

challenge:

Your customers are demanding higher levels of service while your company's financial goals are pressuring you to do more with less investment.

Can you get additional throughput from existing resources?

Do you have visibility and effective control of your whole manufacturing facility?

Can you identify the constraints that inhibit the progress towards your goals?

Do you have the ability to instantly respond to customers and suppliers and provide your trading partners with visibility of your plant operations?

Synchronize Manufacturing Operations

Today's business environment is more competitive than ever before. Manufacturers are faced with volatile demand, reduced product life cycles, complex supply chains, and shrinking margins. To survive, they must have the ability to satisfy customer demand while maximizing profits, but traditional methods fall short of providing the modeling, optimization, and analysis tools required to manage these complex manufacturing environments.

NetWORKS Production Planning™ is a constraint-based planning tool that specifically addresses the needs of complex discrete and process industries. By comprehensively synchronizing and optimizing the flow of materials through the enterprise, it creates a feasible plan for manufacturing operations that simultaneously optimizes both material and capacity constraints. Purchasing and production can now be coordinated with demand, ensuring that the right materials arrive at the right time in the manufacturing process. NetWORKS Production Planning quickly identifies the operation's constraints and provides planners with the tools to make decisions on how to best resolve the issues. Its powerful and flexible algorithm gives the planner control over the priorities of the business through dynamic prioritization. Dynamic prioritization considers management policies such as customer service, throughput, and inventory on all work to be produced, as well as the constraints and supporting costs confronting management.

Advanced Modeling Techniques

NetWORKS Production Planning builds a realistic picture of the business through its advanced modeling techniques. NetWORKS Production Planning maintains a full database of available resources, both mechanical and human. Each resource can have specified substitutes and linked auxiliary resources, such as fixtures, tools, and inspectors, that are required together to complete an operation. The full bill of material is considered along with specified substitutes and any alternative routes needed to handle them. Rules assist in the modeling of particular physical aspects of plant operations, such as cyclic and continuous flow production, time and cost based dependent set up, time per part or per batch operations, permissions to start work, uninterruptible processes, and rework and scrap rate.

NetWORKS Production Planning provides the advanced modeling required by complex discrete and process industries in which the optimization of flow is paramount and where a realistic and robust model of the whole production environment must be constructed — including significant activities, processes, flows, and constraints. This modeling capability allows the planner to simulate how the entire production process operates and identify how its components interact under different conditions. This 'what-if' capability can also help the enterprise with critical business improvement efforts by simulating the consequences of each potential change.

Transforming Supply Chains into Intelligent eBusiness Trading Networks

Reduce manufacturing cycle time and improve customer service by:

- Optimizing multi-site production plans and plant production schedules
- Identifying and optimizing production bottlenecks
- Synchronizing the flow and balancing of production
- Intelligently balancing use of production resources
- Productive, realistic and robust modeling of complex production processes

Features & Benefits

- **Bottleneck optimization** > Maximizes throughput
- **Material flow synchronization** > Reduces lead-time and inventory
- **Reality-based modeling** > Improves the quality and productivity of material and production plans
- **Scalable and flexible** > Maximizes efficiencies
- **Integration to other products** > Reduces cost
- **Dynamic batch sizing** > Optimizes flow



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