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Aaron Happl, controller, Cutt-Rite



*Custom Machine Work*

**CUTT-RITE MACHINES LIMITED**

## Cutt-Rite Machines

### **Made2Manage Systems Helps Cutt-Rite Create Shop Floor Efficiency**

Cutt-Rite Machines is a machine shop that supplies large and midsize machine components for mobile equipment users in the forestry and heavy equipment industries. Located in Woodstock, Ontario, Canada, the shop started more than 32 years ago in a 30' x 30' building and now occupies 37,000 square feet.



As the company has grown, Cutt-Rite’s challenge has been to improve the overall efficiency on the shop floor. While producing as many as 400 items at any one time, they must remain flexible enough to respond to changes in customer orders.

In the past, the company spent an inordinate amount of time interrupting jobs in order to set up new ones for items that had been missed or for a special job that the shop hadn’t been prepared to run. They’d have to tear down a machine, set up a job for the new item, run those pieces, and then set up again for the interrupted job. “Our lead hands were being run ragged,” says Aaron Happl, Cutt-Rite’s controller. “Profits were being squeezed because, instead of doing one setup per operation, they were doing two and three.”

Another challenge was to distribute the workload more evenly among their 26 CNC machines. Even when production demand was relatively stable, some machines were grossly overloaded compared with others. But in periods when large orders came in, this problem of uneven work distribution among the machines became even worse—creating serious bottlenecks and requiring employee overtime. Cutt-Rite also wanted to be able to foresee the need for extra work hours, so that they could give their workers some notice. “Our goal was to try to control the labor force,” says Happl. “Overtime where it’s needed—but not unnecessary overtime.”

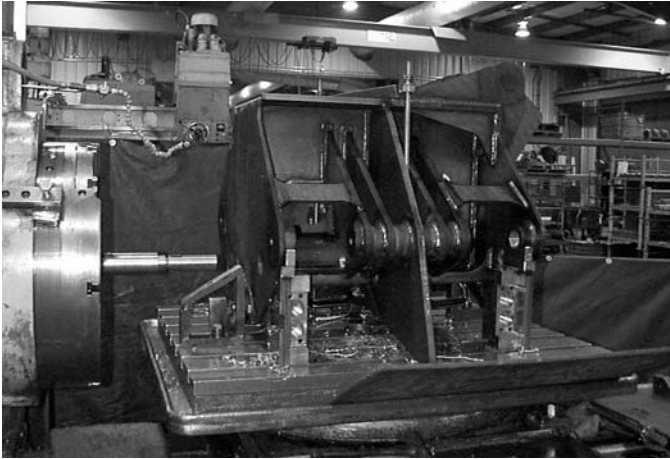
Cutt-Rite knew it was time to upgrade their software system. Using spreadsheets to track production had become very cumbersome as the business grew. The company needed to incorporate all aspects of the shop—from ordering parts through sales and accounting—into one program. They had tried two systems previously, but both were designed more for the accounting side of the business than for production. A business contact recommended Made2Manage Systems (Indianapolis), because it provides total enterprise business solutions ideal for mid-market manufacturers.

“What set Made2Manage Systems apart from other software companies that we looked at was their unique ability to tie together production and accounting,” says Happl. “Other suppliers may have had

a great accounting package or a great production package, but they provided no link between the two.”

The Made2Manage Enterprise Business System tightly integrates sales order entry with inventory management, materials planning with production, and scheduling with human resource functions.

Cutt-Rite installed the Made2Manage business system several years ago. They found it easy to implement. “Most of our people picked up on it very quickly,” says Happl.



According to Happl, Made2Manage Systems offers well-trained, knowledgeable personal support teams along with a choice of in-person or virtual education, services, and consulting. They also provide 24-hours-a-day, seven-days-a-week service with M2M Expert online support, user-centered education seminars, and implementation consultants.

Cutt-Rite utilizes the latest version of the Made2Manage Enterprise Business System with the standard applications, including bar coding and manufacturing resource planning (MRP). The Made2Manage business system provides supply

chain management (M2M SCM), customer relationship management (M2M CRM), business intelligence (M2M BI), and Web-enabling applications—all supported by an enterprise resource planning (M2M ERP) foundation. Cutt-Rite bought most of the options initially, but phased them in over a three-to-four month period. “We started by printing out the material availability list, going through it, and scheduling jobs manually to make sure there were no errors in data input,” says Happl. “Once that was running smoothly, we phased in the MRP module.”

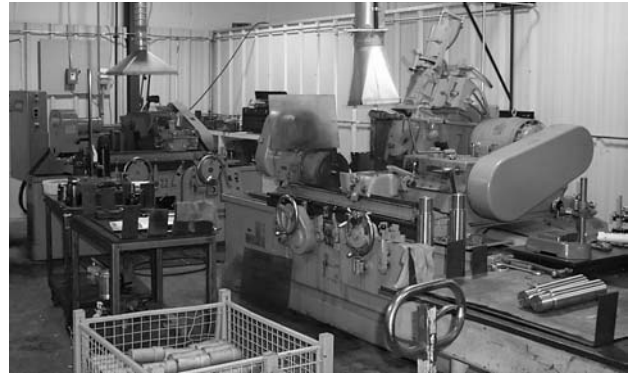
Cutt-Rite’s customers give them blanket orders for items; these orders can be anywhere from three to 80 pages in length. The clients have a contractual obligation to buy what they order, but Cutt-Rite produces and holds the items until the selling dates—usually one week’s worth at a time. Customers send updated blanket orders once a week, covering their needs for the subsequent four to six months. This gives Cutt-Rite some flexibility as orders and dates change. These updates are entered as sales orders, and MRP generates the job orders from them.

The Made2Manage advanced planning and scheduling feature is capable of executing the plan on the shop floor for a few jobs or for thousands of jobs at one time. The Made2Manage scheduler supports many algorithms—including finite and infinite capacity, forward and backward pass, and standard time and overtime. Multiple schedules can be generated at one time; this allows the scheduler to view and compare the results of alternate schedules before deciding on the optimal one. Made2Manage scheduling also provides the ability to create and maintain individual calendars for work centers running on different hours. Resources that are over-allocated can be screened to determine where bottlenecks are occurring on the shop floor.

Once the job orders are created, work center loading is done. Happl searches the work center dispatch list to print out the week’s schedule of work for each center. Each machine on the shop floor is loaded with a week’s worth of raw materials. If materials are not available for a certain job, an e-mail is sent to the purchasing agent who then tracks down those materials. A job doesn’t get initiated until the materials are available. Happl then distributes a list of “release jobs” and “open jobs” to each work center operator so that they know exactly what they have to do for the week. As the jobs are run through, the items go to finished goods; from there, they are delivered to the customer.

The company realized immediate benefits upon installation of the Made2Manage business system. The system paid for itself in the first year by greatly improving efficiency on the shop floor. The scheduling of jobs has also been made more efficient. “Before, it would take two to three days to schedule the shop floor for one week’s or two weeks’ worth of work,” says Happel. “Now I can do it in just four or five hours. It also has cut down on labor. We can probably do twice as much with half as many people.”

The Made2Manage business system has benefits for Cutt-Rite’s customers as well. These include improved accuracy and timeliness of delivery, as well as the ability to track orders. In the past, when a customer would call to check on the status of an order, Cutt-Rite would have to call them back. Someone would have to physically go out on the shop floor, check on the status of the job, estimate the time to completion, and then



return the customer’s call. Because the Made2Manage business system uses bar-coding technology to aid in tracking the progress of jobs, Cutt-Rite now can look up the job onscreen and give the customer an immediate answer—accurate to within one day.

Now that Cutt-Rite has the Made2Manage Enterprise Business System, they can look forward to future growth, knowing that they will be able to handle and schedule new lines efficiently. As Happel puts it, “It’s put us in a position to know what we’re going to get, see down the road what’s going to happen, and be able to make good business decisions from that.”

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