

# MANUFACTURING

## Microsoft Dynamics NAV

### MANUFACTURING IN MICROSOFT DYNAMICS NAV

Respond quickly to rapidly changing customer demands using Manufacturing in Microsoft Dynamics™ NAV.

#### Key Benefits:

- Take advantage of new revenue opportunities.
- Provide more responsive customer service.
- Improve business performance from the shop floor to your bottom line.

*“With the old system it was nearly impossible to keep up with all the changes. But with Microsoft Navision [now known as Microsoft Dynamics NAV], we are on top of it, with great visibility into all our processes. Since we implemented Microsoft Navision [now known as Microsoft Dynamics NAV], we’ve been able to increase productivity by 15-20% and cut lead times by around 2.5-5%.”*

Joachim Baum, IT Manager, Herzog GmbH, a Just-in-Time German manufacturer of precision machine parts

### Turn Changing Customer Needs into New Revenue Opportunities

Manufacturing in Microsoft Dynamics NAV\* gives you the adaptability you need to take advantage of new revenue opportunities.

### Provide Better Customer Service

Good service will make customers want to do business with you again and again. When customers know that you can answer any question about an order at any given time, they won't look elsewhere.

### Respond Quickly to Customer Changes and Questions

Being able to respond quickly to customer changes and questions gives you a competitive advantage. Order promising gives you the ability to promise your customers a reliable delivery date immediately, on request.

With Manufacturing, rush orders can be planned immediately from the sales order. Orders can be modified at any point in the production cycle. Multilevel production orders improve coordination of made-to-order requests and simplify the implementation of make-or-buy decisions.

Multidimensional tracking allows you to respond instantly to customer inquiries about order status. Access tracking to the dispatch list allows the shop floor manager to determine which customers would be affected if you moved a job.

### Improve Your Business Performance

Manufacturing helps you run your business more efficiently, so you improve business performance from the shop floor to your bottom line.

\* Microsoft Dynamics NAV, formerly Microsoft® Business Solutions–Navision®

### **Change Manufacturing Methods and Processes Instantly**

Manufacturing allows you to instantly change your manufacturing methods and processes, helping you to keep up with changing customer needs. You can modify components and operations on the fly, even on released production orders.

When a change occurs, you can update and replan all materials, costs, and operations simultaneously, without time-consuming batch jobs.

Multiple planning options, tracking, and action messaging allow you to quickly and easily make exceptions and last-minute changes to give customers what they want, when they want it. You can plan from the sales order, the production order, the purchase requisition, or by traditional MPS/MRP planning methods. Furthermore, purchase planners can easily recognize how to adjust supplier delivery schedules to take advantage of new revenue opportunities.

### **Change Business Processes Easily**

With Manufacturing, you can readily change your business processes to accommodate changing workload and customer requirements. You can implement realistic plans according to your capacity demands, and you can redefine:

- Order modifiers and reorder policies, as needed.
- Capacity and calendars to optimize shop load.
- Manufacturing policy options to adapt quickly to new projects.

### **Implement the Most Efficient Processes Immediately**

When a customer's needs change, you can easily incorporate the changes made on the shop floor to optimize the current workload. For example, parallel routing enables you to create critical operational paths for make-to-order and project manufacturing.

### **Design Efficient Manufacturing Processes**

Manufacturing provides powerful planning tools that give you the freedom to choose the optimum manufacturing process for ultimate profitability.

For example, when planning production orders, you can plan product family orders that share the same routing. This allows you to make more efficient build schedules.

To help you better meet customer demand, Manufacturing supports efficient collaboration with long-term partners through the use of blanket orders.

### **Speed Up Orders**

Manufacturing speeds up orders by providing visibility into all aspects of your manufacturing processes. You can improve efficiency and reduce lead time by:

- Redefining setup and queue times on the fly.
- Redefining capacity on the fly.
- Using the send-ahead function to control material flow to the next operation.

### **Gain Greater Visibility of Your Business Processes**

Manufacturing helps you quickly identify processes that could be changed to operate more efficiently and profitably. For example, shop floor operations are readily visible to management so you can easily design new processes to produce a positive impact on your bottom line. And, you can respond immediately to emergencies because they are easy to spot, track, and act upon.

You can also plan from the sales order. This gives you the flexibility to define the product order structure, making it easier to track the status of multiline and/or multilevel orders. Inefficiencies are easy to spot because you can monitor shop floor progress job by job.

You can also make better pricing decisions because costs, materials, and operations are simultaneously replanned to reflect shop floor changes.

You can switch instantly between manufacturing policies to optimize your business and plan additional critical paths, on the fly, to improve delivery.

## **Implement Without Disruption**

You get immediate value from your investment because Manufacturing can be implemented with little disruption to your current manufacturing processes.

You can start with a basic implementation and benefit immediately. Then, you can add value with phased software implementation—expanding functionality as your business needs require it.

Training time is reduced because you can retrain with phased implementation. Flexible planning options let you manually plan production orders, or plan them from sales orders, while implementing MRP functionality.

While you implement capacity requirements planning (CRP) and routings, you can calculate and plan production times based on lead times on the item card.

Manufacturing is designed for maximum operational and setup flexibility, so that implementation time is reduced to a minimum. You can fine-tune the system while it is working and easily implement changes as your operations demand. Furthermore, you don't need to forecast all manufacturing scenarios during setup – you can respond on the fly.

## **Effectively Manage your Warehouse and Manufacturing**

Another application area of Microsoft Dynamics NAV is Warehousing, which enables you to increase the efficiency of your warehouse. Warehousing works hand in hand with your Manufacturing solution.

Warehousing functionality enables you to speed up the order handling process to increase customer service and reduce warehouse costs. It provides accurate and transparent inventory data to allow you to streamline your warehouse operations. Warehousing also gives you the warehouse management tools to be able to optimize your warehouse layout and space utilization.

For more information about Manufacturing in Microsoft Dynamics NAV, visit:

[www.microsoft.com/dynamics/nav](http://www.microsoft.com/dynamics/nav)

## DATA SUMMARY SHEET

Key Features	Description
Basic Manufacturing	<p>Production Orders:</p> <ul style="list-style-type: none"> <li>▪ Production orders (including simulated, planned, firm planned, released, and finished orders) created and handled</li> <li>▪ Production orders planned from sales orders as standard, project, or multiline</li> <li>▪ Reservation system provided for hard and soft allocation</li> <li>▪ Blanket orders created for the efficient execution of long-term contracts</li> <li>▪ Serial and lot number processing handled</li> <li>▪ Flexible costing system provided for standard, average, FIFO, LIFO, and specific costing</li> <li>▪ Multi-dimensional tracking and pegging provided to make data more visible</li> <li>▪ Forward, backward, and manual flushing supported</li> <li>▪ Consumption and output journals produced</li> <li>▪ Production reports produced (for example, "where used" reports)</li> <li>▪ Costs tracked and landed costs handled</li> </ul> <p>Production Bill of Materials</p> <ul style="list-style-type: none"> <li>▪ Production Bills Of Material (BOMs), including phantom BOMs, created</li> </ul> <p>Version Management</p> <ul style="list-style-type: none"> <li>▪ Versions of manufacturing bills of materials and routings created and handled</li> </ul>
Supply Planning	<p>Basic Supply Planning:</p> <ul style="list-style-type: none"> <li>▪ Order promising provided for both available-to-promise (ATP) and capable-to-promise (CTP)</li> <li>▪ Multilocation planning facilitates efficient information and material flow through the supply chain</li> <li>▪ Intelligent MRP scheduling (incl. regenerative, net change, and action message planning)</li> <li>▪ Interactive action messaging—for the immediate balancing of supply and demand</li> <li>▪ Simultaneous planning of materials, capacities, and costs</li> <li>▪ Item availability windows allow planners to instantly view the results of MRP</li> <li>▪ Multiple worksheets for reviewing various production options</li> <li>▪ Make or buy decisions implemented on the fly</li> <li>▪ Variants in planning</li> </ul> <p>Demand Forecasting:</p> <ul style="list-style-type: none"> <li>▪ Forecast and Master Production Schedule (MPS)</li> </ul>
Capacity Requirements Planning	<p>Basic Capacity Planning:</p> <ul style="list-style-type: none"> <li>▪ Shop calendar and work shifts</li> <li>▪ Routings</li> <li>▪ Parallel scheduling</li> <li>▪ "Send ahead" functionality for Just-in-Time (JIT) production</li> <li>▪ Routing link codes for automatic flushing per operational steps on the routing</li> <li>▪ Scrap and stop codes can be defined to reduce data entry</li> <li>▪ Automatic flushing of the work or machine center provides automatic recording of expected output</li> <li>▪ Subcontracting by work center or operation</li> </ul>

Key Features	Description
	<p>Machine Centers:</p> <ul style="list-style-type: none"> <li>▪ Allocate work and machine centers as capacities to the manufacturing process</li> </ul> <p>Finite Loading:</p> <ul style="list-style-type: none"> <li>▪ Finite loading of capacity constrained resources</li> <li>▪ Capacity constraints taken into account (to help planners make more reliable plans)</li> </ul>
<p>ADDITIONAL APPLICATION AREAS OF MICROSOFT DYNAMICS NAV</p>	<ul style="list-style-type: none"> <li>▪ Financial Management</li> <li>▪ Marketing and Sales</li> <li>▪ Service</li> <li>▪ Distribution</li> <li>▪ User Portal</li> <li>▪ Commerce Gateway</li> <li>▪ Commerce Portal</li> </ul> <p>For more information about Manufacturing in Microsoft Dynamics NAV and to find out how to obtain additional fact sheets, please contact your local Microsoft Certified Partner or visit our website at <a href="http://www.microsoft.com/dynamics/nav">www.microsoft.com/dynamics/nav</a></p>

### System Requirements

<p>To obtain all of the features mentioned in this fact sheet, the following modules and technologies are required:</p>	<p>Microsoft Dynamics NAV supports graphical 32-bit technology and genuine client server, multitasking environment. The following operating systems are supported:  Client 32-bit: Windows® XP, Windows® 2000, Windows® NT, and Windows® 98  Server: Database Server for Microsoft Dynamics NAV: Windows 2000, Windows NT.  Microsoft® SQL Server® Option for Microsoft Dynamics NAV:</p> <ul style="list-style-type: none"> <li>▪ Operating System: See requirements for Microsoft SQL Server 2000. See requirements for MSDE 2000</li> <li>▪ Other Applications: Microsoft SQL Server 200, SP3, MSDE SP3.</li> </ul> <p>Please refer to the detailed system requirements document for more information.</p>
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