



## Advanced Planning and Scheduling (APS)

Maximize resources, eliminate bottlenecks, and increase throughput with production scheduling tools.

- Finite and Infinite Capacity Scheduling
- Machine, Work Center, and Tool Schedules
- Visual Schedule Board

### Key business benefits

- Optimize machine, work center, and tool schedules for maximum throughput.
- Improve the customer experience by empowering customer service and sales representatives with Capable-to-Promise (CTP) functionality to calculate realistic delivery dates based on capacity constraints, vendor lead times, and material availability.
- Identify bottleneck operations and resources for optimized schedules.

### Related resources

- Prepare for the Factory of the Future > [LEARN MORE](#)
- Multi-Modal Manufacturing with Acumatica > [LEARN MORE](#)
- Schedule a Personalized Demo > [LEARN MORE](#)

## Manage and Monitor your Shop Floor Schedule and Work Center Capacity

Acumatica Manufacturing Edition's Advanced Planning and Scheduling (APS) allows manufacturers to consistently and cost-effectively meet customer demands by setting accurate and reliable delivery dates based on finite resource availability. Optimize manufacturing production by managing resource constraints, including materials, production capacity, process sequences, tooling, and facility schedules.

Advanced Planning and Scheduling software provides essential planning capabilities, real-time insights into production, and the ability to accurately schedule employee and machine resources. It allows you to determine requirements for materials and capacity while providing efficient use of production assets.

### FINITE CAPACITY SCHEDULING

Know how much work can be produced in a given timeframe, considering various resources and demand limitations.

### ROUGH CUT CAPACITY PLANNING (RCCP)

Verify that you have sufficient capacity available to meet the capacity requirements for your master schedule.

### CAPABLE TO PROMISE (CTP)

Access Capable to Promise (CTP) from sales orders and quotes to calculate availability dates for manufactured items considering constraints and lead times.

### VISUAL SCHEDULING

Visualize your production schedule with a graphical view of production order operations by work center and machine.

“We were running blind before. Now, we can see volume, location, type of product, and managers can prepare and put new orders into the production schedule.”

## Resource Capacity

Use rough-cut capacity planning (RCCP) to plan, monitor, and manage work center, machine, tool, and labor capacity. Finite scheduling considers operation durations based on crew sizes and labor efficiency.

## Rough-Cut Capacity Planning (RCCP)

RCCP schedules open production orders against finite capacity constraints. Optionally, the orders selected can be released. Orders are loaded and scheduled in sequence based on priority, constraint dates, and production order numbers. The availability of material is considered including supply orders such as purchase orders, transfer orders, or component production orders. Planners may exclude planning orders from RCCP to focus only on actual production orders.

## Capable to Promise (CTP)

Use Advanced Planning and Scheduling to determine how many units of an item will be available by a specified date or calculate availability dates for a quantity of items based on finite capacity constraints, material availability, and vendor lead times.

## Dispatch Lists

Utilize work center and machine dispatch reports for a clear view of scheduled production orders and operations. View reports identifying required resources for scheduled production orders.

## Visual Schedule Board

Visualize your production schedule with a graphical view of production order schedules by work center and machine. Visual scheduling enables users to view scheduled operations against work centers and machines for individual production orders or all orders simultaneously.

## Firm Schedules

Firm schedules to lock in planned production operations for work centers and machines.

## Scheduling Utilities

Use filters to locate production orders by sales order, scheduling status, and other criteria. Identify work center and machine capacity with built-in histograms. The color-coded schedule makes it easy to identify production orders and operations.

## Queue, Finish, and Move Time

Improve scheduling precision by defining finish, move, and queue times for manufacturing operations that require cooling, drying, movement to upstream operations (such as outsourced manufacturing services), and other expected non-production scheduling time.

## Scheduling Changes

Adjust constraint dates and priorities and firm schedules from the visual schedule board.

## Real-Time Insights

Gain insights into production schedules with real-time data from the shop floor feeding role-based dashboards, live Generic Inquiries, and actionable Business Events for push notifications when scheduling issues require immediate action.

The screenshot shows the Acumatica software interface for the 'Process Capable to Promise' function. The top navigation bar includes the Acumatica logo, a search bar, and user information (Revision Two Products, Products Wholesale, 3/15/2023 6:41 AM, admin admin). The main content area is titled 'Process Capable to Promise' and includes a 'PROCESS' button and 'PROCESS ALL' option. Below this, there are input fields for 'Action' (set to 'Process CTP'), 'SO Type', 'SO Nbr.', and 'CTP ACCEPTANCE SETTINGS' (set to 'Regular Production Order Type: RO - Regular Orders'). A table displays production orders with columns for SO Type, SO Nbr., Inventory ID, Line Description, Warehouse, UOM, Open Qty., Requested On, Ship On, Prod. Order Type, Prod. Order Nbr., CTP Date, CTP Accepted, and Original Request Date. Two rows are visible, both for 'Keurig Model 450' in 'WHOLESALE' warehouse, with 'AMKEURIG45' as the Inventory ID. The first row has SO Nbr. SO006020, Open Qty. 5.00, Requested On 9/30/2021, Ship On 9/30/2021, Prod. Order Type CT, Prod. Order Nbr. CT000002, CTP Date 3/15/2023, and CTP Accepted checkbox. The second row has SO Nbr. SO006078, Open Qty. 5.00, Requested On 2/24/2021, Ship On 2/24/2021, Prod. Order Type CT, Prod. Order Nbr. CT000003, CTP Date 3/15/2023, and CTP Accepted checkbox.

SO Type	SO Nbr.	Inventory ID	Line Description	Warehouse	UOM	Open Qty.	Requested On	Ship On	Prod. Order Type	Prod. Order Nbr.	CTP Date	CTP Accepted	Original Request Date
SO	SO006020	AMKEURIG45	Keurig Model 450	WHOLESALE	EA	5.00	9/30/2021	9/30/2021	CT	CT000002	3/15/2023	<input type="checkbox"/>	
SO	SO006078	AMKEURIG45	Keurig Model 450	WHOLESALE	EA	5.00	2/24/2021	2/24/2021	CT	CT000003	3/15/2023	<input type="checkbox"/>	

Access Capable-to-Promise (CTP) from sales orders to determine realistic promise dates for customers during order entry.

## ABOUT ACUMATICA

Acumatica Cloud ERP is a comprehensive business management solution that was born in the cloud and built for more connected, collaborative ways of working. Designed explicitly to enable small and mid-market companies to thrive in today's digital economy, Acumatica's flexible solution, customer-friendly business practices, and industry-specific functionality help growing businesses adapt to fast-moving markets and take control of their future.

For more information on Acumatica, visit [www.acumatica.com](http://www.acumatica.com) or follow us on [LinkedIn](#).

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