# INDUSTRY

### **Manufacturing**

# ORGANIZATION

Brass Craft, Inc.

## SOLUTION

## Publishing Reports to Network Helps Provide Immediate Response to Customers

Brass Craft, the world's leading manufacturer of plumbing products, is able to respond immediately to the needs of its customers by capturing and downloading reports to a network, and providing online access to all of its users. In the past, scheduling, sales order, shipping and other reports generated on an IBM AS/400 host were printed and distributed to operating personnel, which took between several hours and several days. A team of employees recommended the reports be published electronically instead, allowing users to respond quickly to any concerns that they highlighted. The switch to a network publishing

solution makes it possible to, for example, determine much more quickly that a manufacturing plant is running short of a critical material to avoid delaying customer shipments. Data can also be accessed instantly from headquarters and seven remote manufacturing plants on a wide area network allowing customer service reps the ability to provide much faster answers to customer

inquiries. The principle advantage of the new approach is that the company saves \$90,000 per year that was previously spent to create microfiche copies of the reports for archival purposes.

Brass Craft is a wholly owned subsidiary of Masco with seven manufacturing plants in the United States and Canada that sells over 20,000 different products to the professional plumber and do-it-yourselfer. The company's experience in machining nonferrous alloys has also made it a supplier in manufacturing specialty products ranging from air brake fittings to locomotive engine components. The company got its start when founder Robert Zell developed an inexpensive water stop used to help plumbers turn off water to fixtures, simplifying replacement. Today Brass Craft provides a complete line of water supplies such as stops and risers; brass flare,

compression, pipe and other fittings; connectors for gas appliances and water heaters; showers with spray patterns that range from gentle to relaxing; an attractive line of decorator plumbing products; the leading complete line of do-it-yourself plumbing products sold under the PlumbShop and private labels. Also produced are lines of both commercial and industrial supplies.

#### 9,000,000 pages of reports

Brass Craft uses Material Requirements Planning, Detailed Resource Planning, Purchasing, Order Management, Accounts Payable, Accounts Receivable, General Ledger and Forecasting application modules



from American Software running on an AS/400 Model 730. It also operates an AS/400 System 170 that is used by its sales representatives for remote internet order entry and inquiry access. Over 9,000,000 pages of reports are generated by these applications every year to provide information designed to keep every area of the company in touch with customer needs. 4,350,000 pages of which were captured and converted into microfiche. At the current time Brass Craft produces 181 daily, weekly, and monthly reports. The majority of which are now captured on a dedicated network server providing online viewing to users almost instantaneously Examples include reports that summarize sales orders, customer purchase orders, manufacturing schedules, financial reports and many others.

In the past, the reports were generated and printed on high-speed laser printers by the

AS/400 operator. The printing process in and of itself was time-consuming, with a typical 2000 page report taking about 75 minutes to print. After the reports were printed they had to be distributed to users in the logistics, accounting, engineering, accounts receivable and other departments as well as to the manufacturing plants. These reports were then put into binders for archival purposes. There were many cases in which additional copies of the same report were printed for different departments. Reports going to sales representatives were distributed by regular mail, if they were not time sensitive, by fax or overnight courier, if they were, incurring

additional costs to the company. The cost of paper, printer consumables and printer maintenance became exorbitant.

#### Previous archival methods

Several of these reports were archived in order to provide secure historical records. Storing the records on paper was a very inefficient use of space and made it nearly impossible to track a specific record. So the printer spool files were written to magnetic tape and delivered to a company that produces microfiche archives. The archiving process was

relatively expensive and created its own delays in accessing historical information. For example, if a customer service representative needed to review a recent order, they might first have to wait several days until the microfiche was completed and delivered back to the firm. Then, they had to request the specific microfiche from the record room. Finally, the service representative had to use a special reader to scroll through the tape and try to find the item of interest. Even if the tape was available, this process could easily take half a day. This made it difficult or impossible to provide an immediate response to a customer inquiry.



Brass Craft operates continuous improvement teams called "Better than Before" and one of the opportunities for change highlighted by its members was the paper and microfiche-based report publishing process. "We first started looking at these reports as an opportunity for cost savings," said Joshua Jaime, Computer Operations Manager. "We were running through millions of pages of fanfold paper, miles of microfiche and spending a considerable amount in shipping them to the people that needed them. We thought: why can't we simply post the reports to the network and provide electronic access to those that need them? We figured that anyone that truly needed a printed document could easily print out what applied to them on a laser printer."

### **Evaluating the players**

Jaime and the rest of the team brought in a consultant to evaluate the major players in the field of electronically publishing reports, also known as computer output to laser disk (COLD). The consultant interviewed 70 employees in a one week period, helped Brass Craft determine configurations required for COLD, targeted 181 reports as potential COLD reports, reviewed a request for quotation and sent it to the major players in this market. "We needed to find something that we could get up and running quickly and effectively in the AS/400 environment," Jaime said. "Our ears perked up when we heard that Metafile is located in Rochester, Minnesota, the same place as IBM's AS/400 operations. When we took a close look at their software, we were impressed with how well it supported the AS/400 and its ability to capture the report spool files. Other features included ease of use in searching and highlighting specific areas of a report. While many of the players provided similar functions some of the features that attracted us to Metafile were full-text indexing. optional field searches, structured searches, Boolean searches, ease of Administration functions in report definition, indexing and creating report families.

A small Brass Craft implementation team did the installation by itself with minimal assistance from the developer. The program works by reading the spool file and converting it to a compact, searchable file that resides on a Windows NT server. No host code changes were required. The team installed the client software on 120 users' desktops at headquarters and 200 at the manufacturing plants located throughout the United States and Canada, who access the server through a wide area network. Currently, the AS/400 operator is responsible for manually initiating the process of converting the spool file. In the future, Brass Craft plans to take advantage of the ability of the software to automate the process by scanning a specified location for a new spool file and, if it is found, automatically downloading and indexing it.



### Increasing speed of information flow

Brass Craft achieved the cost savings it had anticipated by eliminating the need for printing, distributing and archiving reports. But during the implementation process it became apparent that even greater benefits would come from increasing the speed at which information flowed within the organization. "We recognized the opportunity to eliminate the delays that are inherent in a paper-based process and begin responding much more quickly to our customers' needs. Jaime said. "We have eliminated the need to wait for reports to be generated and information to be tracked down before making a decision. Things that used to take all day have been reduced to minutes. For example, if a customer calls in and says that he or she didn't get an invoice, instead of ordering

microfiche, the service rep can punch in the customer's name, call up the invoice in seconds and then either fax it or email it the customer. Overall, we can respond more quickly to our customers' needs, which is the name of the game in this business."

The faster flow of information also benefits our internal business processes." Jaime said. "Consider our controllers who need to close the books as soon as possible after the month ends so they can send the information to our corporate parent which in turn needs to prepare reports for shareholders. It used to take days to get access to the necessary reports that they can now access nearly as soon as the information is generated. These include inventory transactions, labor reporting, intercompany cost of sales, costs of sales detail, purchased parts received inventory turns, etc. Our people can now cut numbers or text from the reports and paste them into a spreadsheet, which saves them typing time. Our users now can receive reports as soon as they are available rather than waiting for them to be printed and distributed."

We originally implemented COLD to save money but what was much more important was the way that it streamlined the flow of information within our organization," Jaime said. "For example, manufacturing plants get near real time information on orders and inventory levels, making it possible to see a parts shortage coming up and fix it before it affects a customer. We can also see opportunities, such as a shift in customer purchasing patterns, quickly enough to take effective action. Our customers were pleasantly surprised when our service reps began giving them immediate answers to their questions rather than telling them that they would get the information and get back to them the next day. All in all, COLD has made a big difference by helping our company respond immediately to our customers' needs." Our implementation of COLD has been so successful that we are now looking into Imaging and Workflow applications to streamline the flow of information even more. Another way of being "Better than Before" in response to our customers needs.

#### Contact:

Strategic Business Systems, Inc. 17 South Franklin Turnpike Ramsey, NJ 07446 1-800-727-7260 http://www.sbsusa.com email: info@sbsusa.com

