

PEOPLESOFT MANUFACTURING



Dynamically maintain complex routings, work centers, and resources.

Streamline traditional planning and production processes.

Improve production processes.

Manage rapid change.

Collaborate to better manage production.

PeopleSoft Manufacturing streamlines and manages your production processes. In manufacturing, tight operating margins and rapid change demand agility. New technology, reengineered processes, and changing customer requirements need to be reflected in the way you do business. To keep up with these demands, you need a flexible system that accommodates and manages rapid change.

To effectively plan for and allocate materials for production or perform cost roll-ups, you need accurate and reliable bills of materials (BOMs). You also need complete control over routings, work centers, and resources to build and manage the life cycle of your products. Bills and routings in PeopleSoft Manufacturing, streamlines and enhances traditional processes through innovative technology—simplifying complex processes with revision control, substitute items, and master routings. Multimedia document vaulting and attachments—in the form of detailed work documents, drawings, and videos—clarify, control, and expand instructions for complex operations.

PeopleSoft Manufacturing delivers the most flexible solution in the industry. PeopleSoft's Pure Internet Architecture™ technology helps you improve the efficiency and effectiveness of your production processes. Manufacturing enables you to synchronize planning and execution throughout your enterprise, so you can respond quickly to customer requests and order changes. No matter the type of manufacturing environment, powerful core functionality such as backflushing, shift reporting, subcontracting, and JIT support enables you to shape your production functions to match the way you organize your business. In the end, you get increased customer satisfaction and that translates directly to your company's revenues.

Virtually Unlimited Product Structures

With PeopleSoft Manufacturing, you can exercise complete control over your complex product structures. PeopleSoft Manufacturing enables you to:

- Maintain virtually unlimited product structure levels, including unrestricted nested phantom items.
- Set up a primary BOM and up to 98 alternates.
- Define effective-dated build options using alternate bills and alternate routings.
- Define and track multiple component substitutes, co-products, and by-products.
- Phase components in or out of BOMs, using future, effective, or obsolete dates and revisions.
- Specify build components, quantities required—per assembly (with flexible precision) or per order—and operations for which components are required.
- Incorporate assembly and component attachments and text.

- Define a rework BOM, when a standard repair kit is used.
- Designate components on a BOM as potential outputs if the assembly were to be torn down into its component parts.
- Copy and delete BOMs.
- Detect looping BOM structures.
- Apply, in a single process, the same set of changes to multiple manufacturing or engineering BOMs.
- Define and track component yield, reference designators, position numbers, and dimensions for make, purchase, teardown, or subcontracted items.
- Use versatile inquiry and reporting tools.
- Distinguish between owned and non-owned component items.
- Define PeopleSoft Production Planning and Enterprise Planning BOMs to facilitate both master scheduling and material planning.

Complete Management of Your Resources

Crews, machines, tools—PeopleSoft Manufacturing enables you to easily manage your resources for greater efficiency.

- Assign primary and alternate resources to specific work centers—then assign the resources to specific jobs or routings.
- Define and manage effective-dated BOM code and routing code production combinations.
- Associate multiple machines with a work center, task, or routing.
- Associate resources with multiple work centers.
- Incorporate attachments and associate unlimited text to each resource.
- Maintain manufacturer information.
- Define for each resource a planning instance—which represents the number of identical resources that exist—for scheduling purposes.
- Define planning options for each resource, including planning in aggregate or in detail, planning bucket strategy, and repair options.
- Dedicate resources to tasks during non-scheduled work periods.

Total Control Over Operations

PeopleSoft Manufacturing gives you instant access to essential operational information and enables you to:

- Associate rates for labor, machine, and overhead to the work center or task to determine item conversion costs.
- Support labor-intensive, machine-intensive, and subcontracted tasks.
- Connect work center resources, including machines, tools, and crews, with tasks.

- Associate a calendar to each work center and, with PeopleSoft Production Planning, to each resource.
- Support multiple planning and costing times for both people and machines.
- Employ flexible time units.
- Set up a primary routing and up to 98 alternates per routing type.
- Define master routings, enabling multiple items to share routings by item, item group, or item family.
- Implement routing priority codes.
- Clarify and expand instructions for complex operations by attaching detailed work documents, drawings, and videos to BOMs, work centers, tasks, and routings.
- Support task wrapping for operations.
- Use online inquiries to view work center and task information, and for routing “where-used” information.
- Track the progress of production orders or production quantities manufactured at a work center.

Flexible System Design

With PeopleSoft Manufacturing, you can design your production system to mirror the way you do business, enabling you to:

- Manage discrete, repetitive, flow, or mixed-mode manufacturing environments.
- Centralize or decentralize key business functions and share data across business units to model your organization.
- Track discrete work orders, or use production schedules for repetitive production.
- Split orders, substitute components, and record end items, co-products, and by-products.
- Change production quantities for in-process production IDs and production schedules.
- Manage weekly production schedule information by production area.

Implement Multiple Methods for Releasing Production

Manufacturing enables you to create and release production IDs and schedules either online or from PeopleSoft Planning applications. With them, you can:

- Determine start and due dates for each operation, taking into consideration queue, setup, and in-transit options, operation overlap, and work center calendars.
- Manage production ID and schedule releases with eight status types.
- Use automatic release options to control production execution.

- Copy BOMs and routings to production.
- Release multiple orders or schedules in one process.

Issue Materials Using Flexible Methods

With PeopleSoft Manufacturing, you can consume component materials used in production either directly or through backflushing. You can issue material to work in process (WIP) using staged issues, production kits, or production replenishment. You can:

- Kit (or stage) components uniquely for a particular production ID.
- Generate pick plans for components to be issued. Manufacturing can specify where to pull the material, or let the picker report the depleted location.
- Issue all components to the first operation in the assembly process, or stage component issues by operation and corresponding start date.
- Maintain component items with a minimum stocking level in WIP locations and replenish when notified through PeopleSoft Workflow.
- Use “flow” or “pull” manufacturing techniques to replenish stock from inventory, feeder lines, or directly from suppliers with physical or electronic Kanban cards.
- Pick or pull material from containers.

Proactively Manage Information and Activities

Use PeopleSoft Workflow messages and business process navigation to automate the flow of information and assignments to your team. You can:

- Present a process-oriented view by creating business process maps that show your team the activities and steps they need to take to perform their jobs.
- Notify the stock room to replenish a WIP location.
- Inform the appropriate users that the production status has been changed from pending to complete, and that it should be reviewed and closed.
- Notify users when a work center calendar definition is modified (perhaps due to machine downtime) and production may need to be rescheduled.
- Notify users when component quantities need to be consumed due to WIP location material shortages during backflush.
- Advise the appropriate person when scrap is recorded or when potential variances in production are encountered.

Manage Subcontracting—With Ease

Even with today’s increasing supply chain complexity, PeopleSoft Manufacturing makes subcontracting easy, with powerful and versatile functionality. Fully manage your production and your suppliers—including cost, purchasing, and receiving information—and:

- Define preferred vendors for subcontracted tasks.

- Differentiate between vendor-supplied material, and material purchased and used by your company.
- Track customer-supplied material when you are the subcontractor.
- Identify which tasks or operations are subcontracted.
- Generate subcontracted agreements using PeopleSoft Purchasing. Have the option to generate subcontract releases automatically from PeopleSoft Manufacturing.
- Receive subcontracted assemblies back into production at a specified work center/production area.
- Track outside processing conversion costs.
- Manufacture in-house and supply all components.
- Have some components supplied by a subcontractor, where outside processing is performed.
- Have your customer supply some components when you are the subcontractor.

Control Operational Reporting Level of Detail

PeopleSoft Manufacturing lets you define how closely you want to control work on the shop floor. Many companies have a mix of tightly and loosely controlled products and processes, so Manufacturing flexes to fit your needs.

Production IDs

Use production IDs (traditional work-orders) for control of discreetly manufactured items. With them, you can:

- Create production IDs manually, or convert from planned orders generated by PeopleSoft Production Planning.
- Modify production IDs as required, for substitute components, alternate routing, and so forth.
- Create discreet production documents (or shop travelers) with bar codes for accuracy.
- Use the online dispatch or dispatch reports to manage and review production assignments and priorities at each work center.
- Attach supporting documentation, and enable viewing and/or maintenance to these documents as work moves through the shop.
- Record activity at level necessary for control—at each operation, at selected count point operations, at the end of a cell or assembly line, or at the end of the work-order.
- Record scrap at any operation with an associated reason code.
- Split orders into several production IDs, send quantities ahead, or use alternate routings.
- Backflush components at the end of an operation, at a user-specified count-

point, or at the end of the work order.

- Control serial and lot controlled inventory (components consumed, assemblies completed).
- Move completed end item to stock, a container, shipping, or another production ID.
- Track the quantity of assemblies issued, completed, in process, and scrapped.
- Record actual labor and machine hours by work center or operation—through data collection, MES, or manually. Report labor individually or as a group.
- Close production and interface to financial applications.

Production Schedules

Use production schedules (no work orders) to limit paperwork for repetitive or demand flow items. With them, you can:

- Create paperless production schedules from PeopleSoft Planning, or create them manually through online schedule maintenance.
- For unscheduled customer demand, record unanticipated completions to create new schedules.
- Schedule production by week, day, shift, or operation.
- Publish the online schedule through the online dispatch or production schedule report.
- Record completed quantity, or scrap with reason code, by item at the final operation.
- Control serial and lot controlled inventory—such as components consumed and assemblies completed.
- Move completed end item to stock, a container, shipping, or another production ID.
- Backflush completed production materials and earned standard labor based on the item's BOM and routing—and create all the corresponding accounting entries.
- Record actual labor and machine hours—through data collection or manually.
- View all items within a production area while maintaining schedules for each week.
- View production totals for the day or week.

Production Cost Visibility

Using PeopleSoft Manufacturing, you can automatically record and track production costs and variances to determine the cost of production. You can:

- Earn labor, machine, subcontracting, and overhead costs during production.
- Determine the value of material in process using the WIP inventory value report.

- Record component and assembly scrap costs automatically.
- Manage and evaluate cost performance by analyzing variances based on configuration, usage, component yield, lot size, routing process, product mix, and actual labor and machine time.
- Optionally define inventory accounts by location to provide financial visibility of inventory, based on where it resides.
- Let PeopleSoft Workflow notify appropriate users of potential production variances.

View and Control Important Production Documents

PeopleSoft Manufacturing is integrated to a document management system so you can securely manage and control your production documents. Whether the documents are drawings, specifications, test results, ISO documents, or others, they can be linked to your shop floor—and to your subcontractors—so that authorized individuals can view or maintain them.

Electronic Data Collection

With PeopleSoft Manufacturing you can implement electronic data collection and bar code printing on reports and labels. This improves the speed and accuracy of data entry. You can scan bar code labels and use data collection devices when picking material, processing material issues and returns, recording completions and scrap, and recording labor hours. Print bar codes on picking plans, production documents, and dispatch lists—and print bar code labels for completed assemblies.

Dynamic Reporting Capabilities

Manufacturing accommodates the reporting needs of diverse enterprises by delivering highly flexible, modifiable dynamic reports—enabling you to:

- Provide the location shortages, production shortages, surplus inventory, production schedules, or production areas for a specified operation start date range.
- List production ID or production schedule information, including operation and task details for each work center.
- Generate the component list, operation list, and work center, resource, and schedule information for a particular production ID.
- List all scheduled production for a specified range of actual start dates, production statuses, production IDs, and production schedules.
- Generate picking plan instructions for stockroom processing.

Pinpoint Items on the Shop Floor—With Ease

Track production and items throughout the shop floor with PeopleSoft Manufacturing's powerful inquiry capabilities, enabling you to:

- Access production and rework information for a specific item.
- List and view production orders for each production area.

- Show component and operation lists for a production ID.
- Display scrap costs by operation or by individual scrap transaction.
- Show earned conversion costs for a production ID or production schedule by operation or transaction.
- List actual hours charged to a production ID or production schedule by operation.

Integrate PeopleSoft Manufacturing and Your Enterprise

PeopleSoft Manufacturing is fully integrated with other PeopleSoft applications to create a complete manufacturing solution. By sharing the same relational data structures, the following function and application interfaces with PeopleSoft Manufacturing enable you to:

- Keep track of components, end items, tools, and so on with PeopleSoft Inventory.
- Plan material availability, capacity and other resources required for production with PeopleSoft Supply Planning. Then, convert the planned manufacturing orders into production IDs and schedules.
- Associate vendors and create purchase orders for subcontracted operations using PeopleSoft Purchasing.
- Capture financial transactions for subsequent posting to PeopleSoft General Ledger.
- Create and track configured orders throughout PeopleSoft Manufacturing with PeopleSoft Product Configurator. Track configured items during production using online queries and create configured orders using configuration codes. You can also add custom component and operation lists to directly configured orders for greater item visibility throughout your production process.
- Record quality data and generate online SPC charts using PeopleSoft Quality.
- Link machines and tools with PeopleSoft Asset Management to track assets and maintain service schedules.
- Collaborate on product design with PeopleSoft Engineering.
- Associate cost data from PeopleSoft Cost Management to work centers, tasks, and routings.
- Use BOM and routing information to determine item material and conversion costs in PeopleSoft Cost Management.
- Copy and transfer BOMs and routings from PeopleSoft Engineering to PeopleSoft Manufacturing—and vice versa.
- Update PeopleSoft Manufacturing by transferring new or modified BOMs and routings from PeopleSoft Engineering to production with approved engineering change orders (ECOs).
- Make mass BOM changes with PeopleSoft Engineering.

- Manage PeopleSoft Manufacturing revision, BOM, and routing documents with the document management system embedded in PeopleSoft Engineering.
- View pending engineering change order data on PeopleSoft Manufacturing revisions, BOMs, and routings pages through PeopleSoft Engineering.
- Notify key personnel of BOM and routing changes using PeopleSoft Workflow.

Third-Party Application Integration

PeopleSoft Manufacturing offers several integration solutions for specific business process needs. Through the tools and technology of PeopleTools, PeopleSoft provides packaged integration points for Manufacturing and other PeopleSoft applications with your item content provider package, as well as product data management (PDM), manufacturing execution (MES), and quality data collection systems. These enterprise integration points enable you to publish or subscribe to key operational data, including BOMs, routings, orders, completed production, scrap, and shop floor component changes.

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