

# MANUFACTURING

**QUALITY  
CONTROL**

**BILL OF  
MATERIALS  
& FACTORY  
ORDERS**

MATERIALS  
REQUIREMENTS  
PLANNING  
& FORECASTING

BILL OF  
MATERIALS  
& FACTORY  
ORDERS

QUALITY  
CONTROL

**MATERIALS  
REQUIREMENTS  
PLANNING  
& FORECASTING**

### KEY BENEFITS

- Flexible multi-level BOM configurations
- Visibility and management of costs and processes
- Link Sales Orders to Factory Orders to service priority customers
- Optimise customer delivery with known lead times and route planning
- Real time updates to physical and financial inventory status
- Wide range of configurable reports for decision making
- Visual production planning board avoids surprises, provides flexibility and very nimble production

The ability to respond quickly to customer requirements is key in today's market. Greentree's Manufacturing suite is designed to allow you to easily and accurately manage the assembly of products for make to order and make to stock manufacturing requirements, ensuring you know exactly what materials are required, at what cost, providing responsive customer delivery at appropriate pricing and profit margins.

### Complete management

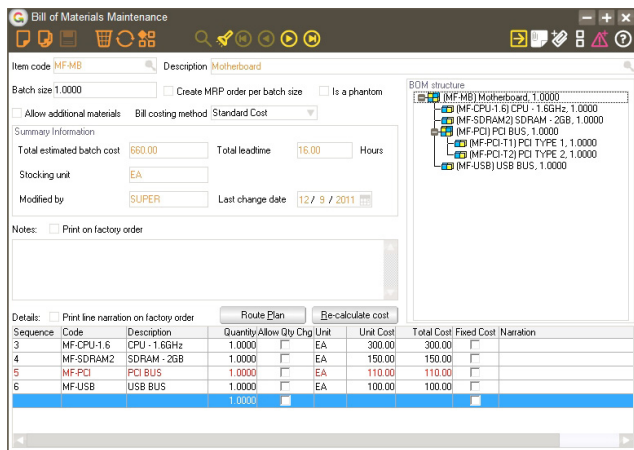
The Greentree Manufacturing suite provides you with the tools to help manage your production, control costs and gives you the flexibility to respond quickly to customer and market demands. It offers a breadth of manufacturing functionality with seamless integration with your Financial and Distribution systems.

Greentree Manufacturing is designed especially for Make-to-order/Make-to-stock, Batch Processing, Discrete Manufacturing, and Job Shop environments. At any time you can measure specific costs associated with materials allowing you to manage costs more effectively and identify

new product opportunities faster. Production route plans allow you to define estimated lead times to advise customers in advance on expected delivery dates.

The Bill of Materials module allows you to define exactly what and how many parts, components or materials are required to complete a production run. Basically, it's a manufacturing recipe and instructions about what to use, how long it will take, and how much it will cost in order to produce your product and is a critical component in the manufacturing process. Optionally it has an interdependent relationship with the Materials Requirements Planning and Forecasting modules.

# 3 Manufacturing Bill of Materials & Factory Orders



Sequence	Code	Description	Quantity	Allow Qty Chg	Unit	Unit Cost	Total Cost	Fixed Cost	Variance
3	MF-CPU-1.6	CPU - 1.6GHz	1.0000		EA	300.00	300.00		
4	MF-SDRAM2	SDRAM - 2GB	1.0000		EA	150.00	150.00		
5	MF-PCI	PCI BUS	1.0000		EA	110.00	110.00		
6	MF-USB	USB BUS	1.0000		EA	100.00	100.00		

Multi-Level Bill of Materials

## Defining and simplifying complex Bill of Materials structures

This is where what could potentially be thousands of component parts or materials are defined and organised into easily managed multi-level structures. Users are able to simply define each layer of design and materials whilst Greentree takes care of complex time and materials calculations in the background. You can see exactly what the optimum batch totals should be, the impact additional or different materials might have on the overall cost and examine detail at whatever level you choose. If you prefer to work in Excel to define your Bill of Materials then simply upload your file using Greentree's FREE capabilities – work with the familiarity of Excel and leverage the capabilities of Greentree.

## Multiple options save time and optimise processes

With Greentree's Bill of Materials module your production process is not locked into rigid Bill of Material structures. Your production team has the ability to include additional materials during manufacture or replace defined materials with alternatives, ensuring production completion in the most time and cost effective way. Factory orders can include unlimited production notes to assist shop floor staff with set-up instructions.

Initiating a factory order is straightforward with all options automatically defaulted. However you can override these to change the destination location for the finished goods, the location to select materials from, as well as whether to commit or backflush materials for the production run. Factory orders can also be adjusted to reflect rejects and to return un-commit or write-off materials not used in the manufacturing process.

## A picture is worth a thousand Bill of Materials lists

If you're a "draw me a picture" type then Greentree provides you with a graphical representation of the bill of materials. This graphical view adds shape and flow to a seemingly complex Bill of Materials structure.

## Visibility, management and control of costs and processes

Costs are managed and calculated automatically and there are multiple options to ensure that all costs associated with the planning and production process are included in the final production figure. For example, the BOM's module Factory Orders offers a variance report comparing actual against receipted costs at any time.

Keeping a close eye on items as they progress through the production cycle to ensure timely customer delivery is all taken care of with the help of a route plan attached to the BOM. The status of all orders, including Factory Orders, is updated automatically by the system so you can always tell what stage any order is at. And to ensure you get the most accurate timeframe for the end-to-end process, lead times can be assigned to each work centre and again are automatically calculated. You have the reassurance of knowing that the delivery times you're giving your customers are provided with a good level of certainty.



“I like the online update of any information I want, and Greentree's cross functionality pulls all linked data together. This means staff are able to get a progress report for any process or sales order regardless of which department the resources are coming from.”

**Kenneth Andersen**, Financial Controller, Pacific Marine Batteries

## Real-time availability of inventory and in-production items

Sales orders can be linked to Factory Orders so that as soon as a manufactured item becomes available. It's immediately allocated to the originating sales order. There is no risk of an item being re-directed to another order. This ensures your priority customers get their priority orders without fuss.

Ordered, committed and in-production items are always displayed in real-time and updated to the inventory module at every step of the production process. You always have the absolute up-to-the-minute picture of exactly what is available and where it's located.

## Make sound decisions based on true costs and filtered reporting

Real-time viewing and updating of every facet of the production cycle, coupled with a number of checks, balances, controls and options, ensures the quality and integrity of the data being accessed through Greentree's powerful enquiry options.

A wide range of reports and filters ensures that managers and planners get exactly the information they need to make fully informed and reliable business decisions about

the BOM & Factory Order processes. Reports include identifying which specific raw materials are used in finished goods, detailed cost analysis of work-in-progress issue and receipt transactions, through to final cost variances. These reports provide up-to-date information for both production and management personnel.

## The Manufacturing Planning Board ensures optimum sequencing and scheduling of production

For short term production planning, the Planning Board offers total visibility and flexibility, allowing the planner to drag and drop Factory Orders so they are in the optimum sequence for any given set of conditions. To ensure you squeeze every possible production minute out of the day, production can be scheduled right down to minutes within each hour so production capacity runs at its absolute optimum. And, as the planning board is automatically updated as orders are created and receipted, it always reflects the latest situation.

The ability to then export updated schedules to Excel for further notation, analysis and printing, gives a simple easy means for pushing the production schedule to factory floor personnel, ensuring everyone is working to the same plan.



“Greentree has proved to be an excellent choice for our manufacturing based business with noticeable efficiencies in the way we define our Bill of Materials and cost jobs”

Bryan Wentworth, Accountant, Maskell Productions Ltd

## INTEGRATION WITH OTHER GREENTREE MODULES

Greentree's modular system builds upon and integrates with all other modules to ensure that every drop of business intelligence is extracted from every transaction right across the business – nothing goes to waste. This translates into aggregated business value and you need only purchase the modules that best fit your business.

The Bill of Materials module integrates with Inventory on-hand quantities and product costs. General Ledger balances are automatically updated through Factory Order issues, receipts and adjustments. Sales Orders can be linked directly to Factory Orders to manufacture goods on demand. Greentree's Forecasting and MRP modules offer powerful capabilities to optimize production requirements and inventory levels.

## KEY FEATURES

- Multi level bill of materials
- Graphical view of BOM structures
- Batch sizes
- Fixed and variable costs
- Visual Production Planning Board
- Powerful Reporting
- Integration with Excel

## CASE STUDY: Maskell Productions

**PROBLEM** Maskell Productions engineers and fabricates below and above ground storage tanks for several industrial and commercial applications, and thus has a significant materials and job costing component to every job it undertakes. To accommodate growth and new product demands, Maskell needed to implement a new system.

**SOLUTION** Greentree's Bill of Materials & Factory Orders automates many processes previously done manually. The free-flow of information through and around the entire system has enabled much greater visibility of costs as they happen, which has improved the quality of information being captured, analysed and reported, which ultimately improves the decision-making process.

**OUTCOME** Maskell Productions has automated and improved the accuracy and efficiency of the BOM & JC processes without the need for costly bespoke development. They now have high visibility of data with the expected improvements in reporting and decision-making. The business expects Greentree to accommodate business growth now and well into the future. “We were more than satisfied that Greentree was a stable, reliable system which posed only a negligible business risk which was carefully managed through a well thought-out implementation plan,” says Accountant Bryan Wentworth.

For more information visit  
[www.maskell.co.nz](http://www.maskell.co.nz)



For more information about  
**Greentree & ERP Software**  
please get in touch:

[info@prerogative.co.uk](mailto:info@prerogative.co.uk)

0870 752 2971

[www.prerogative.co.uk](http://www.prerogative.co.uk)

