Super Bill of Materials section, you can later retrieve these from the Bill of Materials section to view, modify or delete as desired.

[To read further explanations about the Super Bill of Materials fields please see Production/ Bill of Materials.](#)

2.3 Variant Material Definition

This is the section where you can define the alternatives for the components and/or operations in the BOMs. This section consists of two subsections, Material Definition-1 and Material Definition-2.

2.3.1 Material Definition-1

Component Code	Component Desc.	Variant Code	Variant Desc.	Product Code	Quantity	Priority	Planning Ratio	Sequence	Compl	Cor
D001	Button	d002	Button	g001	1,00	0	0,00	1		

Item / Operation

This is the parameter that specifies if the record for which you will define an alternative is a component or an operation.

Component Code

This is the component/operation code for which you will define the alternative. The programme automatically displays in this field the code that you select in the lookup.

Alternative Code

In this field you should enter the alternative code of the selected component.

Product Code

In this field you should enter the product/semi product code of the component/operation for which you will define the alternative. In the cases where more than one product/semi products are used in the component/operation, if you write a single product code in this field, the

alternative material will be valid only for this product BOM. If you leave this field blank, then the alternative material can be used in all product/semi product BOMs where the component is recorded.

Priority

You can define more than one alternative material for a single component. In this field you can define the priorities of these materials. The programme first uses the materials that display the smaller priority value.

Sequence

The component you select in the BOM may be used separately in different sequences in a single BOM. In this case, when you define alternative materials for a component in a specific sequence, then you should indicate the related sequence number. If you do not indicate the sequence number, then the programme applies the given alternative material for all sequences.

Planning Ratio

You should use this field if you want the system to use a material that is defined in the product tree and the alternative materials according to the required ratios. The system calculates the quantity of the semi product to be used in the production of the product according to the ratio indicated in this field. For example, let us assume that the ratio for RM1 in the BOM is 60% and the ratio for its alternative RM2 is 40%. In this case, if you need 100 units of RM1 to produce the product, the system supplies 60 units as RM1, and the remaining 40 units as RM2.

Mult.

You should select this parameter if you want the system to use the alternative material quantity as a multiple of the component quantity indicated in the BOM. For example, in the BOM you want to use 2 units of RM1 for 1 unit of P1. Let us assume that you selected "Mult." (multiple) for the quantity type of RM2, which is the alternative of RM1, and you enter 1,5 in the quantity field. In this case, if you want the system to use RM2 when you produce one unit of P1, then the system uses 3(2x1,5) units.

Const.

You should select this parameter if you will enter a fixed value for the alternative material quantity. In this case, the consumed quantity of the component is the multiplication of the produced unit quantity of the product and the quantity value indicated on the alternative material definition page. For example, let us say that RM1 is used in the BOM of product P1; the quantity type you selected for RM2, which is the alternative of RM1, is "Const." (constant) and the value in the quantity field is 3. In this case, when producing one unit of P1, if the system will use RM2, then it will use 3 units of RM2.

Quantity

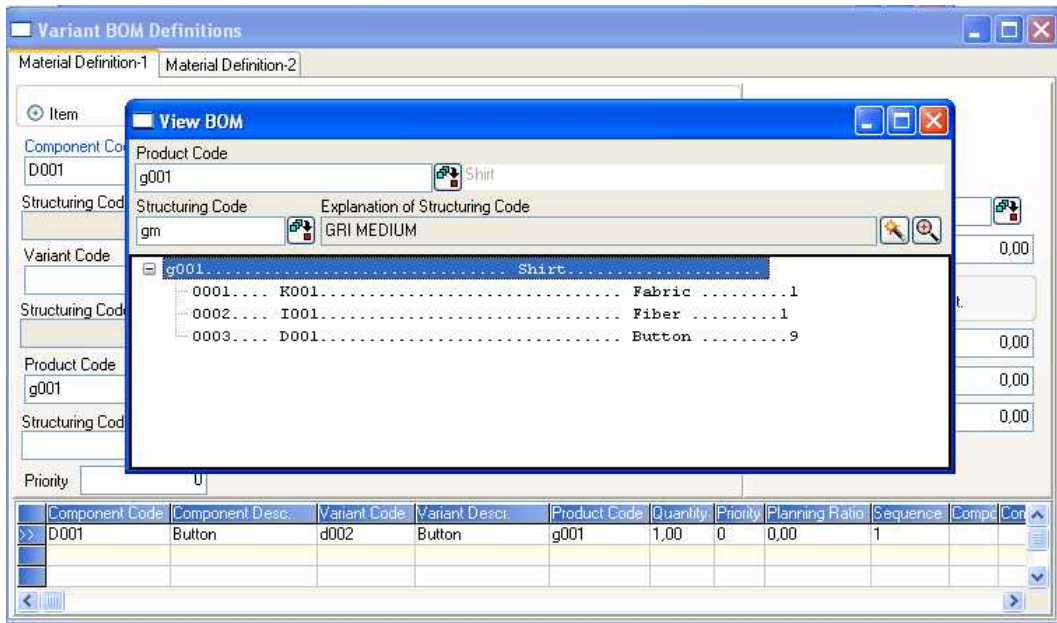
In this field you should enter the quantity/multiplication information for the alternative material.

Loss Qnty.

In this field you should enter the loss quantity for the alternative material.

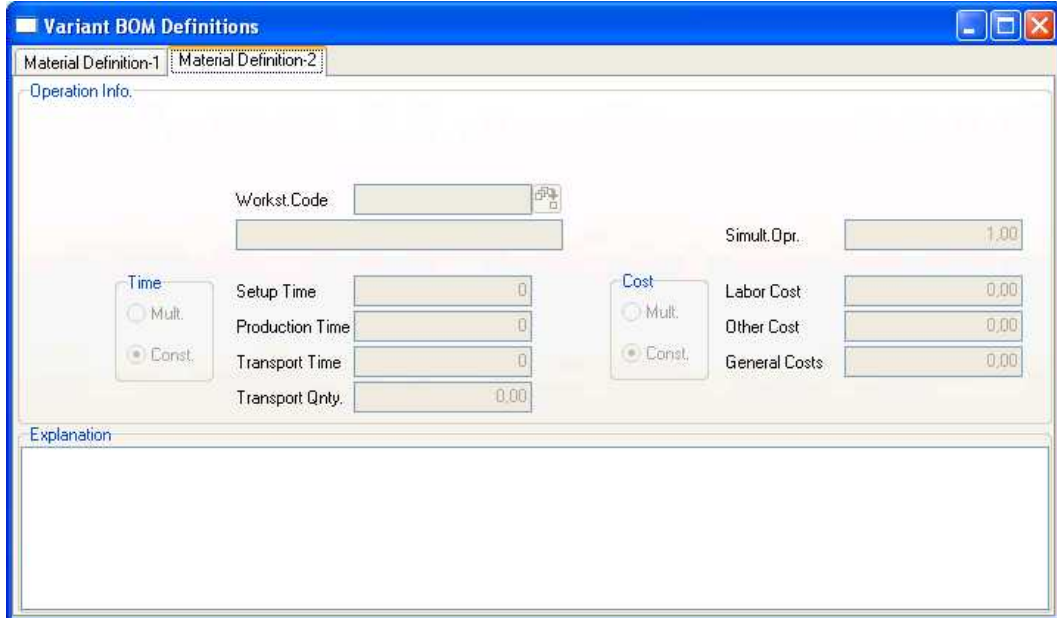
View BOM

If you right click on the Alternative Material Definition screen, you can view the BOM information.



2.3.2 Material Definition -2

On the Material Definition-2 page, you should enter the time and cost information related to the alternatives of the operations in the BOM.



To enter values on the Material definition-2 page you should;

- Select the operation parameter on the Material Definition-1 page,
- Enter as the component code, an operation code that is defined in MRP.

If you leave the product code field on the Material Definition-1 page blank, then you will be able to use alternative operation in all of the product/semi product BOMs where the operation is recorded.

If, however, you enter a product code, then the alternative operation will be applicable only for that product/semi product.

Workst. Code

In this field you should indicate the workstation of the alternative operation. You cannot leave this field blank. You can use the lookup key in the related field to access the workstations lookup that you previously defined in the MRP module.

Time;

Mult.

You should select this parameter if you want to enter values that are specific multiples of the time in the BOM of the operation for the setup, production and transport times of the alternative operation.

Const.

You should select this parameter if you want to enter fixed values for the setup, production and transport times of the alternative operation.

Setup Time

In this field you should indicate the time that you require to start the defined alternative operation. For example, the machine you use in the operation may need 30 minutes to warm up.

Production Time

In this field you should enter the time period that passes between the initiation of the defined operation and the completion of the first unit produced.

Transport Time

In this field you should enter the time period that passes between the end of an operation and the beginning of the next operation.

For example, let us assume that the setup time of the operation coded Y1 on the BOM of product P1 is 10 minutes; and you selected the type of time for the alternative operation Y2 as "multiple" and entered 2 in the setup time field. In this case, if you use the Y2 operation to produce one unit of M1, then the system calculates the setup time as 20 minutes (2*10).

If you select "Constant" as the time type for operation Y2 and enter 25 minutes, then the setup time for operation Y2 will be 25 minutes.

Transport Qnty.

This is the quantity that is transferred to the next operation.

Simultaneous Counter Qnty.

This value is the number of counters that you can simultaneously use in the alternative operation. It allows you to process the same operation on more than one machine. You should enter the total number of machines if the existing machines can do the work at the same time for the same product. If

you can run only one machine due to equipment requirements, then you should enter 1 in this field.

Cost;

Mult.

You should select this parameter if you wish to enter the labour costs, general costs and other costs of the alternative operation as a specific multiple of the cost indicated in the BOM.

Const.

You should select this parameter if you wish to enter a fixed value for the labour costs, general costs and other costs of the alternative operation. For example, let us assume that the unit labour cost for the operation coded Y1 on the BOM of product P1 is 1.000.000 TRL; and you selected "Mult." for the cost type for Y1's alternative operation Y2 and entered 2 for the labour cost. In this case, if you use the Y2 operation when you produce one unit of P1, the system calculates the labour cost as 2.0000.000 TRL (2*1.000.000). If you select "Const." As the cost type for operation Y2 and enter 2.500.000 TRL for the unit labour cost, then the unit labour cost when you use operation Y2 will be 2.500.000 TRL.

Labor Cost

This is the field where you should enter the standard unit labour cost value related to the alternative operation. When you enter a value in this field, the system calculates the standard labour cost against the required labour capacity in capacity planning.

Other Cost

In this field you can enter the value for any costs other than the above-mentioned.

General Costs

In this field you should enter the general production costs related to the alternative operation. You can view these costs in the Capacity Planning Reports of the MRP module.

2.4 Finished Ods Receipts

This section is used for inserting out records for raw materials and semi products in the inventory transactions at the end of the production and in records for semi products and products. The transactions in the inventory are created in type "C." The explanation, contract type "U" (production) is the product code. The explanations for the fields that you should enter in the Finished Ods Receipt section are given below.

Rcpt. No.

This is the receipt number you should record in the inventory transactions of the Finished Ods Receipt. In the case that you have to delete the Finished Ods Receipt for any reason, you should retrieve the receipt by entering the receipt number in order to process any transaction. A Finished Ods Receipt that does not have an assigned number cannot be deleted.

Date

This is the Finished Ods Receipt date that will be copied to the inventory transactions.

MO / Ord. No.

If you are running the Customer Orders section in the Orders Module and wish to follow-up the Finished Ods Receipts as linked to orders, here you should enter the related order number;

If you are operating with manufacture orders in production and wish to follow-up the Finished Ods Receipts as linked to manufacture orders, here you should enter the related manufacture order number.

The system records this number in the order number field of the inventory transactions. If you follow-up both on order basis and manufacture order basis, then you should enter the manufacture order number in this field. You

should write the number of the related order on the manufacture order record. In this field, you can also retrieve the manufacture order lookup.

W.hs.

Companies that use local warehouses as their production phases should enter in this field the information about the local warehouse in which the product is produced. Particularly in cases where local warehouses are used as production phases, there are local warehouses for the production of every product and semi product. This local warehouse code is recorded in the inventory card extra information of the related product or semi product. In the finished ods receipt, the system verifies the local warehouse code that is recorded in the inventory card of the product / semi product and displays a notification if the number is not the same as the local warehouse number that you entered in this field. In this case the system resumes the production if desired.

Exit Warehouse

For companies that define their production phases or warehouses as local warehouses, the system identifies the warehouses, from which the components of the product to be produced will exit, according to the warehouse code that you enter in this field.

Product Code

This is the section where you should enter the product code of the product, which you will produce with Finished Ods Receipt. You must have previously recorded the BOMs of the products that you want to insert in this section.

Quantity

In this field you should enter the quantity in which you will produce the product in the Finished Ods Receipt.

Cost-1(%)

After entering the quantity option, in these fields you can additionally enter two different costs other than raw material costs as rate values (%). After calculating the product cost, the system increases the product costs by the rate you enter and record in the inventory these increased costs.

Cost-2 (%)

In this field, you can enter the second cost rate in percentage (%).

Explanation

This is the field where users can enter information about the operation. The information in this field is only for reporting purposes.

Revision No.

You can use this field if you want to record the manufacture order according to a certain revision. The system normally records the Finished Ods Receipts according to the last valid BOM. But sometimes you may also want to produce according to an earlier BOM. In this case, if you enter a revision number in this field, the system locates the components according to the modifications made in that revision and realises the production according to this BOM. Production according to a specific revision number is possible only if the related revision was previously reflected on the BOM.

Order No.

When you insert a Finished Ods Receipt that is linked to an order, this is the section where you can use the lookup to insert the linked order number.

Project Code

This field is enabled when the "Project Application" query in the Additional Modules/Auxiliary/General Parameters section is selected. In this field you must enter the project code for the related production transaction. If the production is Manufacture Order linked, then the system automatically inserts in this field the project code that you previously entered in the manufacture order and allows you to modify this information. The system copies the project codes you enter to the inventory transaction records.

Qty. 2

This field is active if you have selected the "Qty. 2 Entry" parameter in the Parameters section. If you wish to follow-up a second quantity for the product you produce, you can enter this information in this field. For example, 10 kgs of a product may also be one sack. In this case you can enter the sack quantity in the Qty. 2 field. We should remind that if you use the Loss Application, the Qty. 2 field is used for tracking the loss quantities.

Ext. Field 1/2

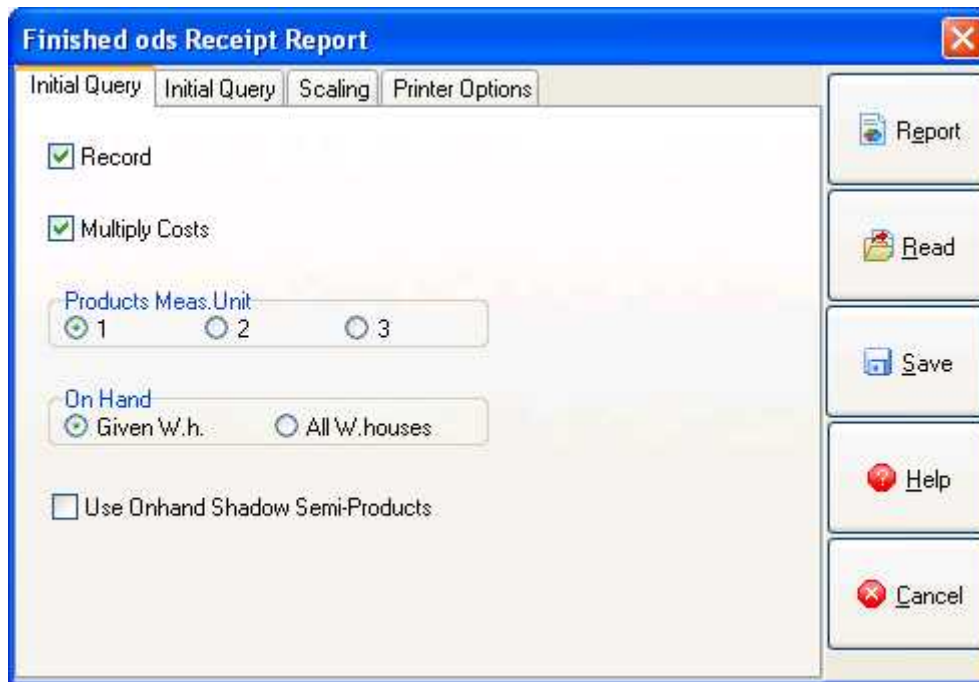
This field is active if you have selected the "Extra Field" parameter in the Parameters section. Here you can enter free information for products. You can view this information on the other 2 page in the "Inventory Transaction Other Info" menu that appears when you right-click on the related record. If you are processing the finished ods receipt order linked, the system inserts in these fields the extra field information that you entered in the order and copies them to the inventory transaction records.

Priority

In the case that you define alternative materials for the components, if you enter any priority code in this field, and when the "change priority in document" parameter is selected in the BOM, the system assumes that the alternative policy is selected for Priority for every item of the product and retrieves the materials that have the selected priority. In this case the system does not consider the other alternative policies.

2.4.1 Finished ods Receipt Report

After you complete the finished ods receipt, you can use this key to retrieve your finished ods receipt report and realise the records if desired. The system displays the following queries when you confirm this key.



Record

This is the query that specifies whether or not the finished ods receipt will be inserted in your Inventory records. You should not select this option if you are processing trial finished ods receipt reports.

Multiply Costs

This section adds the cost contributions that you entered on the finished ods screen by multiplying them with the *product costs* after the calculation of raw material costs.

For example, let us assume that you have a raw material cost of 1.410.000 TRL and the cost contributions are defined as Cost-1+5% and Cost-2+5%. If you select this field, the system first calculates the cost according to Cost-1 and adds this additional cost to the cost of the product, then multiplies this compound cost with the rate in field Cost-2 and adds this additional cost to the compound cost of the product.

Hence, the result is $1.410.000 * 1.05 = 1.480.500 * 1.05 = 1.554.525$ TRL.

If, however, you do not select this field, the system multiplies the product's cost 1.410.000 with 5% twice in a row and calculates the result. In this case the result is $1.410.000 + 70.500 + 70.500 = 1.551.000$ TRL.

Products Meas. Unit

This is the field where you select the measuring unit for the inventory code of the finished ods receipt you process. You can select the measuring unit from the units that you previously entered in the master records.

On Hand (Given W. H. / All W. Houses)

In cases where you have previously identified the phases of your production as local warehouse or branches, and in the manufacture parameters you selected the branch or local warehouses that are related to the production, this is the section where you specify if you wish to run the onhand controls by one or all of the local warehouses that are related to the production. If you

select the all warehouses option, the system considers the material onhand quantities that exist in all of the warehouses that are defined in the production parameters. In the current warehouse option, the system considers the onhand quantities that exist in the main warehouse where the production is made, or the branch or the local warehouse that is indicated in the finished ods receipt.

Use Onhand Shadow Semi-Products

As explained, in the Production Module/Manufacture BOMs there is an "Auto Prod." parameter for the BOMs inserted for semi products, and you can use this parameter to create BOMs automatically during the production of the products in which you use these semi products. When you select this parameter, the system automatically produces the related semi products during the production of the products. In this production, the system does not consider whether or not there is sufficient inventory onhand for the semi product required for the production and produces the semi product in the required quantities. As a result of your production operation for the product, you may end up with an unnecessary increase in your semi product inventory. To avoid this, you can use the "Use Onhand Shadow Semi-Products" parameter in your Finished Ods receipt. When you select this parameter, the system verifies (in the production for products) the inventory onhands for semi products that have the Auto Prod. parameter selected in their related BOM, does not produce the semi product if it identifies sufficient onhand quantities but uses the onhand inventory. If the onhand quantity of the related semi product is not sufficient for production, then the system automatically produces the required semi product.

Report

This is the key that you can use for realising the finished ods receipt and report according to given criteria.

The system transfers the production records to the inventory transactions according to the information that you previously inserted on the finished ods receipt screen. The system processes in (+) transaction for products and out (-) transaction for raw materials and semi products. In cases where you have to delete the finished ods receipt for any reason, you can do so by entering the receipt number by using the same section.

For fictive products, you should enter the code of the fictive product in the product code field during the finished ods receipt section. The system does not process any in/out transactions for the fictive product once the finished ods receipt is completed. The system processes out (-) transaction for raw materials and semi products that have information inserted in the related "code of product consumed" field and in (+) transaction for products that have PRODUCTION written in the component code field.

2.4.2 Delete Rcpt.

Deletes all of the production records that relate to the receipt.

2.4.3 New Rcpt.

This key clears all information displayed on the screen and allows you to enter a new record.

2.5 Free Format Finished Ods

On one receipt you can insert a free format finished ods transaction for only one product. During this transaction the system creates the inventory transactions according to the BOM and allows you to freely modify these transactions.

This is the section where you can transfer the production transactions to the inventory transactions without having to use the finished ods receipt section, by retrieving the BOM on your screen according to the product code and the quantity value that you enter in the quantity field, and furthermore modify and arrange the component quantities. The transaction that you process in this section enables the production of the BOM with special and different values. The modifications you make here are temporary and valid only for the related record. It does not modify the original BOM. The finished ods receipt that you process in this section will also be included in the production reports. In this section you can furthermore insert records that are linked to orders, manufacture orders, and are related to specific local warehouses.

Rcpt. No.

This is the receipt number, which the system inserts in the inventory transactions of the Free Format Finished Ods. In the case that you need to delete the Free Format Finished Ods receipt for any reason, you must have previously recorded the receipt number in order to be able to process the deletion transaction in this section. The system will not allow you to delete the free format finished ods receipts for which you have not recorded the receipt number.

Date

This is the free format finished ods date that will be copied to the inventory transactions.

MO / Order No

If the production is linked to a manufacture order or order, you should insert the related record number by using the lookup.

W. hs.

Companies that use local warehouses as their production phases should enter in this field the information about the local warehouse in which the product is produced. Particularly in cases where local warehouses are used as production phases, there are local warehouses for the production of every product and semi product. This local warehouse code is recorded in the inventory card extra information of the related product or semi product. In the free format finished ods receipt, the system verifies the local warehouse code that is recorded in the inventory card of the product / semi product and displays a notification if the number is not the same as the local warehouse number that you entered in this field. In this case the system resumes the production if desired.

Exit Warehouse

For companies that define their production phases or warehouses as local warehouses, the system identifies the warehouses, from which the components of the product to be produced will exit, according to the warehouse code that you enter in this field.

Product Code

This is the section where you should enter the product code of the product, which you will produce with Finished Ods Receipt. You must have previously recorded the BOMs of the products that you want to insert in this section.

Quantity

This is the field where you should enter the quantity in which the related product is produced in the Free Format Finished Ods.

Qty. 2

This field is active if you have selected the "Qty. 2 Entry" parameter in the Parameters section. If you wish to follow-up a second quantity for the product you produce, you can enter this information in this field. For example, 10 kgs of a product may also be one sack. In this case you can enter the sack quantity in the Qty. 2 field. We should remind that if you use the Loss Application, the Qty. 2 field is used for tracking the loss quantities. On the grid screen in the Loss Application, the system displays the loss quantity in the Qty. 2 field of a component. In this case, for components it records the quantity + loss quantity in the inventory transactions; and for products it

calculates quantity – loss quantity and records the value in the inventory transaction records.

Priority

In the case that you define alternative materials for the components, if you enter any priority code in this field, and when the “change priority in document” parameter is selected in the BOM, the system assumes that the alternative policy is selected for Priority for every item of the product and retrieves the materials that have the selected priority. In this case the system does not consider the other alternative policies.

Expl.

This is the section where you can write the explanation information related to the Free Format Finished Ods for reporting purposes.

Ext. F. 1/2

This field is active if you have selected the “Extra Field” parameter in the Parameters section. Here you can enter free information for products and components. The field named Ext.F. below the Explanation field is for the explanations of products; Ext.F. 1 and Ext.F. 2 are for the explanations of components. The system copies the information that you write for products in Ext.F. to the Ext.F. 1 and Ext.F. 2 for all the components. You can view this information on the other 2 page in the “Inventory Transaction Other Info” menu that appears when you right-click on the related record. If you are processing the finished ods receipt as order linked, the system inserts in these fields the extra field information that you entered in the order and copies them to the inventory transaction records.

Revision No.

You should use this field if you want to produce the Free Format Finished Ods Receipt according to a certain revision number. If you enter a revision number in this field, the system locates the BOM that is related to the modifications made in that revision and realises the production according to this BOM.

Project Code

This field is enabled when the “Project Application” query in the Additional Modules/Auxiliary/General Parameters section is selected. In this field you must enter the project code for the related production transaction. If the production is Manufacture Order linked, then the system automatically inserts in this field the project code that you previously entered in the manufacture order and allows you to modify this information. The system copies the project codes you enter to the inventory transaction records.

Order Extra Field-1

This field is enabled when you insert a record in the order linked finished ods receipt by linking to the related order. If you are using the Extra Field 1 section in the order module and you have entered information in that section, then the system inserts that information to this field.

Series Follow-up

With the series follow-up application in the production module, production companies can access several information that are vital in their operations; i.e., for a specific raw material that has different serial numbers information such as which series are used for which products, which product series are produced of which raw material series.

In order to be able to run the series follow-up application in the Production Module, you should use the Free Format Finished Ods receipt section. As explained, the system runs the Finished Ods Receipt operation automatically and does not allow any modification by users; whereas, since in the series application you should enter the series numbers manually, you should insert the production transactions in a section, which allows manual modification. Companies that use the series application should therefore insert their production transactions by using the Free Format Finished Ods Receipt section.

According to the series criteria that you specified in the series parameter transactions and the inventory transactions, on the series screen, the system either generates the series numbers automatically or asks you to enter manually. If the series numbers are generated automatically, the system inserts 1 new series number for the produced product code (production quantity 1). When you press the Produce button, the raw materials or the semi products that will be used for the related product are displayed on the grid screen together with their quantity values. Once again, if the series numbers are generated automatically, the system inserts series numbers for the raw material and semi products. If desired, you can retrieve this information for raw material and semi products on the grid screen and manually modify the series numbers. The system inserts the series number of the product code, which is generated at the end of this operation, into the corresponding code field recorded in the series transaction file of the components codes in this product's BOM. This feature enables users to get reports about which series are used for which products, which product series are produced of which raw material series.

Warning: 1 unit of the product should be produced at the end of the finished ods receipt. This is because you can insert only 1 series number in the correspond code for raw materials and semi product. If the product manufacture quantity is more than one, the system does not copy the product series numbers to the component codes. Thus, if as many series numbers are generated as the produced quantity, then it is not possible for the system to record this information correctly. However, if only one series number is assigned to the produced product (e.g. paint) regardless of its quantity (e.g. 100 kgs), then the system records this information correctly. For example, the system transfers the series number that is calculated for 100 kgs of paint, to the correspond codes of the component codes.

In/Out Auto Semiproducts

For the semi products for which the Auto Prod. field is selected in the BOM records, this is the parameter that enables the production of a semi product in the quantity that is consumed in a production, regardless of the onhand quantity of the related semi product.

Use Auto Semiproducts from Stock

As explained, in the production module/manufacture BOM section there is an "Auto Prod." parameter that is applicable for semi product BOMs and which enables the automatic production of the semi products that are used in the related production. When this parameter is selected, the system automatically produces also the related semi products when producing the product. The system disregards whether there is sufficient onhand quantity of that semi

product and considers that there is insufficient onhand, thus produces the required quantity.

As a result, you may end up with an unnecessary increase in your semi product inventory since the system disregards the existing onhand quantities. To avoid this, you can use the "Use Auto Semiproducts from Stock" parameter in your Free Format Finished Ods receipt. When you select this parameter, the system verifies (in the production of products) the inventory onhands for the semi product that have the Auto Prod. parameter selected in their related BOM, does not produce the semi product if it identifies sufficient onhand quantities and uses the onhand inventory. If the onhand quantity of the related semi product is not sufficient for production, then the system automatically produces the required semi product.

On Hand Given W.h. / All W. houses

In cases where you have previously identified the phases of your production as local warehouse or branches, and in the manufacture parameters you selected the branch or local warehouses that are related to the production, this is the section where you specify if you wish to run the onhand controls by one or all of the local warehouses that are related to the production. If you select the all warehouses option, the system considers the material onhand quantities that exist in all of the warehouses that are defined in the production parameters. In the current warehouse option, the system considers the onhand quantities that exist in the main warehouse where the production is made, or the branch or the local warehouse that is indicated in the free format finished ods receipt.

Produce

You should use this key to realise the transactions if you want to generate your Finished Goods report after you complete your Free Format Finished Ods Receipt. With this key you can display the BOM that is necessary for the product manufacture quantity. You can move the product, semi product or raw material usage quantities that are sorted at the lower part of your screen to the upper screen by double-clicking on the related inventory code, and modify the quantities.

You can furthermore delete any component code that is used for the related product temporarily for the current manufacture and add a new component code.

After you complete the modifications, you can press the PRODUCE button to realise your updated manufacture transaction.

For fictive products, during the free format finished ods receipt you should write in product code field the code of the fictive product. Once the finished ods receipt is complete, the system does not record any in/out transactions for the fictive material. The system processes in (+) transaction for products that are written in the related "code of product consumed" field in the BOM and out (-) transaction for raw materials and semi products that are written in the component code field.

Delete Rcpt.

This is the key that you should use to delete a recorded free format finished ods receipt. When you write in the receipt number field the receipt number,

which you want to delete and press this key, the system deletes all manufacture transactions that have been previously inserted in the inventory.

New Rcpt.

You can use this key to clear the screen for a new operation after completing the production operation.

2.6 Reverse Finished ods

You should use this key in cases where the raw material is divided in order to produce multiple products. While BOMs are necessary to run this operation, the BOM definition is reversed. The actual product in fact is the raw material (e.g. Beef). And the components are the products that are produced as the result of the dividing process (steak, diced meat, etc.).

To be able to use this section, the measurement unit of the product should be kilograms. If, in this section, you process transactions in units that comprise whole numbers, the results will give errors.

The results of the Reverse Finished Ods Receipt record out transactions for every component produced from the product in the same quantities (the explanation is the related component code in the out transaction), and in transactions to components.

As in the free format finished ods receipt, it is possible to modify transaction.

The screenshot displays the 'Reverse Finished ods' application window. It features a 'Master Information' tab with the following fields: Rcpt.No. (0000000000000001), Date (21.09.2006), W.hs. (0), EntranceWH (0), Pr.Code, Structuring Code, and Explanation of Structuring Code. Below these are fields for Quantity (0), Qty.2 (0), Project Code, MD/Ord.No., and Priority (0). There is an 'Explanation' field and three buttons: 'Produce', 'New Rcpt.', and 'Delete Rcpt.'. The bottom section shows 'Invt.Code', another 'Structuring Code' field, and radio buttons for 'In' and 'Out'. At the very bottom is a table with columns: Invt.Code, Invt.Desc., Conf.Code, Struct.Explanations, /O, Quantity, Qty.2, and Explanation. The table is currently empty.

Rcpt. No.

This is the receipt number you should record in the inventory transactions of the Reverse Finished Ods Receipt. In the case that you have to delete the Reverse Finished Ods Receipt for any reason, you should insert the receipt number in this section in order to process any transaction. A Finished Ods Receipt that does not have an assigned number cannot be deleted.

Date

This is the date of the Reverse Finished Ods. The system copies this date to the inventory transaction records.

W. hs.

Companies that use local warehouses as their production phases should enter in this field the information about the local warehouse in which the product is produced. Particularly in cases where local warehouses are used as production phases, there are local warehouses for the production of every product and semi product. This local warehouse code is recorded in the inventory card extra information of the related product or semi product. In the finished ods receipt, the system verifies the local warehouse code that is recorded in the inventory card of the product / semi product and displays a notification if the number is not the same as the local warehouse number that you entered in this field. In this case the system resumes the production if desired.

Pr. Code

This is the section where you should enter the product code of the product, which you will produce with Reverse Finished Ods Receipt. You must have previously recorded the BOMs of the products that you want to insert in this section.

Quantity

This is the production quantity of the product in the Finished Ods Receipt.

Project Code

This field is enabled when the "Project Application" query in the Additional Modules/Auxiliary/General Parameters section is selected. In this field you must enter the project code for the related production transaction. If the production is Manufacture Order linked, then the system automatically inserts in this field the project code that you previously entered in the manufacture order and allows you to modify this information. The system copies the project codes you enter to the inventory transaction records.

MO / Ord. No.

If you are running the Customer Orders section in the Orders Module and wish to follow-up the Finished Ods Receipts as linked to orders, here you should enter the related order number; if you are operating with manufacture orders in production and wish to follow-up the Finished Ods Receipts as linked to manufacture orders, here you should enter the related manufacture order number. The system records this number in the order number field of the inventory transactions. If you follow-up both on order basis and manufacture order basis, then you should enter the manufacture order number in this field. You should write the number of the related order on the manufacture order record. In this field, you can also retrieve the manufacture order lookup.

Priority

In the case that you define alternative materials for the components, if you enter any priority code in this field, and when the "change priority in

document" parameter is selected in the BOM, the system assumes that the alternative policy is selected as Priority for every item of the product and retrieves the materials that have the selected priority. In this case the system does not consider the other alternative policies.

Explanation

In this section you can write explanation information for reporting in the Reverse Finished Ods Receipt section.

Invnt. Code

This is the inventory code of the product or semi product that you will produce. In this section you can retrieve an inventory code that is recorded in the BOM and replace it with another inventory.

Quantity

In this field you should enter the quantity in which the product is produced in the Reverse Finished Ods Receipt.

In / Out

This parameter queries whether you want to insert an In or Out transaction in the inventory transaction records.

Produce

You can furthermore delete any component code that is used for the related product temporarily for the current manufacture and add a new component code.

After you complete the modifications, you can press the PRODUCE button to realise your updated manufacture transaction.

Delete Rcpt.

This is the key that you should use to delete a recorded reverse finished ods receipt. When you write in the receipt number field the receipt number, which you want to delete and press this key, the system deletes all manufacture transactions that have been previously inserted in the inventory.

New Rcpt.

You can use this key to prepare your screen for a new operation after completing the production operation.

2.7 Manufacture Order Entry

2.7.1 Master Information

Manufacture Order Entry

Master Information | Extra Info. | BOMs Linked to Man. Order Records

Man. Order No. 0000000000000001 Date 21.09.2006

Invnt. Code G001

Structuring Code gm Explanation of Structuring Code GRI MEDIUM

Explanation

Unit [dropdown] Project Code [input]

Quantity 10,00 Ref. Man. Ord. No. [input]

Order No. [input] Order Control 0

Priority 0 Closed

Delivery Date 22.09.2006 Save BOM

Revision No. [input] Update Related MO Records

Man. Order No.	Date	Invnt. Code	Invnt. Desc.	Conf. Code	Struct. Explanations
>> 0000000000000001	21.09.2006	G001	Shirt	gm	COLOR:GREY,SIZE:1

These are the records, which you insert to indicate what you are going to produce. The manufacture order is used for drawing materials from the warehouse (raw material list linked to manufacture order) and informs you about what portion of the planned production is realised (manufacture realised from manufacture order). It clarifies the planning.

In the manufacture order related BOM system,

- 1- You can save the BOM version that relates to the product with every manufacture order.
- 2- The programme does not run if it detects changes in the BOM.
- 3- The system is supported by the finished ods receipt.
- 4- The system is supported by the Warehouse in/out, warehouse transfers operations (Fetch BOM function).

Man. Order No.

This is the number of the manufacture order you record. The system automatically inserts successive numbers.

Date

This is the date that you insert the new manufacture order.

Invnt. Code

This is the inventory code of the product or semi product for which you will insert a manufacture order.

Quantity

This is the quantity value of the product that you record with a manufacture order and which will be produced as linked to this manufacture order.

Explanation

This is the field where users can enter information about the manufacture order. The field is only for reporting purposes.

Order No

If the manufacture order is created for a specific order, you should enter the related order in this field.

Priority

If you indicate a priority in the manufacture order, the system uses the alternative material that has this priority in all places (warehouse transfers, finished ods receipt, etc.) where this manufacture order is used. If the system does not identify any alternative materials with the given priority, it then uses the materials indicated in the BOM.

Delivery Date

This is the estimate finish date for the product that will be produced according to the product code you enter.

Revision No

If you will produce the manufacture order with a specific revision number, then you should enter the related revision number in this field. When you produce with such a manufacture order, the production will be realised according to the BOM that was revised with the revision number that you entered.

Project Code

This field is enabled when the "Project Application" query in the Additional Modules/Auxiliary/General Parameters section is selected. Entering a project code for the related manufacture order is mandatory. When you insert a manufacture order linked finished goods record, the system automatically inserts in this field the project code that you previously entered in this and allows you to modify this information.

Ref. Man. Ord. No.

You should use this field when you wish to follow-up the manufacture order number related to a product and the manufacture orders for your semi products. In this case, when you insert in this section manufacture orders for semi products, you should also enter the manufacture order number related to the product manufacture order, which you enter in this section. With this application, you can also view the Ref. Manufacture Order Numbers in the manufacture order lookup in the finished ods receipt, free format finished ods receipt and reverse finished ods receipts.

You should use this key to generate your Finished Goods report after you complete your Reverse Finished Ods Receipt and realise the transactions if desired. With this key you can display the BOM that is necessary for the product manufacture quantity. You can move the product, semi product or raw material usage quantities that are sorted at the lower part of your screen to the upper screen by double-clicking on the related inventory code, and modify the quantities.

Order Control

This is the field where you can create manufacture orders on order lines basis. This field shows the line number in the order item of the product that is indicated on the manufacture order. If the same inventory is entered in the same order more than once, this field enables you to see for which line this manufacture order was created.

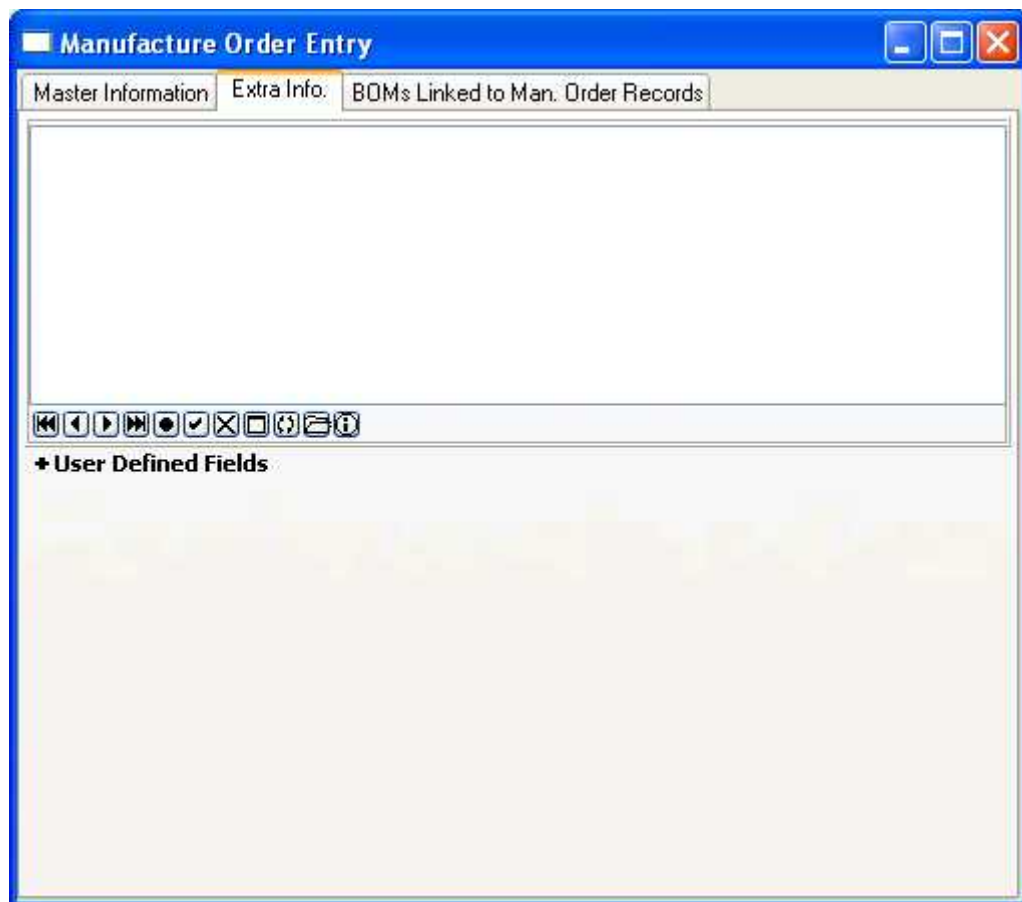
Closed

This field queries whether the recorded manufacture order is still in operation or closed. You should select this field for manufacture orders that display unbalanced onhand but will not be produced. In this way, the system does not consider the related entry as unbalanced onhand production even if the order is not produced. This quantity will not be considered in reporting.

Save BOM

This query field will be active if you have selected the "Save BOM by Manufacture Order" parameter in the Parameters section. When you select this field, the programme saves the current BOM for the materials that you entered in the manufacture order and allows for future modifications. In this way, when you operate production with the related manufacture order, the system will produce according to this saved BOM regardless of the updated version of the BOM.

2.7.2 Extra Info.



This is the section where you can enter extra information. In this section, you can also find the fields that are defined in the Production/ Field Table Matching section and added to the Manufacture Order. You can display the defined fields by pressing the plus sign in the User Defined Fields section.

For further information on extra field definitions and adding these fields, please see Production/ Field Table Matching section below.

2.7.3 BOMs Linked to Man. Order Records

This tab is designed to facilitate the access the operation under the Record menu by using the manufacture order entry. Please see, Production/BOMs Linked to Man. Order Records.

2.8 2.7.3 BOMs Linked to Man. Orders

Companies that operate by selecting the “Save BOM by Manufacture Order” parameter in the Parameters section can use this section. The programme queries the “Save BOM” field for the Manufacture Orders that you insert when this parameter is selected. For manufacture orders that you record by selecting this field, the system inserts the current versions or the revisions of the product/semi product BOMs, which you enter in the manufacture order in this section.

If desired, in this section you can modify the components indicated in the related BOM. When you produce from a manufacture order, the BOM runs in its last saved version.

2.9 Instant Requirement Planning

This section lists the purchasing needs according to the company's existing situation. This report displays the material requirements of the products to be manufactured as at the date on which the report is generated by calculating the current inventory values and reports this information together with their costs. This section reports the quantities and amounts that should be ordered, the quantities in which semi products should be produced.

On the Instant Requirement Planning screen you should enter the codes of the products and the quantities in which they will be manufactured. The system saves the product information you entered in a file after you get the report.

Invnt.Code	Invnt.Desc.	Yap.Kod	Yap.Açk.	Revision No	Quantity
g001	Shirt	gm	GRI MEDIUM		1,00

Invnt. Code

In this field you should enter the code of the inventory for which you will calculate the instant requirement planning.

Quantity

In this field you should enter the quantity information for which you will calculate the requirement planning.

BOM Date

In this field you should enter the date of the BOM according to which you want the system to plan.

Revision No

You can use this field for following-up BOM modifications according to a number such as Revision No./Set No. Although this field must be used together with date modifications, users are not required to know the modification dates, the revision number is sufficient. The reports and finished goods sections support this section.

Search for Orders

This field automatically inserts in the report file, the products in the customer orders, which are not delivered, i.e., display unsettled balance. You should not use this key if you do not want the programme to retrieve any unsettled balance information from the order records. You can modify and arrange the information retrieved from the orders section.

Search for Open Manufacture Orders

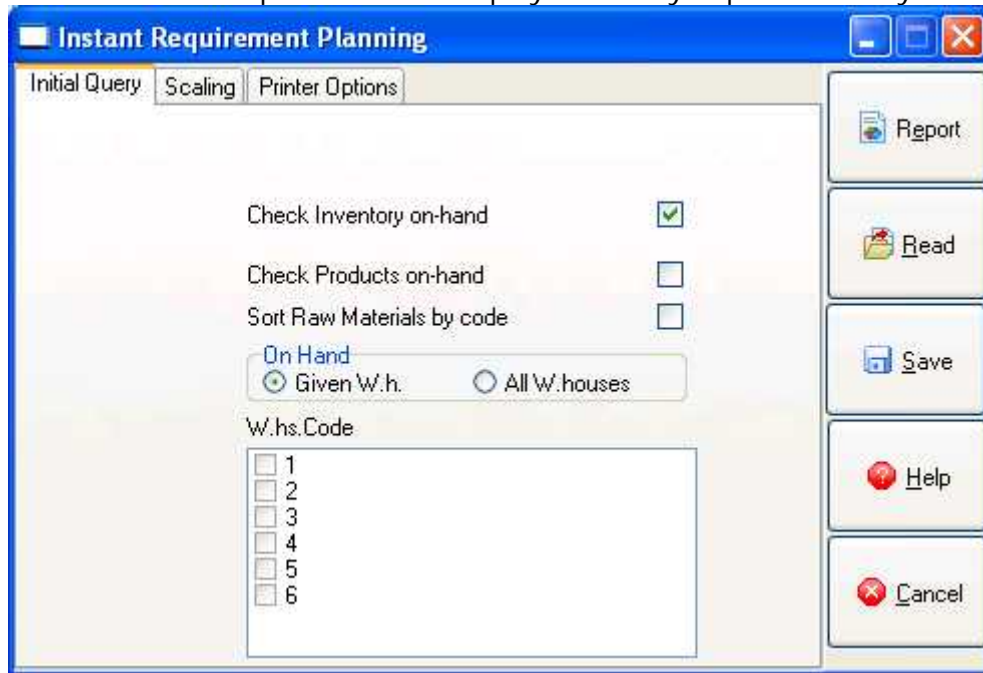
This field automatically inserts in the report file, the products in the manufacture orders, which are not delivered, i.e., display unsettled balance. You should not use this key if you do not want the programme to retrieve any unsettled balance information from the manufacture records. You can modify and arrange the information retrieved from the manufacture orders section.

Delete Recs.

You can use this key to clear the instant requirement planning screen.

OK

The below shown queries will be displayed when you press this key.



Check Inventory on-hand

When you select this query, the programme calculates the quantities in which components are consumed in products, control their inventory onhand levels, verify this information with the quantities required for production and lists the quantities that need to be purchased. If you do not select this query, the programme calculates the production requirements and without verifying the inventory onhands assumes that all of the required quantities will be ordered, and calculates the costs accordingly.

Check Products on-hand

If you select this query, the system verifies the portion of the required manufacture quantity, which you entered in the previous section, is in the inventory, lists the additionally required quantities and calculates the cost. If

you do not select this query, the programme calculates the production requirements regardless of the inventory onhands, and displays the required production quantity as the total required quantity and calculates the costs accordingly.

On Hand (Given W.h./ All W. Houses)

In cases where you have previously identified the phases of your production as local warehouse or branches, and in the manufacture parameters you selected the branch or local warehouses that are related to the production, this is the section where you specify if you wish to run the onhand controls by one or all of the local warehouses that are related to the production. In the all warehouses option, the system considers the material onhand quantities that exist in all of the warehouses that are defined in the production parameters. In the current warehouse option, the system considers the onhand quantities that exist in the main warehouse where the production is made, or the branch or the local warehouse that is indicated in the finished ods receipt.

W. hs. Code

If you selected the Given W.H. in the above-explained section, then you should enter the related warehouse code in this field.

Sort Raw Materials by Code

When you select this query, the system lists all of the raw material codes regardless of their product sequence; otherwise it lists the raw material codes in the sequence they are indicated in the products.

2.10 Budget Planning

Budget Planning

Invt.Code: G001 Shirt

Structuring Code: GM Explanation of Structuring Code: GRI MEDIUM

Months	Quantity	Months	Quantity
January	200,00	July	100,00
February	150,00	August	100,00
March	100,00	Sept.	100,00
April	100,00	October	100,00
May	100,00	Nov.	100,00
June	100,00	Dec.	100,00

Invt.Code	Invt.Desc.	GM	
>> G001	Shirt	GM	COLOR:GREY,S

Buttons:

This section calculates monthly requirement quantities for the monthly production targets that you enter, without considering the company's situation. Here you should enter the monthly targets manually. The system calculates the requirements according to the targets, which users specify.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Main Product												
2	Invnt.Code	Invnt.Desc.	Yap.Kod	Yap.Açk.	January	February	March	April	May	June	July	August	Sept.
3	G001	Shirt	GM	GRI MEDIUM	200,00	150,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
4	Semi Product												
5	Invnt.Code	Invnt.Desc.	Yap.Kod	Yap.Açk.	Last In Price	On Hand	January	February	March	April	May	June	July
6	Raw Material												
7	Invnt.Code	Invnt.Desc.	Yap.Kod	Yap.Açk.	Last In Price	On Hand	January	February	March	April	May	June	July
8	D001	Button			0,00	0,00	1.800,00	1.350,00	900,00	900,00	900,00	900,00	900,00
9	I001	Fiber			0,00	0,00	200,00	150,00	100,00	100,00	100,00	100,00	100,00
10	K001	Fabric			0,00	0,00	200,00	150,00	100,00	100,00	100,00	100,00	100,00
11													
12													

2.11 Planned Engineering Changes

Revision No. 00000002 Explanation:

Planned Date 19.09.2006

Realized Date 00.00.0000

New Comp. New Com.Info.

Product Code G001 Shirt

Old Component

New Component

Status after Brk. Self Catalog Delete New Record Same Record Processed

Product Code	Product Description	Kind	Old Component	Old Component	Sequence	New Comp

Buttons: + New Rev. - Delete Rev. Planned Realize

This is the section where you can plan transactions for defined BOMs, such as modifying components, quantities, adding new components, deleting existing components and/or reflect these on the BOMs. If you insert the modifications that you plan or process for BOMs in this section instead of the Bill of

Materials section will allow you to locate and use and report back-dated BOMs.

Revision No.

This is the number by which you can follow-up the planned revisions for BOMs. The system realises the planning or modification with this number.

Planned Date

In this field you should enter the estimated date for the realisation of the modification you insert by the related revision number.

Realized Date

The system inserts the date of the modification that you insert with the related revision number.

Explanation

In this field you can write an explanation for the revision that you insert.

2.11.1 New Component

Product Code

In this field you should enter the BOM for which you insert the revision. You can use the lookup key in this field to access the lookup for the product codes for which you have defined the BOMs. If you leave the product code field blank, the system assumes that the revision is applicable in all of the BOMs.

Component /Operation

This field specifies whether the modification is made for the component code that is defined in the BOM or in the operation code.

Old Component

In this field you should record the component code that is subject to the modification. You can use the lookup key in this field to access the component lookup of the product that you enter in the product code field.

Sequence

If the code you entered in the old component field is used more than once in the BOM, then you should indicate a sequence number. For example, let us say that component no. X is defined both in line 0002 and line 0006. In this case you should enter the sequence number to identify the sequence of the component, which you want to modify. If you do not indicate the sequence number in such a BOM definition, the system modifies all of the codes that relate to the component code, which you enter in the old component field. In other words, it changes component X for both sequence number 0002 and 0006.

New Component

This is the field where you should enter the code of the new component that will replace the old one in the BOM. The system replaces the old component code with the new code you enter in this field. If you do not want to modify the code of the component but the quantity, you should write the old component code also in the new component field. For example, let us say that you are using 1 unit of component X in the current BOM, and as of a certain date you want to start using 2 units. In this case you should write X in both the old and new component fields.

Status After Brk. (Self /Catalog/Delete/New Record)

This field specifies the status of the component after the modification or the planning. This field is very important for the MRP application. When planning for capacity the system checks this field in the revisions that are reflected on the planning. The system processes the modification that will be revised according to the status definitions recorded in this field, i.e. whether it should consider the quantities in the BOM (self), the quantities in the operation definition (catalog), if it should delete the component (delete) or if there is going to be a new component (new record).

If you will add to a product or to all products a new component that is not already defined in the BOM, you should select the New Record option in this field. You should write the same component code in both the new and old component fields.

If you decide to exclude a component code that is already defined in the BOM, then you should select Delete in the Status After Brk. Field. When the system reflects the related revision on the relevant BOMs, then this component will be deleted from either all of the BOMs or from a specific BOM, according to the definition.

New Revision

When you complete the revision information on the current screen, you can use this key to clear the screen to prepare for a new revision entry. When you press this key the information related to the completed revision will be cleared and your screen will be ready for the new entry.

Delete Revision

This key is used for deleting a previously recorded revision. When you delete a revision record you will not be able to access this revision in the future. To delete a revision record, you should first enter the related revision number and retrieve the revision on the screen, then press the Delete Revision button.

Planned

This key is important only for companies that run the MRP application. For the Capacity Planning in MRP application you should know the revisions that you plan to make. Thus, you should use this key to insert the recorded revisions to the table that will be used in Capacity Planning. When you use the Planned key, the system does not reflect in the BOMs the component modifications that you defined in the revision. In order to reflect a revision record on the plan, you should press the Planned key when you are on the Planned Engineering Changes screen. In this case the programme displays a screen that queries the revision numbers. On this screen you should select the revision number that you want to reflect on the planning and press the "PLANNED" key.

Realize

This key is used for reflecting on the BOMs a revision that you previously entered, and updating the BOMs according to the information in the revisions. In order to reflect a revision on the BOMs, you should press the Realize key when you are on the Planned Engineering Changes screen. In this case the programme displays a screen that queries the revision numbers. On this screen you should select the revision number that you want to reflect on the planning and press the "REALIZE" key.

2.11.2 New Com. Info.

The screenshot shows the 'Planned Engineering Changes' window. The 'Revision No.' is 00000002, 'Planned Date' is 19.09.2006, and 'Realized Date' is 00.00.0000. The 'New Com.Info.' tab is selected, showing a 'Quantity' of 9.00, 'Inventory' selected, and 'Cost' unselected. The 'Alternative Policies' section includes 'Priority' (0), 'Planning Ratio' (0.00), and dropdowns for 'W.H.Trans.Vchr.', 'W.Hs.Issue Vchr.', 'Fin.G.Rcpt.', and 'MRP', all set to 'None'. The 'Workst.Code' field is empty. The 'Setup Time', 'Production Time', and 'Transport Time' fields are empty. 'Transport Qnty.' is 0.00, 'Labor Cost' is 0.00, 'Other Cost' is 0.00, and 'Simult.Qpr.' is 1.00. The 'Explanation' field is empty. At the bottom are buttons for 'New Rev.', 'Delete Rev.', 'Planned', and 'Realize'.

This is the section where you should enter the new modifications for the new component that you entered in the revision. The programme automatically moves to this screen from the Status After Brk. Screen.

Quantity

In this field the system automatically inserts the quantity that is defined in the BOM for the code that you enter in the old component field. If you modify this quantity, the new quantity you enter will be applicable for the new component when the revision is reflected on the BOM.

Explanation

If applicable, the programme brings in this field the explanation information for the old component. You can modify the explanation field if you wish to write new explanation that should be transferred to the BOM for the new component.

Inventory/Cost

In this field you can specify either of the Inventory/Cost options for the new component. The system automatically brings to this field the information that is recorded in the old component. If the new component is one that will affect the inventory onhands in quantity, such as raw material or semi product, then the contract type should be selected as Inventory. If it is a component that will not affect the inventory onhands in quantity but will only affect the product cost, such as labour, electricity, etc., then contract type should be selected as Cost.

Fix Quantity

You should select this field if the consumption quantity of the new component does not vary regardless of the production quantity of the product. During the production of the product (Finished ods receipt) regardless of the production quantity you entered, the system reduces the raw material or the semi product according to the quantity that you specified in the BOM record. The system will record the revision information when you move from this field with the tab key.

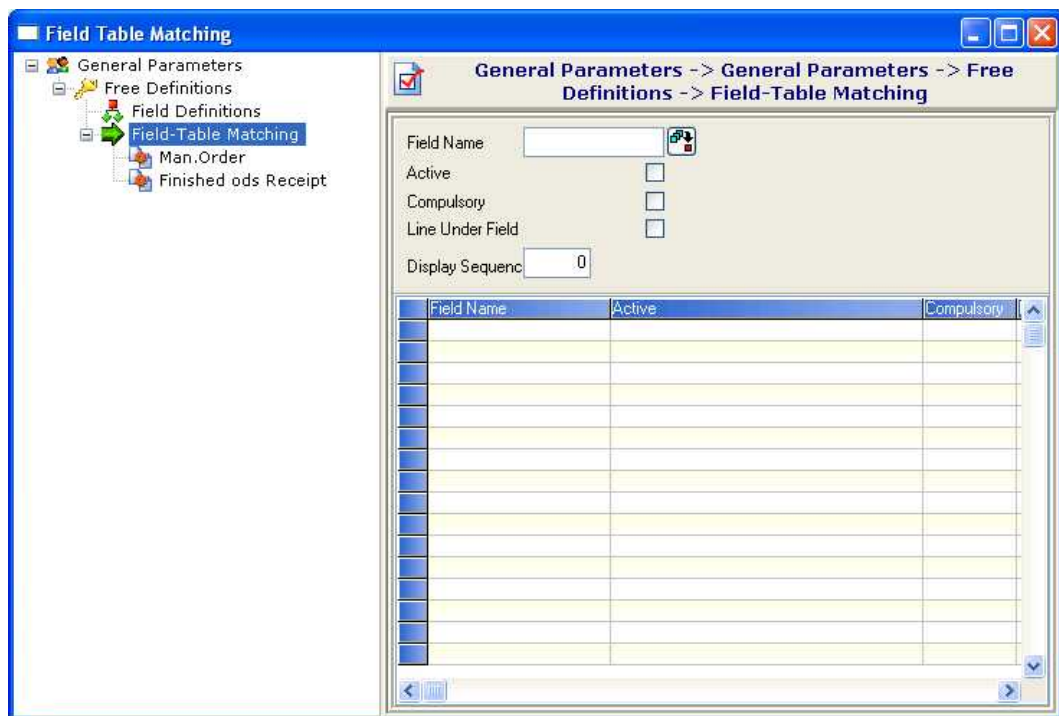
Alternative Policies

This is the section where companies that use alternative material application can revise the alternative policies for the defined components in the BOM and define alternative policies for new components. The system copies the definitions, which you make in this section, to the alternative policies field in the BOM Info 2 page when the related revision is reflected on the BOM. You can get further information about alternative policies on the Bill of Material/BOM Info 2 page.

Explanation

In this field you can freely enter information about the new component. You can view the information that you enter in this field in the explanation field of the BOM, after the related revision is reflected on the BOM.

2.12 Field Table Matching



2.13 Parameters

Parameters

Production Gen.Ledger

Cost Method A- Weighted Average

Alternative Cost Method A- Weighted Average

Save BOM by Work Order Solid Material Application

Check Short Onhand Loss Application

Stop Operation at Deficit Balance Extra Field Usage

Series follow-up at production vouchers BOM will be updated by Formula Sum

Quantity-2 Entry Code of Production Warehouse (default) 0

Work Order Control at Production Operation with barcode at end of manufacturing records

Follow-up The -Bbalance Of Work Order's Material At End Of Manufacturing Voucher Records?

Generate FIFO series for production outs.

Allow excess production when related to Work order Excess Prod. Rate 0.00

At Warehouse Transactions and Warehouse Receive/Issue Slips Follow-up The Balances Of Material

Field that quantity automatically displays during bill of material records

Ok Cancel

Cost Method

This is the query that specifies the cost type that you will calculate the raw material costs in all of the modules for any record or listing. The system calculates the semi product and product costs on the basis of raw material costs and according to the quantities indicated in the product tree. The costs calculated in production are instantaneous; these calculations would be incorrect for the whole period. The system supports all cost methods in the inventory for the production cost calculation.

Alternative Cost Method

In cases when the cost for the above-explained cost type is zero at any period of the raw material, you can use this option to specify the cost calculation type you wish to use. The programme first calculates the raw material cost over the cost type, if this gives nil, then calculates over substitute cost type, if this also calculates nil, then calculates over the buying price.

Decimal Digits for Qnty.

In this option you should enter the number of decimal digits you want to use in the quantity fields of the production reports. E.g. weight in grams.

Decimal Digits for Amnt.

In this option you should enter the number of decimal digits you want to use in the amount fields of the production reports.

Save BOM by Manufacture Order

Companies that follow-up their production by manufacture order can use this parameter to save the product BOM in its current version when the manufacture order is created and later produce the related manufacture order by this earlier BOM version. This parameter can be used particularly in

companies, where BOMs are frequently modified, with the purpose of saving the BOM as at the date when the manufacture order is inserted and transfers are realised to the production warehouse, and later process the finished goods record by this BOM on the day the production is completed.

Check Short Onhand

This parameter controls the onhands of the semi products or raw materials that are defined on the BOM in production and notifies the user. With the Check Short Onhand option you can end the operation, if desired, and prevent that the production records are transferred to the inventory transactions. After you check the short onhand, you can rerun this section and process the finished ods receipt. If you do not select this field, the system does not check the inventory onhands of the components that are related to BOMs, thus will not display any notification.

Stop Operation at Deficit Balance

This parameter stops the operation in case of a deficit balance is generated in the finished ods receipt and prevents insertion of records.

Series follow-up at production vouchers

With the series follow-up application in the production module, production companies can access several information that are vital in their operations; i.e., for a specific raw material that has different serial numbers information such as which series are used for which products, which product series are produced of which raw material series.

In order to be able to run the series follow-up application in the Production Module, you should use the Free Format Finished Ods receipt section. As explained, the system runs the Finished Ods Receipt operation automatically and does not allow any modification by users; whereas, since in the series application you should enter the series numbers manually, you should insert the production transactions in a section, which allows manual modification. Companies that use the series application should therefore insert their production transactions by using the Free Format Finished Ods Receipt section.

According to the series criteria that you specified in the series parameter transactions and the inventory transactions, on the series screen, the system either generates the series numbers automatically or asks you to enter manually. If the series numbers are generated automatically, the system inserts 1 new series number for the produced product code (production quantity 1). When you press the Produce button, the raw materials or the semi products that will be used for the related product are displayed on the grid screen together with their quantity values. Once again, if the series numbers are generated automatically, the system inserts series numbers for the raw material and semi products. If desired, you can retrieve this information for raw material and semi products on the grid screen and manually modify the series numbers. The systems inserts the series number of the product code, which is generated at the end of this operation, into the corresponding code field recorded in the series transaction file of the components codes in this product's BOM. This feature enables users to get reports about which series are used for which products, which product series are produced of which raw material series.

Warning: 1 unit of the product should be produced at the end of the finished ods receipt. This is because you can insert only 1 series number in the correspond code for raw materials and semi product. If the product manufacture quantity is more than one, the system does not copy the product series numbers to the component codes. Thus, if as many series numbers are generated as the produced quantity, then it is not possible for the system to record this information correctly. The products should therefore be manufactured one at a time. However, if only one series number is assigned to the produced product (e.g. paint) regardless of its quantity (e.g. 100 kgs), then the system records this information correctly. For example, the system transfers the series number that is calculated for 100 kgs of paint, to the correspond codes of the component codes.

Quantity-2 Entry

You should select this parameter if in the finished ods receipt, you wish to insert and view on goods items basis, a second quantity record besides the basic quantity for the production. In general, this parameter should be used when goods have two different measurement units that do not have specific conversion values and vary according to the production. For example, let us assume that you manufacture the product in units and pack the products in boxes in the finished ods operation. In this case you can enter and follow-up in the Quantity 2 field the number of boxes for the product, which originally was produced on the basis of items.

Additionally, if you have selected the Loss Application parameter, the programme inserts the loss quantity in the Quantity 2 field. In this case, the system does not allow for any other usage of this field.

Manufacture Order Control at Production

Companies that produce by manufacture order should select this parameter to prevent that the finished ods receipts are processed without entering manufacture order numbers. In this case when inserting the finished ods receipts, the system verifies whether or not the manufacture order numbers are recorded. The system will not allow you to process the finished ods receipts if the manufacture order numbers are not recorded. The system will not run a verification if you do not select this parameter. In that case you can process your finished ods receipts without inserting the related manufacture order.

Follow-up the Balance of Manufacture Order's Material at End of Manufacturing Voucher Records?

When you select this parameter and run an operation for a specific manufacture order, you can process onhand follow-up by considering the previous in/out transactions that are related to this manufacture order.

Solid Material Application

The solid material application is the parameter you should use if the raw materials you consume for production are of evaporating characteristic. Some raw materials (e.g. acetone, ether, thinner) that are used in production evaporate at certain ratios regardless of their quantities defined in the BOM. Thus, the quantities absorbed by the product are less than those defined in the BOM.

In the solid material application, you should enter differentiate these kinds of vapourising raw materials on the inventory cards and enter the evaporation

ratios in the inventory cards. To do this, you should write the title SOLID MATERIAL in any of the Numerical Field Titles in the Inventory Module/Parameters/User Defined Fields. Additionally you should record the evaporation or loss ratio in the corresponding field under this title in the inventory card.

After you insert these definitions, the system calculates the evaporation or loss ratios of these raw materials according to these values when realising the finished ods receipt.

You can view these ratios in the Raw Material Total Information report by right-clicking your mouse when you are in the BOM section. You should not select this parameter if you do not run this type of an application.

Loss Application

You can use this parameter to track and report if products, raw materials or semi products that you use in your manufacture are lost by breaking, spilling or damage. The loss application can only be run in the Free Format Finished Ods Receipt section, because only this section allows users to modify the BOM quantities and components.

You should enter the loss quantities in the Quantity 2 fields in the free format finished ods receipt. When you enter the loss quantity in the Quantity 2 field according to the lines of the raw materials and semi products, the system adds also the loss quantities to the usage quantities and inserts the values in the inventory transaction records inclusive of the loss quantities. When you enter the loss quantity in the Quantity 2 field of the product manufacture quantity, then the system deducts the loss quantity and inserts the calculated value in the inventory.

Extra Field Usage

When you select this parameter the system ads Extra Fields 1 and 2 in the Finished Ods Receipt screens. While you can enter extra field information for products and components in the free format finished ods receipt section, in the finished ods receipt section you can enter extra field information for products. You can view this information on the other 2 page in the "Inventory Transaction Other Info" menu that appears when you right-click on the related record, and generate reports by using the extra fields. If you are processing the finished ods receipt order linked, the system inserts in these fields the extra field information that you entered in the order and copies them to the inventory transaction records.

BOM will be updated by Formula Sum

The BOMs Totals and Instant BOMs Total will be explained in the following sections below. However, to explain these two parameters that are queried and viewed in the Bill of Materials section: The BOMs Total indicates the number of units for which the component quantities are defined to produce the product as defined in the product tree. This is to say that if you enter 1 in the BOMs total field, the programme assumes that you will record raw material/semi product quantities by coefficients for 1 unit of product. If you enter any number other than 1 the system adds the raw material/semi product quantities to calculate the BOMs total. If the BOMs total is different than 1, in other words, if the total of the component quantities constitute the unit total of the product, the Instant BOMs Total is the field that displays

updated information as components (raw material/semi product) are added to the BOM. You cannot manually modify this field. You can compare the value that you defined in the BOM total according to component records that you entered by viewing this field with the value that you reach at the moment you process.

You should use the BOM will be updated by Formula Sum parameter in cases where the BOMs total and instant BOMs total are different and the instant BOMs total value is considered the actual BOMs total. When you select this parameter, the system will not record unless the two totals display equal values. If you do not select this parameter, the programme displays a warning if the two totals are not equal but will allow for records.

Code of Production Warehouse (default)

Companies that use the local warehouse application and define their production section as warehouse can use this parameter. The system brings the warehouse code that you indicate in this field to the finished ods receipt section by default. Users are allowed to modify this value.

Operation with barcode at end of manufacturing records

Companies that operate with barcode equipment can use this parameter. In this application, the barcodes of the inventories are recorded in the barcode field of the inventory transaction records or the barcode records section. When you enable this parameter, you will be able to enter the barcode value instead of the inventory code in the finished ods receipt and free format finished ods receipt\$ the programme will thus be able to identify the inventory code that relates to indicated barcode and insert the finished ods receipt.

Branch / Local Warehouse

In production operations in which the production phases are defined as local warehouses or branches, this is the section where you can identify which local warehouses or branches are related to production. Here you should define maximum 15 local warehouses or branches in an ascending sequence. You should not write codes for any local warehouses or branches that are not related to production, wherever applicable.

General Ledger

The inventory transactions that will be created with the finished ods receipt can be integrated with the "finished ods receipt integration" operation. This operation will be discussed in the later sections of this document. The accounts that you should run for products and raw materials in this operation will be specified according to the parameters, which you select on the general ledger page. To enable this, you must enter the related information in the product, semi product and raw material Detailed Code fields in the inventory transaction records.

3. Operations

3.1 Copying BOMs

The image shows a software dialog box titled "Copying BOMs". It features a blue title bar with a close button (X) in the top right corner. The main area is divided into two sections. The first section contains a "Product Code to Copy" text box with a dropdown icon to its right. Below this is a "Structuring Code" text box with a dropdown icon and an "Explanation of Structuring Code" text box with a search icon. The second section contains a "New BOM Product Code" text box with a dropdown icon. Below this is another "Structuring Code" text box with a dropdown icon and an "Explanation of Structuring Code" text box with a search icon. At the bottom of the dialog are two buttons: "Ok" with a green checkmark icon and "Cancel" with a red X icon.

You can use this section to easily create the similar BOMs. In some cases you may need to make some minor modifications in the BOM during manufacture. You can make these modifications temporarily, then change the BOM back to its original. If you think that you will need to use or view the modification in the future, you can save these modifications in a separate BOM. You can copy the BOM that you created with the modifications. As explained earlier, you must have inserted the codes for the all of the products that you use in the BOM and you can insert only one BOM for a product. Therefore, when you run this option you should create for the BOM a new product code that is the same with the BOM of the product. In the product code, which you will copy, enter the product code of the saved BOM. For example, PRODUCT. Then enter the new product code for the product code of the new BOM.

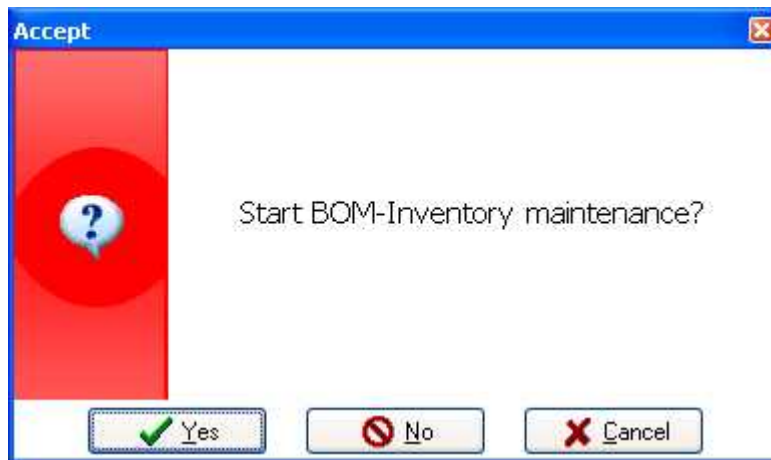
Product Code to Copy

This is the field where you should enter the product code of the previously saved BOM.

New BOM Product Code

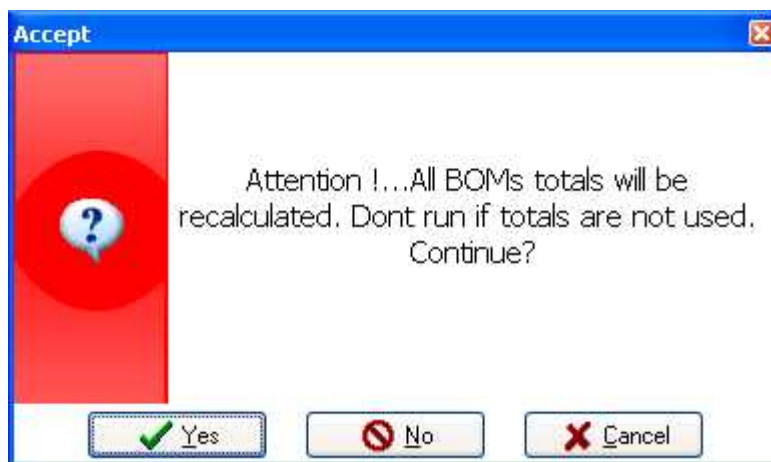
This is the field where you should enter the new product code of the BOM you will create.

3.2 BOM-Inventory Maintenance



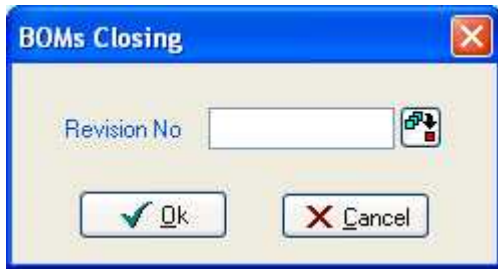
This is the section that scans and maintains the BOMS that occur in the "Product/Component" fields that is located on the inventory record and contains BOM linked information with the purpose of creating the production-related fields in the inventory card after discontinuities / DTS. If the values that are supposed to be displayed in the related fields cannot be viewed in the inventory cards, you can create these by running this section.

3.3 Recalculate BOMs Totals



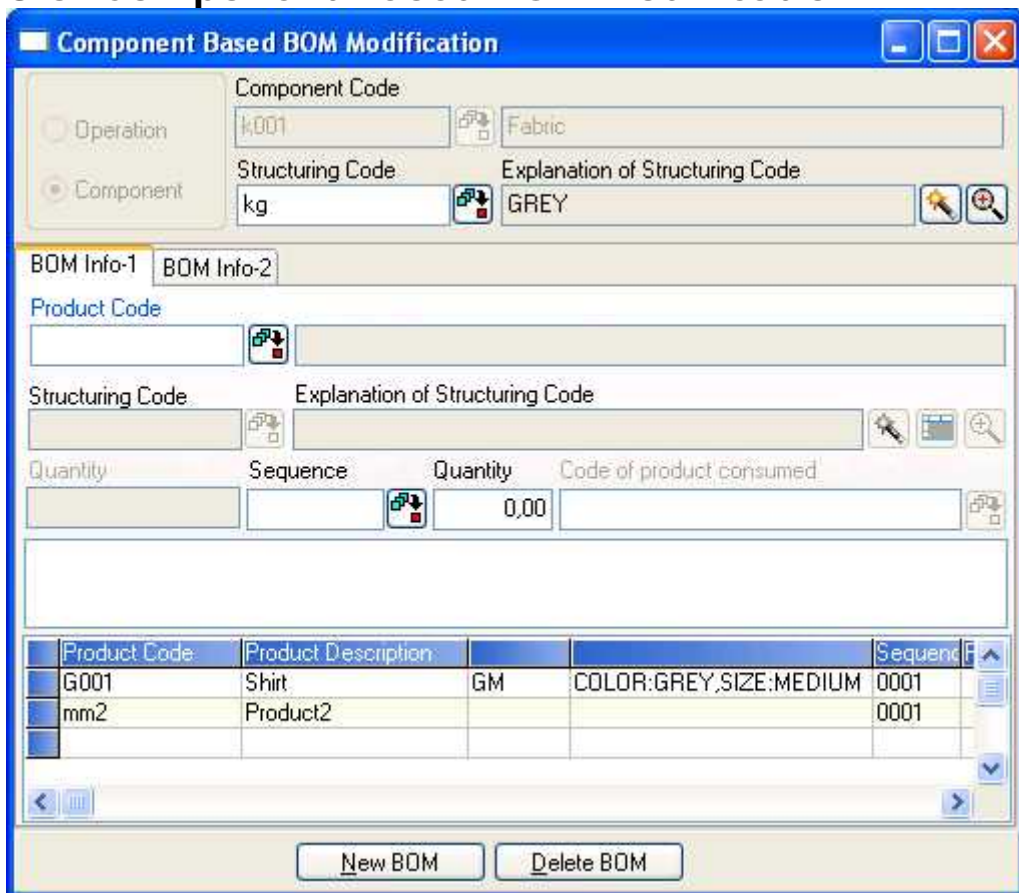
In cases, which the quantity totals of the components display the product total, you can use this section to calculate the product quantities by using the BOM. (Can be used after discontinuities / DTS.) In this section the system first displays a warning screen. When you confirm this warning, the system recalculates your BOMs totals according to the component quantities in the BOMs. As you will read in the warning, in order to be able to run this section you have to be using the instant BOMs total.

3.4 BOMs Closing



In BOMs, when you process modifications in the planned engineering changes section for future usage and your BOMs are revised on the applicable date, multiple back-dated records are piled in your BOM files. You should run this section especially after the year close to delete these records that accumulate in the BOMs file. The "Revision No." Field queries the base date, i.e. the system deletes all revisions that were inserted before the base revision date that you indicate in this field. When your BOMs file grows too big, the system can run the old records if it locates them. The BOMs can be transferred to the following year at year close. You can run this transfer as you desire.

3.5 Component Based BOM Modification



The working logic of this section is the reverse of a BOM entry. You first enter the component code in this section. All of the products in which this component is included will be displayed on the screen. You can modify the

quantities in the BOM records by modifying them in this section. The BOM changes with the entries you process in this section.

The "Consumed Product Code" is active when you run the fictive product application. You can select a component included in the fictive product's BOM and change in this section the products for which these components are consumed.

3.6 Delete BOMs



This parameter deletes all of the BOMs. This section is used for re-entering all definitions after transfer. This operation is for deleting all of the BOMs. You can delete the BOMs one by using the Delete key on the Bill of Materials/BOM Entry screen. You should run this screen only if you want to delete all of the BOMs. Since this section involves high risk, the programme displays warnings with images.



3.7 Batch MO Closing



Batch MO Closing

Process Selection


Batch closing of MOs which are fully produced

Batch closing of MOs according to criteria

Invnt.Code Range  

Man.Order No. Range  

Date Interval

Structuring Code 

Consider Loss

You can use this section when you want to delete your manufacture orders not one by one but quickly or as a total group.

The system displays two different options in the operation selection section.

- 1- Batch closing of MOs which are fully produced
- 2- Batch closing of MOs according to criteria

Batch Closing of Mos which are fully produced

When you select this option you cannot modify the other options below and should proceed with the *OK* key. You can exit the operation by using the *Cancel* key if you do not want to continue with process.

Batch Closing of Mos according to criteria

When you select this option the system allows you to delete records by indicating Inventory Code, Manufacture Order Number and Date Interval. This enables users to delete only the manufacture orders that have the specified common characteristics.

Consider Loss

You can use this parameter when you select the "Batch closing of MOs which are fully produced" option. The field is active only when you select the "Loss Application" and "Qty-2 Entry" parameters in the Parameters section. When you select this parameter the programme adds the net production quantity (excluding the loss quantity) in the finished ors receipt linked to the manufacture order and the loss quantity, and compares this total to the quantity indicated in the manufacture order. If this quantity is equal to or greater than those of the manufacture order, the system closes the related manufacture order. If you do not select this parameter, then the system compares the net production quantity excluding the loss quantity to the quantity indicated in the manufacture order. If this quantity is equal to or

greater than those of the manufacture order, the system closes the related manufacture order.

For example,

Let us say that 100 manufacture orders are given for a product P1. 100 units are produced in the finished ods and 10 units are wasted. The net production quantity is 90. If you select the Calculate Loss parameter, the system closes the manufacture order since the total quantities in the manufacture order and the finished ods receipts are equal. If you do not select this parameter, the system does not close the manufacture order after comparing the 90 units in the finished ods receipt and the 100 units of manufacture order.

3.8 Integration of Finished ods

The screenshot shows a software dialog box titled "Integration of Finished ods". It features a blue title bar with a close button. The main area contains several input fields and a checkbox. The fields are: "Product Code Range" (two empty text boxes with selection icons), "Structuring Code" (one empty text box with a selection icon), "Date Interval" (two text boxes containing "01.01.2006" and "21.09.2006"), "Production Rcpt.No." (two empty text boxes with selection icons), and "Reference Code" (one empty text box with a selection icon). Below these is a checkbox labeled "Integration based on production voucher no." which is currently unchecked. Further down is a section titled "Loss Account Code" containing a checked checkbox "Loss Account Code Detailed" and a "Led.Acc.Code" field with a selection icon. At the bottom are "Ok" and "Cancel" buttons.

You should use this section to transfer the inventory transactions that are generated in the finished ods receipt and free format finished ods receipt to the statement integration in the integration module by means of the related ledger accounts. The account you should run for the products and semi products will be determined according to the definitions in the general ledger page of the parameter module.

In the finished ods receipt integration operation, you can transfer according to the product code, the record date of the production vouchers or the production voucher number. If you are using a reference application, the system transfers the reference code that you enter on this screen to the reference code field in the integration vouchers that will be created. The programme displays "PRODUCTION" in the explanation field of the integration vouchers of the manufactured products, and "CONSUMPTION" in that of the consumed components. The system calculates the consumption prices of the components according to the cost type recorded in the production parameters.

3.9 Finished ods Receipt from Sales

The screenshot shows a software window titled "Finished ods Receipt from Sales". The window has a blue title bar and a menu bar with "Initial Query", "General Filters", "Filter", and "Scaling". The main area contains several input fields: "Transaction Date" with two date pickers set to "19.09.2006", a "Series" field with a dropdown arrow, "Transaction Type" with radio buttons for "Invoice" (selected), "Waybill", and "(-) Balances", "Separate Vouchers" with an unchecked checkbox, and "WHs.Code.Range" with two numeric input fields set to "0" and dropdown arrows. On the right side, there is a vertical toolbar with buttons for "Report", "Read", "Save", "Help", and "Cancel".

This operation enables you to automatically generate finished ods receipts at the end of the day according to the sales invoices, sales waybills or inventory onhands. It is a section, which particularly companies that operate with POS systems can use for generating production vouchers in the same quantity of the sold goods, after recording the day's sales information. You can process transactions by entering an Inventory Code/Group Code/Code 1 or Code 2 interval in the initial query section. The BOMs of the inventories you insert in this section should be previously defined in the Bill of Materials section.

Transaction Date

For the production vouchers to be generated, the system considers the sales invoices, sales waybills or inventory onhands that are recorded on the date indicated in this section.

Transaction Type

In this section, you should specify the transaction types that you wish the system to consider when creating the finished ods receipt vouchers. These can be sales invoices, sales waybills or deficit onhands.

Series

If the "Series follow-up at production vouchers" option is selected in the Parameters section, the sequence of the production vouchers are in the series that you enter in this section.

Separate Vouchers

When you select this parameter, the programme generates finished ods receipt vouchers separately for every product, otherwise generates only on voucher for all products.

You can view these vouchers only in the finished ods receipt section. To generate in transactions for products and out transactions for raw materials, you should press the "produce" button on the finished ods receipt screen, and then select the "Record" parameter.

3.10 Document Numbers



The screenshot shows a dialog box titled "Document Numbers". It is divided into two sections: "Work Orders" and "End Of Manufacturing Vouchers". Each section contains a "Series" dropdown menu and a "Last Number" text input field. The "Series" dropdown in the "Work Orders" section is currently set to "0". At the bottom of the dialog, there are two buttons: a green checkmark button labeled "Iamam" and a red X button labeled "iptal".

This is the section, which companies that operate with branches can use to follow-up manufacture orders and finished ors receipt vouchers according to branches and different series numbers. The programme tracks the manufacture orders and finished ods receipt voucher numbers separately according to the series number for which you enter a single alphabetic or numeric character. When you enter the series number, the programme displays the last number that is used in the related series code in the "last number" field and reflects this information to the number field of the manufacture orders and finished ors receipt vouchers.

4. Reports

4.1 Bill of Materials List

This report gives a BOM report also considering the lower levels. You can indicate the quantity, BOM date, Revision date information for the product in the options section. The system displays the onhand control and requirement information.

This report gives the detailed BOM list for a selected product, instant onhands of materials, inventory onhands and order manufacture requirements according to production quantity.

Quantity

In this field you should enter the unit number of the product manufacture for which you wish to get the BOM list.

Check Inventory on-hand

When you select this query, the programme calculates the usage quantities of components in the product, then controls the inventory onhands and lists the existing onhand quantities for the requirement and the quantities that need to be ordered. If you do not select this query, the programme calculates the production requirements and without controlling the inventory onhands, assumes that all of the requirement will be ordered and calculates costs accordingly.

Check Products on-hand

When you select this parameter the programme controls the onhand quantities of the total quantity that you have entered for Production in the above-explained field, lists the quantity that cannot be supplied from the inventory onhand and calculates the cost. If you do not select this query, the programme displays without considering the onhands the material requirements and costs for the quantity you entered.

Calculate Cost

You should select this query if you want to calculate the costs of all raw material, semi products and products according to the cost type that you defined in the Parameters section, according to the usage quantities.

On Hand (Given W. hs. / All W. houses)

In the case that you have defined your manufacture phases as local warehouses or branches and specified in the production parameters the branches or local warehouses which are related to production, in this section you should specify whether the onhand controls should be made in the warehouse from which the BOM list is supplied or in all of the warehouses that are related to the manufacture. When you select the all warehouses option the system considers the onhand material quantities in all of the warehouses that are defined in the production parameters.

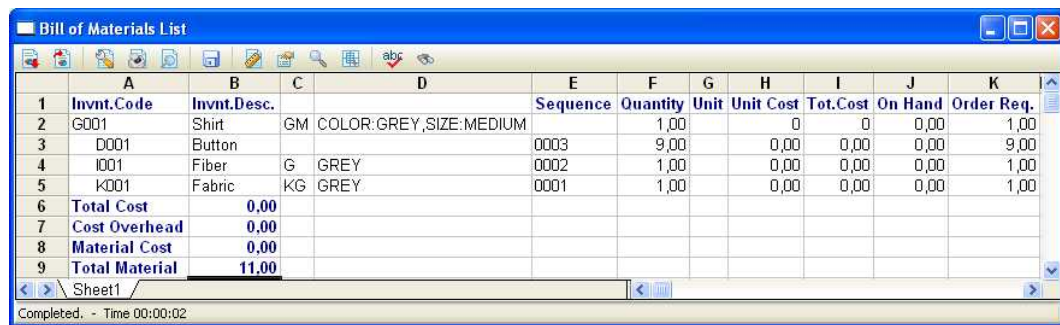
W. hs. Code

This field becomes active when you select the Given Warehouse option in the above-explained query. In this field you should enter the code of the warehouse of which the onhands will be calculated.

Code Sort / Entry Sort

When you select the code sort, the programme lists the components according to their codes regardless of the order you inserted this information in the BOM, when you select the entry sort, it lists the components according to the order you inserted them in the BOM.

You can list a product's inventory codes, titles, production quantities, unit and total costs, onhand levels, order requirements that you defined as semi products and raw materials in all of the levels.



	A	B	C	D	E	F	G	H	I	J	K
	Invnt.Code	Invnt.Desc.			Sequence	Quantity	Unit	Unit Cost	Tot.Cost	On Hand	Order Req.
2	G001	Shirt	GM	COLOR:GREY,SIZE:MEDIUM		1,00		0	0	0,00	1,00
3	D001	Button			0003	9,00		0,00	0,00	0,00	9,00
4	I001	Fiber	G	GREY	0002	1,00		0,00	0,00	0,00	1,00
5	K001	Fabric	KG	GREY	0001	1,00		0,00	0,00	0,00	1,00
6	Total Cost	0,00									
7	Cost Overhead	0,00									
8	Material Cost	0,00									
9	Total Material	11,00									

4.2 BOM Control List

BOM Control List

Initial Query Options Filter Sort Scaling Printer Options

Quantity:

Revision No:

Check Inventory on-hand:

Check Products on-hand:

Calculate Cost:

Cost Date:

On Hand: Given W.h. All W.houses W.hs.Code:

Code Sort Entry Sort

Report
Read
Save
Help
Cancel

Although this is a report that resembles a BOMs List, it brings every semi product to the first level like a product and displays its sub-components.

In the "BOM Control List" report you can read the explanations for the fields in the options section.

BOM Control List

	A	B	C	D	E	F	G	H	I
	Invnt.Code	Invnt.Desc.	Conf.Code	Conf.Desc.	Sequence	Quantity	Unit	Unit Cost	Tot.Cost
1	G001	Shirt	GM	COLOR:GREY,SIZE:MEDIUM		1,00		0	0
2	D001	Button			0003	9,00		0,00	0,00
3	I001	Fiber	G	GREY	0002	1,00		0,00	0,00
4	K001	Fabric	KG	GREY	0001	1,00		0,00	0,00
5	Total Cost	0,00							
6	Cost Overhead	0,00							
7	Material Cost	0,00							
8	Total Material	11,00							
9									
10									
11									

Sheet1
Completed. - Time 00:00:02

4.3 Manufacture Order List

You can use this section to get a report of the manufacture orders with various criteria. In this section you can list only the open manufacture orders according to a date, manufacture order number, reference manufacture order number or project code interval, or all of the manufacture orders.

You can get your report, according to the parameter you select in the sort section, sorted according to the date, manufacture order number, and inventory code or delivery date. If you select the Ref. Manufacture Order No parameter, you can get a report on Ref. Manufacture Order No basis of the records for which you entered Ref. Manufacture Order No in your manufacture order. In this way you can use the manufacture order number (Ref. Manufacture Order No) of a product to follow-up also the manufacture orders inserted for semi products.

	A	B	C	D	E	F	G	H	I	J	K
	Date	Man.Order No.	Invnt.Code	Invnt.Desc.	Conf.Code	Conf.Desc.	Quantity	Explanation	Delivery Date	Revision No.	
1	19.09.2006	0000000000000001	MM1	MAMUL1			10,00		20.09.2006		
2	19.09.2006	0000000000000002	MM2	MAMUL2			3,00		20.09.2006		
3											
4											
5											

4.4 BOM Summary List

	A	B	C	D	E	F	G	H	I
1	Invnt.Code	Quantity	Conf.Code	Invnt.Code	Quantity	Conf.Code	Invnt.Code	Quantity	Conf.Code
2	G001		GM						
3	K001	1,00	KG	I001	1,00	G	D001	9,00	
4									
5									

Completed. - Time 00:00:03

This report lists the components and the quantities only in the related BOM, according to products, without giving details and without identifying their levels.

4.5 Raw Material Usage Report

	A	B	C	D	E	F	G	H	I	J	K
1	Raw Mat.Code	Raw Mat.Description			Product Code	Product Description			Sequence	Quantity	Raw Mat.Ratio
2	D001	Button			G001	Shirt	GM	GRI MEDIUM	0003	9,00	9,00
3	I001	Fiber	G	GREY	G001	Shirt	GM	GRI MEDIUM	0002	1,00	1,00
4	K001	Fabric	KG	GREY	G001	Shirt	GM	GRI MEDIUM	0001	1,00	1,00
5	K001	Fabric	KG	GREY	MM2	Product2			0001	1,00	1,00
6											

Completed. - Time 00:00:03

This section lists the Product BOMs in which a component is included and other related information. It gives you the list of which raw materials are included in which product or semi product according to raw materials.

4.6 First Level BOM List

Initial Query Options Filter Sort Scaling Printer Options

List BOM for Unit

List Costs

List Cost Accounting Information

Report

Read

Save

Help

Cancel

This section gives you a first-level BOMs list.

It lists the components' usage quantities and costs according to products, on first level, without considering the lower levels.

When you select the List Costs parameter, this report calculates the unit cost and total cost values for the components in the BOM according to the cost type specified in the production parameters.

The "List Cost Accounting Information" parameter becomes active when you select the "List Costs" parameter. In companies that calculate their product and semi product costs by using the Cost Accounting module, this section enables you to retrieve the financial main code and financial cost code of the products and components.

	A	B	C	D	E	F	
1	Invnt.Code	Invnt.Desc.	Conf.Code	Sequence	Quantity	Unit	Expla
2	G001	Shirt	GM		1,00		
3	K001	Fabric	KG	0001	1,00		
4	I001	Fiber	G	0002	1,00		
5	D001	Button		0003	9,00		
6							
7							

4.7 BOM Determination List

	A	B	C	D	E	F
1	Invnt.Code	Invnt.Desc.	Conf.Code		BOM	
2	G001	Shirt	GM	COLOR:GREY,SIZE:MEDIUM	Exist	
3						
4						

This report lists the inventory cards for which BOMs are defined, and whether there are BOMs recorded for all or a group of products.

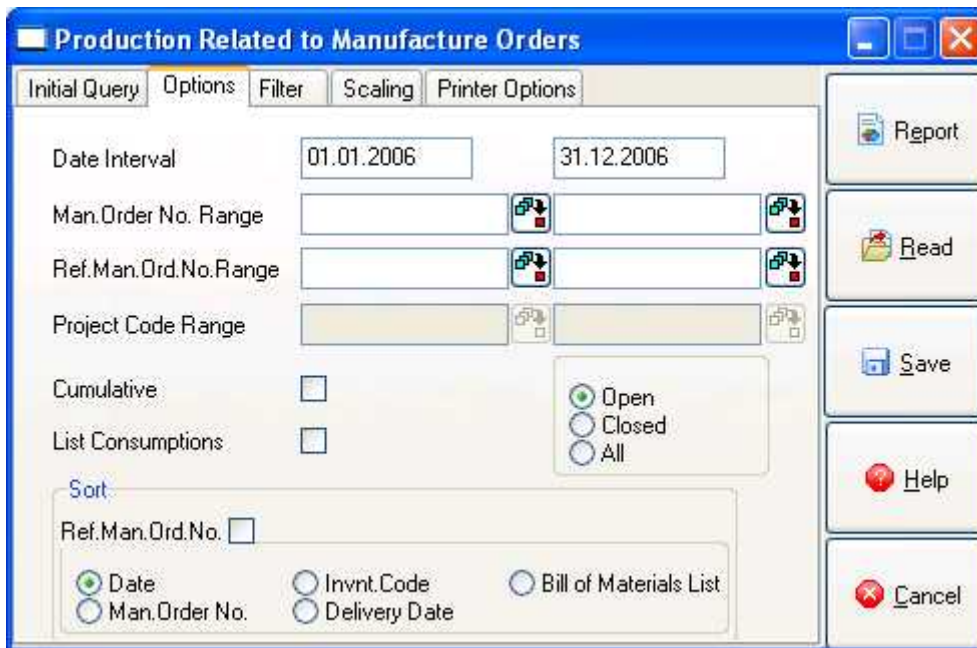
4.8 Manufacture Order Related Raw Material Report

This is the section where you can get the lists of the recorded manufacture orders, materials and their quantities according to products, according to the date and manufacture order intervals, which you enter in the initial query. The list also enables you to get materials from warehouses on manufacture order basis.

You can get your report, according to the parameter that you select in the Sort section, sorted by date, manufacture order number, inventory code or delivery date. If you select the Ref. Manufacture Order No parameter, you can get a report according to the ref manufacture order numbers for the records this information is inserted. In this way you can use the manufacture order number (Ref. Manufacture Order No) of a product to follow-up also the manufacture orders inserted for semi products.

	A	B	C	D	E	F	G	H	I	S
1	Date	Man.Order No.	Invnt.Code	Invnt.Desc	Conf.Code	Unit	Quantity	On Hand	Delivery Date	
2	19.09.2006	0000000000000001	MM1	MAMUL1			10,00	719,00	20.09.2006	
3			HM2	HAMMADC			20,00	200,00	20.09.2006	
4			HM4	HAMMADC			40,00	0,00	20.09.2006	
5			HM5	HAMMADC			80,00	0,00	20.09.2006	

4.9 Production Related to Manufacture Orders



In this section you can get lists for the realised and onhand quantities, which are recorded in the manufacture order section, of the finished ods receipts that you recorded as linked to manufacture orders (by entering manufacture order number in the Finished Ods Receipt or Free Format Finished Ods Receipt section). You can get this list according to a date and manufacture order number interval that you should specify in the initial query. If you select the List Consumptions field, you can also get the list material consumption in the manufacture order linked finished ods receipts. Otherwise it lists only the produced products or semi products according to the manufacture orders.

You can get your report, according to the parameter that you select in the Sort section, sorted by date, manufacture order number, inventory code or delivery date. If you select the Ref. Manufacture Order No parameter, you can get a report according to the ref manufacture order numbers for the records this information is inserted. In this way you can use the manufacture order number (Ref. Manufacture Order No) of a product to follow-up also the manufacture orders inserted for semi products.

	A	B	C	D	E	F	G	H	I	J
	Date	Man.Order No.	Rcpt.No.	Invt.Code	Invt.Desc.	Conf.Code	Quantity	Explanation	Closed	Delivery Date
1	19.09.2006	0000000000000001		MM1	MAMUL1		10,00	Man.Order	H	20.09.2006
2										

Completed. - Time 00:00:17

4.10 Standard Cost List

