

# ADVANCED PLANNING AND SCHEDULING (APS)

Our Advanced Planning and Scheduling solution enables fast, flexible and realistic production scheduling and material requirements planning, using advanced optimization, user-friendly interface, and powerful reporting, for significantly better throughput and lead times.

## Key Features

**Finite Capacity Scheduling:** based on all available equipment, materials, and labor constraints.

**Automatic Scheduling with Optimization:** schedule and re-schedule in seconds, optimizing for multiple custom-defined criteria at once.

**User Friendliness:** Real-time visualization of the impact of schedule changes through intuitive color coding and customizable alerts.

**Fast and flexible:** Massively cut down on manual tasks for planners and schedulers, allowing them to focus on exception management, problem solving, and process improvement.

**Streamline Communications:** No need to email files back and forth anymore - when a change is made, the appropriate parties are notified via automatic alerts.

**Enable 'What If?' Scenarios:** Quickly and easily develop alternative scenarios in a sandbox environment and see what effects proposed actions could have on on-time delivery, capacity utilization, bottlenecks, cost, cash flow, and other key metrics.

## Use Cases

Production Planning & Scheduling	Materials Requirements Planning	Capacity & Resource Planning
Production Activity Control	Simulations & Scenario Analysis	CAPEX Justification

## Benefits

- **Improve On-time Delivery:** Manage orders within existing equipment, materials, and labor capacity constraints to significantly improve on-time delivery performance.
- **Reduce Lead Times:** Start orders for finished goods, subcomponents, and purchased parts in a timely manner, and route jobs across the shop floor in the most efficient manner possible, to dramatically reduce lead times.
- **Increase Throughput and Asset Utilization:** group and sequence production orders based on TOC and JIT principles and run jobs on the best equipment available.
- **Improve Order Promising and Order Quoting:** Promise lead times and price orders based on actual backlog and the best possible understanding of expected production cost.
- **Improve Reactivity:** Allow schedulers to quickly respond to actual shop floor performance.
- **Improve Visibility:** Present critical information in an easy to understand manner to different stakeholders involved.

# About Gemba Systems Inc.

Gemba Systems Inc. supports manufacturing companies in the digitalization of their operations, especially focused on improving their manufacturing execution systems. We help companies navigate the complex and fast-evolving landscape of “smart manufacturing” and the Industrial Internet of Things. We offer guidance, tools, and hands-on support in the selection and implementation of those industry 4.0 technologies that will best support our clients' most critical business processes, and the people who perform them.



## People

Our expert team will guide you through your digital transformation and operational excellence journey with the following services:

- Digital strategy development and execution support
- Needs assessment and opportunity prioritization
- Cost / benefit analysis, ROI assessment, and project justification
- Functional specifications development
- Vendor selection
- System implementation and integration
- User training and support
- Project planning and execution support



## Processes

Gemba Systems will help you achieve your digitization, digital transformation, and operational excellence goals by implementing effective and efficient processes that deliver the best total return and realize the intended value of your solutions, from planning and assessment through testing, deployment, operation, and continuous improvement.



## Technology

Gemba Systems Inc. offers guidance, tools, and hands-on support in the selection and implementation of proven or promising Industry 4.0 technologies, such as augmented reality (for digital work instructions and inspections, remote technical assistance or warehousing operations), real-time asset location tracking, productivity (OEE) reporting, advanced planning and scheduling, and more.

For more information, please visit [www.gemba.systems](http://www.gemba.systems) or contact us at [alain@gemba.systems](mailto:alain@gemba.systems).