

# Factory Planning



#### Accelerate your ROI with factory planning

In today's digital world, demand volatility is high. As customer demand changes, shop floor dynamics including manufacturing resource status and material availability can dynamically shift. The good news is companies can now access a growing volume of data – from sensors enabled by the Internet of Things (IoT), as well as social media, news, events and weather – making it easier to sense and respond to demand changes impacting their factory production plans and schedules. However, without the ability to quickly synchronize factory production plans and schedules, companies will be challenged to optimally meet these changes in demand.

Planners and buyers must be enabled with the right solution in order to create efficient material plans that are aligned with factory schedules and that provide synchronized material flow through the factory. The right solution also ensures that plans are tailored to meet customer delivery requirements and other key operational and financial objectives critical to success.

Blue Yonder has specifically designed factory planning capabilities to meet the daily real-world needs of its customers. By leveraging Blue Yonder's years of experience and features like user-friendly interfaces, businesses can quickly launch factory planning for fast performance results and a rapid ROI.

### Real results

Reduce changeover time by

40%

Reduce production scheduling by

33%

Provides a highly scalable, extremely fast planning engine

## Why go at it alone? Rely on Blue Yonder, the industry leader

Part of Blue Yonder's manufacturing planning solution, factory planning is designed to provide intelligent decision support for production planning and scheduling functions. These capabilities help develop optimized production plans for a single plant or multiple plants, departments, work cells or production lines by scheduling backward from the requirement date and forward from the current date, while simultaneously considering material, capacity and due-date constraints. The solution streamlines and aligns the activities of production control, manufacturing and procurement planning teams by automating mundane tasks and shifting the focus to more important value-added activities.

By using factory planning, your planners and schedulers can intelligently improve manufacturing facility performance to meet business objectives such as enhancing due-date performance, reducing lead times, improving throughput and decreasing inventory and operating expenses.

The problem-oriented planning technique in factory planning goes beyond simple constraint-based planning and exception-based reporting. Your planners are provided with a holistic view of your factory plans and comprehensive demand, supply and capacity key performance indicators (KPIs). Based on business priorities and feasibility, planners can concentrate on a specific area first and then drill down into the details to understand specific issues. Factory planning is designed to provide time-phased reporting on factory KPIs, which enables planners to take corrective measures for short-term and long-term planning.

### Best-in-class factory planning capabilities within easy reach

Unlike most planning systems, factory planning considers both material and capacity constraints together, enabling your planners to generate high-quality plans through multiple planning options. Infinite capacity planning creates a plan with the ideal level of resource capacity needed

to meet customer demand. Factory planning flags overloaded resources so users can take remedial action in order to meet delivery dates.

Constraint-anchored optimization provides planners with a choice of automated load-balancing algorithms to create an optimal finite-capacity constrained plan based on various material flow and capacity utilization policies. Simultaneous capacity and material optimization introduces a new planning approach based on turnaround times, enforcing maximum utilization of critical resources by maintaining tight production cycle times and order-by-order planning.

Factory planning provides a highly scalable, extremely fast planning engine that generates plans and detailed schedules in real time, unlike traditional enterprise resource planning (ERP) solutions. The tool eliminates factory synchronization challenges by generating capacity and material plans simultaneously. Factory planning automates production planning workflows and best practices across various industries.

In addition, the tool provides coexistence with ERP and manufacturing execution systems using industry-standard integration protocols and offers capable-to-promise delivery date quoting while simultaneously considering material and capacity constraints.

Companies that rely on factory planning to synchronize production plans and schedules and to optimize production planning can realize significant benefits. Many companies experience improved manufacturing efficiencies across the supply chain by institutionalizing a repeatable production planning process. They also see reduced manufacturing cycle times, inventory levels and response times to customer demand. In addition, companies see improved throughput and reduced waste due to planners coordinating production plans with material and capacity constraints.





