CUSTOMER STORY

# Ashley Furniture drives rigor into production with Infor and CavCo

**World's largest furniture manufacturer relies on Infor Thru-Put's advanced planning and scheduling to instill flexibility, mitigate risk, and optimize customer satisfaction**

## About Ashley Furniture

Ashley Furniture is the world's largest manufacturer of furniture. What was once a family company with just 35 employees in 1970 now employs more than 35,000 valued team members across the globe. Boasting more than 30 million square feet in facility space in 155 countries globally allows Ashley to support vendors and businesses, create additional jobs and continue to infuse economies.

Ashley Furniture has a commitment to the people, planet, and organizations it is most passionate about. Its ethos is centered around the belief that it has a responsibility to give back to the community and make a positive impact on the world.

### Challenge

To streamline the supply chain challenges, boost throughput, and mitigate costs to drive competitive advantage

### Infor solution

Infor Thru-Put

### Outcome

Using unique planning and scheduling algorithms and unmatched modeling capabilities, Ashley Furniture is able to better manage both material and capacity constraints

## Challenge

**Innovating for enhanced planning**

To streamline and enhance planning and forecasting across Ashley Furniture's operations, the manufacturer sought a new system to address supply chain challenges, boost throughput, and mitigate costs to drive competitive advantage.

"Having reviewed the market, Infor Thru-Put™ stood out as a system that could deliver unparalleled power to manage both material and capacity constraints. Using unique planning and scheduling algorithms and unmatched modeling capabilities, and supported by CavCo Managing Partners, Infor™ Thru-Put integrated with our existing enterprise resource planning (ERP) platform to synchronize with the manufacturing process and instill rigor and flexibility into our production processes," comments John Jasin, Director, Supply Chain Innovation at Ashley Furniture Industries.

## Infor solution

**Groundbreaking modeling**

Infor Thru-Put uses a groundbreaking memory-resident model to ensure customers can predict and manage alternative constraints ahead of time. The model facilitates simulations of strategic alternative scenarios and produces real-time feedback to drive the best choices in the operational planning process.

## Outcome

Ashley Furniture is now seeing a plethora of benefits across all aspects of its production planning.

**Scheduling**

The application runs nightly to schedule all facilities and can also run ad-hoc when needed. This includes those items that are difficult to plan for, such as poor attendance, supplier shortages, or machine downtime. Guest profiles allow for tailored offers and improved interactions.

**Better resource utilization**

Infor Thru-Put allows people to be moved to where the work needs to be completed. This typically occurs more often on the second and third shifts. Using Thru-Put's work center table, Ashley Furniture defines those working machines and shifts.

Local machine optimization at the detriment of the overarching process is counterproductive if a machine does not need to run, it gets shut down and the people moved to where the work is needed to be completed. Ashley Furniture has over 20 different transportation planning (TP) calendars based on division and department, which help mitigate any guidelines or contracts that impede movement within the facility.

"In designing the best workflows and schedules, don't be afraid to fail forward," comments John Jasin, Director, Supply Chain Innovation at Ashley Furniture Industries. "We did not get all our constraints correct the first time. We learned how the Thru-put application takes our data, and most importantly, the order board (sales and forecast tables) schedules that work and changed constraints."

**Streamlined WIP**

Within Thru-Put, work-in-progress (WIP) orders are maintained daily by both the manufacturing and purchasing groups. It's important to ensure that these don't carry past-due purchase orders (POs) or manufacturing orders (MOs) and that any negative inventory balances are reconciled daily. Crucially, Thru-Put can reconcile or take that into account, but the data still needs to be corrected.

Thru-put schedules are sent to all machine work centers, eliminating the need for any paper-generated schedules, and schedule adherence and attainment are measured daily.

There is some provision for flexibility in this area due to the volume of orders and parts that are routed through Ashley's facilities. That leeway is based on the buffers in each department. For example, if an order is brought to the department and is not on the priority list (TP-generated schedule), the order is put aside until it gets scheduled by Thru-Put.  Supervisors tell anyone if it is not on the list then it can't be run.

The schedules are followed and adhered to, and remedial action is taken where the work sequence was not followed. Shop floor data is fed back into the TP plan and Infor XA to ensure a comprehensive status.

### Data is everything

Because manufacturing data is the bedrock of Thru-Put, it is imperative that this data is clean and up to date.

"When we first started, we had minimal data filters meaning that all data came into Thru-put," adds John. "This means the good, the bad, and the ugly data. We quickly discovered bill of materials (BOM), routing, and machine capacity errors which told a story and meant we could remedy to get things right. Once those were worked with the respective owners in engineering, and the L:C (load to capacity chart) to clean and contextualize, Ashley could share it with the manufacturing leadership and department heads, before declaring its drums. Reports were then put in place to keep the data clean moving forward, and owned and reviewed by the engineering group weekly."

### Flexibility

In designing the optimum workflow, both typical and minimal buffers are used to allow for some flexibility, primarily to keep assembly order dates from moving out.

Buffers are cumulative in the manufacturing process. Not every machine needs to have a day or two of buffer in front of it, and in fact, all buffers were actually smaller than initially anticipated.

"Don't let current policy be a constraint," John explains. "If your drum only runs one shift, then add a second shift or possibly a third. If you're already running all three shifts, then how do you add another machine? If space and building are maxed out, what is taking up the space? Is there too much WIP on the floor? Quit ordering ahead of time. Release orders when scheduled. If order run sizes are too large, change them. One of the first things we did was change how orders went to the shop floor, and we now release daily to the floor, no longer once a week or in large quantities."

### Anticipating breakdowns

Against an initial remit for five drums initially, today, the production facility runs with one or two. Following a theory of change (ToC) model, drums were run as drums 24 x 6, and through breaks. Maintenance and critical spares for those drums were on hand in case of machine breakdowns. Additional capacity was justified using the Thru-Put application to break constraints and lower the water to expose the next set of constraints.

## Innovation for manufacturing excellence

“Throughout our implementation and subsequent journey with Thru-Put, we’ve amassed a great deal of experience, and learnings. there are several items to keep in front of the team when on this implantation journey. The first and most important, is that the project needs a champion. This person should have a good understanding of the manufacturing process and have the authority to drive change.”

“It’s no longer enough to simply respond to customers’ needs—you need to anticipate those needs to ensure that you operate at peak efficiency. By optimizing your internal and external supply chains and streamlining your production processes, you can give customers what they want, when they want it, at the lowest possible cost.”

“Overall, we have been really happy with the application and look forward to continuing our journey with Infor Thru-Put at the helm of our operational planning,” John concludes.