

# ADVANCED PLANNING AND SCHEDULING (APS)

Advanced Planning and Scheduling solutions enable fast, flexible, and realistic production scheduling and material requirements planning, including advanced optimization, user-friendly interface, and powerful reporting, for significantly better throughput, shorter lead times, and improved on-time delivery, with less inventory, less work-in-progress, and less fire-fighting.

## 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.

**Quick & Easy Rescheduling** in case of added orders or unplanned issues.

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

## Key Uses

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

## Key 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 your actual backlog and a better understanding of expected production cost.
- **Improve Reactivity:** Allow schedulers to quickly respond to actual shop floor performance and unplanned issues.
- **Improve Visibility:** Present critical information in an easy to understand manner to different stakeholders involved.

# About Gemba Systems Inc.

Gemba Systems is an Industry 4.0 Solution Partner. We help manufacturing companies navigate the complex and fast-evolving landscape of Smart Manufacturing technologies and the Industrial Internet of Things. We offer guidance, tools, and hands-on support in the selection, implementation, and integration of those Industry 4.0 solutions that will best support our clients' most critical business processes - and the people who perform them. Ultimately, our goal is to empower manufacturing people with smarter solutions that boost productivity and drive top-and bottom-line results.



## People

Our expert team will support you through your digital transformation and operational excellence journey with e.g. the following services:

- Digital strategy development and program execution support
- Needs assessment and opportunity prioritization
- Cost / benefit analysis, ROI assessment, and project justification
- Functional & technical specifications development
- Vendor search & selection
- System implementation, configuration, and integration
- User training and support
- Go-live support (“hyper care”)
- Overall project planning and execution support



## Processes

Gemba Systems can help you achieve your digit(al)ization, 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 chosen solutions, from planning and assessment through testing, deployment, operation, and continuous improvement!



## Technology

Gemba Systems offers guidance, tools, and hands-on support in the selection and implementation of proven or promising industry 4.0 technologies and solutions. We have special experience in e.g. digital work instructions, Vision AI for inspection automation, real-time location systems (RTLS), productivity (OEE) reporting, and advanced planning & scheduling.

## Empowering People with Smarter Technologies!

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

