

## GLOBAL SHOP SOLUTIONS CASE STUDY

# Metalform

Founded in 1961, *Metalform* is a sheet *metal processing and fabricating* business that provides contract manufacturing services for customers in New Zealand and Australia, and also manufactures *make-to-stock* metal products and components for distribution around the world. Headquartered in Dannevirke, New Zealand, the family-owned business also maintains offices in Australia and the United States, and has market representation in the U.K., Europe, Japan and Chile.



*Pictured are the four generations of Metalform: Founder Bryce Easton, Design Manager Geoff Easton, Managing Director Campbell Easton, and Campbell's children Anders and William.*



*Metalform's pressbrake operator Chris Hulegas using a Shop Floor Data Collection station. Online drawings enable a paperless shop floor.*

On the contract side of the business, Metalform provides turn-key custom manufacturing solutions from 3D design to manufacturing, fabrication, painting, finishing and final assembly. Service capabilities include flat sheet laser cutting, high-speed automated punching, forming and folding, machining, fabrication, robotic welding and plasma, painting and bead blasting.

On the make-to-stock side, products include farming pasture management equipment, knife sharpening systems, pediatric wheelchairs and rotary display bins, all marketed under their own brand names.

Like many long-established manufacturing firms, Metalform managed the business for years with a disparate assortment of manual spreadsheets and external software programs. As the business grew and began taking on more complex jobs with several thousand unique components, they implemented Global Shop Solutions' fully-integrated **ERP software**.

"We chose Global Shop Solutions primarily for its robust functionality and knowledgeable sales people," says Metalform Managing Director Campbell Easton. "We also liked the fact that we would be dealing directly with the developer of the software rather than a reseller or other third-party vendor."

### Going Paperless

With around 5,000 jobs going through the shop floor at any given time, the amount of paper (job packs) following those jobs could have built a bridge from New Zealand to Australia. Upon implementing Global Shop Solutions ERP software, one of the first goals involved **removing all paper from the shop floor** to improve production efficiency. According to Easton, the software had an immediate impact.

“Previously, we could only process one job at a time, which presented a problem when we had two different jobs on the same pallet,” he says. “With Global Shop Solutions, every component now has its own work order. This allows us to concurrently process different jobs, which has dramatically improved production efficiency and reduced work in progress.”

“With all the job data in the system, we don’t rely on the job packs anymore,” says Easton. “Instead using

***“The nesting integration manages the whole process, including the cutting time and material issuing, so it saves time and money.”***

move tickets allows the work to flow through whatever department is needed, and then the parts meet up for final assembly. No more paper, and the work flow goes much smoother.”

#### **Multilevel BOMs in One Hour**

Building complex custom jobs with thousands of unique parts is hard enough. At Metalform, the challenge is magnified by the fact that each product comes with about 100 different high-level configuration options. Building BOMs for these projects used to take hours, and created a real constraint on the business.

Using the [Project Management application](#), which is designed for managing complex, lengthy jobs, Metalform now builds their BOMs faster by creating a unique BOM or sub-BOM for each option and using the system to pull them all together.

“Previously, building our BOMs required more than a full-time role for one person,” says Easton. “It now takes about one hour per day, and is no longer a constraint.”

#### **Repeat Work Orders in Five Minutes**

The software has also dramatically reduced the time required to create repeat work orders – a major improvement considering 90% of Metalform’s make-to-stock orders consist of repeat jobs.

“In our old system, we had to print and collate a new job pack with all the programs and drawings for every reorder,” recalls Easton. “We also had to take the time to manually identify all ECNs (Engineering Change Notice) before releasing the updated pack to the floor.”

“Now all ECNs are managed within the system and communicated electronically,” he says. “Kicking off a repeat work order takes about five minutes, even for a complicated BOM. Also, we don’t have to worry about building jobs off the wrong revision because someone didn’t get the updated job pack.”

#### **Putting Sales in Charge of Scheduling**

The [Advanced Planning & Scheduling \(APS\) application](#) is the final application to be implemented at Metalform, and has only recently been used. As management continues to understand the full functionality of APS, they expect to see a major improvement from using it to schedule all jobs through the shop floor.

Thanks to the data in APS, Metalform now has excellent visibility of its capacity, allowing them to see which parts of the business are overloaded. That way, they can take appropriate action, such as hiring new employees or outsourcing some of the work to stay ahead of the curve.

To further simplify the scheduling process, Metalform has now given this responsibility to the sales team.

“Our sales reps were always saying ‘yes’ to new orders without knowing our capacity,” explains Easton, “so we put them in charge of scheduling. They receive the job orders, make the scheduling plan, and the production team carries it out. This represents a huge shift in our culture.”

"If a job can't fit in the schedule, our sales people will know which customer might be able to take a later delivery date," he says. "They can call the customer and arrange a new delivery date so we can fit the new job into the schedule. That's much better than having the production manager tell the customer we can't do it."

### 10% Improvement in Material Utilization

Integrating Metalform's **nesting software** with Global Shop Solutions ERP software has significantly improved material utilization. In the past, steel cutters could only plan one job for a particular piece of material. As a result, any unusually shaped or sized leftovers went to scrap.

Now the system looks ahead at all the jobs in a two-week period that need to be cut from that same material. It then puts them together on the same sheet so most or all of it can be used, rather than throwing much of it away.

"The nesting integration manages the whole process, including the cutting time and material issuing, so it saves time and money," notes Easton. "The ability to look ahead and group jobs together makes all the difference."

Meanwhile, managing ECNs in the system rather than on paper has simplified that process while significantly reducing errors. When engineers trigger an ECN, the system automatically prevents new work orders with the part number from getting started, guaranteeing that machinists won't make the wrong revision parts.

### Straight Answers and Great Customer Service

From quote to cash collection, Metalform takes full advantage of Global Shop Solutions ERP software, using everything from order entry, purchasing, and **quality** to project management, **accounting**, and more. They also used the system's flexibility to **customize dashboards** and Crystal reports to organize data the way managers prefer to see it.

One of these reports provides a rolling overview of current sales, orders, and shipments, allowing Metalform to make proactive changes rather than after the fact.

"In our old system, the best we could do was take a historical look back at the end of the month," says Easton. "Now we can track how we are doing in the moment and take immediate action when needed. For example, if we're behind on sales, we can make more sales activity occur to make sure we're on track with estimates for the current financial period."

According to Easton, Metalform values the company behind the ERP product as much as the product itself.

"When we were evaluating different ERP programs, Global Shop Solutions was the only vendor to have a software engineer as a sales rep, so we knew we were getting straight answers to our questions," he says. "Other vendors' sales reps would say things like, 'Our system can do that....maybe.' Or, 'I think so,' which didn't give us a lot of confidence in their answers."

"The Global Shop Solutions salesperson always told us straight up if their system could or could not do something," says Easton. "The **implementation consultant** did a great job of helping us set up the system to fit our business, and was always there when we needed him. And the tech support has been great. I have recommended Global Shop Solutions to several business associates in large part because of their customer service."



*Sold worldwide, the K450 wheelchair was developed and manufactured by Metalform.*