

# HCS Engineering

## ERP SOFTWARE CASE STUDY

### THE PROBLEM

A privately owned, mixed-mode manufacturer serving companies throughout Asia, HCS provides turnkey engineering solutions from research and design to system assembly.

Their primary ERP goals included scheduling work orders more efficiently for just-in-time (JIT) jobs, improving accuracy for inventory and deliveries, and determining their true cost of finished goods.

### THE SOLUTION

- Customized Dashboards helped achieve 90% accurate inventory with order records and deliveries.
- Improved JIT scheduling by increasing work order accuracy to 50%.
- Increased productivity by more than tripling work orders while adding only 20 – 30% more manpower.
- Unexpected outcome: ERP software changed the mindset from “everything has to be done manually, we need to add manpower” to “is there a way to automate this process so we can work more efficiently?”

### ERP APPLICATIONS USED

- Dashboards
- Purchasing
- Inventory
- Tailored ERP

Customer Snapshot



CUSTOMER LOCATION  
Singapore



FOUNDED IN  
2009



INDUSTRY  
Metal Fabrication



EMPLOYEE COUNT  
250-300



MODE  
Mixed Mode



CUSTOMER SINCE  
2018

Established in Singapore since 2009, [HCS Engineering](#) is a privately owned, mixed-mode manufacturer providing complete engineering solutions to companies of all sizes throughout Asia. Formerly known as HFB Singapore, HCS is recognized as a pioneer in the sheet metal industry and has 40 years' experience providing turnkey engineering solutions – from research and design to system assembly – that provide one-stop service for its customers.

**Using state of the art machine technology,** HCS has the capability to perform 2D mechanical design and prototyping in a highly customized manner. Their arsenal of CNC machinery includes tube laser, laser cutting, turret punch, bending machines, vertical and double column vertical machine centers, YAG laser welding and more for complete engineering solutions from initialization to realization.

Customizing complex engineered products and assemblies presents difficult production challenges for HCS. These include scheduling work orders for just-in-time (JIT) jobs, getting the inventory and deliveries right, and determining the actual cost of finished goods. To overcome these challenges HCS implemented [Global Shop Solutions ERP software](#) in 2018. Since going live with the system, HCS has improved shop floor efficiency, productivity, and inventory accuracy while significantly increasing the number of work orders with minimal increase in manpower.



*A glimpse of HCS's shop floor*

“Global Shop Solutions offered a lot of features and capabilities to improve our business processes,” says Boon Eng, ERP Champion for HCS. “What really caught our attention was the software’s flexibility and open architecture that allows easy [tailoring](#) of screens, tables, dashboards and programs to fit our company’s needs. Over the years we’ve written a number of customized tables and [dashboards](#) so our workers can view the data however they want based on their individual needs.”

### SIMPLIFYING JIT PRODUCTION

Some of HCS’s parts are built the same but require a different process or subouts. Global Shop Solutions ERP simplifies production of these parts by making it easy to push changes from the router to the work order. The [Automated Purchasing](#) screen enables HCS to buy materials more accurately for JIT production and account for long lead items so the materials arrive in time to finish the job by the scheduled due date.



Global Shop Solutions offered a lot of features and capabilities to improve our business processes.



“The Supply & Demand screen and the tailored Dashboards help simplify JIT productions by monitoring orders, inventories and deliveries in real time,” says Eng. “We always know where we stand with each work order and what actions, if any, need to be taken to get the delivery out on time.”

### IMPROVED ACCURACY IN KEY AREAS

With Global Shop Solutions ERP, HCS has achieved impressive gains in several important areas. Accuracy has climbed to 90% for inventory, order records and deliveries, and work orders have surpassed 50% accuracy. [Orders](#) have increased more than three-fold, yet manpower has only gone up 20-30% on average, resulting in higher productivity per person.

“We’re not satisfied with the 50% figure for work order accuracy, but we’re still working on getting better at closing [BOMs](#) with a lot of child parts,” says Eng. “Even so, 50% is a big improvement over our previous manual workflow.”

“Global Shop Solutions has transformed our mindset from ‘everything has to be done manually, we need to add manpower’ to ‘is there a way to automate this process so we can work more efficiently?’” adds Eng. “We’ll keep at it, and one day we’ll get work order accuracy where we want it to be.”

### CUSTOMIZATION MAKES HCS MORE COMPETITIVE

Given the complexity of HCS’s products and work processes, Eng considers the flexibility and tailoring of Global Shop Solutions as its most valuable feature.

“The ability to write our own view tables with the Global Application Builder (GAB) – an SDK application that enables users to create their own customizations – is what makes Global Shop Solutions stand out from other ERP systems,” he says. “The software is highly customizable, and as long as you can define your requirements there will be a solution.”

When HCS can’t configure a customization just the way they want it, Global Shop Solutions’ [Southeast Asia team](#) steps in and gets the job done.

“Sometimes we can’t come up with the right solution for our in-house customizations,” says Eng. “In those situations, the Southeast Asia team works tirelessly to come up with alternative solutions that keep us going, something I believe other ERP vendors can’t provide. Their commitment to helping us get things done our way enables HCS to compete more effectively with our competitors by delivering top quality service to our customers.”



*HCS's inventory shelves*

