

# Supercast Foundry & Machinery Corp.

## ERP SOFTWARE CASE STUDY

### THE PROBLEM

A mixed-mode manufacturer of metal casting products, Supercast Foundry & Machinery Corp. (SFMC) uses more than 100 different ferrous and nonferrous alloys to serve the casting needs of the cement, mining, construction, and sugar industries. They needed a way to centralize shop floor information, simplify business processes to improve efficiency, and reduce costs.

### THE SOLUTION

- Increased shop production capacity 60% through capture and analysis of machine utilization and employee productivity.
- Reduced shop's rejection rate six-fold by improving quality control.
- Increased customer satisfaction from 4.1 to 4.8 (out of 5) due to on-time delivery, improved pricing and better service.
- Unexpected outcome: ERP software improved employees' problem solving skills.

#### ERP APPLICATIONS USED

- Dashboards & KPIs
- Inventory
- Planning & Scheduling
- Quality Control



Customer Snapshot



**CUSTOMER LOCATION**  
Valenzuela City,  
Metro Manila,  
Philippines



**FOUNDED IN**  
1993



**INDUSTRY**  
Metal Casting  
& Fabrication,  
Automotive,  
Machinery



**EMPLOYEE COUNT**  
250-300



**MODE**  
Mixed Mode



**CUSTOMER SINCE**  
2013

Founded in 1993, [SFMC](#) is a mixed-mode global provider of advanced metal casting products. Working with more than 100 ferrous and non-ferrous alloys, SFMC serves the casting needs of the cement, mining, construction, and sugar industries, as well as aggregates, transportation, automotive, machinery and other allied industries. Operating out of Valenzuela City, Metro Manila, Philippines, SFMC also produces residential and agricultural pumps, cast iron fittings, gratings and other products through its Eagle™ trademark.

**In 2012, SFMC management began looking for** an ERP system to help systemize and simplify the company's business processes. They selected [Global Shop Solutions ERP software](#) for its robust capabilities and customization options, and went live in 2013.

"As a mixed-mode manufacturer, manpower and resource management constantly created headaches," says Nickol John Villareal, Foundry Manager for SFMC. "Monitoring manpower and inventory for our make-to-stock items presented few challenges. However, manpower and raw material requirements could vary greatly with our make-to-order parts. Global Shop Solutions' ability to [forecast, allocate, and monitor](#) these requirements with ease was a major factor in our decision to implement the software. We also liked the option to build fully customized screens and programs for users' needs."

Upon implementation, SFMC focused on using the software to improve three specific goals – reduce



*An SFMC employee on the shop floor*

costs, simplify operations, and improve shop floor efficiencies. It didn't take long before the company began making strides in each area.

## CUTTING DIRECT AND INDIRECT COSTS

Prior to using Global Shop Solutions ERP, new batch productions were often launched before completing scrap rate root cause analysis of the previous batch or evaluating the effectiveness of proposed solutions. The ease of monitoring rejection/scrap rates on Global Shop Solutions ERP now facilitates fast, effective solutions that reduce scrap rates on subsequent batches of the part.

Global Shop Solutions has also lowered costs through improved [inventory management](#). SFMC uses least-cost charge estimates for their melt production by selecting which raw materials are already available in the system and will deliver the least cost.



Global Shop Solutions' ability to forecast, allocate, and monitor requirements with ease was a major factor in our decision to implement the software.



The inventory software automatically tracks depletion of raw material stocks, providing ample time to import some materials at a lower cost compared to costlier local sources.

“Realizing the most cost-effective plan and schedule is easy when you can visualize the shop floor using the data in Global Shop Solutions,” says Villareal. “Scheduling job orders and managing the workforce more efficiently reduces direct and indirect production costs by avoiding overtime and not overloading work orders with too many people.”

### **BIG PICTURE MAKES IT EASY**

Modifying plans and schedules can be slow and cumbersome using Excel and other traditional techniques. Global Shop Solutions ERP simplifies the process by providing instant access to real-time data on everything happening on the shop floor. For example, daily and weekly monitoring, forecasting, and grouping work orders – by priority, due dates, and commonality – make it easy to handle changes to jobs in progress or customer due dates.

“Corporate communications have also improved thanks to Global Shop Solutions,” says Villareal. “In the past, we transmitted important shop floor information to different departments or individuals via phone or email. Information sometimes got lost in translation or wasn’t conveyed at all, causing problems with planning and scheduling. With company-wide access to all the data in the system, we rarely use these inefficient modes of communication to share information.”

### **INCREASING CAPACITY WITHOUT COMPROMISING FLEXIBILITY**

Using Global Shop Solutions ERP software to capture and analyze machine utilization, productivity, and overall equipment efficiency has enabled SFMC to optimize production. Improved production metrics combined with sales growth enabled the company to transition to a more automated facility. This further improved all metrics and grew production capacity by more than 60% without compromising the shop’s manufacturing flexibility.

Leveraging data analytics on rejection data within Global Shop Solutions ERP help reduce the shop’s rejection rate sixfold over a period of seven years. Perhaps most indicative of the overall impact of the software has been the big jump in customer satisfaction. In a survey measuring [quality](#), delivery, pricing and service, customer satisfaction rates climbed from 4.1 (out of 5) to 4.8.

### **TOTAL CONTROL OF SHOP FLOOR ENHANCES COMPETITIVE POSITIONING**

According to Villareal, Global Shop Solutions [Advanced Planning & Scheduling](#) application and the Supply and Demand screen have made the biggest impact on SFMC.

“We get to ‘control’ the shop floor on our computer screens; how cool is that!” he exclaims. “Supply and Demand makes it easy to monitor open work orders on a day-to-day basis so we can see the status of every job in progress. Advanced Planning & Scheduling allows quick navigation between one production planning and scheduling matter to another. It provides all the bells and whistles our staff needs, including the variety and flexibility to help them come up with the best solution out of many.”

“Global Shop Solutions makes us more competitive as well,” adds Villareal. “Lowering direct and indirect costs enables us to accommodate more jobs. Fewer rejects means better quality and less rework. Thorough job costing keeps our casting prices competitive. We’ve become better problem solvers, and we continue to become better users of the software. I can’t wait to see where it will take us next!”

