

# Manufacturing

## BENEFITS

### Manage costing more effectively.

Provide timely, detailed, and accurate tracking of production costs. Help improve efficiency, cut costs, and increase profitability.

### Define operations in greater detail.

Define the manufacturing process to fit your specific operations, providing a tailored fit between the process and the product. Add the detail necessary for complicated operations.

### Expand operational controls.

Provide greater operational controls to manage orders, receipts, routings, material requirements planning (MRP), work center definitions, work in progress (WIP), and production costing.

**Access critical information—faster, easier, and in greater detail—for better decision making.** Find the key information you need to make critical decisions by gaining quick access to manufacturing orders, their progress, and associated costs.

## Manufacturing Order Processing in Microsoft Dynamics GP

Track detailed production costs and manage work orders and the shop floor more efficiently. Integrated sales and production processes support flexible, efficient make-to-order environments. Integrating production with forecasting processes significantly improves planning in build-to-forecast or hybrid environments.

Manage outsourced operations more efficiently, so you can focus more on core competencies to improve your competitive standing in today's tough markets.

Manufacturing Order Processing in Microsoft Dynamics™ GP empowers you to direct the entire cycle of order processing so that you can build a business that is both customer-driven and profitable.

The screenshot displays two overlapping windows from the Microsoft Dynamics GP software. The top window is titled 'Master Production Scheduling' and shows a grid of data for various items (CHAIR, COMPUTER, WATCH) across different time periods (4/12/2007, 5/12/2007, 6/12/2007, 7/12/2007). The bottom window is titled 'Edit Manufacturing Order Status' and shows a list of manufacturing orders with columns for MD Number, Status, Finished Good, Start Date, and Ending Quantity. The status of the orders is being updated from 'Open' to 'Released'.

ITEM NUMBER	FCST QTY.	FCST QTY.	FCST QTY.	FCST QTY.
CHAIR	0	200	300	0
COMPUTER	0	20	50	0
WATCH	0	600	800	0

MD Number	Status	Finished Good	Start Date	Ending Quantity
MD0001	Open	PR01	8/25/2006	450
MD0002	Open	100AS	3/15/2006	50
MD0003	Released	CHAIR	3/5/2007	5

*MONITOR ORDER  
PROGRESS with  
precision, addressing  
potential problems  
before they arise.*

*MASS CHANGE THE STATUS of  
multiple manufacturing orders  
at one time.*

## FEATURES

## MANUFACTURING ORDER PROCESSING

<b>Manufacturing Orders</b>	
<b>Quick Manufacturing Orders</b>	Set up quick manufacturing orders and empower timely recording of production. You can also backflush materials, labor, and machine expenses.
<b>Improved Workflow</b>	Set up sales orders to flow easily into manufacturing orders.
<b>Precise Production Control</b>	Define end production quantities more efficiently. Establish setups taking maximum and minimum quantities into account, provide alerts, and account for scrap and shrinkage.
<b>Capacity Requirements Planning</b>	View manufacturing orders from within Capacity Requirements Planning windows to help effectively manage the demand for finished goods.
<b>Automated Scheduling</b>	Calculate start and due dates automatically, based on the routing used. (If desired, or if situations indicate, you can enter dates manually.)
<b>More Efficient Picking</b>	Streamline picking operations and improve efficiency by printing picking documents for a range of manufacturing orders, components, sites, and dates.
<b>On-Demand Allocation</b>	Allocate, issue, and scrap components as needed. Operations can be reversed to place components back into inventory.
<b>Visibility into Component Shortages</b>	View a list of picklist component shortages, including details about when the items are needed for manufacturing orders, to help manage your inventory replenishment plans.
<b>Detailed Visibility and Management of Orders</b>	Receive full or partial manufacturing orders with actual quantities. Automated reversal of incorrectly posted manufacturing order receipts helps you correct orders efficiently. You can also easily view and track collected labor, machine costs, and backflush levels.
<b>Comprehensive Variance</b>	Assessment Track enables you to track in dollars or percentages for each cost category by estimated, work-in-progress, and actual amounts. View by unit or for complete manufacturing orders.
<b>Flexible Rescheduling</b>	Reschedule batches for sequences in manufacturing orders to respond to unforeseen situations or delays, quickly and easily.
<b>Automated or Direct Work In Progress Data Entry</b>	Enter work-in-progress (WIP) data directly into the system or automatically integrate with many popular data collection devices.
<b>Improved Collaboration with Outsourced Service Vendors</b>	Generate purchase orders for outsourced services based on manufacturing orders. Track shipment details and outsourcing costs precisely.
<b>Serial/Lot Linking</b>	Link serial or lot-tracked components to serial or lot-tracked finished goods for complete traceability throughout the system.

## FEATURES

## MANUFACTURING ORDER PROCESSING

<b>Manufacturing Orders</b>	
<b>Mass Manufacturing Order Status Change</b>	Change the status of manufacturing orders all at once, as well as turn MRP Planner Orders into Open or Released manufacturing orders.
<b>Integration with Business Portal</b>	View critical manufacturing information by using a Web browser from within Business Portal.
<b>Routing</b>	
<b>As-Needed Definition</b>	Define routings on an as-needed basis. Assign a virtually unlimited number of routes to items, each with a virtually unlimited number of sequences, to provide alternate routes when capacity is constrained.
<b>Detailed Instruction Capability</b>	Attach detailed notes to each routing sequence, providing clear direction through easy access to information designed to improve accuracy and efficiencies.
<b>Flexible Routing</b>	Link sequences in sequential, overlapping, and parallel routes for more efficient use of resources.
<b>Reusable Sequences</b>	Reuse sequences within a route for repeat steps in the manufacturing process, helping to save time and reduce costs.
<b>In-Depth Sequence Control</b>	Control sequences for tight alignment with production processes. For example, designate a sequence as the last to run in a day, such as a painting step that requires overnight drying, before taking the next routing step.
<b>Elimination of Duplicate Effort</b>	Eliminate duplicate effort in setting up or changing routes by reusing sequences from routes or by copying and modifying routes as necessary.
<b>On-Time Routing of Materials</b>	Help ensure that materials are where they are needed, when they are needed (and not before), by linking components from bills of materials to specific sequences.
<b>Work Center Management</b>	
<b>Powerful Outsourcing Management</b>	Manage outsourced work centers efficiently. All manufacturing orders and related purchase orders can be viewed for status. Outsourcing vendors can be added or changed as needed to avoid delays or other problems at any time in the manufacturing process.
<b>Detailed Resource Allocation</b>	Assign machines and employees to each work center to take advantage of effective capacity and availability. Alternate work centers are assigned efficiently to counteract bottlenecks when they occur.
<b>Tight Schedule Control</b>	Track shifts and the hours per shift at each work center to accommodate various work center schedules.
<b>Consolidated Operations</b>	Easily group operations for more efficient, cellular environments.
<b>Automated Backflushing</b>	Set operations to backflush labor and/or machine expenses automatically.

Costing	
<b>Flexible Cost Basing</b>	<p>Track nine different cost categories:</p> <ul style="list-style-type: none"> <li>• Material</li> <li>• Fixed Material Overhead</li> <li>• Variable Material Overhead</li> <li>• Machine</li> <li>• Fixed Machine Overhead</li> <li>• Variable Machine Overhead</li> <li>• Labor</li> <li>• Fixed Labor Overhead</li> <li>• Variable Labor Overhead</li> </ul> <p><b>Outsourcing:</b> You can use any of these nine cost categories to capture outsourcing costs.</p>
<b>Flexible Cost Basing</b>	Base costing on actual or standard costs.
<b>Improved Product Costing</b>	Automatically apply WIP materials to a receipt, calculate labor costs, and add completed product into stock for better visibility into product costs.
<b>Better Visibility of Cost Effects</b>	As new standard costs are defined for components or services, you can track bills of materials to see their effects on the cost of finished goods. Changes can be applied systemically or to a single bill of materials.
<b>Standard Cost Changes History</b>	Provide a complete view of standard cost revaluations with automated recording of changes and the ability to generate historical reports.

For more information about Manufacturing Order Processing in Microsoft Dynamics GP, visit [www.microsoft.com/dynamics/gp](http://www.microsoft.com/dynamics/gp).