

ORACLE PRODUCTION SCHEDULING

KEY FEATURES

- Simultaneously considers capacity and calendar constraints on machines, crews and tools
- Material constrained
- Automatic floating bottleneck detection
- Representation of all routing precedence relationships
- Graphical multi-stage production pegging
- Sequence dependent changeover minimization
- Campaign run optimization (via Repetitive Manufacturing Optimization option)
- Advanced analytical views (Gantt charts, line graphs and bar charts)
- Intelligent resource offloading between alternates
- Event-based bucket-less scheduling
- Generative & repair based solve capabilities
- Multi-scenario with KPIs for scenario comparisons
- Intuitive graphical model
- Resource dependent operation duration and lot sizes
- Co-products and by-products
- Demand priorities
- Alerts with root cause

Are you able to sequence orders to best use your production resources? Do you know when to offload production to alternate resources? Do you need to minimize the effect of unplanned production and down time? Are you able to evaluate the impact of a supply shortage on fill rates? Oracle® Production Scheduling enables you to create detailed, up-to-the-minute schedules that enable you to produce the right amount of product when it is needed, thereby minimizing inventory, changeovers, overtime, and other undesirable costs.

Overview

Oracle® Production Scheduling, designed for schedulers by schedulers, enables you to take control of your production scheduling problem, and helps you to maximize shop floor throughput while optimizing resource investment. You can optimize the usage of your critical resources, calculate realistic and feasible schedules that the shop floor can execute, and easily determine the schedule that best meets your objectives. In addition, you can leverage the out-of-the-box integration with the Oracle E-Business Suite to implement quickly and get immediate value.

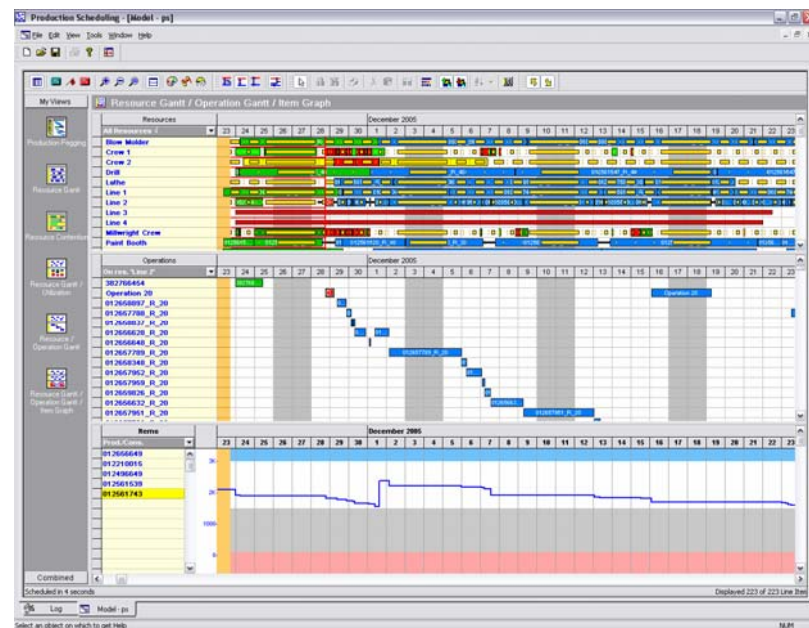


Figure 1. Production Scheduling Workbench

Maximize Throughput and Increase Resource Utilization

One key to profitable manufacturing is maximizing the utilization of your critical resources. Oracle® Production Scheduling calculates feasible and realistic schedules that consider your key manufacturing constraints. It automatically detects bottlenecks and ensures the flow of production through the bottleneck to maximize the productive throughput while synchronizing all the stages of production. You can also easily identify specific issues and take corrective action by drilling directly to the root cause of the problem.

Often, the key to maximizing utilization and throughput is minimizing unnecessary setup time. Production Scheduling can automatically sequence production to minimize setup time while still meeting all requirements on time. It recognizes when dependencies between products exist that determine the amount of changeover time. Production Scheduling can also automatically determine what quantity of product should be run together to minimize setup while not jeopardizing demand or carrying excessive inventory. This is often called campaign planning, batch planning, or run length optimization (and is facilitated through the Oracle® Repetitive Manufacturing Optimization option to Oracle® Production Scheduling).

Improve Shop Floor Performance

If your production floor has been given an infeasible schedule, much time is spent expediting around shortages and resource constraints. This typically leads to inconsistent lead times and excess work in process inventory. Oracle® Production Scheduling enables you to improve your shop floor performance. It provides the shop with a feasible schedule that is executable, and considers all the production constraints. When issues exist, it provides you alerts that identify precisely where problems exist, and what the root cause is. Interactive drag and drop rescheduling and fast interactive simulation enable you to quickly try out and assess ways to rectify problems. After refining the schedule, you can approve it for release and immediately communicate all the changes to dates and sequences to the production floor for execution. You can also publish a dispatch list that enables each operator or work center to view a prioritized list of work. This leads to higher overall throughput with consistent and predictable cycle times, which translates to better schedule adherence, lower work in process inventories, and a reduction in non-value added expediting costs.

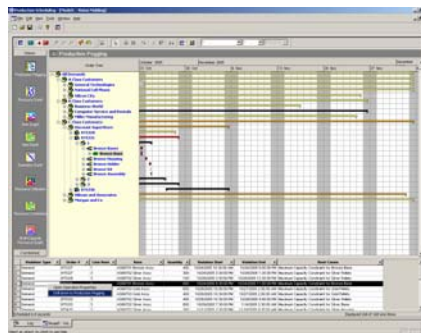


Figure 2. Production Scheduling Workbench – Gantt View

Determine the Best Schedule Through Interactive Simulation

Oracle® Production Scheduling enables you to easily evaluate one or more schedules based on multiple metrics. It provides many pre-seeded key performance indicators by which the schedule quality can be assessed. You can also quickly compare schedules and what-if scenarios to identify the schedule that best meets your business objectives. For example, when you have demand that is not scheduled to be late, you can compare a baseline schedule against one where you simulate working overtime and see how the two schedules differ both in delivery performance and cost. As part of the analysis, you can weigh the incremental cost of working overtime against the improvement in delivery to make an informed and intelligent decision on whether or not to work overtime.

Comprehensively Plan and Schedule Production Integrated with Oracle EBS

Oracle® Production Scheduling is completely integrated with the Oracle E-Business Suite and other components of Oracle® Advanced Planning, enabling you to implement quickly and get value rapidly. Designed for schedulers, not programmers, it is very intuitive and easy to use and automates many of the decisions that schedulers currently do manually. Oracle provides a comprehensive and integrated manufacturing planning and scheduling process through tight integration between Oracle EBS, Oracle® Advanced Supply Chain Planning, and Oracle® Production Scheduling. You can use Production Scheduling to schedule production orders or process batches only, or you can decide to simultaneously plan both production and planned orders. Once the schedule is refined and released to execution, the production orders become the starting point for the next supply chain plan and schedule run. Oracle® Production Scheduling supports all manufacturing modes: discrete work orders (through Oracle Discrete Manufacturing), process batches (through Oracle Process Manufacturing), and lot-based jobs (through Oracle Shop Floor Management).

KEY BENEFITS

KEY BENEFITS:

- Maximize throughput and increase resource utilization
- Improve shop floor performance
- Increase profits through asset rationalization
- Determine the best schedule through interactive simulation
- Comprehensively plan and schedule production integrated with Oracle EBS
- Incremental deployment – get benefits quickly without the loss of integration

RELATED PRODUCTS:

- Collect WIP jobs, process batches, and shop floor lots directly from Oracle E-Business Suite
- Release approved schedule to Oracle E-Business Suite
- Input planned orders from Oracle Advanced Supply Chain Planning (to schedule simultaneously with actual orders)

Proven, Secure, Scalable, and Reliable Component Architecture

Oracle Advanced Planning's unique database-centric architecture enables companies to operate business operations, 24 x 7. First, by storing all planning information in the database, Oracle Advanced Planning leverages the built-in capabilities for locking, hot backup and recovery, multi-threading, and materialized views, for the most secure, reliable, and fastest response. Second, by supporting a distributed architecture, you can deploy Advanced Planning as a component against multiple ERP source systems or in a single instance when deploying with Oracle's E-Business Suite.

Incremental Deployment – Get Benefits Quickly

You can deploy all Oracle Advanced Planning products incrementally, enabling you to start with a smaller planning footprint quickly, while still leveraging the tight integration once all components are operational. Each additional module requires limited incremental effort to implement since all the components share a common foundation and work together seamlessly. If your shop floor throughput poses the most challenges to your business, you can decide to implement Production Scheduling first. Alternatively, you can enable it later as an add-on to your existing implementation of other Oracle Advanced Planning modules, leveraging all of your existing setup.

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