Connecticut Spring & Stamping

ERP SOFTWARE CASE STUDY

THE PROBLEM

Connecticut Spring & Stamping (CSS) needed to schedule their 600 workcenters more efficiently with continuous live time flow and improve on time delivery and customer satisfaction. They needed a software that could effectively run and simplify their job shop.

THE SOLUTION

- Displaying real-time scheduling data on computer monitors throughout the factory
- Accurately track material using GS Mobile
- Automated purchasing
- Use Dashboards in all departments
- Simplified cert documentation through barcoding
- Deliver materials with special packaging to the right jobs at the right time.

ERP APPLICATIONS USED

- **Accounting**
- **Advanced Planning & Scheduling (APS)**
- **Dashboards**
- **Global Application Builder**
- **GS Mobile**
- **Inventory**
- **Purchasing**
- **Shipping**
- **Shop Floor Data Collection**

Customer Snapshot

CUSTOMER LOCATION
Farmington, CT

FOUNDED IN
1939

INDUSTRY
Aerospace, Automotive, Electronic, Medical Device

EMPLOYEE COUNT
450

MODE
Engineer-to-Order, Make-to-Order

CUSTOMER SINCE
2008

Global Shop SOLUTIONS ERP SOFTWARE

GLOBALSHOPSOLUTIONS.COM

Connecticut Spring & Stamping (CSS) offers a compelling example of how to get the most out of their investment in ERP software. An international manufacturer of precision springs and metal shaped solutions, CSS has been providing custom springs, progressive and fine-blanked stampings, machined components, and assemblies for more than 80 years. Known for developing innovative and difficult-to-make parts, CSS delivers comprehensive solutions by collaborating with their customers through all stages of product development.

Real-time scheduling data displayed in the factory

CSS upgraded to Global Shop Solutions ERP in 2008 when their old ERP system could no longer meet the growing company's needs. In particular they wanted to resolve real-time scheduling through multiple departments, inventory management and other challenges that were hampering on-time delivery. Their new ERP produced quick results in these and other areas, including the ability to accurately schedule 600 workcenters for a dramatically improved product flow and a 35% improvement in on-time delivery, which generated an all-time high rate of 97.5%. These results also contributed to a 50% increase in sales. Since then, CSS has continued to simplify their manufacturing by adding new products, features and capabilities to their ERP system.

35% IMPROVEMENT IN ON-TIME DELIVERY RATE

Scheduling in-house work for thousands of part numbers through 600 workcenters was hard enough with CSS' old ERP system. Worse, many of the parts have multiple secondary workcenters to schedule; some with as many as 28 operations, both in-house and operations at offsite vendors.

With Advanced Planning & Scheduling (APS) software, scheduling all jobs has become faster and more efficient. More importantly, APS provides the real-time data needed to complete jobs on time, resulting in a huge leap in on-time delivery rates.

"Based on the extensive routers we create for every part, Global Shop Solutions tells us when we need to do something in each of our workcenters," says President Steve Dicke. "It gives us the lead times and lets us know when parts need to come out of a workcenter to keep us on time. Equally important, we can see the available capacity of all machines at any given moment, which allows us to make sure we can deliver before promising specific due dates to customers."

"This past quarter we hit 97.5% for on-time delivery, an all-time high for CSS. The superb visibility of data in the system ensures that we don't over-promise and under deliver – a capability we did not have in our old system."

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IMPROVE SHOP FLOOR EFFICIENCY BY WATCHING TV

One improvement for CSS came from using APS to electronically send scheduling data to big TV screens in every department. Previously, workers had to log into the ERP system to know what job to work on. Now they simply look at the TV screens to know what to be working on in the moment and what's coming up next.

"Having live scheduling data at each workcenter has definitely improved our workflow," says Dicke. "The information is always accurate because it comes straight from APS, and workers don't stand around wondering what to do next. Displaying the schedule electronically has also moved us closer to reaching our goal of a paperless system."

Some of the raw material CSS uses

ANYTIME, ANYWHERE MATERIAL TRACKING

When CSS began barcoding all incoming materials and immediately issuing them to a job or inventory 10 years ago, it greatly improved inventory management and material movement. However, entering the barcode data manually made the process less efficient than it could have been. When Global Shop Solutions introduced GS Mobile – a real-time paperless inventory tracking system that uses mobile barcode scanning – CSS added it to their ERP capabilities.

"We quickly upgraded to mobile scanners, which enabled us to scan raw material or finished goods anywhere on the shop floor at any time," says Dicke. "This made the entire process faster and more efficient while also providing precise lot control and highly accurate inventory tracking."

"Adding certification information to the barcodes helped simplify the process of making sure the right certs go out with every shipment," adds Dicke. "Whether it's a raw material, plating, heat treating, or some other cert, all the necessary documentation is automatically printed at shipping without having to manually track it down."

AUTOMATED PURCHASING

CSS realized that to continue streamlining their process, they would need to automate purchasing, helping them make big strides in their goal of becoming paperless. When purchasing materials, buyers look at the Purchasing Dashboard to review material requirements, planning functions, and purchase history to see what is needed for each job. They don't order materials until demand is created through the work order, and they buy straight from the Material Dashboard rather than using material request sheets.

"We deliver material the same way," says Dicke. "Previously, every department had to call for the material they needed. Now, the material department checks the Dashboard to see when materials need to be sent and delivers them to the job at the appropriate time. It's all electronic and much more efficient than it used to be."

TAILORED DASHBOARDS MAKE ERP A BETTER FIT

Over the years, CSS has advanced its use of the ERP software's increasingly sophisticated Dashboards. In particular, they have taken advantage of the Global Application Builder (GAB) to tailor various Dashboards, reports, and screens the way different departments want to see the information. CSS Software Engineer Richard Delatorre has customized several hundred GAB programs, many of which involved modifying Dashboards to include more data, refiguring or reorganizing screens, or consolidating information from many different screens into one.

"GAB lets me pull data directly from our ERP system to create custom layouts and grids that are easy to filter and sort." says Delatorre. "With these tailored Dashboards, management can evaluate important metrics to make informed decisions at the right time. "What I really like is the ability to download existing Dashboards from the ARC Store. I simply download an ARC project that would fit our work processes, plug it into the system, and it's good to go."

A COMPLETE ERP SOLUTION

CSS implemented Global Shop Solutions primarily to revamp its scheduling process. As they have continued to use more of the system, it now basically runs the business.

"We're very happy with Global Shop Solutions ERP," says Dicke. "I tell our people the information is all there in one central location, so no more spreadsheets or doing things offline. Find what you need in the system, follow it, and we'll do a better job of serving our customers."

Dashboards make everyone's jobs easier