

# Manufacturing

## BENEFITS

**Manage production planning effectively.** Visibility to forecasts as well as sales orders makes production planning more effective and allows for more detailed analysis of recommendations drawn from data. The result is better production planning and control. Site-specific inventory planning provides flexibility to manage each site.

**Issue purchase orders easily and efficiently.** Material Requirements Planning suggestions can be easily converted to purchase orders which helps ensure that your flow of materials synchronizes with production planning. By combining multiple requirements into a minimum number of orders, workflow is accelerated and simplified.

**Access, monitor, and analyze critical data more effectively.** Material Requirements Planning tracks up to 26 different material requirements categories and offers flexible order suggestions, including "What if" scenarios. A multi-level pegging tree improves supply chain visibility, while manual plan generation and expanded querying processes improve planning and analysis.

## Material Requirements Planning in Microsoft Dynamics GP

Material Requirements Planning in Microsoft Dynamics™ GP empowers you to adjust procurement and production with greater precision—a key advantage in rapidly changing markets. Visibility to material requirements and detailed vendor information, along with flexible planning and analysis capabilities, help ensure proactive planning, smart procurement decisions, and precise adjustments to production. You can make sure supplies flow in when and where they are needed—helping reduce stock outages, drive down inventory costs, and streamline the production process.

The left screenshot, titled 'Pegging Inquiry', displays a multi-level tree view of demand sources for item MECHANISM. The tree includes nodes for MECHANISM, REDSHLEY, and YELLOWSHLEY, each with associated document numbers and quantities. Below the tree is a table with columns for Item Number, Document Number, Status, Site ID, Planner ID, Buyer ID, Type, Release Date, and Demand Quantity.

| Item Number | Document Number     | Status   | Site ID | Planner ID | Buyer ID | Type | Release Date | Demand Qty |
|-------------|---------------------|----------|---------|------------|----------|------|--------------|------------|
| MOP         | MO0002              | Released | BOZEMAN |            |          | MOP  | 01/03/2000   | 15.00000   |
| POP         | PO0017              |          | BOZEMAN |            |          |      | 01/03/2000   | 200.00000  |
| SOP         | 00003               |          | BOZEMAN |            |          |      | 01/03/2000   | 15.00000   |
| MPK         | MRP0000000000000001 |          | BOZEMAN |            |          |      | 01/03/2000   | 20.00000   |
| MPK         | MRP0000000000000002 |          | BOZEMAN |            |          |      | 01/03/2000   | 10.00000   |
| PK          | MO0007              |          | BOZEMAN |            |          |      | 01/06/2000   | 15.00000   |

The right screenshot, titled 'MRP Projected Available Balance Inquiry', shows a table with columns for Item Number, Status, Apply Type, Document Number, Customer/Vendor ID, Demand, Supply, Due Date, and Projected Avail. Bal. The table lists various document numbers and their corresponding supply and demand values.

| Item Number | Status | Apply Type | Document Number     | Customer/Vendor ID | Demand   | Supply    | Due Date   | Projected Avail. Bal. |
|-------------|--------|------------|---------------------|--------------------|----------|-----------|------------|-----------------------|
| POP         |        |            | PO0017              |                    |          | 200.00000 | 01/03/2000 | 200.00000             |
| MOP         |        |            | MO0002              |                    | 15.00000 | 15.00000  | 01/03/2000 | 215.00000             |
| SOP         |        |            | 00003               |                    | 15.00000 |           | 01/03/2000 | 200.00000             |
| MPK         |        |            | MRP0000000000000001 |                    | 20.00000 |           | 01/03/2000 | 180.00000             |
| MPK         |        |            | MRP0000000000000002 |                    | 10.00000 |           | 01/03/2000 | 170.00000             |
| PK          |        |            | MO0007              |                    | 15.00000 |           | 01/06/2000 | 195.00000             |
| PK          |        |            | MO0003              |                    | 5.00000  |           | 01/10/2000 | 190.00000             |
| MOP         |        |            | MO0005              |                    |          | 10.00000  | 01/14/2000 | 160.00000             |

*AN IN-DEPTH MULTI-LEVEL PEGGING TREE provides greater demand visibility.*

*REDUCE THE RISK of item shortages with the Projected Available Balance inquiry window.*

FEATURES

MATERIAL REQUIREMENTS PLANNING

|   |  |
|---|--|
| Advanced Filtering  | Filter data by item, warehouse, planner code, buyer code, date, and more with robust filter and query options. Save frequently used queries. Analyze material requirements from Workbench and Pegging windows.   |
| Comprehensive Drilldown Capability                        | Drill down on any quantity to identify the source of demand. A new multi-level pegging tree allows for the tracing of material needs, sources of supply, and new demand generation.  |
| Better Exceptions Management                              | Broaden or narrow the forecast view and improve your response to exceptions generated by previous runs. "What if" scenarios allow you to determine the effects of choosing to implement or not implement suggestions.                                    |
| Agile Order Management                                    | Automatically record and respond to additional components required by manufacturing and purchase orders. Material Requirements Planning will recommend which orders should be "moved out" or "canceled" in addition to what orders should be "moved in." |
| Efficient Aggregation of Requirements                     | Easily combine material requirements into a minimum number of purchase orders with Purchase Request Resolution.  |
| Increased Efficiency                                      | Automatically create purchase orders and manufacturing orders from the Pegging Inquiry window.   |
| Designated Time Frames                                    | View requirements by days, weeks, months, user-defined periods, or in a "bucket-less" format that shows requirements without regard to time frame.   |
| Multiple Quantity Display                                 | Display up to six different types of quantities within the 26 tracked categories—including on-hand totals, sales orders, planned purchase orders, and quoted sales orders.   |
| Forecasting of Consumption Leverage Material Requirements | Plan in tandem with Sales Forecasting in Microsoft Dynamics GP to reflect sales demand in material requirements plans.   |
| Supply Chain Visibility                                   | Increase the predictability of incoming raw materials inventory and improve efficiency by making integrated materials requirements data and processes available to both manufacturers and distributors.  |

For more information about Material Requirements Planning in Microsoft Dynamics GP, visit <http://www.nexdimension.net>