



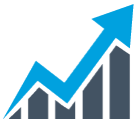
THE PLEX MANUFACTURING CLOUD

Advanced Planning & Scheduling



Today's trend toward more lean and agile manufacturing drives companies to do more with their existing resources. Traditional approaches to planning that back out schedules based on due dates do not take into account the limitations of finite resources of machines, materials, or operators.

The Plex Advanced Planning & Scheduling (APS) solution gives you configurable logic that takes into account the expected performance of your machines and available resources. It also gives you the flexibility to define a custom range of production data for greater scheduling accuracy. With the ability to plan for scenarios and “what-if” analysis, you can meet and exceed customer expectations on each order.



Increase profits by resolving costly manufacturing resource conflicts with Finite Scheduling.

Finite scheduling takes into account the constraints of workcenter capacity and available resources to optimize manufacturing production runs, alleviating major cost and time conflicts in the process. Finite scheduling reduces your work-in-process inventory through timely order release, shorter lead times, and increased throughput.



Improve on-time-delivery performance with Capable-To-Promise functionality.

APS enables sales and service organizations to set accurate expectations on every quote, proposal and contract by providing customers with a reliable delivery date based on actual availability of resources. APS enables you to consider capacity relative to current workload and backlog as well as the inventory required for both.



Explore alternative solutions easily with complex “what if” modeling.

APS takes into account multiple scheduling options and provides the ability to level-load production across alternative workcenters. Use APS to examine different or competing resource demands like, an additional shift or workcenter. Go beyond calculated solutions, using APS to optimize production influences on and off the shop floor, for example taking into account “tribal knowledge”.

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Finite Scheduling Capabilities

Finite Scheduling - Develop a feasible schedule based on a true view of available resources.

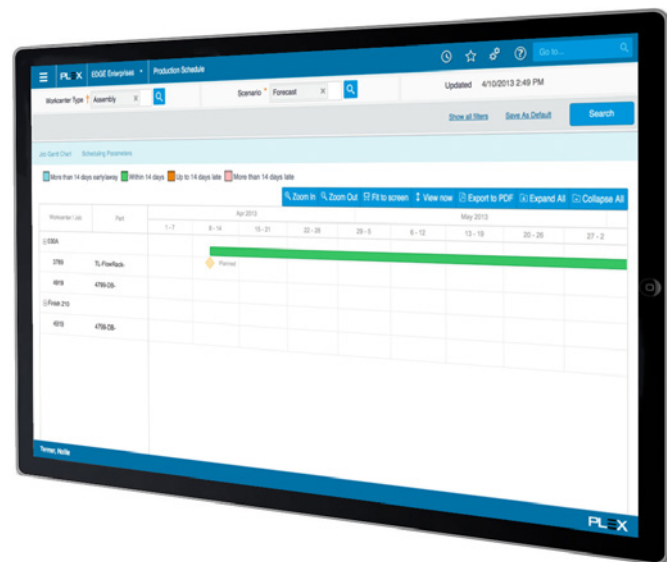
- Schedule operations based upon available workcenter loading and capacity with selectable logic (forward, backward, or both).
- Plan resources to ensure or account for availability of employee skills, tools, workcenter space, etc.
- Batch operations to run concurrently as appropriate for related jobs.
- Sequence production processes which overlap or run in parallel.
- Load level schedules for multiple workcenters.

Calculate Capable to Promise dates for prospective sales orders

- Calculate the earliest time an order can be completed based on material or resource constraints on the shop floor.
- Clear visibility of the impact of material and labor shortages, or downtime on the production schedule.

“What If” Analysis

- Create multiple scenarios to define scheduling options in an “offline sandbox”.
- Explore the impact of changes in labor and tooling availability as well as workcenter capacity.
- Review and evaluate the performance of different scenarios using quantitative metrics.



A Gantt-chart view of the jobs that are loaded in workcenters having been scheduled based on available capacity, resources, and material.



“With the report functionality available in Plex Advanced Planning and Scheduling we are able to see what part jobs are at risk of becoming past due so we can adjust to meet our deadlines thus avoiding cost and time challenges in the process.”

GEOFF PITTS

Production Control Manager, Avon Machining