



C&C POWER USES IFS TO IMPROVE MANUFACTURING AND FIELD SERVICE PROCESSES

C&C Power manufactures, installs and services power supply and telecommunications equipment used in data centers around the world. Their demanding customer base includes numerous fortune 100 companies along with data centers, telecommunication companies and government agencies. The engineer-to-order and configure-to-order manufacturer sells and provides aftermarket service for front access, standard, rack mount, and spares battery cabinets, as well as landing boxes, battery monitoring, telecom, commander plus controllers, and integrated distribution systems.

A BURNING PLATFORM

According to John Materse by 2019, the company had been working hard to reduce order turn time and complete battery replacements and other field service work with its internal team of technicians and external contractors. The company found itself on a burning enterprise resource planning (ERP) software platform—Microsoft Dynamics NAV, supplemented by third party report

ABOUT C&C POWER

C&C Power is an industry leader in the manufacture and servicing of battery systems, uninterrupted power supply peripherals telecommunication equipment and electrical equipment. Headquarters and operations are located near Chicago in Carol Stream, Ill. C&C Power's state-of-the-art facility features 230,000 sq. ft. of manufacturing space including high power testing capabilities. Their facility allows them to stock a large selection of standard products for quick shipment and custom design solutions for specific power needs.



writing and quality management software. The company hired an independent software selection consultancy that, based on their needs, shortlisted IFS, Microsoft Dynamics 365, Infor Syteline (since rebadged as Cloudsuite Industrial) and Epicor.

“We had some strict requirements,” Materse said. “Our business is very dynamic. Our products are very configurable. Our forecasts were limited and typically only project-based with configurations changes. So, we needed an ERP system that helped us better plan inventory, labor and was forgiving to accommodate customer changes—some that are very last minute.”

Materse said their low volume, high-mix, highly configured products are specific to each customer, yet customers still expect fast turn times, due in part to customer specification approvals, lean supply chains and expecting quick delivery. Before implementing IFS, C&C Power heavily customized their systems to lower turn time for most orders from 45 to 60 days to within 14 days, with just less than half shipping within one week.

“One thing we needed IFS to do was help us reduce and sustain a shorter lead time—without us breaking our backs trying to accommodate that,” Materse said. “So we needed real materials requirements planning (MRP) capability in an ERP system. The other software vendors we talked to said they had MRP, but they really didn’t. We wanted something to make quick decisions, simulate whether we had parts and really service our customer and provide them answers now instead of having to make out a bill of materials (BOM) to see what parts might be bottlenecks to completion. Other vendors had electronic MRPs where it was not very descriptive. It just seemed very broad and lacked detail.”

Materse, recalling his initial explorations of IFS’s MRP system, was amazed by “just how detailed and how easy it was to read. IFS’s MRP seemed more preconfigured and ready to go—right out of the box we could enter lead times at a supplier level, at a part level—we gained a lot of the flexibility we were looking for. And for capacity planning—we really liked how you could manage the resources and get a pretty detailed capacity plan for manufacturing.”

C&C Power selected IFS and stood the system up during an accelerated, six-month implementation. The initial April 2020 go-live, which was delayed a few days due to COVID-19, was designed to replace the existing footprint of Microsoft Dynamics NAV.

“We went live with the bare minimum at first, and one reason was we were out of licenses with our old software,” Materse said. “We had attempted to buy more licenses temporarily, and the software was no longer supported. In addition, the system was hanging up because we were not on a SQL server, and we outgrew the native platform. We just wanted to be able to provide excellent customer service, ship quality products and make sure our colleagues had uninterrupted access to the system.”

BENEFITS

- Reduced stock-outs by 25 percent thanks to strong materials requirements planning (MRP) functionality
- Faster order turn time, improving customer experience
- Reduced impact on processes associated with design changes after orders are released to manufacturing.
- Ability to grow without increasing headcount in planning
- Replaces third party solutions for quality management and reporting

Materse was impressed with the team of IFS consultants during implementation. “We would ask a question and the answer was always yes,” he said. “But we always got the feeling we were being told the truth about the software.”

IMMEDIATE PROCESS IMPROVEMENTS

Right away, C&C Power enjoyed improved visibility into their inventory levels and how they squared with customer orders.

“We have seen a reduction in stockouts already of about 25 percent,” Materse said. “We expect that to increase as we get more acclimated to the system and have the data to re-plan inventory levels on other parts. We did not bring over any transaction history during implementation, so we are starting from ground zero.”

When inventory is reserved for an existing customer project, C&C Power’s legacy system did not reflect that, which lead to stockouts and delays of customer orders when the same inventory was sold twice.

“Our ability to handle reservations of components is greatly improved,” Materse said. “Our legacy system had functionality for this, but it did not work. Now, we do not have to worry about someone coming in and placing an order ahead of someone else and people don’t know that material has already sold.”

Regardless of the lack of transaction history, IFS’s MRP functionality already provides vastly improved visibility into when parts need to be replenished due to the demand plan.

“In our old system—I would spend time looking proactively for problems—just hunting for that part we had to order that would cause us heartache,” Materse said.

“Now every time MRP runs, our planners have information in front of them that finds the problem for them and points them in the right direction.”

The IFS ERP solution is proving a good fit for C&C’s low volume, high-mix manufacturing environment, where the product and related BOM are built around customer requirements. And according to Materse, customer requirements can change in midstream.

“We always see a lot of product customizations,” Materse said. “In complex manufacturing, there is a lot of room for change with customer orders. Flexibility is important. In IFS, you can go in and open a shop order and add a part when the customer calls and says they want an additional configuration. We are able to go in and make changes up until manufacturing without it being that critical. Even during the manufacturing process, we can change things.”

IFS ERP is so much more efficient at handling these midstream changes—enabling adjustments right on the shop order that are then carried through to other parts of the system—that according to Materse, C&C Power has been able to reduce the cost of the average change order by several percentage points.

“We always charged for changes of this nature, but that fee was higher because we had to go through a series of manual transactions,” Materse said. “Our IFS ERP system has improved the process for us to make changes after the fact enough that we can sometimes lower our design costs.”

FASTER FIELD SERVICE

C&C does more than design and manufacture equipment for their customers—they also provide aftermarket service and support for their uninterruptible power supplies, DC power equipment or batteries. They are relying on service management functionality in their IFS ERP solution to increase technician utilization rate and improve the customer experience on annual maintenance contracts, warranty work, battery change-outs and break-fix repair.

“One of our biggest challenges is understanding our customer site, the obstacles we have to deal with, and where our equipment is placed,” Materse said. “In IFS, we can set up customer sites to reflect what equipment is in what room so it can be serviced more efficiently. We rent equipment, and now have the systems in place to recognize when it is rented, where it is located and when to invoice it.”

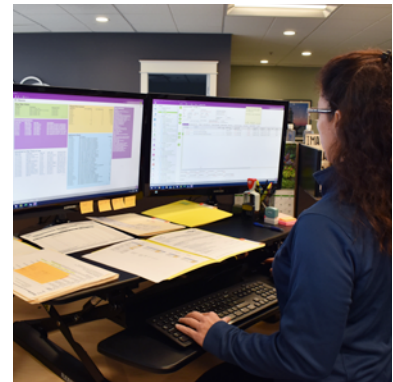
Prior to implementing IFS ERP software, service information was stored in Microsoft Excel, including site surveys, data on where equipment is located and serial numbers.

“We can be more effective while quoting,” Materse said. “If we have to through a security checkpoint that takes three hours, or the room is a mile into the building—we are now in a position to factor in that time.”

EXPANDING INTO ADDITIONAL FUNCTIONALITY

Now that C&C Power is live on core functionality for manufacturing and service delivery, they will roll out more IFS software to drive additional returns and notch out third-party systems that had run alongside their legacy ERP.

“As we start using the capacity planning functionality, we will be better able to plan labor, optimizing the number of workers required execute and achieve our build plan,” Materse said. “We are going to discontinue our third-party quality system and use IFS’s functionality. We will also, as we build up our transaction history in the system, roll out demand planner, which will allow us to take bigger sets of data, analyze it and improve our overall supply chain.”



The visually intuitive nature of the system is already playing a role in helping with capacity planning.

“If you need to level load production, you can drag and drop orders into different days,” Materse said. “And with IFS Lobby, people can see their workload. From a labor management standpoint, leadership can see someone with a 20 percent load and can re-assign tasks to them.”

Taking advantage of IFS Lobby, the configurable role-specific dashboards that enable users to drill down from a visual representation of their roles and tasks to operational tools to execute what the display is communicating to them, is a high priority for C&C Power.

“We want to be a visual factory, and IFS was one of the few products where we could pull information out on our own and configure our own screens,” Materse said. “We are putting together custom lobbies for people, and we have some basic ones now. They give us insight into how much work load an individual has. Our shipping person—when she logs into her lobby—can see five shipments and 10 things that need to be picked and five things that need to be delivered. Lobbies will help us reduce ad hoc communication by providing people with real time information on what they need to do.”

C&C Power considered, in their selection, not just functionality currently released to market, but what potential vendors planned for the future.

“One of the questions we asked all the ERP companies was to describe their road map,” Materse said. “IFS had a solid roadmap going forward for everything from the internet of things (IoT) to artificial intelligence and the cloud. A lot of competitors did not have a clear road map at all. We only wanted to do this once and we felt IFS was the best option to support us today and the years to come.”

FIND OUT MORE

For further information, e-mail to info@ifs.com, contact your local IFS office or visit our web site, ifs.com

